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A Balance of Powers: The Role of Public Support Measures in the Path Towards a European Energy Union

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ABSTRACT

This doctoral thesis discusses the role of the EU State aid regime in the path towards the completion of the liberalisation processes in national European energy markets and the creation of a sustainable, competitive and integrated Energy market.

In the past years, the European Union has adopted an expansive set of policies and targets, which culminated in the framework strategies for an Energy Union, purporting to the transformation of the internal energy market and a progressive transition to a broader and more sustainable mix of energy sources. The policy efforts of European Institutions have required financial support at State level. In general, while a virtuous version of public support is fundamental to correct market failures and contribute to achieving objectives of common interest, if not properly targeted, State intervention may disrupt markets and alter competition.

The doctoral thesis identifies and discusses certain key factors, associated with the structural, and renewable-centric, architecture of the European State aid regime, which resulted in the failure thereof to steer public intervention towards "*good aid*".

Against the above mentioned background, the doctoral thesis attempts a comprehensive analytical review of the revised compatibility framework applicable to energy aid measures resulting from recent reform initiatives. Moving from the letter to the application of the legal framework, this thesis considers case law and decisions of EU Institutions that have elaborated on the notion of energy aid.

On the basis of all the foregoing, this thesis illustrates certain options and initiatives at the State aid regime's level that may contribute to foster "good aid" in the energy field.

TABLE OF CONTENTS

INTRODUCTION

The research question that this doctoral thesis attempts to answer concerns the role which has been played so far and might be played in the future by the EU State aid regime on the path towards completing the liberalisation process in European national energy markets and creating a sustainable, competitive and integrated EU-wide Energy Union.

The Commission has recently announced its framework strategy for an Energy Union, the development of which requires "*a fundamental transformation of Europe's energy system*".[1] The vision illustrated by the Commission for the building and development of the Energy Union revolves around five key mutually reinforcing and closely inter-linked dimensions:

1. energy security, solidarity and trust across Member States, with the outward-looking ambition to establish a stronger European role in global energy markets
2. a fully integrated internal energy market, with free cross-border energy flows based on competitive, efficient and non-discriminatory practices
3. energy efficiency, contributing to the moderation of energy demand
4. a sustainable, decarbonised and climate-friendly economy
5. research, innovation and competitiveness.

The grand goals of the Energy Union have been translated into a list of actionable points and a roadmap for the implementation thereof. Successful implementation depends on the convergence of consensus and political commitment at the level of the EU institutions, Member States and other Euro-wide and local stakeholders, in accordance with the principles of subsidiarity, proportionality and better regulation.

The Energy Union is but the most recent, and perhaps the most ambitious, initiative adopted by the European Union in the energy and environmental field and aiming at a transformation of the energy market and a progressive transition to a broader and more sustainable mix of energy sources.

Two key arguments – corroborated by research and legal analysis – underlie the thesis. The first one is that national governments may, through public support measures, play a transitional

[1] See, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank of 25 February 2015, *A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy* (Energy Union Communication, COM(2015) 80 final, section 2.5.

'supplementary' role in fostering the achievement of energy and climate change policy objectives while developing a further liberalised and integrated European energy market. The second one is that the EU State aid control system has so far failed to steer public intervention in energy markets through aid measures only purporting to address market failures and negative externalities or reacting to the challenges faced by the relevant industry based on a clear long-term strategy.

In particular, the role of the EU State aid regime in connection with achieving energy and environmental policies and objectives has historically been twofold: while, during the process of liberalising electricity and gas markets, certain national aid measures have facilitated eradicating the system of national monopolies and increasing cross-border transactions,[2] other forms of support have run counter to the integration goal.

On the one side, in fact, it is well acknowledged that State aid measures may impair Europe's competitiveness and the development and efficient functioning of the internal market. This was actually affirmed long ago by the European Court of Justice in early judgments concerning energy-related measures under the Treaty establishing the European Coal and Steel Community.[3] Indeed, in this case law, the Court clearly spelt out how the artificial effects of aid measures could frustrate and neutralise the essential driving force behind the internal market project: the principle that undertakings should compete based only upon their natural and undistorted production, distribution and selling conditions.[4] More precisely, the Court ruled that all special conditions involving an element of aid or subsidy are in breach of the abovementioned principle in that they artificially alter the production and commercial

[2] This is the case, for instance, of "stranded costs" compensation systems, which have been adopted by many Member States to offset the losses incumbent electricity undertakings were suffering as a result of the liberalisation of the electricity sector. More precisely, they were aimed at compensating these undertakings for past investments that could no longer be exploited commercially due to energy market liberalisation. See, *inter alia*, Commission Decision of 27 February 2002, State Aid N 661/1999, *UK Competitive Transition Charge*, OJ 2002 C113/3. For a different kind of measure also intended to offset the advantage created for certain undertakings by the liberalisation of the electricity market see Joined Cases C-128/03 and C-129/03, *AEM SpA and AEM Torino SpA v. Autorità per l'energia elettrica e per il gas and Others* (*AEM*), [2005] ECR I-2861.

[3] The Treaty Establishing the European Coal and Steel Community, signed in Paris on 18 April 1951, 261 U.N.T.S. 140, as amended. The ECSC Treaty was first signed by Belgium, Germany, France, Italy, Luxembourg and the Netherlands to create a framework of production and distribution arrangements for coal and steel and to set up an autonomous institutional system to manage it. It entered into force on 23 July 1952. Fifty years after entering into force, on 23 July 2002, it expired, and the European Coal and Steel Community was subsumed into the EU.

[4] See, *inter alia*, Joined Cases 27/58, 28/58 and 29/58, *Compagnie des hauts fourneaux et fonderies de Givors and others v High Authority of the European Coal and Steel Community* (*Hauts Fourneaux et Fonderies de Givors*), [1960] ECR 241, p. 254, and Case 30/59, *Steenkolenmijnen in Limburg v. High Authority* (*Steenkolenmijnen*), [1961] ECR 1, p. 19.

conditions of the beneficiaries and, thus, potentially allow the establishment and permanence in the market of inefficient undertakings.[5]

The above considerations have since been proved by empiric observation. National protectionist aid measures have exacerbated and might further exacerbate the partitioning of the internal energy market and, thus, the security of supply problem facing European countries. Moreover, these measures are among the causes of the price distortions currently experienced by the energy sector, and have altered competition not only at the electricity generators' level but also among Member States. Finally, certain domestic aid measures could threaten the European sustainable energy targets and ultimately result in increased electricity bills for least intensive consumers. In conclusion, protectionist State aid measures have the potential to hinder the fulfilment of the Energy Union's goals.

Nonetheless, on the other side, State aid measures are an important instrument of economic policy. In particular, certain forms of State intervention represent viable tools for achieving the Energy Union's objectives. Indeed, if properly framed, national financial mechanisms can foster the creation of an integrated energy market, ensure that climate change targets and environmental goals are reached in the short term, and deal with the challenges facing the energy sector. This holds especially true with respect to the security of supply issue and the competitiveness and carbon leakage concerns.

It is precisely the afore-addressed two-sided nature of State aid measures that led the founding fathers of the European Economic Community to structure the State aid regime as a control system. Indeed, a comprehensive and clear State aid framework and a rigorous and outcome-oriented application thereof can foster so-called "*good aid*" and thwart highly distortive forms of public support.[6] It is, in fact, necessary to accurately balance the positive

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[5] *Ibidem.*

[6] The concept of "good aid" is now defined under the State Aid Modernisation Communication as " *aid which is well-designed, targeted at identified market failures and objectives of common interest, and least distortive*" (See, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 8 May 2012, *EU State Aid Modernisation* (SAM Communication), COM(2012) 209 final, para. 12). However, this concept is not that new. In a 2005 consultation paper, The State Aid Action Plan, the European Commission had already introduced the slogan "*less and better targeted aid*". This slogan was actually also meant to highlight the necessity to adopt a "*refined economic approach*" when addressing a measure under the notion of aid, in order to improve legal certainty about the effectiveness of this notion. The so-called 'balancing test' was, therefore, developed in an attempt to better frame the balance between the positive impact of aid, which is represented by its contribution to an objective of common European interest, and its negative effects on competition and trade. See, Communication from the Commission, S*tate Aid Action Plan-Less and Better Targeted State Aid: A Roadmap For State Aid Reform 2005-2009*, COM (2005) 107 final, para. 18.

effects that certain aid measures might generate in terms of contributing to objectives of common interest and the potential negative impact they might have on the relevant market.

This thesis shall, therefore, attempt to identify instruments for rendering the State aid regime a catalyser of well-tailored support measures facilitating the pursuit of energy policy objectives in an efficient and cost-effective way.

Chapter Synopsis

This thesis comprises four separate but closely-linked parts, each of which is, in turn, divided into two chapters addressing specific elements and levels of analysis.

The starting point of this doctoral thesis is an analysis of the reasons, corroborated by scientific evidence, underlying the efforts of the European Union towards adopting binding international commitments and targets in the environmental and energy fields. This analysis appears to be important if one considers the data evidence that, over the period 2003-2014, such environmental and energy-related objectives have overtaken other important European policy goals as the most subsidised horizontal objectives in the EU.[7] Moreover, the most recent available figures on aid granted for pursuing environmental and energy-related goals and targets cover the year 2014 and evidence a great increase in expenditure from 2013 to 2014, amounting to approximately 28.5 billion EUR.[8] According to the European Commission 85 per cent of this increased amount is due to the fact that from 2014 Member States' annual reports include information on more – but still not all – renewable energy schemes.[9] Hence, a significant portion of national energy support measures so far have been adopted to foster the achievement of the European Union targets, objectives and policies in the environmental field. In addition to the foregoing it is important to analyse whether strong interventionism purporting to enable a transition to a broader and more sustainable mix of energy sources, in general, and renewable

[7]The data on the absolute amounts of aid awarded by the Member States in each of the relevant years for both environmental and energy-related objectives and regional development goals are available at http://ec.europa.eu/eurostat/tgm_comp/refreshTableAction.do?tab=table&plugin=1&pcode=comp_sa_01&language=en (accessed 30 October 2016).

[8] State aid statistics are available from the European Commission's State Aid Scoreboard, which can be accessed at http://ec.europa.eu/competition/state_aid/scoreboard/index_en.html. The relevant figures have been provided by Eurostat and are available at http://ec.europa.eu/eurostat/tgm_comp/refreshTableAction.do?tab=table&plugin=1&pcode=comp_sa_01&language=en (accessed 30 October 2016).

[9] *Ibidem.*

energy systems, in particular, has been among the causes of the challenges that European energy markets are currently facing. These include, *inter alia*, security of supply challenges, infrastructural needs, and carbon leakage and competitiveness issues.

The second chapter of the first part of this doctoral thesis builds upon the findings under Chapter 1 and analyses whether the framework for the assessment of the EU State aid regime is capable of driving the compromises required to reconcile the conflicting interests, goals and policies that any government intervention in energy markets should take into consideration. This evaluation is carried out on two separate levels. The first aims to consider whether, as framed under the Treaty, the State aid control regime provides all the instruments necessary to enter into the relevant balancing exercise. Moreover, it also considers whether, in principle, the mentioned regime allows for drawing a distinction between protectionist environmental and energy-related aid measures and those national provisions that are either neutral and, thus, not covered under the regime, or justifiable on the basis of essential EU objectives. The second level of analysis discusses how the Court of Justice has traditionally interpreted the 'notion of energy aid' and whether this notion has been reshaped over time. This is in turn instrumental in assessing whether the current notification deficit may have been facilitated as a result of a very dynamic jurisprudence on the notion of aid. The foregoing sets the scene for a critical assessment, set out in the third part of the doctoral thesis, of a broad spectrum of the case law and the Commission's decisional practice elaborating on the 'notion of energy aid'. Moreover, a general overview of the EU legal framework applicable to the energy sector is illustrated.

The second part of this doctoral thesis, which borrows from and elaborates upon the foregoing, provides a critical evaluation of the new EU State aid provisions governing the compatibility assessment of aid schemes devised by Member States for dealing with EU energy markets' failures. Indeed, in the period 2012-2014, the Commission adopted a wide array of regulations, decisions and communications that have extensively reformed the framework for the assessment of energy aid measures. The analysis is, therefore, aimed at evaluating whether the new provisions are sufficient, clearly defined and effective grounds to steer public intervention in energy markets towards aid measures able to deal with all the challenges the energy sector is currently facing in a cost-effective way. The ultimate purpose of this analysis is to identify potential remedial actions that may further improve the compatibility framework, these being proposed and discussed in detail as part of the concluding remarks of the thesis.

The analysis is carried out in two different chapters providing increasing levels of granularity in the assessment of the new provisions.

In Chapter 3 an evaluation of the drivers of the far-reaching reforms in the period 2012-2014 is first provided, with a specific focus on soft law and hard law instruments, including include provisions having a direct impact on energy aid measures. More precisely, the relevant reforms encompass the adoption of the so-called Almunia SGEI package,[10] the Guidelines on certain State aid measures implemented in the context of the post-2012 European Emission Trading System, [11] and the numerous frameworks, guidelines, communications and regulations implemented in the context of the State Aid Modernisation (SAM) initiative.[12] The new common assessment principles introduced as part of the SAM initiative to govern the compatibility assessment and the impact of these principles on the appraisal of energy aid measures are also subject to extensive analysis. Finally, the chapter focuses, *inter alia*, on the important new *ex post* evaluation mechanism, which represents one of the major innovations of the reform.

Chapter 4 starts with a comprehensive analysis of the numerous grounds for authorisation and exemption from the notification obligation which energy aid measures may now rely upon. The interactions, overlaps and potential contradictions among the various frameworks considered are discussed. The second part of the chapter analytically addresses the new specific compatibility criteria established for evaluating peculiar forms of energy aid. More precisely, the types of aid analysed in more detail have been specifically selected on the basis of their relevance in terms of their direct impact on the functioning of energy markets, their

[10] The Almunia SGEI package includes the Communication from the Commission, European Union framework for State aid in the form of public service compensation (2011) (SGEI Framework) OJ 2012 C 8/15, the Commission Decision 2005/842/EC of 28 November 2005 on the application of Article 86(2) of the EC Treaty to State aid in the form of public service compensation granted to certain undertakings entrusted with operating services of general economic interest OJ L 2015 312/67, and Commission Regulation (EU) No. 360/2012 of 25 April 2012 on the application of Articles 107 and 108 of the Treaty on the Functioning of the European Union to de minimis aid granted to undertakings providing services of general economic interest, OJ 2012 L 114/8 (SGEI *de minimis* Regulation). The regulation establishes a threshold of 500,000 EUR for SGEI compensation, which is higher than the 200,000 EUR ceiling that applies outside the SGEI field; and the Communication from the Commission on the application of the European Union State aid rules to compensation granted for the provision of services of general economic interest (SGEI Communication), OJ 2012 C8/4.

[11] Communication from the Commission of 22 May 2012, *Guidelines on certain State aid measures in the context of the greenhouse gas emission allowance trading scheme post-2012* (EU ETS Guidelines), OJ 2012 C158/4, as amended on 6 December 2012 with regard to electricity consumption efficiency benchmarks (OJ 2012 C 387/5).

[12] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 8 May 2012, *EU State Aid Modernisation* (SAM Communication), COM(2012) 209 final.

'supplementary' role in the pursuit of energy and climate change policy objectives, and the potential obstacles they might pose to other goals set forth in the Energy Union Communication. All the abovementioned analyses are carried out against the background and in the context of the market failures purported to be addressed by the forms of aid under scrutiny. When relevant, accounts of recent Commission Decisions that have applied the new compatibility conditions have been given.

The third part of this doctoral thesis consists of an extensive analytical review of the judgments of the EU Courts and decisions of the Commission on energy aid measures that have elaborated on the notion of aid by narrowing down its scope. The critical evaluation focuses on what is deemed to be the most problematic element of this test with respect to national energy aid measures: the State origin criterion. An explanation of why the other elements of the notion of aid are of somewhat minor importance in the assessment so far provided by the EU's jurisprudence and decisional practice regarding energy aid measures is included. The analysis aims to provide extensive practical evidence on how certain approaches to interpreting the notion of aid have set strict boundaries to the supranational jurisdiction over energy support regimes, and have overstepped into areas within the precinct of other elements of this notion and of the compatibility assessment. The resulting legal uncertainty and notification deficit are also addressed through a comparative analysis of the case law of the previous and new millennium. Future, and potentially risky, paths within the context of assessing the imputability criterion are also detected through an analysis of cases on aid measures other than those aimed at promoting the energy sector. In an effort to systematise the conundrum of case law in the field, and our findings thereunder, national support provisions have been categorised and relevant analysis conducted on the basis of the structures of the measures they implement.

With respect to the foregoing, and with a view to giving the research question a forward-looking perspective, the last part of the thesis encompasses an evaluation of certain theories and interpretations of the case law that, if embraced by EU courts, may further restrict the perimeter of the State aid review and intrude on the precinct of compatibility analysis of aid measures. To the extent that some of the analytical methods advanced by scholars are allegedly already being applied in the antitrust and internal market fields of EU law, a comparative assessment of the impact the relevant approaches would have in the three fields of law is provided where relevant.

PART I

Introducing the Factor Background and the Legal Responses

A Brief Overview

The starting point of this part of the doctoral thesis is an analysis of the reasons, corroborated by scientific evidence, underlying the efforts of the European Union towards adopting binding international commitments and targets in the environmental and energy fields. This analysis appears to be important if one considers the data evidence that, over the period 2003-2014, such environmental and energy-related objectives have overtaken other important European policy goals as the most subsidised horizontal objectives in the EU. Moreover, the most recent available figures on aid granted for pursuing environmental and energy-related goals and targets cover the year 2014 and evidence a great increase in expenditure from 2013 to 2014, amounting to approximately 28.5 billion EUR. According to the European Commission 85 per cent of this increased amount is due to the fact that from 2014 Member States' annual reports include information on more – but still not all – renewable energy schemes. Hence, a significant portion of national energy support measures so far have been adopted to foster the achievement of the European Union targets, objectives and policies in the environmental field. In addition to the foregoing it is important to analyse whether strong interventionism purporting to enable a transition to a broader and more sustainable mix of energy sources, in general, and renewable energy systems, in particular, has been among the causes of the challenges that European energy markets are currently facing. These include, *inter alia*, security of supply challenges, infrastructural needs, and carbon leakage and competitiveness issues.

The second chapter of the first part of this doctoral thesis builds upon the findings under Chapter 1 and analyses whether the framework for the assessment of the EU State aid regime is capable of driving the compromises required to reconcile the conflicting interests, goals and policies that any government intervention in energy markets should take into consideration. This evaluation is carried out on two separate levels. The first aims to consider whether, as framed under the Treaty, the State aid control regime provides all the instruments necessary to enter into the relevant balancing exercise. Moreover, it also considers whether, in principle, the mentioned regime allows for drawing a distinction between protectionist environmental and energy-related aid measures and those national provisions that are either neutral and, thus, not covered under the regime, or justifiable on the basis of essential EU objectives. The second level of analysis discusses how the Court of Justice has traditionally interpreted the 'notion of energy aid' and whether this notion has been reshaped over time. This is in turn instrumental

in assessing whether the current notification deficit may have been facilitated as a result of a very dynamic jurisprudence on the notion of aid. The foregoing sets the scene for a critical assessment, set out in the third part of the doctoral thesis, of a broad spectrum of the case law and the Commission's decisional practice elaborating on the 'notion of energy aid'. Moreover, a general overview of the EU legal framework applicable to the energy sector is illustrated.

Chapter 1

Setting the Scene of Initiatives towards a Sustainable Energy Transition

1.1. Energy Sector, Climate Change and International Competitiveness Goals: a Multi-Faceted Cause-and-Effect Relationship

The current millennium seems to be characterised by unceasing attempts to devise the perfect combination of policies able to address the key regional and global challenges associated with energy system developments while dealing with climate change concerns and the increase in world energy needs. Actually, the recent rise in global energy demand is also a function of the economic and demographic growth curve of several countries during the implementation period of the Millennium Development Goals (MDGs) agenda.[13] Global transition towards renewable energies and progressive fossil fuel divestment have, therefore, been advocated and hailed by many as the future of the industry and a key element of global sustainable development.[14] Indeed, as early as in the 1980s the Brundtland Commission – to which the paternity of the term "sustainable development" is ascribed – emphasised that "*a safe and sustainable energy pathway is crucial to sustainable development*", and that renewable energy "*should form the foundation of the global energy structure during the 21st Century*".[15] However, the sector was neither covered under the eight MDGs nor specifically affected by their associated targets and related detailed indicators. The omission can perhaps be partially ascribed to a reliance – which, with hindsight, proved to be perhaps misdirected – upon the

[13] UN General Assembly Resolution 55/2, *United Nations Millennium Declaration*, 18 September 2000, UN Doc A/RES/55/2. As per the relationship between economic growth and energy demand, see, *inter alia*, the relevant figures provided in EIA (2013) *International Energy Outlook 2013*, U.S. Energy Information Administration, Washington D.C., ch. 1, pp. 9-19.

[14] Pope Francis himself advocated a transition towards sustainable energy sources, lamenting, however, that "*the international community has still not reached adequate agreements about the responsibility for paying the costs of this energy transition*". (2015, 24 May) Encyclical Letter *Laudato Si'* Of The Holy Father Francis On Care For Our Common Home. Vatican: The Holy See, paras 22, 26, 52, 153, 164, 165, 179. Retrieved from the Vatican website: http://w2.vatican.va/content/francesco/it/encyclicals.index.html (accessed 1 August 2016).

[15] World Commission on Environment and Development (WCED) (1987) *Our Common Future*, Oxford University Press, Oxford, *From One Earth to One World*, Part II, ch. 4, paras. 58, 62. For a more recent analysis in that respect, even more related to the MDGs, see, *inter alia*, Flavin C., Aeck M.H. (2005) Energy for Development: The Potential Role of Renewable Energy in Meeting the Millennium Development Goals, a paper prepared for the REN21 Network by The Worldwatch Institute, available at http://www.ren21.net/ (accessed 1 August 2016).

ability and willingness of countries to include energy considerations in their national development strategies. Surely, however, the complexities that the establishment of a cause-effect relationship between the energy sector and the development goals entail had a role to play in the decision not to stipulate specific energy targets.[16]

In effect, as an answer to worldwide warming, an international environmental treaty, the United Nations Framework Convention on Climate Change (UNFCCC), was signed, in 1997, by the most developed and developing nations.[17] Its main purpose was the "*stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system*".[18] The Kyoto Protocol to the UNFCCC (Kyoto Protocol) sets forth,[19] among the pre-requisites for reaching the decarbonisation objective, extensive reform of the energy sector through, *inter alia*, the increased use of new and renewable forms of energy and the phasing out of fiscal incentives, tax and duty exemptions and subsidies in respect of all greenhouse gas (GHG) emitting sectors.[20] However, no immediate restrictions and mitigation policies appear to be envisaged, and this agreement only establishes legally binding emission reduction targets for certain industrialised countries and the European Union, which have proved to be inadequate to reverse the global warming trend.[21]

It appears, therefore, of paramount importance that, after over twenty years of UN negotiations, a legally binding international agreement was reached at the 2015 Paris Climate Conference of the Parties (COP21). This entered into force on 4 November 2016 and set forth,

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[16] The above considerations as to the relevance of the energy sector and the reasoning for its exclusion can be inferred also from, *inter alia*, Modi V., McDade S, Lallement D., Saghir J. (2006) *Energy Services for the Millennium Development Goals*, ESMAP, UNDP, UN Millennium Project, World Bank, New York, chs. 2, 6.

[17] See, *United Nations Framework Convention on Climate Change*, signed at the United Nations Conference on Environment and Development, Rio de Janeiro, June 1992.

[18] *Ibidem.*, Article 2.

[19] The Kyoto Protocol to the UNFCCC was adopted on 11 December 1997 in Kyoto and entered into force on 16 February 2005.

[20] *Ibidem.*, Article 2, para. 1(a), and Article 10(b)(i). Other options include, *inter alia*, on the supply side, the development and increased use of carbon dioxide sequestration technologies and advanced and innovative environmentally sound technologies, and, on the demand side, the enhancement of energy efficiency in relevant sectors.

[21] For a proper analysis in that respect see Höhne N. (2005) *Impact of the Kyoto Protocol on Stabilization of Carbon Dioxide Concentration*. Cologne, Germany: ECOFYS energy & environment, available at http://stabilisation.metoffice.com/ (accessed 1 August 2016), and Boehmer-Christiansen S., Kellow A.J. (2003) *International Environmental Policy: Interests and the Failure of the Kyoto Process*. London: Edward Elgar Publishing.

inter alia, specific objectives in terms of global temperature increase, to be translated into proper country-related reduction targets and quantifiable and practical policy measures. [22]

In addition to the foregoing, the drafters of the far-reaching 2030 Sustainable Development Agenda adopted in September 2015 directly targeted the energy sector, in general, and renewable energies, in particular, when drawing up the new Sustainable Development Goals (SDGs).[23]

As opposed to the belated political action, the international scientific community have generally agreed in principle on the fact that the pursuit of sustainable energy systems pathways is crucial for reaching the mitigation goals set at the international level without compromising the development goals and requires considerable changes in the energy sector. Agreement, in fact, exists also with respect to the main changes this sector should go through, which are deemed to be potentially successful only if immediately and simultaneously implemented.[24] Indeed, a multi-sided cause-and-effect relationship has been identified among the climate change phenomenon, the impairment of growth paths and an energy system dominated by fossil fuels combustion in power generation and fossil fuels preparation in natural gas processing. A steady transformation of the energy sector towards large-scale deployment of low-carbon energy technologies has been considered, thus, such as to significantly contribute to reaching both mitigation and development agendas.

More precisely, while being the main driver of growth patterns, the energy sector is also the major contributor to anthropogenic climate change, accounting for roughly two-thirds of all human-induced GHG emissions and over 65 per cent of total GHG emissions.[25] Fossil fuels – including oil, coal and natural gas – currently represent more than 80 per cent of total primary energy demand and a great number of GHGs are released during their combustion.[26] Therefore,

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[22] The 2015 United Nations Climate Change Conference was held in Paris from 30 November to 12 December 2015. It was the 21st yearly session of the Conference of the Parties to the UNFCCC and the 11th session of the Conference of the Parties to the Kyoto Protocol.

[23] *Transforming our world: the 2030 Agenda for Sustainable Development* adopted pursuant to Resolution A/RES/70/11 of the General Assembly of the United Nations on 25 September 2015.

[24] See, *inter alia*, UNDP, UNDESA, WEC (2000) *World Energy Assessment: Energy and the Challenge of Sustainability*, and *World Energy Assessment: Overview 2004 Update*, United Nations, New York; GEA (2012) *Global Energy Assessment - Toward a Sustainable Future*, Cambridge University Press, Cambridge, UK and New York, NY, USA and the International Institute for Applied Systems Analysis, Laxenburg, Austria; IEA (2012) *READy*: *Renewable Energy Action on Deployment – Presenting: The ACTION Star; six policy ingredients for accelerated deployment of renewable energy*, London: Elsevier and, recently, IEA (2015) *World Energy Outlook Special Report, Energy and Climate Change*, OECD Publishing, Paris and IEA

[25] IEA (2015) *World Energy Outlook Special Report, Energy and Climate Change*, *cit*., ch. 1, p. 17 and figure 1.3.

[26] *Ibidem*, ch. 1, p. 25.

the energy made from fossil fuel burning is the leading cause of GHG emissions, the heat-trapping gases deemed responsible for the current global warming trend. Moreover, the recent increase in fossil fuel-based energy demand, for which the rapid economic growth of certain countries mainly shoulders responsibility, has further exacerbated global climate change.[27]

The negative production externalities of economic growth powered largely by GHG-emitting resources in turn adversely affect the very development trend undertaken. This statement is also corroborated by the most recent projections on the impact of global warming on the environment and the energy sector and on the consequences thereof in terms of GDP.[28] Indeed, in addition to the well-known environmental impact of climate change and the related significant net damage costs, it is noteworthy that the energy industry is one of the most disrupted by the effects that the mentioned growth path has on climate and weather phenomena. More precisely, the ensuing changes in climate conditions include, *inter alia*, a progressive rise in the average global temperature level, an increase in extreme weather events and alterations of precipitation patterns.[29] These changes are projected to affect the majority of the energy sources and technologies as a result of their potential to severely impact energy production, transmission and transport systems.[30] Scientists have in fact demonstrated and explained how they might, for instance, challenge solar and wind energy generation.[31] Moreover, they may damage oil and gas offshore and onshore facilities, thermal, hydroelectric and nuclear power plants, and energy transmission and distribution infrastructures, such as oil and gas pipelines and electricity grids.[32] The impact on the different sources and technologies depends, obviously, on the resources, technological processes and locations involved. Whatever the level of the impact, however, the consequences of the mentioned phenomena will further exacerbate current security of supply challenges.

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[27] With respect to the foregoing, see, Jamasb T. and Pollit M.G. (2011) *The Future of Electricity Demand: Customers, Citizens and Loads*, Cambridge: Cambridge University Press.

[28] See the projections provided in IPCC (2014) *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, ch. 10, s. 2.4.

[29] For an exhaustive analysis of the causes and effects of these climate and weather phenomena see IPCC (2013) *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, ch. 2.

[30] IPCC (2014) *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A*, *cit.*, ch. 10, ss. 2.2, 2.3.

[31] *Ibidem*.

[32] *Ibidem*.

As a result of the above, the leading experts in the field describe climate the change externality as the greatest ever example of market failure.[33] China's recent situation is an illustration of this failure. According to a World Bank 2007 report, in fact, the annual costs of environmental and energy-related damages due to climate change were at the time already in the region of USD 100 billion a year, that is to say about 5.8 per cent of Chinese GDP.[34] Pan Yue, one of the vice ministers of the Ministry of Environmental Protection in China, went even further than the World Bank estimation by maintaining in 2006 that Chinese annual cost of climate change inaction ranged from 8 to 13 per cent of GDP, meaning that China had lost almost everything it had gained since the late 1970s due to pollution.[35] Other emerging economies will surely be affected by the aforesaid market failure, and will certainly experience a similar reversal of their economic growth path if effective domestic mitigation policies are not implemented in the short term.

Last but not least, role reversal might also be detected in the abovementioned cause-and-effect relationship between energy demand and the climate change phenomenon: the warming trend determined mostly by the rise in global energy consumption might, in turn, trigger a further increase in energy use due to a greater demand for cooling.[36] More precisely, since cooling is electricity powered and, contrary to heating, does not involve direct burning of fossil fuels, a shift in consumer demand from heating to cooling would indeed generate a downward pressure on direct fossil fuel use but also cause a potentially higher upward pressure on demand for electricity. Moreover, given that electricity is still mainly produced by steam turbine generators burning fossil fuels, the resulting power consumption increments would bring about an increase in indirect fossil fuel use and, thus, in GHG emissions. At certain high temperature

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[33] Stern N. (2007) *The Economics of Climate Change: the Stern Review*. Cambridge: Cambridge University Press, p. 1.

[34] World Bank, SEPA (2007) *Cost of Pollution in China: Economic Estimates of Physical Damages*, The World Bank, Washington D.C., chs. 2-6. The reason underlying the choice of data from 2007 is that in the last eight years China has developed one of the most advanced regulatory systems to address climate change and energy scarcity issues: the adoption in 2007 of the National Climate Change Programme (available at http://www.ccchina.gov.cn/WebSite/CCChina/UpFile/File188.pdf, accessed 1 August 2016) represents a watershed between a suspicious approach to climate consequences and a renewed stance of great efforts to develop both stringent policies and targets and economic incentives to encourage low-carbon activities. Moreover, afterwards, China's annual GDP growth rate started to decrease. See, the relevant data provided in the World Bank's Open Data database and available at http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG (accessed 1 August 2016).

[35] Pan You's editorial of the 1st December 2006, *China's green debt*, Daily Times, Lahore, Pakistan, available at http://archives.dailytimes.com.pk/editorial/01-Dec-2006/view-china-s-green-debt-pan-yue (accessed 1 August 2016).

[36] IPCC (2014) *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A*, *cit.*, ch. 10, s. 2.1.

levels, the demand for cooling will rise to such an extent that the number of GHG emissions added to the atmosphere to satisfy this demand will surely overtake the reduction in emissions caused by the abovementioned downward pressure on direct fossil fuel use.

In addition to the foregoing, it is worth highlighting that an additional factor which may impair the implementation of sustainable energy policies is that policies established at a regional level only, in the absence of co-ordinated global initiatives, might result in a progressive decrease in the competitiveness of the undertakings in the adopting countries, as well as carbon leakage issues. More precisely, carbon leakage consists of the transferring of greenhouse gas emissions via the relocation of production activities and jobs outside the region implementing sustainable energy-driven policies, in countries where lower CO_2 prices or lesser CO_2 constraints exist. These are actually among the main problems that the European Union, as a frontrunner in connection with the implementation of policies to reduce GHG emissions,[37] is facing.[38]

1.2. The Magnitude of the Challenges: the Scientific Consensus

As discussed in the previous paragraph, consensus now exists on the fact that the observed global warming is mostly due to GHG emissions coming from the combustion and preparation of fossil fuels, which are currently the primary sources of energy in the world.[39] Indeed, by elaborating on a measurement of the status of the Earth's climate, scientists and economists have first of all delineated the role of GHGs in the current global warming trend. They have since determined the maximum GHG concentration in the atmosphere that allows for holding the increase in the global average temperature below a certain level, which might be considered

[37] For an exhaustive analysis of these policies, see, Hinrichs-Rahlwes R. (2013) *Sustainable Energy Policies for Europe: Towards 100% Renewable Energy*. Boca Raton: CRC Press; and Lerum Boasson E. and Wettestad J. (2013) *EU Climate Policy: Industry, Policy Interaction and External Environment*. London: Ashgate. Regarding the autonomous initiatives of the EU Member States, see *Climate law in EU Member States: Towards National Legislation for Climate Protection*. Cheltenham: Edward Elgar.

[38] In that respect, see, Prentice J. (2013) Carbon Leakage and Competitiveness under the EU ETS. *European Energy and Environmental Law Review* **22**(4) 132-140.

[39] IPCC (2007) *Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. IPCC, Geneva, Switzerland, ss. SPM.2-SPM.3; and IPCC (2014) *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. IPCC, Geneva, Switzerland, s. SPM.1.2. IPCC reports provide the most authoritative scientific assessment of the climate system. They encompass extended coverage of climate change projections based on a range of specific climate scenarios.

the upper limit for avoiding the most worrisome adverse impacts of climate change. Emissions projections and the expectations for future climate change under business-as-usual scenarios have also been developed. Once the estimated future concentration of GHG emissions is set against the established upper limit of GHG saturation in the atmosphere, the resulting gap provides a scientifically meaningful indication of the reduction in atmospheric GHGs needed to reverse the detected global warming trend. This, in turn, helps with delineating in qualitative and quantitative terms the required mitigation actions and, thus, the role of sustainable energy sources in a future secure and sustainable power mix.[40]

We shall, therefore, start with ab analysis of the causes, determinants and implications of the current status of the Earth's climate, as these have been elaborated on by the scientific community. In this regard, it is worth first explaining that the most crucial measurement of the status of the Earth's climate is provided by the Earth's energy imbalance because the balance between absorbed and radiated energy determines the average global temperature. More precisely, the Earth is out of balance when the difference between the amount of solar radiation absorbed by the planet and the amount of energy the planet radiates back into the space as heat is not equal to zero ($E_{in} \neq E_{out}$). When $E_{in} < E_{out}$ the imbalance is negative and the planet goes through a cooling phase because it radiates back more energy than the amount absorbed. When $E_{in} > E_{out,}$ the imbalance is positive and the planet warms up as the atmosphere is retaining too much heat. The difference between the outflow and inflow of energy that causes the energy imbalance is, in turn, induced by changes in climate-forcing agents acting on the planet. These climate-forcing agents are essentially substances or processes originating from outside the climate system and having an influence on the climate, such as volcanic eruptions, solar variations and anthropogenic changes in the composition of the atmosphere and in land use.[41] More precisely, on the basis of the kinds of effect they produce, they can be categorised as negative forcings, having a cooling effect, and positive forcings, which, conversely, have a warming effect. Examples of the first type of forcings are volcanic eruptions and anthropogenic sulfate aerosols. The second category includes, for instance, increases in the luminosity of the sun and human-made GHGs. Hence, for the Earth to be in balance, negative and positive

[40] For an extensive discussion of the abovementioned, as well as other, steps of analysis, see Muradov N. (2014) *Liberating Energy from Carbon: Introduction to Decarbonization*. New York: Springer.

[41] Indeed, the climate system evolves over time either under the influence of its own internal dynamics and natural phenomena, such as the El Niño Southern Oscillation (commonly called ENSO), or as a result of the operation of external forcings.

forcings have to roughly cancel each other out, which is currently not the case, as we shall see. In this regard, it is worth noting that, while we cannot have a significant influence on natural forcings, it is, of course, to a certain extent possible to limit and/or increase the number of human-induced climate forcings acting in the planet, such as the highly warming GHGs.[42]

Against this background we can, thus, preliminarily conclude, on a theoretical basis, that climate-forcing agents that alter the global energy balance largely regulate the planet's average temperature. Since some of these agents are driven by human actions, they can be offset, at least to some degree, through appropriate corrective actions. Climate change mitigation measures, such as those aimed at boosting renewable energy generation, should embody precisely these adjustments in natural and human systems, which are intended to respond to actual or expected climatic effects and risks associated with human-induced global warming.

In order to properly establish the mitigation actions required for restoring the Earth's energy balance and, thus, maintaining a constant global average temperature, it is necessary to go through two main stages of analysis. The first stage encompasses measuring current and expected future levels of energy imbalance, determining the ensuing temperature rise and the identifying the climate forcings responsible for the detected imbalances and increases in temperature. For the second stage, once the data resulting from the above assessment are set against a scientifically meaningful temperature goal, it is possible to establish in numerical terms the changes in climate forcings required for re-establishing the radiative equilibrium and, thus, a bearable global average temperature level.

With regard to the first stage of analysis, experts have evidenced that a sustained increase in the Earth's positive energy imbalance has been experienced since at least the mid-1970s, and they have identified the causes of this increase and the severe implications thereof in terms of global warming.[43] According to recent studies, as a result of the above trend the energy

[42] Natural forcings include, in fact, increases in the luminosity of the sun, which have a warming effect, and negative forcings such as volcanic eruptions. Human-induced climate forcings are, instead, imposed perturbations of the Earth's energy balance; that is to say, anthropogenic substances and processes that alter the global energy balance. The main human-induced forcings are GHGs, which are positive forcings, and sulfate aerosols, which, instead, cause a cooling effect on the Earth.

[43] For a comprehensive analysis of the Earth's energy balance since 1950 see Murphy D. M., Solomon S., Portmann R. W., Rosenlof K. H., Forster P. M. ,Wong T. (2009) An Observationally Based Energy Balance for the Earth since 1950, *Journal of Geophysical Research* **114**(D17).

imbalance is currently in the order of +0.58 W m^{-2} ±0.15 to 1W m^{-2} and the future average energy imbalance is expected to be ~1 W m^{-2} under a business-as-usual scenario.[44]

Turning to the climate anomalies determined by the mentioned levels of energy imbalance, average temperatures have risen more quickly since the late-1970s, with a detected global warming trend of about 0.15-0.20 degrees Celsius per decade.[45] Although over the decade 2005-2014 the rate of increase in global average surface temperature has been slower than in previous decades,[46] this downtrend should not be overestimated since the underlying cooling effect is mainly due to recent changes in natural forcings – *i.e.*, an increase in volcanic activity and a decrease in solar radiation – and to increased heat uptake by the oceans. Moreover, this reduction has also arisen as a consequence of the temporary decrease in energy demand due to the global economic crisis, which, in turn, generated a reduction in GHG emissions. As a result of the abovementioned global warming trend the average temperature is currently about +0.85°C relative to a pre-industrial baseline period. There is, in addition, a great amount of heat trapped by GHGs and still stored in the oceans.[47] This large quantity of latent heat should be released over the coming decades, causing, *per se*, an increase in temperature of 0.8 degrees.[48] Therefore, we are not far from missing the UNFCCC target of keeping global warming below 2°C over the 21st century compared to pre-industrial levels, this target having been set by the international climate negotiators in the 2009 Copenhagen Accord and eventually adopted as part of the Cancún agreements.[49] Indeed, according to the most recent projections, the

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[44] Hansen J., Sato M., Kharecha P., and von Schuckmann K. (2011) Earth's energy imbalance and implications. *Atmospheric Chemistry and Physics* **11** 13421–13449, and IPCC (2013) *Climate Change 2013: The Physical Science Basis*, *cit.*

[45] This trend is already close to the proposed sustainable limit of 0.2°C/decade. See, *inter alia*, van Vliet A., Leemans R. (2006) 'Rapid Species Responses to Changes in Climate Require Stringent Climate Protection Targets', in Schellnhuber H.J. (ed. in chief) *Avoiding Dangerous Climate Change*. Cambridge: Cambridge University Press, pp. 135-141.

[46] *I.e.*, between 0.08 and 0.12 degrees Celsius. *Contra*, Karl T.R et al. (2015) Possible artifacts of data biases in the recent global surface warming hiatus. *Science* **348**(6242) 1469-1472.

[47] IPCC (2013) *Climate Change 2013: The Physical Science Basis*, *cit.*, figure SPM.4.

[48] See, *Ibidem*; EEA (2015) *Global and European temperatures* (CSI 012/CLIM 001) Assessment published the 13 July 2015, available at http://www.eea.europa.eu/data-and-maps/indicators/global-and-european-temperature-1/assessment; and the data set compiled by the Earth Policy Institute from NASA, Goddard Institute for Space Studies, *Global Land-Ocean Temperature Index in 0.01 Degrees Celsius*, available at http://data.giss.nasa.gov/gistemp/ (both accessed 1 August 2016).

[49] The Copenhagen Accord is a rather disappointing non-binding political agreement reached at the 15th session of the Conference of Parties (COP15) to the UNCCC held in *Copenhagen* from the 7 to the 19 December 2009. See, UNFCCC (2010), Decision 2/CP.15, *Copenhagen Accord*, UN Doc. FCCC/CP/2009/11/Add.1, 30 March 2010.

UNFCCC target will be exceeded between 2081 and 2100.[50] This is to say nothing of a revised target of 1.5°C, established at the 2015 Paris Climate Conference of the Parties because the scientific evidence on the considerable adverse impacts a 2°C temperature would bring about was recognised.[51]

In order to frame appropriate corrective actions able to reverse the current global warming trend and, thus, meet the abovementioned temperature goals, it is also essential to identify the main determinants of the Earth's current positive energy imbalance, which, in turn, have caused the alarming increase in temperature. In this respect, it is noteworthy that, through an assessment of climate forcings' changes and interplay over time, analysts have almost unanimously established that the current status of energy imbalance mainly arises from the recent substantial increase in human-induced climate forcing agents having a warming effect.[52] Actually, the climate change phenomenon was long ago defined under the UNFCCC as "*a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere*", as opposed to climate variability, which is attributable to natural causes.[53] Moreover, as already stated, consensus also exists on the fact that GHG emissions are playing a prominent part among anthropogenic positive forcings.[54] This is because by absorbing the Earth's heat radiation and preventing it from going into the atmosphere, GHGs are leading to a warming of the surface as negative forcings are unable to balance out the surplus of GHGs in the atmosphere.[55] GHG emissions have, in fact, continued to rise over the period 1970-2010 and, in particular, between 2000 and 2010, notwithstanding

[50] Those are the projections under the three highest of the four IPCC Representative Concentration Pathways scenarios (*i.e.*, RCP4.5, RCP6.0 and RCP8.5) provided in IPCC (2013) *Climate Change 2013: The Physical Science Basis*, *cit*. See, IPCC (2014) *Climate Change 2014: Synthesis Report*, *cit*., table SPM.1. Similarly, IEA (2014) *World Energy Outlook 2014*, OECD Publishing, Paris.

[51] In that respect, see Vautard R. et al. (2014) The European Climate under a 2°C Global Warming. *Environmental Research Letters* **9**(3), and IPCC (2007) *Climate Change 2007: The Physical Science Basis*, *Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, Cambridge: Cambridge University Press, Chapters 2, 10 and 11.

[52] See, IPCC (2007) *Climate Change 2007: The Physical Science Basis*, *cit*., and IPCC (2013) *Climate Change 2013: The Physical Science Basis*, *cit*.

[53] See, UNFCCC, *cit*., Article 1.

[54] See, UNFCCC, *cit*., Article 2, quoted in full above; IPCC (2007) *Climate Change 2007: Synthesis Report*, *cit*., ss. SPM.2-SPM.3 and figure SPM.3; and IPCC (2014) *Climate Change 2014: Synthesis Report*, *cit*., s. SPM.1.2 and figure SPM.2.

[55] See, IPCC (2014) *Climate Change 2014: Synthesis Report*, *cit*., figure SPM.3, illustrating the contributions of the different categories of climate forcings to the observed temperature change over the period 1951–2010.

several climate change mitigation policies having been put into place.[56] Scientists likewise agree regarding the major role carbon dioxide (CO_2) is having, among the GHGs, in the increasingly dangerous warming trend. Indeed, CO_2 emissions from industrial processes, fossil fuels combustion in power generation and fossil fuels preparation in natural gas processing caused about 78 per cent of the total GHG emissions upsurge during the mentioned time frame.[57]

Therefore, a precondition for stabilizing the Earth's climate at a scientifically meaningful temperature level is the re-establishment of the radiative equilibrium (*i.e.*, $E_{in}= E_{out}$) through a reduction in human-induced GHG emissions, in general, and CO_2 emissions, in particular. As first step in that direction, the maximum CO_2-equivalent concentration in the atmosphere that allows for maintaining the necessary radiative balance and, thus, a sustainable temperature over time (*i.e.*, a GHG emissions budget) has to be estimated.[58] This scientific exercise constitutes precisely the second of the stages of assessment that we delineated at the beginning of this subparagraph.

The importance of identifying a proper GHG emissions budget should not be underestimated. Indeed, as previously mentioned, the gap between the established budget and the surplus of atmospheric GHGs, which generates the current and expected positive energy imbalance, dictates the reduction in GHG emissions necessary to reach the Earth's energy balance and, thus, reverse the global warming trend. The resulting required level of emissions reduction, in turn, defines the essential mitigation efforts and, accordingly, the needed deployment rate of sustainable energies, especially in the short term.

Very useful instruments for the purpose of establishing the feasibility and efficiency of various GHG emissions budgets are climate scenarios, which provide input for climate numerical model simulations. More precisely, climate scenarios consist of plausible representations of how the climate system may develop in the future and are based on a set of assumptions about climate-forcing agents, other driving forces and their relationships. Climate models are applied in this context as research tools for studying the dynamics of the climate

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[56] IPCC (2014) *Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, ch. 1, s. 3.1.

[57] *Ibidem*.

[58] Please note: when talking about the GHG emission budget we refer to a cumulative concentration level for all GHGs, *i.e.*, the GHGs covered by the Kyoto Protocol and the Montreal Protocol plus the GHGs that are not included in global treaties, such as stratospheric and tropospheric ozone, water vapour and aerosols.

system: they use quantitative methods and mathematical representations to simulate the interactions of its components in order to provide projections and predictions of global climate change. The latest generation of climate scenarios, adopted by the IPCC for its Fifth Assessment Report, is composed of representative concentration pathway (RCP) scenarios. These consist of four GHG concentration (not emission) trajectories and supersede the emissions scenarios which were developed in 2000 under the Special Report on Emissions Scenarios and used in the IPCC's Third and Fourth Assessment Reports.[59] The RCP scenarios are also employed with climate models to develop projections on future changes in atmospheric GHG concentrations and to assess the probability of meeting the 2°C UNFCCC target in relation to the different GHG concentration levels. Useful tools for these purposes also include some empirical measurements, which were exploited for the first time in the Fifth Assessment Report to complement RCP scenarios. Indeed, this report builds upon the critiques moved regarding prior IPCC assessments, which were based primarily on observed changes in surface temperature and climate model analyses.[60] Its results are, therefore, also grounded on a careful analysis of observational records of the atmosphere, land, ocean and cryosphere systems.

On the basis of a scientific analysis of a wide range of emission and RCP scenarios, and of the mentioned empirical measurements, a GHG emissions budget of about 450 parts-per-million (ppm) in 2100 has been so far considered the upper limit of GHG saturation in the atmosphere for limiting the global average temperature increase to less than 2°C relative to pre-industrial levels.[61] In this regard, it is first worth recalling that before the Industrial Revolution there was a CO_2-equivalent concentration in the atmosphere of about 280 ppm. Moreover, it is important to highlight that, since negative and positive forcings have to roughly cancel out for the Earth to be in balance, and given that future changes in non-GHG forcings are difficult to predict with sufficient certainty, any target is temporary.

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[59] See, Van Vuuren et al. (2011) The Representative Concentration Pathways: an Overview. *Climatic Change* **109**(1-2) 5-31, and Meinshausen et al. (2011) The RCP Greenhouse Gas Concentrations and their Extension from 1765 to 2300. *Climatic Change* **109**(1-2) 213-241.

[60] For a critique of the principal global climate models contributing to the IPCC climate studies, which are deemed unable, *inter alia*, to take into due account the relative roles of oceans and direct and indirect aerosol forcings in modulating GHG forcing, see Murphy D. et al. (2009) *cit.* and Hansen J. et al. (2011), *cit.* The authors of this scientific and technical literature provide their own analysis of the climate system, which is based, *inter alia*, on empirical measurements (including satellite measurements) of the heat content of the ocean, the land and the atmosphere.

[61] See, *inter alia*, IPCC (2014) *Climate Change 2014: Synthesis Report, cit*, table SPM.1.

Whatever the situation is in the long term, the emissions projections under the business-as-usual scenarios provided by the most recent studies suggest that the 450 ppm GHG emissions budget will be soon exceeded, with carbon dioxide playing a prominent part among the long-lived GHGs.[62] Indeed, global emissions are increasing at an annual rate of 3 per cent, which is consistent with the most pessimistic RCP scenario envisaging a global temperature rise of more than 4°C by 2100.[63] Also, the International Energy Agency has recently envisaged, on the basis of the climate policies announced by various countries and taking into account most GHGs, that the GHGs concentration in the atmosphere will end up somewhere around 700 ppm by 2100. This, in turn, would lead to a global temperature increase of 3.6°C, compared with pre-industrial levels, which could further rise to 4°C if additional emissions result from other changes in physical conditions, such as a slowly melting permafrost.[64] A World Bank study went even further than the above forecasts by maintaining that there is a 20 per cent likelihood that the above levels of temperature increase will be reached as early as the 2060s.[65] Rather frightening are also the estimated GHG emissions trends under socioeconomic scenarios based on the voluntary pledges made in the Copenhagen Accord and on the ensuing policy commitments and plans announced by the Parties to the UNFCCC. Indeed, great emissions gaps between the Copenhagen Accord pledges and the 2°C goal are evidenced by the figures provided by the most important scientific studies carried out in the immediate aftermath of COP15.[66] We might, of course, agree with those economists who have provided projections demonstrating that, although these pledges are unable to deliver the 2°C goal, they can provide better results in terms of emissions cuts than would occur without the Accord.[67] This might, though, still not be enough to avoid the most adverse impacts of climate change. Suffice it to

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[62] See, for instance, the figures provided in IPCC (2014) *Climate Change 2014: Mitigation of Climate Change*, *cit*., TS.2.2, and in the 2011 to 2014 editions of the *World Energy Outlook* elaborated by the IEA (OECD Publishing, Paris) and those provided in the 2010 to 2014 editions of *The Emissions Gap Report* published by the UNEP (Nairobi, Kenya).

[63] IPCC (2013) *Climate Change 2013: The Physical Science Basis*, *cit.* ch. 12, 5.4.

[64] IEA (2014) *World Energy Outlook 2014*, *cit*., Part A, ch. 2, pp. 87-88.

[65] World Bank (2012) *Turn Down the Heat: Climate Extremes, Regional Impacts, and the Case for Resilience*. Washington, DC: World Bank.

[66] See, *inter alia*, UNEP (2010) *The Emissions Gap Report: Are the Copenhagen Accord Pledges Sufficient to Limit Global Warming to 2 °C or 1.5 °C? A preliminary assessment*, UNEP, Nairobi, Kenya; IEA (2010) *World Energy Outlook 2010*, OECD Publishing, Paris; and Rogelj J. et al. (2010) Analysis of the Copenhagen Accord pledges and its global climatic impacts – a snapshot of dissonant ambitions. *Environmental Research Letters* **5**(3).

[67] See, for instance, Nicholas Stern's speech at the event organised on 16 March 2010 at the London School of Economics and Political Science, *Beyond Copenhagen*, available at http://richmedia.lse.ac.uk/publicLecturesAndEvents/20100316_1230_beyondCopenhagen.mp3 (accessed 1 August 2016).

say that one of the less pessimistic reports gives a scientifically sound explanation of how, under a scenario based on the Copenhagen Accord pledges, we are on the path to stabilising the concentration of GHGs in the atmosphere at over 650 ppm of CO_2-equivalent, with a resulting increase in temperature of over 3.5° C.[68] The same holds true regarding the GHG emissions levels expected to be achieved in 2020 by complying with the Cancún pledges.[69]

The above-described circumstances are aggravated by the fact that the prior scientific consensus on the 450 ppm GHG emissions budget is starting to vacillate and some analysts are already advancing new, more stringent, targets. Indeed, first of all, various experts evidenced, some years ago, that the stabilisation of the CO_2-equivalent concentration level at 450 ppm carries roughly a 26 per cent to 85 per cent risk of exceeding the 2°C UNFCCC target.[70] Secondly, as previously mentioned, the adoption of a 1.5°C temperature goal in place of the above cited target has been recently taken into consideration by international negotiators because it would not cause the great adverse impacts that getting to a temperature level of 2°C would seemingly bring about.[71] The limited number of scenarios so far developed that explore the paths required to bring the temperature change back to below 1.5°C by 2100 compared to pre-industrial levels envisage a GHG emissions budget of below 430 ppm in 2100.[72]

Last but not least, in 2007 the ex-NASA scientist James Hansen advocated, at a meeting of the American Geophysical Union, a new 350 ppm CO_2 emissions target (carbon dioxide emissions budget).[73] This carbon dioxide emissions budget now roughly corresponds to a 400

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[68] IEA (2010) *World Energy Outlook 2010*, *cit.*

[69] OECD (2012) *OECD Environmental Outlook to 2050: The Consequences of Inaction*, OECD Publishing, Paris, ch. 3, pp. 120-127; IPCC (2014) *Climate Change 2014: Mitigation of Climate Change*, *cit.*, ch. 6, s. 3, and ch. 13, s. 13.

[70] The risk percentages provided by experts range from 26-78 per cent to 46-85 per cent to approximately 50 per cent. See, respectively, Meinshausen, M. (2006) 'What does a 2°C target mean for greenhouse gas concentrations?', in Schellnhuber J.S., Cramer W., Nakicenovic N., Wigley T.M.L., Yohe G. (eds) *Avoiding Dangerous Climate Change*. Cambridge: Cambridge University Press, pp. 265-279; Baer P., Mastrandea M. (2006) High Stakes: Designing emissions pathways to reduce the risk of dangerous climate change. Stockholm: IPPR, available at http://www.ecoequity.org/wp-content/uploads/2009/05/high_stakes.pdf (accessed 1 August 2016); IPCC (2007) *Climate Change 2007: The Physical Science Basis*, *cit.*, ch. 10.

[71] See, UNFCCC (2010), Decision 2/CP.15, *Copenhagen Accord*, *cit.*

[72] IPCC (2014) *Climate Change 2014: Mitigation of Climate Change*, *cit.*, ch. 6, s. 3, and ch. 7, s. 11.

[73] For the scientific reasoning underlying the stated need for a 350 ppm carbon dioxide emissions budget see, Hansen J., Sato M., Kharecha P., Beerling D., Berner R., et al. (2008) Target atmospheric CO2: Where should humanity aim?. *The Open Atmospheric Science Journal* **2** 217-231, and, more recently, Hansen J., Kharecha P., Sato M., Masson-Delmotte V., Ackerman F., Beerling D., et al. (2013) Assessing "Dangerous Climate Change": Required Reduction of Carbon Emissions to Protect Young People, Future Generations and Nature. *PLoS ONE* **8**(12), available at http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0081648#references (accessed 1 August 2016).

ppm GHG emissions budget. However, the relationship between these distinct measures is subject to changes over time. In fact, the less non-CO_2 forcings, positive and negative, are able to cancel out, the less the net radiative forcing expressed in ppm CO_2-equivalent corresponds to the level of carbon dioxide. Since then Hansen's lower CO_2 emissions target has started to become scientific – although still not political – common sense.[74] Just like the GHG emissions budget, the 350 ppm carbon dioxide emissions budget stems from measuring the global energy imbalance. According to Hansen, in fact, since the Earth is currently out of energy balance by at least +0.5 W m^{-2}, a reduction in atmospheric CO_2 emissions to an approximate level of 360 ppm is necessary to increase the Earth's heat radiation to space by 0.5 W m^{-2}.[75] The new carbon dioxide emissions budget would stabilise the global average temperature at about +1°C relative to the pre-industrial baseline period, which he considers the maximum temperature level possible for avoiding the worst impacts of climate change.[76]

Importantly, setting either of the abovementioned new emissions budgets would mean that, instead of stabilising the CO_2-equivalent concentration in the atmosphere at approximately the current level, as the 450 ppm GHG emissions budget would require, the total greenhouse gas concentration would need to peak. This would clearly require many more mitigation efforts, especially in the short term.

In any event, there is no doubt that international negotiators and national governments can and should immediately start working towards stabilising GHG emissions at 450 ppm while climate scientists work out if it is necessary to ultimately get below this target. Indeed, for instance, a rapid scale-up of low-carbon energy technologies, such as renewable technologies, is deemed to be of paramount importance for achieving any emissions budget so far considered.

1.3. A Portfolio of Technological Options for the Energy Sector: the Driving Role of Renewable Technologies

[74] Apart from Hansen's NASA team, the 350 ppm CO_2 target has been endorsed by, *inter alia*, the only two men who won a Nobel prize for their work on climate change – that is to say Rajendra Pachauri, who was the chairperson of the IPCC until few months ago, and Al Gore, an American politician – and other important climate economists and scientists such as Nicholas Stern, Jonathan Foley, Adele C. Morris, Peter H. Gleick, Johan Rockström, Eban Goodstein, Frank Ackerman, Kristen Sheeran, Lester Russel Brown, etc.

[75] Hansen J. et al. (2008) *cit.*, and Hansen J. et al. (2013) *cit*.

[76] *Ibidem*.

Scientists have developed and analysed several climate change mitigation scenarios that, together with adaptation policies, seem likely to deliver the low-concentration stabilisation pattern necessary to reach the 450 ppm GHG emissions budget by 2100 and, thus, a 2°C UNFCCC target. Interestingly enough, these mitigation scenarios require cutting global emissions by 40 to 70 per cent compared to 2010 by 2050, and reaching emissions levels near to zero billion metric tonnes of CO_2-equivalent or below in 2100.[77] For that purpose they all provide for mitigation pathways leading, *inter alia*, to great changes in the energy supply sector, which has so far been the largest contributor to anthropogenic CO_2 emissions.[78] Indeed, to the extent that CO_2 emissions from the energy supply sector are projected to double or even triple by 2050 under baseline scenarios, it may be argued that there is a need to reduce emissions from this sector to at least 90 per cent below 2010 levels between 2040 and 2070, and to deliver a further decline to below zero thereafter.[79] This, in turn, requires a tripling to nearly quadrupling of the share of zero- and low-carbon energy supply by the year 2050, and an almost complete phasing out of fossil fuel power generation without CCS by 2100.[80]

Increasing reliance on and investment in sustainable energy sources might, therefore, be regarded as one of the essential elements of the imperative and pressing path towards mitigating climate change.

Before deriving further conclusions with regard to the policies and measures required under the mitigation pathways so far elaborated, it is worth recalling that the above figures are based on the 450 ppm GHG emissions budget and that the scientific consensus on this target is declining, since it might not be sufficiently stringent to reverse the global warming trend. Therefore, the mentioned figures, which actually already entail very demanding and onerous efforts, are even more optimistic than they might be in future studies. However, analysis of the available mitigation options is not affected by the current uncertainty on the appropriate climate stabilisation target. Indeed, whatever the chosen emissions budget, all the international reports providing the most authoritative assessments of energy system challenges and/or climate concerns require swiftly halting the rise in emissions for the whole energy sector. Moreover,

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[77] See, *ex plurimis*, IPCC (2014) *Climate Change 2014: Mitigation of Climate Change*, *cit.*, s. SPM.4.1 and ch. 6, s. 3.

[78] For instance, in 2010 the energy supply sector was responsible for approximately 35 per cent of total anthropogenic GHG emissions. *Ibidem*, s. SPM.4.1, ch. 6, s. 3.4, and ch. 7, ss. 2, 3, 11.

[79] *Ibidem*, s. SPM.4.1, ch. 6, s. 3.4, and ch. 7, ss. 2, 3, 11.

[80] *Ibidem*, ch. 6, s. 8, and ch. 7, s. 11.

they envisage very similar blends of policies for that purpose. The difference in terms of atmospheric concentrations goals has an influence only on the timescale for the recommended reforms of this sector, which is just a little less tight in scenarios envisaging higher concentrations levels but still far beyond the baseline scenarios' reach.

For instance, under all the mitigation scenarios covered by the IPCC's Fifth Assessment Report that might secure at least the 450 ppm GHG emissions budget, an essential prerequisite is the rapid scale-up of low-carbon energy technologies compared to baseline scenarios. This entails, on the supply side, a larger reliance on renewable sources, nuclear energy, fossil energy with CCS, and carbon dioxide removal (CDR) technologies and methods such as bioenergy with CCS (BECCS) and afforestation.[81] Actually, the very same sectorial reforms are strongly recommended in other scientific studies produced by the most authoritative research and intergovernmental international organizations in the field.[82]

It is indisputable that none of the above technologies is able, on its own, to meet the emissions reduction requirements, at least in the medium-long term.[83] A portfolio of mitigation measures is, in fact, needed. However, the levels of maturity and efficiency, the current availability and the production costs of each technology vary widely. Therefore, we shall briefly analyse the pros and cons of all the available options in order to identify the technology that might be exploited more and by most countries in the short term.

We will start our assessment with renewable technologies because their large-scale deployment can be considered a potential candidate for a leading position among the climate action measures and, thus, might be regarded as a benchmark of sorts in the evaluation of the other supply-side mitigation alternatives. In this regard we shall, first of all, highlight that some renewable technologies still need direct and/or indirect support to further increase their global market share[84]. However, the proliferation of renewable electricity generation may trigger

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[81] IPCC (2014) *Climate Change 2014: Mitigation of Climate Change*, *cit*., ch. 6 and ch. 7, ss. 5, 11.

[82] See, *inter alia*, UNDP, UNDESA, WEC (2000) *World Energy Assessment* and *World Energy Assessment: Overview 2004 Update*, *cit*., GEA (2012) *Global Energy Assessment*, *cit*., and IEA (2015) *World Energy Outlook Special Report*, *cit*.

[83] For an exhaustive analysis of the extent to which these technologies have been relied upon worldwide, their possible interactions, effects and proper structuring, see, Galarraga I., Gonzalez-Eguino M. and Markandya A. (2011) *Handbook of Sustainable Energy*. Cheltenham: Edward Elgar; and Kopsakangas-Savolainen M. and Svento R. (2012) *Modern Energy Markents: Real-Time Pricing, Renewable Resources and Efficient Distribution*. London: Springer. With a more specific focus on the European Union, see, Morata F. and Solorio Sandoval I. (2012) *European Energy Policy: An Environomental Approach*. Cheltenham: Edward Elgar.

[84] IPCC (2014) *Climate Change 2014: Mitigation of Climate Change*, *cit*. For an exhaustive analysis of the financing alternatives, which also include instruments other than public financing, see Curley M. (2014) *Finance*

security of supply issues. Indeed, renewable energy sources are volatile and intermittent in nature and situated in different locations because they depend on physical phenomena. These characteristics make it rather problematic to integrate the generated energy into the traditional power grid infrastructure. Moreover, building new grid infrastructures such as smart grids is rather expensive.[85] Nonetheless, technical options may be identified for meeting these challenges, albeit that it may be argued that investments in such technical options have not reached an adequate scale as compared to investment in renewable energy sources in certain countries such as, for example, EU Member States. Also, in light of the security of supply challenges experienced in recent years at the EU level, the implications triggered by such an inadequate scale of investments should not be underestimated.

That said, a growing number of renewable energies, such as hydropower, solar and wind energy, are becoming more competitive because the related technologies have achieved a level of maturity that today allows their production at significantly lower operating costs. This is, in turn, generating substantial economies of scale that incentivise their deployment on a considerable scale. Moreover, it is important to note that renewable energy sources are available in one form or another to every country, and most of them are lasting, potentially inexhaustible, sources. As a result, they are mostly import-independent resources. Therefore, if complemented with the necessary infrastructural investments, renewable technologies might, first of all, help with addressing countries' energy scarcity issues alongside possibly increasing energy security. Moreover, they might lower the costs of mitigating climate change for each and every country. As a result, these technologies are potentially also effective for the purpose of decarbonising electricity generation without compromising the growth and development pathways undertaken by all countries. Replacing GHG emitting fuels in a cost-effective way might, in fact, reduce the carbon intensity of surging growth and population patterns without disrupting these very same patterns.[86] This is very important because framing a climate action strategy based on technologies able to reconcile mitigation and economic goals might be the only chance for assuring that sufficient efforts will be made in all countries in the short term and, hence, that at

Policy for Renewable Energy and a Sustainable Environment. Boca Raton: CRC Press; and Ettenhuber C. (2012) *Financing Corporate Growth in the Renewable Energy Industry*. Frankfurt am Main: PL Academic Research.

[85] *Ibidem*; see also, van den Bergh J. and Bruinsma F. (2008) *Managing the Transition to Renewable Energy*. Cheltenham: Edward Elgar.

[86] Carbon intensity is the amount of carbon by weight emitted per unit of energy consumed.

end of the century the level of CO_2-equivalent concentration will be still below the 450 ppm GHG emissions budget.

As opposed to what was previously stated with respect to renewable resources, research into technical solutions for the variety of barriers and risks associated with nuclear energy systems, CCS systems and CDR methods is still underway. Actually, it seems that this will not produce enough results to render these technologies sufficiently viable and cost-effective in the very short run. With no ambition to provide an exhaustive assessment in that regard, we will now briefly outline the main concerns related to the deployment of the mitigation options just cited.

Regarding nuclear energy, the main barriers include significant up-front investment costs, safety and uranium utilisation risks, waste management issues, nuclear weapon proliferation concerns, and the associated strong aversion towards nuclear power plants evidenced by public opinion polls.[87] These barriers have determined a decrease in the share of nuclear power in the energy mix compared to 1990s levels. Nonetheless, nuclear energy is still the largest source of low-carbon electricity in OECD countries, accounting for 18 per cent of electricity production in 2014. Moreover, it is the second largest source in the world, with an 11 per cent share.[88] In this regard we should, however, underline that the amount of energy produced through each renewable technology is usually individually measured and considered. Hence, the share of nuclear energy in the energy mix is generally compared with the share of each renewable resource. Should the shares of renewable sources be considered in aggregate terms, they would probably rank first among the most deployed low-carbon energy sources.

In any event, since nuclear energy is a mature and stable source of low-GHG emissions base-load power, it is considered a requisite technology in all the low-stabilisation scenarios developed under the most authoritative international reports.[89] Therefore, in recent years scientists have investigated technologies addressing the abovementioned concerns associated with the deployment of this form of energy, and have outlined key actions and roadmaps that

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[87] See, *inter alia*, IPCC (2014) *Climate Change 2014: Mitigation of Climate Change*, *cit*., ch. 7, ss. 5.4, 8, 9, 10; IAEA (2014) *Climate Change and Nuclear Power*, IAEA Publications, Vienna, chs. 3-4; Sovacool B.K. (2011) *Contesting the Future of Nuclear Power: A Critical Global Assessment of Atomic Energy.* Singapore: World Scientific Publishing.

[88] IPCC (2014) *Climate Change 2014: Mitigation of Climate Change*, *cit*., ch. 7, s. 5.4; IEA, NEA (2015) *Technology Roadmap: Nuclear Energy*, OECD Publishing, Paris, p. 7 and table 1; IAEA (2014) *Climate Change and Nuclear Power*, *cit.*, ch. 2; IAEA (2013) *Energy, Electricity and Nuclear Power Estimates for the Period up to 2050*, IAEA Publications, Vienna, figures 1-3.

[89] *Ibidem.*, respectively, ch. 7, ss. 8.1, 2-4; pp. 21-24; ch. 2; tables 3-5. *Contra*, Greenpeace International, European Renewable Energy Council, Global Wind Energy Council (2012) *The Energy [R]evolution: A Sustainable World Energy Outlook*. Greenpeace International, EREC and GWEC, Amsterdam.

are deemed able to solve them within the coming decades.[90] However, even assuming that these actions are completely successful in the medium run, the mentioned public aversion towards nuclear power plants will probably last because the relevant debate revolves around ethical, social and political concerns that are difficult to eradicate, rather than purely scientific arguments.

Public acceptance is also a pivotal issue with regard to CCS technologies and CDR projects. Nonetheless, scientific consensus exists on the utmost importance of also properly developing such technologies and projects to achieve mitigation goals, at least in the medium-long term.[91] Indeed, CCS is an emissions reduction tool that captures carbon dioxide from, *inter alia*, large fossil fuel or biomass point sources. Hence, prevents this greenhouse gas from entering into the atmosphere. CDR methods, instead, include 'negative emissions' technologies, such as BECCS, which absorb CO_2 emissions that are already in the atmosphere. As a result, they directly reduce the existing GHG concentration levels.[92] However, several problems still have to be solved for CCS and CDR technologies to be employed on a large scale, as would be required for the purpose of reversing the warming trend.

With regard to CCS technologies, for instance, economic incentives are still crucial and, so far, insufficient for their deployment in large fossil-fuel power generation facilities. Indeed, the investment, operating and capital costs of CCS-ready power plants are high and, for them to be covered in full, a relevant increase in electricity prices would certainly be necessary.[93] Moreover, the risks associated with transporting CO_2 and concerns related to the operational safety and long-term integrity of storage sites have not been solved as yet.[94]

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[90] *Ibidem.*, respectively, ch. 7, s. 12; pp. 25-54; ch. 5; tables 3-5.

[91] See, *inter alia*, IPCC (2014) *Climate Change 2014: Mitigation of Climate Change*, *cit.*, ch. 7, ss. 11.2-11.4 and 5.5, and ch. 6, s. 3.2; IEA (2013) *Technology Roadmap: Carbon Capture and Storage*, IEA Publications, Paris, pp. 7-8, 22-24 and 47-51; OECD (2012) *OECD Environmental Outlook to 2050*, *cit.*, ch. 3, box 3.13; IPCC (2005) Special Report on *Carbon Dioxide Capture and Storage*, Cambridge University Press, Cambridge, United Kingdom and New York, ch. 1, ss. 1, 3.

[92] For a proper assessment of the climate cooling potential of CDR technologies and other climate geoengineering options see Lenton T.M. and Vaughan N.E. (2009) The radiative forcing potential of different climate geoengineering options. *Atmospheric Chemistry and Physics* **9** 5539–5561.

[93] *Contra*, Azar C., Lindgren K., Larson E., Möllersten K. (2006) Carbon Capture and Storage From Fossil Fuels and Biomass: Costs and Potential Role in Stabilizing the Atmosphere. *Climatic Change* **74** (1-3) 47-79, explaining in quantitative terms the potential of CCS and BECCS technologies to largely reduce the costs of meeting the lower stabilization targets (e.g. 350 ppm).

[94] A recent assessment of all the problems and challenges associated with CCS is provided by IPCC (2014) *Climate Change 2014: Mitigation of Climate Change*, *cit.*, ch. 7, ss. 5.5, 6.4, 8-11, and IEA (2013) *Technology Roadmap: Carbon Capture and Storage, cit*., pp. 13-21.

A last relevant point should be made with regard to CCS: several scholars have warned that the employment of CCS technologies might result in a departure from the sustainable energy transition pattern. Indeed, widespread deployment of such technologies might further perpetuate fossil fuels path-dependence and, thus, reinforce the so-called 'fossil fuel lock-in'. Technological lock-in phenomena arise, in fact, as a result of the significant increasing returns generated by economies of scale, learning and networks. Importantly, further exacerbation of the current fossil fuel lock-in situation would, in turn, create barriers to the development and diffusion of more efficient climate-friendly technologies. It would, in fact, impair their capacity to compete and eventually replace incumbent environmentally harmful sources.[95]

Turning to the challenges associated with CDR methods, they likewise include significant cost barriers.[96] In addition, there is a great deal of uncertainty as to the quantity of CO_2 emissions they can offset. Their potential availability and large-scale deployment is also unclear. All these uncertainties stem, *inter alia*, from the biogeochemical and technological limitations that still characterise almost all CDR technologies, and, of course, such limitations in turn represent another barrier to their deployment.[97]

Actually, the only CDR technology so far considered to be a real, actionable, mitigation option is BECCS. Indeed, it is the most mature among CDR technologies. However, BECCS employs biomass to draw CO_2 from the atmosphere, and CCS technologies to concentrate and store it afterwards. Therefore, on the one hand, it raises sustainability concerns associated with the upstream large-scale provision of biomass. These concerns include, for instance, biodiversity loss, scarcity of arable land and water, the resulting competition with food production and deforestation.[98] On the other hand, BECCS entail the already mentioned risks

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[95] For an extensive analysis of the topic see Vergragt P.J. (2012) 'Carbon Capture and Storage: Sustainable Solution or Reinforced Carbon Lock-in?', in Verbong G., Loorbach D. (eds) *Governing the Energy Transition. Reality, Illusion or Necessity?*. New York, London: Routledge, pp. 101-124; Markusson N., Haszeldine S. (2008) *How ready is 'capture ready'? – Preparing the UK power industry for carbon capture and storage*. Edinburgh: Scottish Centre for Carbon Storage, report commissioned by WWF-UK, available at http://www.wwf.org.uk (accessed 1 August 2016); Unruh G.C., Carrillo-Hermosilla J. (2006) Globalizing carbon lock-in. *Energy Policy* **34**(10) 1185–1197.

[96] *Contra*, Azar C., Lindgren K., Larson E., Möllersten K. (2006) Carbon Capture and Storage From Fossil Fuels and Biomass, *cit.*

[97] See, in that respect, IPCC (2013) *Climate Change 2013: The Physical Science Basis*, *cit.*, ch. 6, s. 5, and IPCC (2014) *Climate Change 2014: Mitigation of Climate Change*, *cit.*, ch. 6, s. 3.2.

[98] *Ibidem.* See also, IPCC (2014) *Climate Change 2014: Mitigation of Climate Change*, *cit.*, ch. 11, ss. 7, 13, and Rhodes J.S., Keith D.W. (2008) Biomass with capture: negative emissions within social and environmental constraints. *Climatic Change* **87** 321-328.

related to the transporting, injection and storage of CO_2 in geological formations which CCS methods also bring about.[99]

As a consequence of all the above considerations, CCS and BECCS technologies are currently still not playing an adequate role in the efforts towards meeting the GHG concentration goals, although their contribution might be critical while fossil fuels continue to be the largest incremental sources of global primary energy consumption. However, in recent years the scientific community has made great progresses in analysing the available options for addressing the challenges that the foregoing technologies are currently facing. As a result, possible conditions and transition pathways for their successful large-scale implementation have been detected. However, the required transition will probably materialise only in the medium-long term.[100]

The conclusion of our brief analysis of the supply-side mitigation measures recommended by the scientific community is, therefore, that large-scale deployment of renewable energies may be considered, at the present moment, the most viable, cost-effective and harmless route for reversing the global warming trend. Moreover, renewable technologies will probably keep this leading position in the near future. This is, of course, a general conclusion because it does not take into account the peculiarities of each and every country. This conclusion might, indeed, be reversed as a result of the characteristics of certain peculiar countries, although those countries would probably be exceptions. Indeed, as mentioned, renewable energy sources are available in one form or another to every country.

Lastly, it is important to note that, in any event, the foregoing assessment cannot be considered as providing conclusive evidence of the actual role renewable technologies could potentially play in mitigation efforts worldwide. Other issues and objectives, in fact, need to be considered in the devising of a climate change agenda. By way of example, the inability at the EU level to adequately factor in security of supply challenges, infrastructural needs and carbon leakage and competitiveness issues, while progressively increasing financial support for renewable energy sources, has determined systemic instabilities, electricity shortages, the

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[99] *Ibidem*.

[100] See, *inter alia*, IPCC (2014) *Climate Change 2014: Mitigation of Climate Change*, *cit*., ch. 7, s. 12; IEA (2013) *Technology Roadmap: Carbon Capture and Storage*, *cit.*, pp- 25-46; IPCC (2005) Special Report on *Carbon Dioxide Capture and Storage*, *cit.*; Vergragt P.J., Markusson N., Karlsson H. (2011) Carbon capture and storage, bio-energy with carbon capture and storage, and the escape from the fossil-fuel lock-in. *Global Environmental Change* **21**(2) 282-292; Court B., Elliot T.R., Dammel J., Buscheck T.A., Rohmer J., Celia M.A. (2011) Promising synergies to address water, sequestration, legal, and public acceptance issues associated with large-scale implementation of CO2 sequestration. *Mitigation and Adaptation Strategies for Global Change* **17**(6) 569-599.

relocation of undertakings outside of the European Union and, more generally, adverse financial consequences for EU undertakings.

1.4. Competitiveness and Carbon Leakage: Divergences in the Outcomes of the Cost-Benefit Analyses

As discussed above, the implementation of sustainable energy policies established at a regional level only, in the absence of co-ordinated global initiatives, certainly triggers a progressive decrease in the competitiveness of undertakings in the adopting countries, as well as carbon leakage issues. These are actually among the main problems that the European Union, as a frontrunner in connection with the implementation of policies to reduce GHG emissions, is facing. In fact, as long as certain countries allow lower CO_2 prices or lesser CO_2 constraints, as opposed to other, more environmentally conscious neighbours, it will be extremely difficult to identify solutions in respect of the issue described above.

In order to determine whether the needed global transition to a broader and more sustainable mix of energy sources, in general, and renewable energy systems, in particular, is feasible and realistic, it is necessary to analyse the correlation of environmental, economic, social and other factors inherent in issues connected to this transition. The ultimate aim of this assessment is to determine whether and under what conditions a shift towards an energy sector largely powered by renewable sources might turn out to be beneficial, not only for the above-analysed mitigation needs but also for the growth and development goals of all countries, at least in the medium-long term. In other words, it is necessary to determine if growth and development can be mutually reinforcing goals, thus eradicating the main obstacle to universal participation to the path towards non-carbon energy sources. A shift from a slavish 'GDP-centric' economic paradigm to a proactive 'no-regret' strategy is, in fact, likely to be pursued by each and every country only if the surging growth and/or development paths of the economies proves to be enhanced under the new strategy – or, at least, not slowed down. A legitimate dread of the adverse impacts that supply-side mitigation measures might have on such paths has, in fact, so far been the main obstacle to engaging in proper actions able to drive the required paramount transformation of the energy sector. The key determinant of such transitions is the greater cost-

effectiveness of energy sources other than incumbent ones.[101] This, in turn, depends, *inter alia*, on the potential availability and output of the sources considered, the stage of development of the associated technologies and infrastructures, and the ensuing cost of producing and distributing energy from these sources. In short: the cost-effectiveness of the transition. As a result of the foregoing considerations, a comparison of the cost of the actions necessary to reach the so-far agreed 2°C UNFCCC target in 2100 and the cost of inaction in terms of global GDP is of paramount importance.

Energy resources have always influenced the degree of economic growth and development of nations and world regions. It is, therefore, important to understand whether a transition to low-carbon energy sources would provide a boost or, alternatively, create a limit to the economic and societal goals of all countries. The integrated assessment models which try to combine climate numerical models with models of costs of action and inaction should in theory be of help in this respect.[102] However, what is the current state of the economics of lessening climate change?

With no ambition to go through the economic and scientific aspects of the cost-benefit analyses so far developed or to provide a fully-fledged assessment of the costs of action and inaction – since this is neither an analysis of climate economics or climate science - we will simply try to answer the above question. Our purpose is just to understand to what extent the

[101] In that regard, it is interesting to note that some authors have evidenced that, before the dawn of the Industrial Revolution, renewable resources, such as woodfuels, coupled with sound management of demand and supply curves, were the essential components of the economic growth of several countries and human societies, starting with the Roman Empire. Actually, at the beginning of the nineteenth century they still accounted for 95 per cent of global primary energy consumption. The following move towards fossil fuels was not determined, *per se*, by the increased energy needs associated with industrialisation but by other concurrent elements, such as the lack of technological advances in renewable energy, deficient demand and supply management policies and primitive transport networks. All these elements together have rendered renewable resources too expensive to outcompete carbon-based sources and created a perceived resource scarcity. Therefore, the lesson that might be learnt from one of the main historical energy transitions is that the key determinant of similar transitions is the greater cost-effectiveness of energy sources other than incumbent ones. In that respect see, Fouquet R. (2010) The slow search for solutions: Lessons from historical energy transitions by sector and service. *Energy Policy* **38**(11) 6586-6596. For an overview of some past economies dependent on renewable energy sources see Fouquet R. (2011) 'The Sustainability of 'Sustainable' Energy Use: Historical Evidence on the Relationship between Economic Growth and Renewable Energy', in Galarraga I., Gonzˆlez-Eguino M., Markandya A. (eds) *Handbook of Sustainable Energy*. Cheltenham: Edward Elgar Publishing, pp. 9-20.

[102] For a recent overview of the main issues in the economics of climate change, the integrated assessment models so far developed and their role in the development of climate policies see both Nordhaus W. (2013) *The Climate Casino: Risk, Uncertainty, and Economics for a Warming World*. New Haven: Yale University Press, and Nordhaus W. (2013) 'Integrated Economic and Climate Modeling', in Dixon P. B., Jorgenson D. W. (eds.) *Handbook of Computable General Equilibrium Modelling*. Amsterdam: Elsevier B.V., pp. 1069-1131.

economic assessment of climate change can help – not just with informing but also with fostering - the introduction of GHG abatement policies.

In this regard, a few years ago Paul Krugman remarked that "*there is no credible research suggesting that taking strong action on climate change is beyond the economy's capacity. Even if you do not fully trust the models – and you shouldn't – history and logic both suggest that the models are overestimating, not underestimating, the costs of climate action. We can afford to do something about climate change. But that's not the same as saying we should. Action will have costs, and these must be compared with the costs of not acting. Before I get to that, however, let me touch on an issue that will become central if we actually do get moving on climate policy: how to get the rest of the world to go along with us*".[103]

These few sentences do not tell us the entire story but a relevant part of it. First of all, they reveal that it is a story characterised by great connected and ensuing uncertainties, at least – but not only – in numerical terms: the uncertain uncertainties, probabilities of probabilities, unknown unknowns, imprecise probability estimates of the probabilities, as Weitzman has always termed the elements of the economic and scientific framework of climate change analysis.[104]

In Krugman's words, the economic models developed by different environmental economists are in fact uncertain and, thus, they provide diverse results regarding the costs of action and inaction in terms of global GDP. Particularly uncertain are the so-far developed integrated assessment models which, as previously indicated, try to combine climate numerical models with the mentioned models for cost-benefit analysis. Nonetheless, some of the findings provided in the IPCC's Working Group III contribution to the Fifth Assessment Report are rightly based on integrated assessment models.[105] Very well-known examples of such models include the Dynamic Integrated Climate-Economy (DICE) model, developed by William Nordhaus, the Policy Analysis of the Greenhouse Effect 2002 (PAGE2002) model, created by Chris Hope, and the Climate Framework for Uncertainty, Negotiation, and

[103] Krugman P. (2010) Building a Green Economy. *The New York Times Magazine*, 7 April, available at http://www.nytimes.com/2010/04/11/magazine/11Economy-t.html?_r=0 (accessed 1 August 2016).

[104] *Inter alia*, Weitzman M. (2011) Fat-Tailed Uncertainty in the Economics of Catastrophic Climate Change. *Review of Environmental Economics and Policy* **5**(2) 275-292, and Weitzman M. (2007) A Review of The Stern Review on the Economics of Climate Change. *Journal of Economic Literature* **45**(3) 703-724.

[105] IPCC (2014) *Climate Change 2014: Mitigation of Climate Change*, *cit.*

Distribution (FUND) model, whose developer is Richard Tol.[106] Interestingly, MIT Professor Robert S. Pindyck recently delivered a critical study on these and similar models, stating that they create an "*illusory perception of knowledge and precision*".[107]

The integrated assessment models appear to be uncertain to the extent that uncertain is, first of all, the proper way to conceptualise and deal with notions such as uncertainty, risk aversion and discounting. The importance of these concepts for encouraging cost-effective climate change policies should not be underestimated. Indeed, for instance, discounting is the procedure used by economists to compare costs and benefits that occur at different points in time, such as the current costs of abating GHG emissions and the resulting future benefits.[108] When going through this procedure it seems to be important to provide appropriate adjustments for the risks and uncertainties associated with both the climate change problem and the policy measures deemed able to deal with it. Moreover, the mentioned models also seem to be uncertain because they are a function of other uncertain factors, such as, *inter alia*, the proper discount rate, future technological progress, the potential creativity of the private sector, and climate projections and GHG emissions budgets. The latter seem, in turn, to be uncertain because the climate scenarios developed by various climate scientists are uncertain and differ. This in turn provide input to climate models which also differ. Interestingly enough, the projections for 2100 under business-as-usual scenarios are the result of most analysts doubling their predictions in the last years. Further revisions may, thus, occur in the future. This is also due to the fact that many physical phenomena are unpredictable. For instance, climate sensitivity is unpredictable to a certain extent; that is to say, the temperature change that resulting from changes in climate-forcing agents acting on the planet.[109] The impact that GHGs might have on ecosystems is also fairly

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[106] William Nordhaus refined the DICE model over time and extensively used it for its scientific assessments of climate change, while the PAGE2002 model was widely used by Nicholas Stern in his *Review*. Richard Tol, instead, relied on his and other models for analysing the social cost of carbon. For detailed descriptions of these models see, respectively, Nordhaus W. D. (2008) *A Question of Balance*: *Weighing the Options on Global Warming Policies*, New Haven: Yale University Press; Hope C. (2006) The Marginal Impact of CO2 from PAGE2002: An Integrated Assessment Model Incorporating the IPCC's Five Reasons for Concern. *Integrated Assessment* **6**(1) 9-56; and Tol R. (2002) Estimates of the Damage Costs of Climate Change, Part I: Benchmark Estimates. *Environmental and Resource Economics* **21**(1) 47 - 73.

[107] See, Pindyck R. S. (2015) *The Use and Misuse of Models for Climate Policy*, Working Paper No. 21097, Cambridge, Mass.: Massachusetts Institute of Technology, National Bureau of Economic Research, issued in April and available at http://web.mit.edu/rpindyck/www/papers.htm(accessed 1 August 2016).

[108] This procedure, therefore, allows for giving a present value to future impacts in terms of damage, utility, costs and benefits of both climate change and mitigation policies.

[109] Regarding the recent increase in uncertainties surrounding the climate sensitivity values - also due to the IPCC recent re-widening of the range of temperature levels that might result from a doubling of GHG concentrations in the atmosphere (IPCC (2013) *Climate Change 2013: The Physical Science Basis*, *cit.*) – see, Freeman M. C.,

unpredictable because the forecast levels of GHGs saturation in the atmosphere have never yet been achieved. Importantly, such unpredictable elements, when coupled with the lack of clear data to be used as attributes of the climate change damage function – which provide the relationship between, *inter alia*, average temperature levels and GDP -[110] seem to render the estimates on the costs of inaction even more uncertain.

The foregoing dissertation on the uncertainties underlying the integrated assessment models so far developed might provide some colour with respect to the difficulties associated with attempts to devise proper climate policies. Besides this, it is far from being an exhaustive list of the uncertainties surrounding the topic.[111]

Nonetheless, some fundamental clear points also seem to be implied in Krugman's statement. Whatever the divergences in the models used, and regardless of what the numerical estimates and estimated values of the social cost of carbon are, the values provided under different models and assessments are all far from being equal to zero. Most environmental economists and climate scientists agree, thus, that there is a case for action, that it is necessary to put a price on carbon emissions, and that the ensuing negative economic effects are still manageable, at least at the global level, while the costs of inaction will at some point be unbearable.[112]

Unfortunately, however, there is no consensus on certain aspects of paramount importance for climate change mitigation measures to ultimately gain public acceptance and for ensuring their political and legal viability. Indeed, as we shall see, the required timing and extent of action are still the subjects of great discussion among climate economists of the calibre of Nicholas Stern and William Dawbney Nordhaus.

The reasons for such dissenting opinions are grounded on the above-described uncertainties and, in particular, on the great disagreement on the discount rate to be adopted. The choice of

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Gernot Wagner, and Richard J. Zeckhauser (2015) *Climate Sensitivity Uncertainty: When is Good News Bad?*, Working Paper 20900, Cambridge, Mass.: National Bureau of Economic Research, issued in January and available at http://www.hks.harvard.edu/fs/rzeckhau/Climate_sensitivity_uncertainty.pdf (accessed 1 August 2016).

[110] Climate change damage functions provide the relationship between, *inter alia*, average temperature levels and GDP. In that regard see, *inter alia*, Weitzman M. (2010) What is the "Damages Function" for Global Warming – and What Difference Might it Make? *Climate Change Economics* **1**(1) 57-69.

[111] For a detailed assessment of some of the mentioned uncertainties underlying the integrated assessment models see, Pindyck R. S. (2013) Climate Change Policy: What Do the Models Tell Us?. *Journal of Economic Literature* **51**(3) 860 - 872.

[112] For a survey of the latest scientific and economic literature in that respect and a clear explanation of the risks and dangers of inaction, the resulting pressing reasons for action and the central role carbon pricing should play in mitigation efforts, see Gernot W., Weitzman M. L. (2015) *Climate Shock: The Economic Consequences of a Hotter Planet.* Princeton, NJ: Princeton University Press.

a correct discount rate is, in fact, one of the most decisive aspects of the cost-benefit analysis when dealing with problems unfolding over long intergenerational human time frames, like climate change.[113] Indeed, discounting is the procedure used by economists to convert, *inter alia*, future impacts of both climate change and mitigation policies into their present equivalent. Therefore, it allows for making a trade-off between costs and benefits that occur at different points in time that would not otherwise be comparable because the value of costs and benefits is intimately associated with time.[114]

In order to properly understand the relevance of the notion of discounting for the purpose of ensuring that public funds are directed to those mitigation measures yielding the greatest social benefits, we should consider mitigation policies as an investment and governments as investors. The envisaged future payoffs on investment should, accordingly, drive governmental decisions on whether and how much they are ready to spend on such policies. However, intertemporal policy decisions, such as the choice to introduce a particular mitigation policy, have two peculiarities that differentiate them from ordinary financial decisions. First, the returns on investment are embodied by the general welfare impacts of the government policy, which are also difficult to measure due to all the above-analysed uncertainties that characterise the topic. It is, therefore, necessary to provide adjustments for such uncertainties in the chosen system of measurement. Secondly, the payoffs are often tremendously delayed. Since distant benefits are less desirable, it is also necessary to adjust the cost-benefit analysis by incorporating the cost of time into the assessment. The discounting practice is the means used to provide such further adjustments to the cost-benefit analysis because it allows for attaching a lower weight to future costs and benefits than to current ones. More precisely, the discount rate 'exponentially' (*i.e.*, proportionately) discounts the value of mitigation policies' outcomes and of envisaged damage in the absence of such policies according to how much they are uncertain and delayed in time.[115]

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[113] Kenneth Arrow explains how much the choice of the social discount rate is really critical by showing how divergences in the rates adopted override possible differences in projections on future losses caused by the climate change phenomenon. See, Arrow K. J. (2007) Global Climate Change: a Challenge to Policy. *Economists' Voice* **4**(3) 1-5 (available at Berkeley Electronic Press website).

[114] For a proper explanation of why discounting occupies such an important and controversial place in long-term policy decisions, and for an assessment of the evidence in that respect, provided with practical application by different institutions and in different countries, see Hepburn C., Gosnell C. (2014) 'Evaluating Impacts in the Distant Future: Cost–benefit Analyses, Discounting, and the Alternatives', in Atkinson G., Dietz S., Neumayer E., Agarwala M. (eds.) *Handbook of Sustainable Development*. Cheltenham: Edward Elgar Publishing, pp. 140-159.

[115] See *ibidem*, which provides also a clear analysis of discount functions, factors and rates, and of their implications and limits.

Based on the above considerations we can easily infer that selecting a discount rate has a strong influence on the results that integrated assessment models generate regarding the abatement policies that might pass the cost-benefit analysis and the determination of the optimal amount of abatement. As a consequence, it has huge effects on the required timing and extent of climate action.[116] This is even truer when discounting climate change investments because the 'exponential' discounting exercise extends over long time horizons and this renders such investments incredibly sensitive to the discount rate. Therefore, even ordinarily negligible differences in discount rates can cause great differences among the outcomes of the cost-benefit analyses. More precisely, using overly high discount rates prompts too little investment in mitigation, since future significant damage comes out small in current discounted values, especially when compared to the present costs of abatement policies.

In order to properly understand the above statement we can examine, for instance, Nordhaus' economic assessment of climate change. Indeed, by applying a descriptive 'market' approach to discounting, Nordhaus has adopted a relatively high average annual discount rate.[117] As opposed to a prescriptive approach to discounting, the descriptive approach does not factor in ethical intergenerational considerations when determining the discount rate, which is therefore simply derived from the actual behaviour of individuals in the market (*i.e.*, the private discount rate).[118] Hence, economists relying on a descriptive approach to discounting adopt the market rate of return of capital in their cost-benefit analyses. As a result, by using the DICE model and adopting a discount rate of about 4 per cent per year, Nordhaus has estimated GDP losses of about 5 per cent under a business-as-usual scenario and, thus, has advocated the so-called gradualist "climate-policy ramp".[119]

In this regard, it remains not fully clear whether Nordhaus' economic projections have the potential to support a gradual course of action. Indeed, under his estimations, the cost of

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[116] For a detailed analysis of the impacts different discount rates can have on the results of any climate change cost analysis see, IPCC (2007) *Climate Change 2007: Mitigation of Climate Change, Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, ch. 2, s. 4.2.1.

[117] Nordhaus W. D. (2007) A Review of the Stern Review on the Economics of Climate Change. *Journal of Economic Literature* **45**(3) 686–702.

[118] For a detailed analysis of the different approaches to discounting – *i.e.*, prescriptive (normative) approach *vs* descriptive (opportunity-cost) approach – and on the impacts the adoption of either approach has on the level of the ensuing discount rates see, IPCC (2007) *Climate Change 2007: Mitigation of Climate Change, cit.*, ch. 2, s. 4.2.1, Hepburn C., Gosnell C. (2014) 'Evaluating Impacts in the Distant Future: Cost–benefit Analyses, Discounting, and the Alternatives', *cit*., pp. 140-159.

[119] Nordhaus W. D. (2007) A Review of the Stern Review on the Economics of Climate Change, *cit*.

inaction in terms of GDP still exceeds the cost of the actions necessary to reach the so-far agreed 2°C UNFCCC target in 2100. More precisely, the cost of such actions would be around 2 per cent of GDP, as opposed to the mentioned GDP cost of inaction of about 5 per cent that would materialise should the estimated temperature rise of 5°C in 2100 compared to 2000 occur.[120] Secondly, there might be scope to argue that climate change is different from other commodities, and that its evaluation over time should take into account that it is a public good to which all generations have some right. Therefore, Nordhaus' approach to mitigation policies might be considered by others to contrast with the notions of intergenerational equity and sustainable development. Moreover, generally speaking, it might be deemed to not fully factor in the 'known uncertainty' regarding the catastrophic risks that climate change could potentially bring about. Hence, it has been argued that Nordhaus' approach does not provide sufficient insurance in that respect.

Conversely, adopting overly low discount rates makes investments for mitigating global climate very attractive and might result in too much investment. Actually, it might well be that this has had an impact on the very proactive path that the EU has undertaken with respect to mitigation policies. That said, an overly low discount rate might, on the one side, spur a sort of reverse intergenerational ethical complaint and, on the other side, even favour policies that are not cost-efficient and environmentally effective.

Some guidance on the implications of an integrated assessment model when adopting a relatively low average annual discount rate may be identified in Stern's economic assessment of climate change. Indeed, by applying the PAGE2002 model and a social discount rate of 1.4 per cent per year, Stern has estimated GDP losses under the business-as-usual scenario that range from 5 per cent to 20 per cent. More specifically, a 20 per cent GDP loss is considered a probable outcome when all the risks and impacts are taken into account.[121] As a result, Stern has urged strong climate policies that are able to immediately curtail GHG emissions.[122] This is known as the 'big-bang approach'. More precisely, Stern's low social discount rate and the ensuing strong activist conclusions are the results of embracing a prescriptive 'ethical' approach to discounting, which, as opposed to the abovementioned descriptive 'market' approach to discounting, incorporates value judgments when defining the parameter values determining the

[120] *Ibidem*.

[121] Stern N. (2007) *The Economics of Climate Change*, *cit*., pp. x, 143-144, 153 and 163-165.

[122] *Ibidem*.

discount rate (*i.e.*, the social discount rate).[123] Indeed, following in Cline's footsteps,[124] Stern relied mostly on intergenerational ethical judgments for justifying the choice, in his economic modelling of climate-change impacts, of very low taste-preference parameters (*i.e.*, $\delta = 0.1$ per cent and $\eta = 1$),[125] which were actually set on a priori grounds.[126] When applying the famous Frank Ramsey function for defining the social discount rate ($r = \delta + \eta g$),[127] these low parameters determine an almost risk-free interest rate and, thus, a very low discount rate.[128] This low discount rate, combined with an estimated picked high D/Y ratio in one century's time – where D is the aggregate damage from global climate change and Y is the GDP - does indeed advocate a so-called 'big-bang approach' to mitigation.[129]

From the foregoing brief overview of the current status of the economics of lessening climate change it might be inferred that the problem to be addressed is not just whether it is possible to technically clear up the above-surveyed uncertain uncertainties that characterise the elements of the economic and scientific framework of climate change analysis. A preliminary important question is in fact whether, under which conditions and to what extent the wide ranges of cost-benefits analyses that can be found in economic theory might yield robust policy advice and, thus, provide sufficient incentives to ensure universal participation in the needed global transition to a more sustainable mix of energy sources.

A word of caution is necessary in this respect. The brief survey above does not purport to judge the economic models and ensuing analyses so far developed, nor does it aim to argue that they are unnecessary because of the considerable uncertainties and divergences underlying their estimations.[130] All economic models, in fact, require simplification of the real world. This even

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[123] In that regard see, *inter alia*, IPCC (2007) *Climate Change 2007: Mitigation of Climate Change*, *cit.*, ch. 2, s. 4.2.1, and Hepburn C., Gosnell C. (2014) 'Evaluating Impacts in the Distant Future: Cost–benefit Analyses, Discounting, and the Alternatives', *cit.*, pp. 140-159.

[124] See, Cline W. R. (1992) *The Economics of Global Warming*. Washington D.C.: Institute for International Economics, who determined a low interest rate of 1.5 per cent per year on the basis of parameter values such as $\delta = 0$ per cent and $\eta = 1.5$.

[125] While η is the coefficient of relative risk aversion or elasticity of marginal utility, simultaneously providing a measure of aversion to interpersonal inequality and a measure of personal risk aversion, δ is the rate of pure time preference or utility discount rate.

[126] Stern N. (2007) *The Economics of Climate Change*, *cit.*, pp. x, 143-144, 153 and 163-165.

[127] While r is the social discount rate, g is the rate of per capita consumption growth; that is to say, the reduced-form representation of 'technology'. More precisely, as opposed to δ, which is the rate used to discount utility, r is the interest rate used to discount consumption.

[128] Ramsey F. P. (1928) A Mathematical Theory of Saving. *The Economic Journal* **38**(152) 543–559.

[129] Stern N. (2007) *The Economics of Climate Change*, *cit.*, pp. x, 143-144, 153 and 163-165.

[130] This is, however, the reason provided by Pindyck for justifying his proposal to replace the integrated assessment models with alternative approaches. See, Pindyck, R. (2013) Climate Change Policy: What Do the Models Tell

truer regarding models dealing with extraordinarily complex realities such as the economic impacts of global warming.

Unfortunately, however, policy evaluations with respect to complex matters require a credible range of numerical values.[131] Such a range of values should also include credible variables providing numerical measures of the uncertainties stemming from the intrinsic evolving nature of the climate change problem. Therefore, it is important that the economic and scientific assessments be set forth in a transparent way and in accessible language, and that the functional forms, parameter values and other inputs having huge effects on the results the models produce be based on accurate assumptions. Moreover, a reduction in the number of models and the range of numerical values and variables used, and consistency in the results and estimates of different models, are all factors which may be helpful in connection with the foregoing. Whether these goals can be achieved by assigning probability distributions to the various parameters, providing appropriate adjustments for risks and uncertainties, incorporating relative price changes in assessing the optimal amount of abatement, adopting a mixed approach to discounting, using a declining discount rate, etc., is for the scientific community to assess, possibly through a joint effort.[132]

In any event, a way to deal with the above-addressed structural uncertainties associated with the integrated assessment models is to introduce more, not less, economic and scientific analysis into the process with the aim of individuating the parameters providing inputs to the models. We do not, in fact, subscribe to those stating that the only way to deal with the uncertainties underling the integrated assessment models and the ensuing contrasting outcomes is to cease to use such sophisticated models. Indeed, in our view, the above-described role that integrated

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Us?. *Journal of Economic Literature* **51**(3) 860-872.

[131] See, in that regard, Metcalf G., Stock J. (2015) *The Role of Integrated Assessment Models in Climate Policy: A User's Guide and Assessment*, Discussion Paper 2015-68. Cambridge, Mass.: Harvard Project on Climate Agreements, issued in March and available at http://belfercenter.ksg.harvard.edu/files/dp68_metcalf-stock.pdf (accessed 1 August 2016); and Weyant J. (2015) Contributions of Integrated Assessment Models. *Review of Environmental Economics and Policy*, [forthcoming].

[132] As a good starting point for that purpose, see Arrow K., Cropper M., Gollier G., Groom B., Heal G., Newell R., Nordhaus W., Pindyck R., Pizer W., Portney P., Sterner T., Tol R., Weitzman M. (2014) Should Governments Use a Declining Discount Rate in Project Analysis?. *Review of Environmental Economics and Policy* **8**(2) 145–63. See also, *inter alia*, Sterner T., Persson M. U. (2008) An Even Sterner Review: Introducing Relative Prices Into the Discounting Debate. *Review of Environmental Economics and Policy* **2**(1) 61–76, and Gollier C., Weitzman M. (2010) How Should the Distant Future be Discounted When Discount Rates are Uncertain?. *Economic Letters* **107**(3) 350-353.

assessment models should play in delineating and encouraging first-best policies cannot be replaced by the combined opinion of a pool of experts, as was recently suggested.[133]

Indeed, only scientifically sound and coherent calculations based on sophisticated models can provide, for instance, a measure of the price of carbon emissions, which is, in turn, necessary for framing meaningful market-based policies, command-and-control standards and/or systems of subsidies, whichever is the instrument chosen for reducing GHG emissions.[134]

Importantly, in our view, all the above discussion runs counter to the purpose of encouraging governments to adopt proper policies to tackle climate change. As long as economists question the usefulness of integrated assessment models, the economic analysis of climate change will never be perceived as reliable and, thus, gain public acceptance. Therefore, it will not ensure the political and legal viability even of those mitigation policies able to deliver the lower amount of abatement considered, and may be used as an argument for delaying the required transition to a low carbon economy until such time as scientific evidence is established beyond doubt.

Is there any easy way out of this impasse? Could the line of analysis be simply reversed, as Krugman might seem to suggest in The New York Times article we previously quoted? Krugman, indeed, affirmed that before we get to the costs of action and inaction, the central issue is "*how to get the rest of the world to go along with*" economists and scientists regarding the need for climate change action.[135]

Our answer to the above questions is that this approach will not provide a solution to our problems. Indeed, decoupling the mentioned costs from the rationale for universal participation in climate actions would mean that the discussion would ultimately revolve around arguments based on subjective opinions regarding intergenerational and global interregional ethical issues. Another possible outcome of the above decoupling exercise would be for the analysts to go

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[133] Certain economists maintain, in fact, that the equations that are at the basis of most of these models are nothing more than representations of the judgments of the analysts who have developed and applied the models. However, first of all this approach might bring about precisely the subjective and arbitrary attitude that is currently imputed to the choice of many functional forms and parameter values providing inputs to integrated assessment models, and that led these very same economists to for search solutions other than these models. Moreover, it might generate even greater inefficiencies in selecting proper mitigation 'investment' policies. See, *inter alia*, Pindyck R. S. (2013) Climate Change Policy: What Do the Models Tell Us?, *cit.*, and Pindyck R. S. (2015) *The Use and Misuse of Models for Climate Policy*, *cit.*

[134] Let us leave aside the obvious problematic issues that would result from the choice to opt for a pool of experts, such as identifying who would be in charge of selecting them, who would challenge their judgments, etc.

[135] Krugman P. (2010) Building a Green Economy, *cit.*

directly through the front door by simply relying on points such as the famous one made by Weitzman contending that a kind of precautionary principle should apply in the decision-making process related to climate policy, especially in the absence of scientific consensus on the probabilities of extreme events.[136] More precisely, he has stated in several articles that, to the extent that there is a positive probability that the frightening worst-case scenarios of global warming will occur, the details of cost-benefit analysis are not relevant; indeed, the simple possibility of a future catastrophe should reinforce the case for action, whatever the levels of the abovementioned probability and of the unsettled uncertainties.[137]

The above arguments are advanced by analysts having surely their hearts in the right place and might be even substantiated through economically and scientifically sound considerations. However, they will never play as key drivers of a global mitigation action plan in a world dominated by a high degree of self-centredness and a deep-rooted 'GDP-centric' economic paradigm, that hardly supports early action.

[136] *Inter alia*, Weitzman M. (2013) A Precautionary Tale of Uncertain Tail Fattening. *Environmental and Resource Economics* **55**(2) 159-173; Weitzman M. (2007) A Review of The Stern Review on the Economics of Climate Change, *cit.*

[137] *Ibidem*.

Chapter 2

The Legal Framework Governing the Energy Sector

2.1. Primary and Second Level Sources of EU Energy Law. The Energy Union and Recent Strategic Initiatives

This subparagraph of the thesis purports to set forth a brief overview of the comprehensive legal framework governing the energy industry in the European Union. Sources of European law will be described and analysed following the traditional division between primary sources. In particular, these encompass the TFEU, the EURATOM Treaty, second level legislation and a set of initiatives and strategies recently adopted in respect of the energy and environmental fields. The following pages only purport to provide a brief illustration for completeness sake, without any ambition to a comprehensive and in depth discussion of the foregoing, which would strain outside of the principal scope of this doctoral thesis.

Regarding the analysis of the TFEU, it should be noted that, until recently, energy was not explicitly included in the list of principal areas within the competence of the European Union; as such, legislation in the field relied upon the internal market legal basis[138], provisions in respect of the environment[139] or implied EU powers.[140] With the entry into force of the Lisbon Treaty, the energy sector was included in the list of principal matters of shared competence between the European Union and Member States.[141]

The nature and extent of this shared competence conferred upon the European Union is set out under Article 194 TFEU, which sets forth, *inter alia*, the key objectives of the EU energy policy. These, in particular, aim to "*ensure the functioning of the energy market*", "*ensure security of energy supply*", "*promote energy efficiency* [,] […] *saving and the development of new and renewable forms of energy*"[142] and "*promote the interconnection of energy networks*".

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[138] In particular, under Article 114 TFEU (ex 95 EC).

[139] In particular, under Article 192 TFEU (ex 175 EC).

[140] In particular, under Article 352 TFEU (ex 308 EC).

[141] In particular, under Article 4(2)(i) TFEU. It should be noted that, pursuant to provisions under Article 2(2) TFEU, on matters of shared competence, Member States may only legislate to the extent that the European Union has not exercised its competence.

[142] See, Article 194(1) TFEU.

In addition to the foregoing, Article 194(2) TFEU confers upon the European Union the competence to adopt, by ordinary legislative procedure, measures necessary to achieve the above-described objectives, provided that such measures do not prejudice the right of Member States to determine the conditions for exploiting energy resources, their choices between the various energy sources, and the general structures of their energy supplies.[143]

As mentioned above, prior to the inclusion of energy matters among those of EU shared competence and the introduction of Article 194, a number of measures in the energy field, in particular with respect to renewable energy sources and energy efficiency, were introduced. These relied upon provisions under Articles 191 and 192 TFEU, which set forth the key objectives to be pursued by EU environmental policies, as well as the procedures for adopting legislation in connection therewith.[144]

As will be discussed in detail in Chapter 2 and, more generally, throughout this thesis, provisions under Articles 107-109 TFEU regarding State Aid have been frequently employed with respect to energy-related matters, including, in particular, for assessing the compliance of state support and intervention regarding the energy industry. It is also worth noting that the abovementioned provisions have also represented the key legal basis for issuance by the Commission of *ad hoc* guidelines governing state intervention for environmental protection and energy.[145]

As mentioned above, an *ad hoc* treaty, EURATOM, was entered into with respect to nuclear energy which, *inter alia*, established the European Atomic Energy Community,[146] the mission

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[143] See, Article 194(2) TFEU. It is also worth highlighting that Article 194(3) TFEU stipulates a derogation from paragraph 2 with respect to measures having a primarily fiscal nature.

[144] See, Articles 191, 192 and 193 TFEU.

[145] With a view to providing a comprehensive description of energy-relevant provisions set forth under the TFEU, it is worth mentioning the following Articles of the TFEU. Article 122 TFEU, sets forth the Council's prerogative to determine, "*in a spirit of solidarity between Member States*", appropriate measures "*severe difficulties arise in the supply of certain products, notably in the area of energy*". Article 114 TFEU, which provides for certain harmonisation measures aiming to achieve high level of protection in a number of areas, including health, safety, environmental and consumer protection, has been employed as legal basis for energy-related measures. In addition to the foregoing, provisions under the TFEU with respect to freedom of establishment, free movement of services and market liberalisation (see, *inter alia*, Articles 49, 56 and 59 TFEU) have contributed to reshaping the energy industry on a European-wide basis. Lastly, Article 352 TFEU – providing grounds for the Council to adopt measures to attain one of the Union's objectives where the existing Treaties do not explicitly confer *ad hoc* powers, and to the extent that such measures remain within the boundaries of the EU competence – has been largely employed in the past in connection with the adoption of energy-relevant measures. Of course, the relevance of the foregoing post-recognition of EU competence to legislate in the energy fields appears to be rather limited.

[146] The European Atomic Energy Community is an international organisation with a legal personality, distinct from the European Union and with its own objectives and decision-making processes. However, the European Atomic Energy Community shares the same membership as the European Union and is governed by the same institutions (although the European Parliament has a somewhat limited role under the EURATOM).

statement of which is "*to contribute to the raising of the standard of living in the Member States and to the development of relations with the other countries by creating the conditions necessary for the speedy establishment and growth of nuclear industries*". The EURATOM sets out the key areas of intervention and the principal roles and competences of the European Atomic Energy Community, which include, *inter alia*, the promotion of R&D activities as well as the establishment of basic standards for health protection.[147]

Regarding the second-level EU energy framework, a broad array of measures and legislation has been adopted by EU institutions.

The key EU legislation with respect to the electricity and gas sector is contained in the Third Energy Package, a comprehensive set of third-generation measures in the field which entered into force in September 2009, replacing the previously applicable second-generation framework.[148] The common trait among the measures included in the Third Energy Package is its contribution to further liberalisation of, and increasing transparency in, the EU energy markets and its facilitating of cross-border access by removing national disparities and barriers to integration.

We shall now discuss in more detail the various measures comprising the Third Energy Package. Regulation (EC) 714/2009[149] sets forth provisions purporting, *inter alia*, to establish a framework for cross-border electricity exchanges, fostering integration and competition in the internal market "*taking into account the particular characteristics of national and regional markets*",[150] and facilitating the development of a functioning and transparent wholesale market

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[147] See, Article 2 and Chapters 1, 2 and 3 EURATOM. It is worth mentioning that the European Atomic Energy Community enjoys exclusive competence on certain matters, while competence is shared with Member States with respect to other areas. However – and as opposed to the TFEU - EURATOM does not explicitly indicate the respective perimeters of exclusive and shared competences.

[148] In particular, the so called "Second Energy Package" was largely contained in Regulation (EC) No 1228/2003 of the European Parliament and of the Council of 26 June 2003 on conditions for access to the network for cross-border exchanges in electricity, OJ 2003 L176/1 and Directive 2003/54/EC of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in electricity and repealing Directive 96/92/EC, OJ 2003 L176/37, regarding electricity and Regulation (EC) No 1775/2005 of the European Parliament and of the Council of 28 September 2005 on conditions for access to the natural gas transmission networks, OJ 2005 L289/1 and Directive 2003/55/EC of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in natural gas and repealing Directive 98/30/EC, OJ 2003 L176/57 with respect to the gas sector. The above-described measures comprising the Second Energy Package replaced, in turn, the first generation electricity and gas directives, in particular Directive 96/92/EC of the European Parliament and of the Council of 19 December 1996 concerning common rules for the internal market in electricity, OJ 1997 L27/20 and Directive 98/30/EC of the European Parliament and of the Council of 22 June 1998 concerning common rules for the internal market in natural gas, OJ 1998 L204/1.

[149] *Cit.*

[150] Article 1(a) of Regulation (EC) 714/2009, *cit.*

with "*a high level of security of supply in electricity*"[151]. The second key piece of electricity legislation under the Third Energy package is Directive 2009/72/EC[152], which lays down, *inter alia*, provisions applicable to the generation, transmission, distribution and supply of electricity, consumer protection rules and rules regulating the unbundling process. More precisely, the directive requires the separation of energy supply and generation from the operation of transmission networks. In terms of the organisation of the sector, this directive sets forth rules applicable to public service obligations which Member States may impose upon undertakings in connection with issues of security and security of supply, regularity and quality of service, price, environmental protection and energy efficiency.

Regarding the framework applicable to the gas sector established under the Third Energy Package, Regulation (EC) 715/2009[153] contains a set of conditions governing cross-border access to national gas transmission networks. In particular, the regulation purports to establish non-discriminatory rules for access conditions to natural gas transmission systems and certain gas production and storage facilities, as well as facilitating the development of a "*well-functioning and transparent wholesale market with a high level of security of supply in gas and providing mechanisms to harmonise the network access rules for cross-border exchanges in gas*".[154] The Regulation, in the framework of the above-described objectives, also contemplates the establishment of harmonised principles for tariffs in connection with network access, a third-party access service, principles for capacity allocation and congestion management, certain transparency requirements, balancing rules and imbalance charges, and rules applicable to capacity trading.[155] The legislation applicable to the gas sector is complemented by Directive 2009/73/EC[156], which was issued upon the same legal basis as, and broadly mirrors the perimeter and scope of, Directive 2009/72/EC for the gas sector. In particular, the directive sets forth, *inter alia*, rules with respect to the generation, transmission, distribution and supply of natural gas, consumer protection rules and unbundling obligations.[157]

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[151] Article 1(b) of Regulation (EC) 714/2009, *cit.*

[152] *Cit.*

[153] *Cit.*

[154] See Article 1 of Regulation (EC) 715/2009, *cit*.

[155] See Article 1(2) of Regulation (EC) 715/2009, *cit.*

[156] *Cit.*

[157] See Article 1 of Directive 2009/73/EC, *cit*.

As mentioned above, one unifying trait of Directive 2009/73/EC on natural gas and Directive 2009/72/EC on electricity is the emphasis upon the establishment, at each Member State's level, of an independent national regulatory authority with responsibility for monitoring the national market and supervising compliance with the EU applicable legal framework.[158] In connection with the foregoing, the EU Agency for the Co-operation of Energy Regulators was established pursuant to statutory instruments, with a view to assisting and co-ordinating the activities of national regulatory authorities.[159] Lastly, it is worth mentioning that the Third Energy Package sets forth provisions for the harmonisation of technical standards and requirements through third-level legislation, known as comitology.

As shall be discussed in detail in Chapter 2, ensuring security of supply is a key objective of the EU energy framework, and throughout the years a number of measures and initiatives at the EU level have been adopted to confront security of supply concerns at a local or European-wide level. In connection with the foregoing, it is worth mentioning Directive 2005/89/EC,[160] also known as the "Electricity Security of Supply Directive", which establishes measures purporting to safeguard security of supply so as to procure a proper and orderly functioning of, and foster the development of, a competitive, internal electricity market. In particular, the directive aims to maintain adequate levels of generation capacity, an adequate balance between supply and demand and adequate interconnection levels among Member States. By the same token, Regulation (EC) 994/2010[161] sets forth measures purporting to safeguard security of gas supply, including certain "exceptional measures" to be adopted where the market is no longer able to deliver the required supply levels. Furthermore, the regulation identifies a clear allocation of responsibilities among Member States, the EU and natural gas undertakings regarding the implementation of preventive actions and the adoption of reactive measures in connection with supply disruption events.

Second-level EU energy legislation also includes a broad array of measures addressing specific energy sources, infrastructures and tax matters.[162] The EU legislation in the field of

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[158] See Article 39 of Directive 2009/73/EC and Article 35 of Directive 2009/72/EC, *cit*.

[159] In particular, see Regulation (EC) No 713/2009 of the European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators, OJ 2009 L211/1.

[160] Directive 2005/89/EC of the European Parliament and of the Council of 18 January 2006 concerning measures to safeguard security of electricity supply and infrastructure investment, OJ 2006 L 33/22**.**

[161] Regulation (EU) No. 994/2010 of the European Parliament and of the Council of 20 October 2010 concerning measures to safeguard security of gas supply and repealing Council Directive 2004/67/EC, OJ 2010 L295/1.

[162] In addition to the foregoing, it is worth mentioning, for the sake of completeness, Regulation (EU) No 1227/2011 of the European Parliament and of the Council of 25 October 2011 on wholesale energy market

renewable sources, energy efficiency and carbon capture and storage, which comprises a broad array of legislative measures, is part of a wider scheme purporting to encourage the development of environmentally efficient energy sources,[163] countering climate change and minimising greenhouse gas emissions. The aim is to do this coherently, with the objective being to "*promote energy efficiency* [,] […] *saving and the development of new and renewable forms of energy*" and "*preserving, protecting and improving the quality of the environment*", as set forth under the TFEU. Among the various legislative measures adopted, it is worth highlighting Directive 2012/27/EU, the so-called "Energy Efficiency Directive", which establishes a common framework of measures aimed at promoting energy efficiency within the European Union, with a view to reaching the 20% energy saving target by 2020 compared to the projected use of energy in that year. [164]

The European Union has also issued measures[165] in connection with the oil and petroleum industry, although the legislative effort has arguably not been so prolific or granular in comparison with other areas of the energy sector. The key pieces of legislation in connection

integrity and transparency, OJ 2011 L326/1, which, in continuity with consumer protection measures under the Third Energy Package, sets forth provisions purporting to ensure the transparency and integrity of the wholesale energy market.

[163] In particular, the key EU measures are Council Directive 92/42/EEC of 21 May 1992 on efficiency requirements for new hot-water boilers fired with liquid or gaseous fuels, OJ 1992 L167/17, Directive 2004/8/EC of the European Parliament and of the Council of 11 February 2004 on the promotion of cogeneration based on useful heat demand in the internal energy market and amending Directive 92/42/EEC, OJ 2004 L52/50, Directive 2006/32/EC of the European Parliament and of the Council of 5 April 2006 on energy end-use efficiency and energy services and repealing Council Directive 93/76/EEC, OJ 2006 L114/64, *Directive 2009/28/EC* of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC, OJ 2005 L140/16, which purports to establish a common framework for the promotion of energy from renewable sources, Directive 2009/31/EC of the European Parliament and of the Council of 23 April 2009 on the geological storage of carbon dioxide and amending Council Directive 85/337/EEC, European Parliament and Council Directives 2000/60/EC, 2001/80/EC, 2004/35/EC, 2006/12/EC, 2008/1/EC and Regulation (EC) No. 1013/2006, OJ 2009 L140/114, Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products, OJ 2009 L285/10, Directive 2010/30/EU of the European Parliament and of the Council of 19 May 2010 on the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products, OJ 2010 L153/1, Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings, OJ 2010 L153/13.

[164] Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC, OJ 2012 L315/1**.**

[165] Directive 98/70/EC of the European Parliament and of the Council of 13 October 1998 relating to the quality of petrol and diesel fuels and amending Council Directive 93/12/EEC, OJ 1998 L350/58 and Directive 2013/30/EU of the European Parliament and of the Council of 12 June 2013 on safety of offshore oil and gas operations and amending Directive 2004/35/EC, OJ 2013 L178/66**.**

with the foregoing are Directive 94/22/EC,[166] which establishes certain obligations upon Member States in connection with the issuance of licenses for oil exploration and production activities purporting to help the development of a competitive and efficient European market and safeguarding security of supply, and Directive 2009/119/EC with respect to minimum levels of oil and petroleum supplies to be maintained by Member States.[167]

Regarding coal, the coal industry was the first to be regulated under the founding community of the modern EU, the European Coal and Steel Community Treaty.[168] This treaty terminated in 2002; therefore, the sector is now governed by the same single market framework, including competition rules, that applies to other sectors of the energy industry.[169]

The TFEU vests the European Union with the power to introduce measures with respect to trans-European energy networks, with a view to "*contribut*[ing] *to the establishment and development of trans-European networks in the areas of* […] *energy infrastructure*",[170] as a key element of the internal market.[171] Among the legislative measures adopted in this field, it is worth emphasising the importance of Regulation (EU) 347/2013, which, *inter alia*, establishes certain strategic infrastructure priority corridors, sets out conditions and the process applicable to the identification and review, on a two-year basis, of projects of common interest necessary to implement priority corridors and having substantial cross-border impact, and identifies eligibility requirements for EU financial assistance in favour of projects of common interest.[172]

With respect to tax matters impacting the energy sector, it should be recalled that direct taxation is an area where national competence predominates, without prejudice to EU principles

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[166] Directive 94/22/EC of the European Parliament and of the Council of 30 May 1994 on the conditions for granting and using authorizations for the prospection, exploration and production of hydrocarbons, OJ 1994 L164/3.

[167] Council Directive 2009/119/EC of 14 September 2009 imposing an obligation on Member States to maintain minimum stocks of crude oil and/or petroleum products, OJ 2009 L265/9.

[168] Treaty establishing the *European Coal and Steel Community*, signed at Paris, on 18 April 1951 and in force on 23 July 1952, as amended by subsequent *treaties*, n.p.

[169] Among the other coal-relevant statutory instruments, it is worth mentioning Council Decision 2010/787/EU of 10 December 2010 on State aid to facilitate the closing of uncompetitive coal mines, OJ 2010 L 336/24 and Council Regulation (EC) No 405/2003 of 27 February 2003 concerning Community monitoring of imports of hard coal originating in third countries, OJ 2003 L62/1.

[170] See, Article 170(1) TFEU.

[171] In addition to the abovementioned Article 170, Articles 171 and 172 also include provisions applicable to energy infrastructures.

[172] Regulation (EU) No. 347/2013 of the European Parliament and of the Council of 17 April 2013 on guidelines for trans-European energy infrastructure and repealing Decision No. 1364/2006/EC and amending Regulations (EC) No. 713/2009, (EC) No. 714/2009 and (EC) No. 715/2009, OJ 2013 115/39.

on free movement and non-discrimination, while the EU shares competence with Member States regarding indirect taxes and excise duties. Article 113 TFEU vests the EU with qualified competence to introduced measures as necessary for the "*harmonisation of legislation concerning turnover taxes, excise duties and other forms of indirect taxation to the extent that such harmonisation is necessary to ensure the establishment and the functioning of the internal market and to avoid distortion of competition*". Relying upon the foregoing provisions, the European Union has adopted measures governing energy taxation, albeit that a special legislative procedure applies with respect to the adoption of measures thereunder, whereby Member States' unanimity is required.[173]

That said in terms of Treaty provisions and legislative acts governing the energy sector, we should now provide a brief overview key recent initiatives adopted at the European level in the energy and environmental fields.

With that regard we have already mentioned the grand framework strategy for an Energy Union with an ambitious climate policy and the objective to provide EU wholesale and retail consumers with secure, sustainable, competitive and affordable energy, based upon the three long-established objectives of EU energy policy: security of supply, sustainability and competitiveness.

In particular, the establishment of an Energy Union has been prompted by the recognition that, despite European-wide energy rules, in practice, 28 different national regulatory framework are applicable in the European Union. Integration, therefore, is needed to increase competition and market efficiency. Moreover, in the opinion of the Commission, a fragmented internal energy market may hinder or complicate the "*unavoidable challenge of shifting to a low carbon economy*".

The Energy Union appears to be the latest and, arguably, the more ambitious stage of a process of strategic priority and target setting carried out by European institutions in the past decades.

In particular, and in addition to the recent Energy Union initiative, the key policy areas identified by European institution as pivotal to achieve strategic objectives in the energy and

[173] Among the EU tax legislation applying to the energy sector, it is worth mentioning Council Directive 92/81/EEC of 19 October 1992 on the harmonization of the structures of excise duties on mineral oils, OJ 1992 L316/12, Council Directive 92/82/EEC of 19 October 1992 on the approximation of the rates of excise duties on mineral oils, OJ 1992 L316/19, Council Directive 2003/96/EC of 27 October 2003 restructuring the Community framework for the taxation of energy products and electricity, OJ 2003 L283/51.

environmental fields include:

1. a European Energy Security Strategy, which presents short and long-term measures to shore up the EU's security of supply;
2. a resilient and integrated internal energy market;
3. boosting the EU's domestic production of energy, including the development of renewable energy sources;
4. promoting energy efficiency; and
5. safety across the EU's energy sectors with strict rules on issues such as the disposal of nuclear waste and the operation of offshore oil and gas platforms

With a view to incorporating the above mentioned goals within a coherent and actionable long-term strategy, the EU has formulated targets for 2020, 2030, and 2050.

In particular, the 2020 Energy Strategy defines the EU's energy priorities in the period 2010-2020, identifying in a reduction of greenhouse gases by at least 20%, an increase in the share of renewable energy in the EU's energy mix to at least 20% of consumption and the improve of energy efficiency by at least 20%.

More ambitious targets are expected to be met by 2030. In particular, a binding EU target has of at least a 40% reduction in greenhouse gas emissions by 2030, compared to 1990, a binding target of at least 27% of renewable energy in the EU and an energy efficiency increase of at least 27% and potentially reaching up to 30% by 2030, and the completion of the internal energy market by reaching an electricity interconnection target of 15% between EU countries by 2030, and pushing forward important infrastructure projects.

By 2050, the EU aims to achieve an 80% to 95% reduction in greenhouse gasses compared to 1990 levels. The Energy Roadmap 2050, analyses a series of scenarios on how to meet this target, revolving around four main routes to a more sustainable, competitive and secure energy system: energy efficiency, renewable energy, nuclear energy and carbon capture and storage.

In addition to the foregoing, we have mentioned the importance of the Energy Security Strategy as a conduit to achieving security of supply in both the short and the long term. The rationale underlying the Energy Union Strategy is associated with the recognition that the EU imports more than half of all the energy it consumes. Its import dependency is particularly high for crude oil and natural gas. Several Member States are also heavily reliant on a single supplier, including some that rely entirely on Russia for their natural gas. This dependence leaves them vulnerable to supply disruptions, whether caused by political or commercial disputes, or

infrastructure failure. The Commission identified, also as a result of the findings of *ad hoc* stress-test simulating a disruption scenario, a number of short-term and long-term measures to counter the foregoing. In particular, and as regards long-term measures, the Commission has proposed actions in five key areas:

1. increasing energy efficiency, reaching the proposed 2030 energy and climate goals and help consumers lower their energy consumption;
2. increasing energy production in the EU and diversifying supplier countries and routes;
3. completing the internal energy market and building missing infrastructure links to quickly respond to supply disruptions and re-direct energy across the EU to where it is needed;
4. Speaking with one voice in external energy policy, including having EU countries inform the European Commission early-on with regards to planned agreements with non-EU countries that may affect the EU's security of supply; and
5. strengthening emergency and solidarity mechanisms and protecting critical infrastructure.

In terms of the initiatives adopted at the international stage, as already mentioned, European institutions enthusiastically embraced the principles inspiring the entry into of the Kyoto Protocol and the legally binding emission reduction targets set forth thereunder. The same holds true as regards the Paris Agreement, which contemplates specific objectives in terms of global temperature increase, to be translated into proper country-related reduction targets and quantifiable and practical policy measures.

2.2. The State aid Regime as a Multifunctional System: Structural Compromises Having an Impact on the Energy Sector

The State aid regime of the European Union was long ago identified as one of the main policies for the creation of an integrated market with regard to each and every sector. In the introduction to this doctoral thesis we have, in fact, explained the two-sided nature of the role that State aid measures might play with respect to the integration goal and other important public interest. It is precisely the afore-addressed two-sided nature of the role that State aid measures might play with respect to the integration goal and other important public interest

objectives that has led the founding fathers of the European Economic Community to structure the State aid regime as a control system. Indeed, only rigorous supervision of State aid provisions can help with distinguishing so-called "good aid" from highly distortive forms of public support.[174] More precisely, this distinction can be properly made only on a case-by-case or a category-by-category basis. It is, in fact, necessary to accurately outweigh the positive effects certain aid measures might generate in terms of contributing to objectives of common interest and the potential negative impact they might have on the relevant market.[175]

At the time when the Treaty establishing the European Economic Community was drafted, it was already clear that this balancing exercise could not be left at the mercy of the national administrations of Member States who planned to grant the aid.[176] The sole available and efficient solution was, therefore, to establish a supranational system where a supranational institution was vested with exclusive competence for the supervision of such an important but also dangerous instrument of economic policy.[177] As a result, the responsibility of carrying out the relevant assessment fell on the European Commission, in its role of guardian of the Treaties and executive body of the European Union.

That said, two further and, at first sight, conflicting issues had to be addressed. The first question to be answered was how the control system had to be framed to enable the Commission to prevent Member States' attempts to circumvent it and to make it competent to carry out the

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[174] The concept of "good aid" is now defined under the State aid Modernisation Communication as " *aid which is well-designed, targeted at identified market failures and objectives of common interest, and least distortive*" (See, Communication from the Commission of 8 May 2012, COM(2012) 209 final, para. 12). However, as explained in Part I of this doctoral thesis, this concept is not that new. In a 2005 consultation paper, The State Aid Action Plan, the European Commission had already introduced the slogan "*less and better targeted aid*". This slogan was actually meant to highlight the necessity to adopt a "*refined economic approach*" when addressing a measure under the notion of aid as well, in order to improve legal certainty about and the effectiveness of this notion. The so-called 'balancing test' was therefore developed in an attempt to better frame the balance between the positive impact of the aid, which is represented by its contribution to an objective of common European interest, and its negative effects on competition and trade. See, Communication from the Commission, S*tate Aid Action Plan-Less and Better Targeted State Aid: A Roadmap For State Aid Reform 2005-2009*, COM (2005) 107 final, para. 18. See, in that respect, also Lowe P. (2006) Some Reflections on the European Commission's State Aid Policy. *Competition Policy International* **2**(2) 57 ff.

[175] In increasing numbers of cases, this balancing exercise is not performed explicitly. It is, instead, carried out with reference to predetermined criteria and proxies. This is the case for all aid measures that fall within the scope of a block exemption regulation or one of the Commission's enforcement guidelines, setting out the criteria to be adopted when assessing the compatibility of certain categories or kinds of aid measures.

[176] See, Buts C., Joris T., Jegers M. (2013) State Aid Policy in the EU Member States. *European State Aid Law Quarterly* **12**(2) 330-340**.**

[177] *Ibidem.*

abovementioned effect-based assessment of domestic support measures.[178] As per the second matter to be addressed, it was important to avoid the risk of deregulating entire sectors of the domestic economies and to ensure that Member States were left with some leeway to pursue their legitimate public policy goals.

With regard to the first aforesaid issue, no option could have been more effective than that finally opted for by the founding fathers of the EEC. Indeed, having a very far-sighted vision, under what is now Article 107(1) TFEU they provided a generalised and absolute prohibition on all forms of State aid. More precisely, they established that national measures that fall within the definition of State aid are to be considered incompatible with the internal market.[179] Importantly, this negative presumption has relevant practical consequences, especially for those Member States wishing to grant new aid.[180] Actually, these consequences were directly provided for in a rather rudimentary form under both the procedural and the substantive provisions of the Treaty.[181] According to Article 108(3) TFEU, in fact, any plans to grant new aid have to be notified to the Commission by the granting authority of the Member State concerned, except for in certain exceptional cases.[182] Moreover, any new aid should not be put into effect until the Commission has adopted a decision authorising it.[183] As a consequence, any aid awarded in breach of this 'standstill obligation', the abovementioned requirement to

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[178] This is what has been named commitment to a functional approach. See, in that respect, de Cecco F. (2012) 'State Aid and Self-Government: Regional Taxation and the Shifting Space of Constitutional Autonomy' in Shuibhne N. N., Gormley L. W. (eds) *From Single Market to Economic Union: Essays in Memory of John A. Usher*. Oxford: Oxford University Press, at 223.

[179] Article 107(1) TFEU in fact reads as follows:

> "*Save as otherwise provided in the Treaties, any aid* […] *shall* […] *be incompatible with the internal market*" (emphasis added).

[180] We should mention that, according to Article 1(c) of the Procedural Regulation, the concept of 'new aid' also includes any alteration to 'existing aid' systems, which are in turn defined under Article 1(b) of the Procedural Regulation and have to be kept under "*constant review*" by the European Commission according to Article 108(1) TFEU.

[181] More precisely, while the substantive provisions are contained in Article 107 TFEU, the procedural provisions are provided in Article 108 TFEU.

[182] Exemptions from the obligation to notify new aid include aid measures that satisfy the compatibility conditions of a Block Exemption Regulation or of the European Commission decision concerning aid in the form of compensation granted for financing public services, aid measures that are considered *de minimis* by virtue of one of the *de minimis* regulations, and an increase in the budget of an authorised aid scheme that does not exceed 20 per cent of the original amount.

[183] More precisely, Article 108(3) TFEU reads as follows:

> "*The Commission shall be informed, in sufficient time to enable it to submit its comments, of any plans to grant or alter aid. If it considers that any such plan is not compatible with the internal market having regard to Article 107, it shall without delay initiate the procedure provided for in paragraph 2. The Member State concerned shall not put its proposed measures into effect until this procedure has resulted in a final decision*" (emphasis added).

notify new aid, or in breach of the terms of the Commission's authorisation, shall be considered 'unlawful aid'. Both the Commission and national courts are, therefore, entitled to order the suspension and/or the provisional recovery of unlawfully granted aid, irrespective of the foreseeable result of the following compatibility assessment. Finally, Article 107 TFEU implicitly provides that the Commission actually enjoys a broad margin of discretion in assessing the compatibility of those State aid measures that are most frequently adopted by the Member States; that is to say, those aid measures that allegedly address a market failure which prevents market forces achieving on their own one of the objectives listed in Article 107(3) TFEU.[184] In this respect it is also worth noting that, as we shall properly explain in Part II of this work, the objectives pursued by environmental and energy-related support schemes are covered precisely by some of the justification grounds provided under Article 107(3) TFEU.

We should now briefly turn to the second of the abovementioned issues that had to be addressed when the Treaty was drafted; namely the necessity of avoiding excessive deregulation at national level and of securing a certain degree of regulatory power for Member States, both in general and when pursuing legitimate public policy goals. The foregoing structure of the EU State aid regime does actually accommodate these needs. Indeed, first of all, for the above-described State aid control regime to be applicable public support measures have to qualify as State aid. Member States are, in fact, bound over to comply with Article 108(3)'s prior notification and standstill obligations only with respect to national measures that fall within the definition of aid and, hence, are *prima facie* incompatible with the internal market according to Article 107(1) TFEU. As a result, the Commission retains jurisdiction only over these measures. This means that all financial mechanisms and provisions that fail to fulfil even only one of the cumulative conditions provided under Article 107(1) TFEU are not subject to supranational control. Actually, the Court has clearly established that the Commission also enjoys no discretion in determining whether a measure satisfies these conditions and, thus, qualifies as State aid.[185] Finally, it is important to mention that the outright proscription of

[184] The words used to introduce the two paragraphs of Article 107 TFEU that list the exemptions from the State aid prohibition actually diverge, with the consequences thereon in terms of Commission discretion. More precisely, while the State aid measures that fall under one of the exceptions provided by Article 107(2) TFEU "*shall be compatible with the internal market*" (emphasis added), those that can be justified on the basis of the more numerous and wide-ranging Article 107(3)'s exceptions "*may be considered to be compatible with the internal market*" (emphasis added).

[185] See, in that regard, *inter alia*, Case T-67/94, *Ladbroke Racing Ltd v. Commission* (*Ladbroke Racing*), [1998] ECR II-1, para. 52, upheld also in that respect by the CJ ruling in Case C-83/98 P, *French Republic v. Ladbroke Racing Ltd and Commission (Ladbroke)*, [2000] ECR I-3271, para. 25.

domestic aid measures can be overcome by public interventions in the market that, in the light of a thorough and elaborated analysis carried out by the Commission, turn out to be necessary for achieving the objectives listed in Article 107(2) and (3) TFEU, which include environmental protection and energy-related goals. In that regard we should also stress that, with respect to an increasingly wider number of categories of aid and of possible justifications for Member States' interventions in the market, balancing exercises have been pre-emptively carried out by the Commission through the issuance of successive block exemptions regulations according to Article 108(4) TFEU. Importantly, State aid measures that fall within the scope of the block exemption regulation in force at the time they are adopted do not have to comply with Article 108(3)'s prior notification and standstill obligations and, thus, can be implemented without any further individual examination and authorisation.

Given the above considerations we might preliminarily conclude that, as framed under the Treaty, the State aid control regime provides all the instruments required to properly distinguish protectionist environmental and energy-related aid measures from those national provisions that are either neutral and, thus, not covered by the regime, or are justifiable in the name of essential EU objectives.[186] More precisely, the last two mentioned categories of national provisions encompass, respectively, those regulatory initiatives that are simply the expression of Member States' power to govern the energy sector and its related activities, and the domestic aid measures that are necessary for fostering the creation of an integrated and sustainable energy market.

That said, it is important to explain that for the State aid control regime to be applicable and, thus, effective, public support measures have to qualify as State aid. It is therefore blatantly clear that the notion of aid has uttermost relevance because it sets the boundaries of the European Institutions' jurisdiction over domestic support measures.

It is precisely here that one of the main problems of the EU State aid policy lies: no clear definition of aid has been laid down in the Treaty of Rome and the formulation of the substantive provision of the Treaty concerning the sources and effects of aid has remained unchanged since then. Indeed, Article 107(1) TFEU, which was and is also meant to set out the

[186] The Court expressly referred to environmental protection as "*one of the Community's essential objectives*" for the first time long ago, in Case 240/83, *Procureur de la République v. Association de défense des brûleurs d'huiles usagées* (*ADBHU*), [1985] ECR 531, para. 13.

conditions to be fulfilled for a measure to constitute State aid, still simply states that it has to be considered incompatible with the internal market:

> "*any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods* […], *in so far as it affects trade between Member States*".

It seems, therefore, that this Article has been kept deliberately unspecific. One of the reasons underlying this choice might have been that the European legislator wanted to favour the broadest possible application of the State aid prohibition. Surely, only a sufficiently flexible notion of aid could allow for responding to granting authorities' creativity in framing what now appears to be an endless variety of support measures. Another possible explanation for opting for and keeping a vague formulation might be that in this way the concept of aid could be more easily adapted to the changes occurring over time in specific sectors and in the European economy in general. A third, quite pragmatic, rationale for such a conservative attitude might be that all the successive Member States' representatives who have sat in the European Council – which is in charge of decisions about any changes to Treaty provisions –[187] have thought that an unclear definition of aid would allow them to enjoy a greater margin of manoeuvre in framing their domestic support policies than would otherwise have been the case.

It is, however, important to highlight that, as we shall explain, the scopes and attributes of some of the requirements for the applicability of Article 107(1)'s negative presumption have been repeatedly reshaped and/or refined over time by a 'very dynamic' jurisprudence and the Commission's decision-making practice. According to some distinguished scholars, this constant process of reinterpreting Article 107(1) TFEU has an important purpose. It is, in fact, allegedly aimed at ensuring that not only the compatibility criteria set by the Commission but also the notion of aid can be adjusted to keep pace with the increasing degree of liberalisation and integration that the single market and the sectors concerned with the relevant measures are experiencing along with several other steadily evolving external variables. The problem is, however, that by embracing different interpretative options over time the Court and the Commission have continuously attempted to adapt the definition of aid to certain contingent

[187] It is, in fact, for the European Council to adopt a decision amending the TFEU's articles on the substantive policies and actions of the EU, by following the simplified revision procedure recently introduced by the Treaty of Lisbon and provided under Article 48(6) TEU.

needs. These have encompassed, *inter alia*, the necessity to follow the evolving characteristics of some particularly relevant markets, such as the energy market. These characteristics include the exigency of fostering certain public values, the wish to secure Member States' regulatory power in certain sensitive areas of law and in relation to specific public policies or sectors – such as environmental policy and the energy sector, the need to safeguard the effectiveness of State aid control and to prevent Member States' attempts to circumvent the State aid regime.

Although most of the above-listed are worthy purposes, the ways they have been pursued have generated rather problematic outcomes. Indeed, first of all, in the author's view the interpretation of the elements of the concept of aid is not the right place to deal with such goals, that place being, instead, the compatibility framework. The abovementioned relevant needs should in fact be addressed by simply adjusting or redefining over time the different compatibility criteria set out by the Commission for each sector and each category or kind of support measure. Secondly, the European case law and practice regarding Article 107(1)'s requirements have been rather inconsistent, both over time and among different measures and financial instruments.

As we shall see in Part III of this doctoral thesis, with particular regard to the energy sector the reinterpretation of certain elements of the notion of aid has sometimes opened the doors for EU State aid rules not to be applied to domestic measures having the same effects as measures that are considered to constitute State aid. Actually, evaluations of national measures adopted to support the gas and electricity industries have frequently represented turning points in the interpretation of certain conditions for the applicability of Article 107(1) TFEU. Indeed, Member States have always fiercely and assiduously fought to safeguard their space for manoeuvre with regard to these industries. They have also done so by arguing for a narrower interpretation of some elements of the notion of aid, which, when backed by the Court, has resulted in the avoidance of State aid control over highly distortive energy-related support regimes. Interestingly, this has occurred notwithstanding that State aid control has been identified as one of the main policies for creating an integrated EU energy market. Indeed, as we shall see, this lack of control has, in turn, granted a free pass to those national protectionist aid provisions that have further hindered the achievement of a true internal energy market and exacerbated the challenges that the relevant sector is currently facing.

2.3. Environmental and Energy-Related Measures Put to the Test of the Objective Notion of Aid

A first noteworthy consideration regarding the general characteristics of the analysis of aid is that, according to settled case law, determination of measures falling within the definition of aid shall be made by taking into account only the aim that Article 107(1)'s prohibition purports to achieve.[188] In this regard it is important to note that this aim has also been clearly established by the relevant jurisprudence.[189] More precisely, the ambitious goal of the EU State aid control regime is to avoid Member States' interventions in the market negatively affecting intra-EU trade and distorting competition within EU borders.[190] Indeed, the Court has recently restated that EU State aid rules are an expression of some of the essential tasks with which the European Community has been entrusted from the outset under Articles 2 and 3(1)(g) EC.[191] These are, namely, the establishment of a common market, the promotion of a high degree of competitiveness and convergence of economic performance, and guaranteeing that competition in the internal market is not distorted.[192] Actually, this was first clearly explicated by the Court in judgments dealing with aid measures in favour of the coal and steel industry.[193]

The CJEU, therefore, long ago unequivocally declared and further repeated in several judgments that whether a measure can be categorised as aid or not depends only on the *effects* it produces in the EU marketplace.[194] Moreover, it has specified that, for this categorisation to

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[188] This can be easily inferred from the wording of leading cases such as Case 173/73, *Italian textiles, cit.*, para. 13, and Case 310/85, *Deufil GmbH & Co. KG v. Commission* (*Deufil*), [1987] ECR 901. See, respectively, paras 13 and 8.

[189] The aim of the State aid control regime has been clearly defined in, *inter alia*, Case 173/73, *Italian textiles, cit.*, para. 13; Case C-387/92, *Banco Exterior de España SA, cit.*, para. 12; Case C-39/94, *Syndicat français de l'Express international and others v. La Poste and others (SFEI)*, [1996] ECR I-3547, para. 58; and Case T-613/97, *Ufex, cit.*, para. 64.

[190] *Ibidem*.

[191] These Articles have been now replaced in substance by, respectively, Article 3 TEU and Article 3 TFEU.

[192] Case C-369/07, *Commission v. Greece*, [2009] ECR I-5703, paras 118-119.

[193] See, Case T-89/96, *British Steel v. Commission*, [1999] ECR II-2089, para. 106; Joined Cases C-280/99 P to C-282/99 P, *Moccia Irme and Others v. Commission* [2001] ECR I-4717, para. 33; and Case T-25/04, *González y Díez SA v. Commission*, [2007] II-3121, para. 55. To that effect, also Joined Cases C-75/05 P and C-80/05 P, *Germany, Glunz AG and OSB Deutschland GmbH v. Kronofrance SA*, [2008] I-6619, para. 66.

[194] For an exhaustive explanation in that regard see, *inter alia*, Hancher L. (2012) 'The General Framework', in Hancher L., Ottervanger T., Slot P.J. (eds) *EU State Aids*. London: Sweet and Maxwell, pp. 51 ff.

occur, the effects of the measure shall be precisely those that Article 107(1)'s prohibition aims to avoid.[195]

Conversely, as explained by the Court in the very same rulings, the *causes* or *aims* of the State action are not at all relevant for determining if it is to be classified as State aid.[196] Indeed, they are not even mentioned in the provision under discussion. Actually, the CJEU has explicitly clarified that the causes and aims of the domestic measures are to be appraised through complex economic, social, regional and sectoral assessments, which can be carried out only in the context of the compatibility analysis. It is, in fact, only in this context that the Commission enjoys the required competence and degree of discretion for properly balancing and composing the number of conflicting interests at stake.[197] To put it in more straightforward terms, "*the nature of the objectives pursued by State measures and their grounds of justification have no bearing whatsoever on whether such measures are to be classified as State aid*", as the Court has recently reiterated.[198] This is undeniably tantamount to stating that public support initiatives cannot avoid being classified as aid on the ground that they pursue essential EU and/or national objectives.[199] As a result, no objectives-based approach is allowed when addressing a measure under Article 107(1) TFEU. The State aid test should, instead, be carried out by applying a rigorous effect-based approach.

Given the above-specified goals of the State aid regime, this effect-based evaluation of national support measures certainly requires a detailed "*competitive impact analysis*" and an assessment of the threat the relevant measure might pose to the single market programme.[200] In that regard it might be argued that analysis of the distortion of competition and the effect on intra-EU trade criteria is usually not properly carried out by the competent European

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[195] See, in that respect, Case 173/73, *Italian textiles*, *cit*., para. 13, which was confirmed in, *inter alia*, Case 310/85, *Deufil*, *cit.*, para. 8, Case C-56/93, *Belgium v. Commission*, *cit.*, para. 79, Case T-46/97, *Sociedade Independente de Comunicação SA v. Commission* (*SIC v. Commission*), [2000] ECR II-02125, para. 83, and, more recently, in Case C-409/00, *Spain v. Commission*, [2003] ECR I-1487, paragraph 46, and Case C-172/03, *Heiser*, *cit.*, para. 46. See also Hancher L. (2012) 'The General Framework', in Hancher L., Ottervanger T., Slot P.J. (eds) *EU State Aids*, *cit*., pp. 51 ff.

[196] *Ibidem*.

[197] A brief but clear and exhaustive explanation of all the foregoing was provided by the General Court in Case T-67/94, *Ladbroke Racing*, *cit.*, para. 52.

[198] Case C-81/10P, *France Télécom SA v. Commission* (*France Télécom*), [2011] ECR I-12899, para. 17.

[199] *Contra*, Biondi A. (2013) State Aid is Falling Down, Falling Down: an Analysis of the Case Law on the Notion of Aid. *Common Market Law Review* **50**(6) 1719-1744, at 1732, stating that, without going so far as to apply a rule of reason approach under Article 107(1) TFEU, the conformity of Member States actions to essential EU interests should still play a certain role in determining whether these actions qualify as State aid.

[200] See, in that respect, Bishop S. (1997) The European Commission's Policy Towards State Aids: a Role for Rigorous Competitive Analysis. *European Competition Law Review* **18**(2) 84-86.

Institutions. Hence, under Article 107(1) TFEU the effect-based approach is almost confined to assessing whether the contested measure confers a selective benefit which would not be enjoyed in the course of normal market conditions. However, first of all, at the request of the Court, the Commission has been recently reconsidering its traditionally superficial and perfunctory attitude towards the last two components of the notion of aid. In any event, the method of analysis adopted with respect to these components has no impact on the requirement to apply the effect-based approach as opposed to the objectives-based approach when examining support measures under each of Article 107(1) conditions.

This reading of the notion of aid has been confirmed and further elaborated on by a closely related line of case law. More precisely, in many rulings the CJEU has recalled the above-provided rationale to conclude that the concept of aid is a legal concept providing for a neutral characterisation of aid measures and must, therefore, be interpreted in an objective way.[201] Hence, according to the Court, the kinds of measures that fall within the scope of Article 107(1) TFEU have to be established on the basis of objective factors.[202] The objective nature of the concept of aid, thus, forcefully extends to each and every requirement that is intrinsic to the classification of a measure as State aid.[203] Although the CJEU has mostly used this argument to maintain that the Commission has no discretion regarding the classification of a measure as State aid and, thus, that the Courts have full power to review its assessment in that respect, this does not diminish the value of its statement.[204]

For those who reject the idea that the evolutionary character of the European Union project should be driven by CJEU jurisprudence to such an extent, it is also worth noting that the case

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[201] See, in that regard, *inter alia*, Case T-67/94, *Ladbroke Racing*, *cit.*, para. 52, upheld also in that respect by the CJ ruling in C-83/98 P, *Ladbroke*, *cit.*, para. 25; Case T-613/97, *Ufex*, *cit.*, para. 67; and, more recently, Case C-487/06P *British Aggregates Association v. Commission (British Aggregates)*, [2008] ECR I-10515, paras 111-112; Joined Cases C-71/09 P, C-73/09 P and C-76/09 P, *Comitato "Venezia vuole vivere" and Others v. Commission*, [2011] ECR I-4727, para. 132; Case C-194/09 P *Alcoa Trasformazioni*, *cit.*, para. 125; Case C-452/10 P, *BNP Paribas and BNL v. Commission*, ECLI:EU:C:2012:366, para. 100; and Joined Cases T-268/08 and T-281/08, *Land Burgenland and Austria v. Commission*, ECLI:EU:T:2012:90, para. 76; Case C-272/12 P, *Commission v. Ireland*, ECLI:EU:C:2013:812, para. 53.

[202] *Ibidem.*

[203] For instance, the CJ has recently explicitly stated that, according to the above-cited case law on the irrelevance of the aims the granting authorities purport to achieve and the required effect-based approach under Article 107(1) TFEU, "*the concept of advantage that is intrinsic to the classification of a measure as State aid is an objective one*". See, Case C-81/10P, *France Télécom*, *cit.*, para. 17.

[204] For a recent, quasi-official recognition by the Commission of the objective and legal nature of the concept of aid and of its very limited discretion in that regard – confined to cases involving complex economic or technical assessments. Regarding the margin of discretion the Commission enjoys when complex appraisals are required see, recently, Case C-525/04P, *Spain v. Lenzing*, [2007] ECR I-9947, paras 57-60; Case C-487/06P *British Aggregates*, *cit.*, para. 114; and Case C-290/07P, *Commission v. Scott*, [2010] ECR I-7763, paras 64-66.

law cited so far does not provide an evolutionary interpretation of the Treaty's norms disciplining the EU State aid regime. Quite the contrary is, in fact, true. The Court's findings on the nature of the concept of aid and the role that the *causes, aims* and *effects* of public support measures should play in the State aid test stem from a very literal reading of Article 107(1) TFEU. Moreover, they provide a construal of the system sketched by Article 107 TFEU that is strictly adherent to and coherent with the structure of this Article. Indeed, first of all, as previously highlighted, Article 107(1) TFEU does not even mention or allude to the causes, aims, purposes, objectives or goals of the State action. The terminology used in this provision clearly implies, instead, the need to address and analyse the effects of national support measures in order to reach a conclusion on their qualification as aid. An unequivocal reference to the required assessment of the potential competition-distorting and trade-distorting effects of national policies having certain characteristics is, in fact, made under Article 107(1) TFEU. By contrast, paragraphs 2 and 3 of Article 107 TFEU explicitly provide a broad number of objectives and interests that Member States can legitimately pursue. As previously explained, under the last-mentioned provisions, domestic support provisions already classified as aid might qualify for derogation from the generalised and absolute prohibition on State aid. This might be the case when the relevant aid measures are capable of achieving one of the listed goals and all the other conditions and criteria of the compatibility assessment are satisfied.

Given the foregoing, it is incontrovertible that the drafters of the Treaty of Rome have clearly distinguished the two stages of assessment described above – *i.e.* the finding of aid and the evaluation of justifications for State aid. It is also undeniable that they have devoted only the second one to analysing the causes or aims of State interventions. Stating the contrary would thus allow, *per se*, an evolutionary interpretation of the Treaty's norms on State aid. Moreover, it would cause an unreasonable duplication of the objectives-based evaluation of public support measures, thereby impairing the coherent structure of the State aid regime.

As a result of all the above considerations, we can preliminarily conclude that any attempt to focus on the character, nature or purpose of a national support measure when addressing it under Article 107(1) TFEU would clearly represent, first of all, a departure from a well-established body of CJ case law. Further, incidentally, the CJ is the final authority for coping with situations where EU goals provided for by different Treaties' provisions interfere with each other. This also holds true when the conflict concerns the objectives of the State aid control regime and the environmental protection and energy-related ones. Secondly, even if this is not

considered a sufficient reason for supporting the Court's understanding of the concept of aid, it is worth recalling that an objectives-based approach to the definition of aid would also clash with the very wording of Article 107(1) TFEU. Finally, it would be inconsistent with the structure of the State aid control system, as neatly framed under the Treaty.

According to settled case law, the principle of the irrelevance of the aim that the national measure pursues in terms of determining whether it amounts to aid applies also with respect to a legitimate public interest goal such as the protection of the environment,[205] which now constitutes one of the essential objectives of the European Union.[206] Indeed, the CJEU has repeatedly held that the alleged environmental protection purpose of a State action cannot justify outright exclusion of the relevant domestic support measure from the scope of Article 107(1) TFEU.[207] Such an essential EU objective can only be taken into account by the Commission when addressing its compatibility with the internal market pursuant to Article 107(3) TFEU.[208] The last-mentioned stage of analysing public support measures is, in fact, deemed by the Court to provide an adequate ground of assessment for properly establishing and considering the beneficial impact a measure might have on the environment.[209] Also, as we shall see, the same holds even truer for other important energy-related EU goals, such as, for instance, guaranteeing and promoting the continuity of electricity and gas supply.

Interestingly, but for some exceptions,[210] the Court's position in this respect has also been endorsed by those environmentally friendly scholars who strongly allege that competition law

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[205] This has been acknowledged also by those scholars advocating a different approach by the Court with respect to support measures having a relevant environmental purpose. See, *inter alia*, Bjørnebye H. (2010) *Investing in EU Energy Security*: *Exploring the Regulatory Approach to Tomorrow's Electricity Production*. The Netherlands: Kluwer Law International, p. 110.

[206] We should recall that the first express acknowledgment of the prominent place of environmental protection within the legal order of the European Union, as "*one of the Community's essential objectives*", was provided in the *ADBHU* judgment (See, Case 240/83, *ADBHU*, *cit.*, para. 13).

[207] For explicit pronouncements by the CJEU to that effect, see, *inter alia*, Case C-409/00, *Spain* v *Commission*, *cit.*, paras 53-54; Case T-109/01, *Fleuren Compost BV v. Commission (Fleuren Compost)*, [2004] ECR II-127, para. 54; Case C-487/06P, *British Aggregates*, *cit.*, paras 84-85 and 90-92; Case C-279/08P, *Dutch NOx*, *cit.*, para. 75; Case T-251/11, *Austria v. Commission* (*Austrian Green Electricity Act 2008*), ECLI:EU:T:2014:1060, para. 118.

[208] *Ibidem*. *Contra*, Biondi A. (2013) State Aid is Falling Down, Falling Down: an Analysis of the Case Law on the Notion of Aid, *cit.*, at 1732.

[209] *Ibidem.*

[210] See, for instance, Wiesbrock A. (2015) 'Sustainable State Aid: a Full Environmental Integration into the EU's State Aid Rules?', in Sjåfjell B., Wiesbrock A. (eds) *The Greening of European Business under EU Law: Taking Article 11 TFEU Seriously*. Abingdon/New York: Routledge, pp. 75-96.

should be regarded as an instrument to be placed at the service of environmental policy.[211] Actually, these scholars have clearly affirmed that an environmental objective pursued by a domestic legislator should be considered exclusively under Article 107(3) TFEU.[212] Indeed, in their opinion, this provision is not only sufficiently open-textured to allow for taking environmental protection considerations into account but is also a significant asset for ensuring the success of the pertinent national policies.[213]

As we will explain in Part III, in fact it is precisely the proportionality test, to be applied by the Commission under the compatibility assessment, that allows truly energy-efficient and environmentally effective settling of the potential conflicts among the goals of the European Union's competition, energy and environmental policies. Indeed, this test helps with distinguishing State measures that are really suitable and necessary to achieve the EU's energy and environmental protection objectives from those that are not. The above-quoted clever environmentally friendly scholars have, for instance, warned against the risk that the lack of compatibility evaluation of measures allegedly beneficial for the environment might result in the implementation of State support provisions that are in reality inconsistent with both the environmental integration clause provided under Article 11 TFEU and the polluter-pays principle enshrined in Article 192(2) TFEU.[214]

Apart from the foregoing thoughtful reflection, which certainly provides *per se* a sufficient reason for excluding eco-friendly considerations when defining a national measure as aid, in the author's view the Court could not have found otherwise with respect to both environmental and energy-related goals. Indeed, the very same principle of irrelevance of the State intervention's aim in the context of the State aid test has long been applied with respect to traditionally more sensitive goals such as, for instance, social and employment objectives.[215] At least during the first fifty years of European integration, in fact, domestic legislations

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211 See, *ex plurimis*, Kingston S. (2011) 'Why Environmental Protection Goals Should Play a Role in EU competition policy: a legal systemic argument' and 'State aid' in Kingston S. (ed.) *Greening EU Competition Law and Policy*. Cambridge: Cambridge University Press; de Sadeleer N. (2014) 'Competition Law and the Environment: Part III Introduction', 'State Aids and Environmental Protection' and 'Part III Conclusions' in de Sadeleer N. (ed.) *EU Environmental Law and the Internal Market*. Oxford: Oxford University Press.

212 *Ibidem*.

213 *Ibidem*. See, with explicit reference to the EU ETS, de Sépibus J. (2009) The European Emission Trading Scheme Put to the Test of State Aid Rules. *Environmental Liability* **17**(4) 125-129.

214 *Ibidem*.

215 See, for instance, Case C-241/94, *France v. Commission (Kimberley Clark)*, [1996] ECR I-4551, paras 20-21; C-342/96, *Spain v. Commission*, [1999] ECR I-2459, para. 23; C-75/97, *Belgium v. Commission (Maribel bis/ter)*, [1999] ECR I-3671, para. 25; Case C-310/99, *Italy v Commission*, [2002] ECR I-2289, para. 50.

adopted for accomplishing these objectives were considered, alongside fiscal and economic measures, the epitome of the ample margin of autonomy that the Treaty of Rome granted to Member States for pursuing their legitimate policies. Nonetheless, it was precisely in cases dealing with such national provisions that the Court first proved keen to apply the notion of aid to trace the line that national authorities should not overstep unless they were ready to subject their policies to the Commission's powers of review over State aid measures.[216]

In this regard it is also worth clarifying that the mentioned EU jurisprudence on the objective notion of aid cannot be deemed to have been repealed, contradicted or even refined by certain Court judgments on domestic employment and energy legislations.[217] Contrariwise, the CJ strongly reaffirmed its position in this respect not long ago. Indeed, it recently repealed two rulings where, by departing from the traditional case law, the General Court took into account the environmental purposes of the contested measures to justify their exclusion from the scope of the prohibition laid down in Article 107(1) TFEU. More precisely, in the judgments delivered in the *British Aggregates* and *Dutch NOx* cases, the General Court first stressed that Member States were free to balance different interests and determine their priorities regarding environmental protection, a field in which they retain their powers in the absence of harmonisation.[218] Then, it justified its finding that the relevant measures did not fulfil the selectivity criterion on the ground of the environmental protection objectives they pursued.[219]

As previously mentioned, the CJ explicitly rejected the General Court's reasoning. In doing so it clearly explained that, by applying to the concept of aid an approach which was based exclusively on a regard for the objectives pursued by the contested measures, the General Court had disregarded Article 107(1) TFEU, as interpreted in its jurisprudence.[220] This line of action

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[216] For an exhaustive analysis in that regard see Biondi A., Rubini L. (2005) 'Aims, Effects and Justifications: EC State Aid Law and Its Impact on National Social Policies', in Dougan M., Spaventa E. (eds) *Social Welfare and EU Law*. Oxford: Hart Publishing, pp. 79-104; Freedland M., Craig P., Jacqueson C., Kountouris N. (2007) *Public Employment Services and European Law*. Oxford: Oxford University Press, chs. 1, 3 and 8.

[217] We refer to, *inter alia*, Joined Cases C-72/91 and 73/91, *Firma Sloman Neptun Schiffahrts AG v. Seebetriebsrat Bodo Ziesemer* (*Sloman Neptun*), [1993] ECR I-887; Case C-189/91, *Petra Kirsammer-Hack v. Nurhan Sidal* (*Kirsammer-Hack*), [1993] ECR I-6185; Case C-379/98, *PreussenElektra AG v. Schleswag AG* (*PreussenElektra*), [2001] ECR I-2099; Case C-200/97, *Ecotrade, cit.*; Case C-143/99, *Adria-Wien, cit*

[218] See, Case T-210/02, *British Aggregates v. Commission*, [2006] ECR II-2789, para. 115, and Case T-233/04, *Netherlands v. Commission*, *cit.*, paras 99-100.

[219] Case T-210/02 *British Aggregates v. Commission*, *cit.*, paras 117 and 144-146, and Case T-233/04, *Netherlands v. Commission*, *cit.*, paras 99-100.

[220] See, Case C-487/06P, *British Aggregates*, *cit.*, paras 84-93; Case C-279/08P, *Dutch NOx*, *cit.*, paras 75 and 79. For a proper explanation in that regard see also the Opinion of Advocate General Mengozzi delivered on 17 July 2008 in Case C-487/06P, *British Aggregates*, *cit.*, paras 95-102 and the Opinion of Advocate General Mengozzi delivered on 22 December 2010 in Case C-279/08P, *Dutch NOx*, *cit.*, para. 63.

was, in fact, found to be at variance with the above-provided case law on the principle of irrelevance of the aim of the State action and the required effect-based approach under Article 107(1) TFEU.[221] Hence, according to the CJ, the General Court's reasoning amounted to an error of law and a clear misconstruction of the notion of aid which would have resulted in cancelling out the effects of the aid measures.[222] Therefore, following the referral of the *British Aggregates* case back to it, in its second judgment on the matter the General Court finally annulled the Commission's decision against raising objections to the contested national support measure, *i.e.*, a British environmental levy.[223]

Importantly, the *British Aggregates* and *Dutch NOx* rulings have been the very last judgments in which the General Court has tried to rely on environmental and other objectives-based considerations to exclude aid measures from the scope of Article 107(1) TFEU. Actually, in a recent case concerning an amended version of the *Austrian Green Electricity Act 2003*,[224] the *Austrian Green Electricity Act 2008* case, it explicitly reconsidered its previous position by making reference to the ruling delivered by the CJ in the *British Aggregates* case.[225] More precisely, it alleged that this ruling has definitively set the framework of assessment for energy-related measures that, like the Austrian FIT scheme under discussion in the case,[226] aim to pursue environmental protection objectives.[227] As a result, according to the General Court, the

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221 *Ibidem*.

222 *Ibidem*.

223 See Case T-210/02 RENV, *British Aggregates v. Commission*, ECLI:EU:T:2012:110, para. 102.

224 *The Austrian Green Electricity Act 2003*, which provided for a FIT scheme, had been already approved by the Commission (Commission Decision of 4 July 2006, State Aid NN 162/A/2003 and State Aid N 317/A/2006, *Support of electricity production from renewable sources under the Austrian Green Electricity Act (feed-in tariffs)* (*Austrian Green Electricity Act 2003*), OJ 2006 C221/8.

225 See Case T-251/11, *Austrian Green Electricity Act 2008*, *cit.*

226 In reality, the subject-matter of the action that has led to the relevant General Court's judgment was only one element of the Austrian legislation in question, the exemption mechanism for energy-intensive businesses. Indeed, in July 2009 the Commission had already approved the amendments to the previous Austrian FIT scheme and had initiated a formal investigation procedure just with respect to the mentioned exemption mechanism (See, Commission Decision of 22 July 2009, State Aid N 446/2008, *The Austrian Green Electricity Act – Aid to the Producers of Green Electricity and Aid to Large Electricity Consumers* (*Austrian Green Electricity Act 2008 – FIT scheme*), OJ 2009 C217/12). At the end of this procedure the Commission adopted a negative decision on this mechanism, which was challenged by the Republic of Austria before the General Court (See, Commission Decision of 8 March 2011, State Aid C 24/2009 (ex N 446/2008) *State aid for energy-intensive businesses under the Green Electricity Act in Austria* (*Austrian Green Electricity Act 2008 – EIUs*, OJ 2011 L235/42). However, the Court considered that the compensation mechanism had to be analysed against the background of the overall structure of the energy support regime provided for under the Austrian legislation in question (Case T-251/11, *Austrian Green Electricity Act 2008*, *cit*., para. 32); thus, in its assessment it covered all the aspects of the Austrian measure, including those that had already been authorised by the Commission.

227 Case T-251/11, *Austrian Green Electricity Act 2008*, *cit.*, para. 126.

reasoning provided by the CJ in *British Aggregates* has invalidated any divergent path the Commission has so far undertaken when analysing similar domestic provisions.[228] This also holds true with regard to the General Court itself, which in fact applied the abovementioned framework of assessment when analysing the *Austrian Green Electricity Act 2008* under the selectivity criterion. Indeed, in rejecting the arguments put forward by the Austrian authorities in that respect, it clearly stated that "*it would be to disregard Article 107(1) TFEU to hold that Member States are free, in balancing the various interests involved, to set their priorities as regards the protection of the environment*".[229] This statement is absolutely antithetical to the reasoning behind the then quashed judgments the General Court delivered in the *British Aggregates* and the *Dutch NOx* cases.[230]

As a result, all the considerations regarding purely environmental measures certainly apply even to energy support measures that are meant to satisfy environmental protection objectives. Hence, also, the great contributions which national schemes adopted to foster the generation of electricity from renewable energy sources ('RES-e' or 'green electricity') make to reversing the climate change trend and protecting the environment, by assisting domestic undertakings with meeting Member States' legal obligations in that respect, cannot enable these measures to outright escape classification as State aid. The same holds true, for instance, with regard to domestic provisions supporting other more stable sources of low-carbon electricity, such as nuclear energy, national schemes furthering highly energy efficient generating stations such as CHP and district heating (DH) installations, and measures favouring new power plants that are carbon capture and storage (CCS)-ready or that use carbon dioxide removal (CDR) technologies.

Moreover, the principle of the irrelevance of the domestic provision's aim also clearly applies with respect to other goals that are relevant to the energy sector, including the creation of an integrated energy market and ensuring energy security and generation adequacy. Therefore, for instance, national measures promoting an increase in energy infrastructures and interconnection capacity or granting support to generators for the mere availability of generation capacity cannot avoid being qualified as aid just because they are crucial to addressing market failures that might impair the achievement of important EU objectives.

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228 *Ibidem*, paras 126-129.

229 *Ibidem*, para. 118.

230 See, Case T-210/02, *British Aggregates v. Commission*, *cit.*, para. 115, and Case T-233/04, *Netherlands v. Commission*, *cit.*, paras 99-100.

All the above considerations hold all the truer if we consider that the soft law instruments providing the rules applicable to the compatibility assessment of aid measures fostering the energy sector have recently been completely reformed as part of the SAM initiative to include most of the energy-related measures addressing the abovementioned objectives. Had the European Institutions considered such goals relevant for classification purposes, they would not have included aid provisions pursuing these goals among the measures covered by these soft law instruments. Instead, first of all, the Environmental Aid Guidelines have been replaced by the more far-reaching Guidelines on State aid for environmental protection and energy, whose scope have been widened to a great extent. The EEAG do, in fact, encompass most of the environmental policy instruments, the energy-related mitigation measures and the other forms of energy aid commonly employed by the national granting authorities to deal with the above-addressed energy-related objectives and market failures. [231] Secondly, a new Communication has been adopted by the Commission which sets out, for the first time, a common and specific framework for analysis of the compatibility with the internal market of State aid in order to promote the execution of important projects of common European interest. Importantly, the IPCEIs Communication expressly covers all aid measures promoting large projects of a transversal nature and 'integrated projects'[232] that are relevant to fulfilling the objectives of all the energy and climate strategies and frameworks so far elaborated by the EU. Finally, as we shall see in text Part of the thesis, many of the energy support schemes addressing these objectives might now be exempt from the prior notification requirement mandated by Article 108(3) TFEU. Indeed, the scope of the previous General Block Exemption Regulation has also been broadened as part of the SAM initiative. More precisely, the environmental aid category provided under the General Block Exemption Regulation currently in force – which, of course, even includes energy-related measures – has been widened to such a degree that its reach now extends to grounds very similar to the EEAG.

[231] Wiesbrock A. (2015) 'Sustainable State Aid: a Full Environmental Integration into the EU's State Aid Rules?', in Sjåfjell B., *Wiesbrock A.* (eds) *The Greening of European Business under EU Law: Taking Article 11 TFEU Seriously*, *cit.*, pp. 75-96.

[232] For the purpose of the IPCEIs Communication, an 'integrated project' is "*a group of single projects inserted in a common structure, roadmap or programme aiming at the same objective and based on a coherent systemic approach*".

PART II

The SAM Initiative Put to the Test of the Energy Union Package

A Brief Overview

This part of this doctoral thesis, which borrows from and elaborates upon the foregoing, provides a critical evaluation of the new EU State aid provisions governing the compatibility assessment of aid schemes devised by Member States for dealing with EU energy markets' failures. Indeed, in the period 2012-2014, the Commission adopted a wide array of regulations, decisions and communications that have extensively reformed the framework for the assessment of energy aid measures. The analysis is, therefore, aimed at evaluating whether the new provisions are sufficient, clearly defined and effective grounds to steer public intervention in energy markets towards aid measures able to deal with all the challenges the energy sector is currently facing in a cost-effective way. The ultimate purpose of this analysis is to identify potential remedial actions that may further improve the compatibility framework, these being proposed and discussed in detail as part of the concluding remarks of the thesis. The analysis is carried out in two different chapters providing increasing levels of granularity in the assessment of the new provisions.

In Chapter 3, an evaluation of the drivers of the far-reaching reforms in the period 2012-2014 is first provided, with a specific focus on soft law and hard law instruments, including include provisions having a direct impact on energy aid measures. More precisely, the relevant reforms encompass the adoption of the so-called Almunia SGEI package, the Guidelines on certain State aid measures implemented in the context of the post-2012 European Emission Trading System, and the numerous frameworks, guidelines, communications and regulations implemented in the context of the State Aid Modernisation (SAM) initiative. The new common assessment principles introduced as part of the SAM initiative to govern the compatibility assessment and the impact of these principles on the appraisal of energy aid measures are also subject to extensive analysis. Finally, the chapter focuses, *inter alia*, on the important new *ex post* evaluation mechanism, which represents one of the major innovations of the reform.

Chapter 4 starts with a comprehensive analysis of the numerous grounds for authorisation and exemption from the notification obligation which energy aid measures may now rely upon. The interactions, overlaps and potential contradictions among the various frameworks considered are discussed. The second part of the chapter analytically addresses the new specific compatibility criteria established for evaluating peculiar forms of energy aid. More precisely, the types of aid analysed in more detail have been specifically selected on the basis of their

relevance in terms of their direct impact on the functioning of energy markets, their 'supplementary' role in the pursuit of energy and climate change policy objectives, and the potential obstacles they might pose to other goals set forth in the Energy Union Communication. All the abovementioned analyses are carried out against the background and in the context of the market failures purported to be addressed by the forms of aid under scrutiny. When relevant, accounts of recent Commission Decisions that have applied the new compatibility conditions have been given.

Chapter 3

The Recent Far-Reaching Reforms of the Framework for State Aid Control of Energy Aid Measures

3.1. The Main Drivers of the Comprehensive Reforms and their Impact on Energy Aid Measures

The time period 2012-2014 saw the adoption by the Commission of a wide array of regulations, decisions and communications that have shaped a new landscape for State aid control. As we shall explain, this extensive reform of the State control system has had a great impact on the compatibility assessment of national support measures aimed at fostering the achievement of environmental and energy-related objectives.

Actually, the year 2012 started with the adoption of a set of new rules for appraising aid measures that might be implemented to compensate undertakings that provide services of general economic interest (SGEIs) (altogether, Almunia SGEI package), replacing the previous package regulating the field (Monti-Kroes SGEI package). On the basis of our previous analysis of the decisional practice on energy aid measures, in principle, these new provisions might be relevant for the energy sector.[233] In fact, certain energy aid measures can – at least potentially – be authorised on the basis of the SGEI derogation under Article 106(2) TFEU. [234] Indeed, the successive electricity directives applicable from time to time and the EU's past decisional practice have, for instance, included the supply of electricity among the universal services and security of supply obligations imposed by Member States upon prospective candidates for public service obligation (PSO) status.[235] However, the Commission has always adopted a very strict approach to the application of Article 106(2) TFEU exception, in general, and with respect to aid measures promoting energy-related objectives, in particular. With that regard, it is,

[233] In that respect see, Chapter 4.

[234] More precisely, Article 106(2) TFEU reads as follows: "[u]*ndertakings entrusted with the operation of services of general economic interest or having the character of a revenue-producing monopoly shall be subject to the rules contained in the Treaties, in particular to the rules on competition, in so far as the application of such rules does not obstruct the performance, in law or in fact, of the particular tasks assigned to them. The development of trade must not be affected to such an extent as would be contrary to the interests of the Union*" (emphasis added).

[235] See, now, Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC, OJ 2009 L211/55**.**

therefore, important to note that the Almunia SGEI package is both stricter in terms and wider in scope than its predecessor. We will deal with the more challenging compatibility and exemption requirements provided under the various instruments it is composed of at a later stage,[236] when relevant for the purpose of our analysis.[237] Suffice it here to note that the previous framework,[238] which specified the conditions for approval of SGEI compensation under Article 106(2) TFEU, has been revised (SGEI Framework) to provide a more detailed assessment of the risks of distortion of competition when there is no overcompensation as well.[239] Also, the previous decision, adopted under Article 106(3) TFEU to establish the conditions for support measures to be block exempted,[240] has been amended by halving the annual compensation ceiling (SGEI Decision).[241] In addition, two new instruments have been introduced: a *de minimis* regulation specifically dedicated to services of general economic interest (SGEI *de minimis* regulation),[242] and a communication which clarifies those concepts of the notion of aid that are relevant for evaluating these kinds of services under Article 107(1) TFEU (SGEI Communication).[243]

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[236] In that respect see, Chapter 4.

[237] For an exhaustive analysis of the Almunia SGEI package see, Szyszczak E., van de Gronden J. W. (2013) *Financing Services of General Economic Interest: Reform and Modernisation*. Berlin: Springer; Buendía Sierra J. L., Muñoz de Juan M. (2012) Some Legal Reflections on the Almunia Package. *European State Aid Law Quarterly* **11**(2) 63-81; Sinnaeve A. (2012) What's New in SGEI in 2012?: An Overview of the Commission's SGEI Package. *European State Aid Law Quarterly* **11**(2) 347-367.

[238] *Community framework for State aid in the form of public service compensation*, OJ C 297, 29.11.2005, p. 4–7

[239] Communication from the Commission, *European Union framework for State aid in the form of public service compensation (2011)* (SGEI Framework) OJ 2012 C 8/15.

[240] Commission Decision 2005/842/EC of 28 November 2005 on the application of Article 86(2) of the EC Treaty to State aid in the form of public service compensation granted to certain undertakings entrusted with the operation of services of general economic interest, OJ L 2015 312/67. More precisely, Article 106(3) TFEU reads as follows: "[t]*he Commission shall ensure the application of the provisions of this Article and shall, where necessary, address appropriate directives or decisions to Member States*".

[241] Commission Decision 2012/21/EU of 20 December 2011 on the application of Article 106(2) of the Treaty on the Functioning of the European Union to State aid in the form of public service compensation granted to certain undertakings entrusted with the operation of services of general economic interest (SGEI Decision), OJ 2012 L7/3. More precisely, the annual compensation ceiling has been reduced from 30 million EUR to 15 million EUR.

[242] Commission Regulation (EU) No. 360/2012 of 25 April 2012 on the application of Articles 107 and 108 of the Treaty on the Functioning of the European Union to *de minimis* aid granted to undertakings providing services of general economic interest, OJ 2012 L 114/8 (SGEI *de minimis* Regulation). The regulation establishes a threshold of 500.000 EUR for SGEI compensation, which is higher than the 200.000 EUR ceiling that applies outside the SGEI field.

[243] *Communication from the Commission on the application of the European Union State aid rules to compensation granted for the provision of services of general economic interest* (SGEI Communication), OJ 2012 C8/4.

In May 2012 the Commission also adopted the Guidelines on certain State aid measures implemented in the context of the post-2012 European Emission Trading System (EU ETS)[244] (altogether, EU ETS Guidelines).[245] These Guidelines are particularly important for certain electro-intensive users and conventional electricity generators. Indeed, they provide the framework under which Member States can compensate certain sectors and subsectors or power generators particularly affected by the changes to the EU ETS, in effect from 2013 onwards, as a result of adopting the 2009 ETS Directive.[246] More precisely, they explain the Commission's approach to the compatibility assessment of certain special and temporary measures which have been allowed under the 2009 ETS Directive in connection with electricity generation and consumption. These include: (i) operating aid for compensating indirect emission costs –[247] *i.e.*, EU ETS allowance costs passed on in electricity prices – borne by energy-intensive industries active in sectors deemed vulnerable to carbon leakage,[248] (ii) investment aid for the construction of highly efficient power plants such as those that are carbon capture and storage (CCS-) ready, and (iii) aid in the form of transitional free allocation of allowances to the electricity sector for

[244] We should recall that the EU ETS system, launched in 2005, has since become one of the major pillars of the European climate change policy. It is a *cap and trade* system, determining the reduction of carbon dioxide (CO_2) emissions through the identification of specific targets within each Member State. The 2003 ETS Directive, setting out the legal framework for the system as such, introduced a market-based regulatory instrument that consisted of the creation of a market for emission allowances. Moreover, it established that, in the first two trading periods, most of the allowances were to be issued to the covered installations and sectors free of charge. See, Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse emission allowance trading within the Community and amending Council Directive 96/61/EC, OJ 2003 L 275/32.

[245] Communication from the Commission of 22 May 2012, *Guidelines on certain State aid measures in the context of the greenhouse gas emission allowance trading scheme post-2012* (EU ETS Guidelines), OJ 2012 C158/4, as amended on 6 December 2012 with regard to the electricity consumption efficiency benchmarks (OJ 2012 C 387/5).

[246] Directive 2009/29/EC of the European Parliament and of the Council of 23 April 2009 amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading scheme of the Community (2009 ETS Directive), OJ 2009 L 140/63.

[247] In that regard, it is worth recalling that, unlike 'investment aid', 'operating aid' relieves undertakings of their day-to-day costs. Hence, they are generally regarded as more distortive.

[248] We should recall that 'carbon leakage' means the transfer of greenhouse gas emissions via the relocation of production activities and jobs outside the EU, in countries where lower CO_2 prices or lesser CO_2 constraints exist. Hence, the issue arises as a result of the fact that the environmental policies – if any – adopted by most non–EU nations are not as strict as European rules. The carbon leakage phenomenon, therefore, occurs especially in sectors facing outside-system competition.

the modernisation of electricity generation.[249] Hence, the EU ETS Guidelines provide specific eligibility and compatibility criteria applicable only to these forms of aid.[250]

A further even more important reform was inaugurated in the very same month in which the EU ETS Guidelines were adopted. Indeed, in May 2012 the Commission adopted the State Aid Modernisation (SAM) Communication,[251] a policy document that launched a far-reaching initiative aimed at modernising the State aid regime, in general, and the compatibility assessment, in particular, by taking advantage of the expiry by 2014 of numerous relevant regulations and guidelines.[252] The ultimate goal of the initiative was to align the State aid provisions to the objectives of the Europe 2020 Strategy,[253] which provides Europe's growth strategy for this decade and aspires to targeting EU policies towards transforming the European economy in a smart, sustainable and inclusive economy.[254] In particular, under the Europe 2020 strategy, stimulating sustainable growth implies "*promoting a more resource efficient, greener and more competitive economy*".[255] It is, therefore, self-evident that framing a stronger State aid control system, better targeted at common European objectives, is one of the main tools for ensuring that this goal is reached. It is also clear that achieving public spending efficiency, 'greening' and competition objectives requires both the liberalisation of the internal energy market and the phasing out of environmentally harmful subsidies and aid leading to inefficient use of resources.[256]

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[249] See, 2009 ETS Directive, *cit.*, Articles 10a, 10b and 10c, and EU ETS Guidelines, *cit.*, section 1. Another type of aid allowed under Article 27 of the 2009 ETS Directive and disciplined by the EU ETS Guidelines is aid in the form of excluding small installations from the EU ETS.

[250] In that regard, see, further, Chapter 4.

[251] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 8 May 2012, *EU State Aid Modernisation* (SAM Communication), COM(2012) 209 final.

[252] In that regard see, further, Flynn L., Pesaresi N. (2014) Main Developments in State Aid Control in 2014: A Focus on the State Aid Modernisation Package and the Evolution of the Jurisprudence. *Competition Law & Policy Debate* **1**(2) 4-13.

[253] See, SAM Communication, *cit*., section 1.

[254] See, Communication from the Commission of 3 March 2010, *Europe 2020 – A strategy for smart, sustainable and inclusive growth* (Europe 2020 Strategy), COM(2010) 2020 final. More precisely, this ten-year growth and job strategy was launched as a response to the financial and economic crisis.

[255] Prioritising smart and inclusive growth means, respectively, developing an economy based on knowledge and innovation and fostering a high-employment economy delivering economic, social and territorial cohesion. See, *ibidem*, section 2.

[256] See, in that respect, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *Roadmap to a Resource Efficient Europe* (Resources Efficiency Roadmap), COM(2011) 571 final, p. 10. See also, the European Council, Conclusions of 23 May 2013, EUCO 75/1/13. The Council Conclusions confirm the need to phase out environmentally or economically harmful subsidies and to facilitate investments in new and intelligent energy

As a result of the foregoing, the SAM reformed package, which was almost completed in 2014,[257] was inspired by three closely linked and mutually reinforcing objectives,[258] which will be addressed in turn. The first one was to encourage growth through facilitating the awarding of what has been defined as "*good aid*".[259] The second one consisted of improving the efficiency of the State aid control system by intensifying and targeting efforts towards assessing aid measures with the most significant impact on trade and competition.[260] The third objective, however, had a more procedural nature. Indeed, in order to deliver better decisions within shorter timelines, the Commission purported to streamline the assessment process and, thus, to reform certain procedural aspects of the State aid control system.[261] This brought to the revision of the Council Procedural Regulation and the Commission Implementing Regulation.[262] We will not deal with the not particularly ambitious adjustments to the existing procedural apparatus because the topic falls outside the scope of our research question.[263] Suffice it here to note that the reform has encompassed certain improvements to complaints handling, new tools for obtaining information directly from market participants – the so-called market information tools – and for conducting sector inquiries, and the codification of cooperation between the national courts and the Commission.[264] As a complementary instrument, the

infrastructure, alongside the need to ensure security of supply at affordable and competitive prices and costs, the completion of the internal energy market by 2014, the development of interconnections and other energy-related important objectives, and the necessity to provide guidance on capacity mechanisms.

[257] The only exception was the *Commission Notice on the notion of State aid as referred to in Article 107(1) of the Treaty on the Functioning of the European Union* (Notice on the Notion of Aid), OJ 2016 C262/1, which was adopted in 2016.

[258] See, SAM Communication, *cit*., para. 8.

[259] *Ibidem*, section 2.1., in general, and para. 12, in particular.

[260] *Ibidem*, section 2.2., in general, and para. 19, in particular.

[261] *Ibidem*, section 2.3.

[262] Council Regulation (EU) No. 734/2013 of 22 July 2013 amending Regulation (EC) No. 659/1999 laying down detailed rules for the application of Article 93 of the EC Treaty (Council Procedural Regulation), OJ 2013 L204/15, and Commission Regulation (EU) No. 372/2014 of 9 April 2014 amending Regulation (EC) No 794/2004 regarding the calculation of certain time limits, the handling of complaints, and the identification and protection of confidential information (Commission Implementing Regulation), OJ 2014 L109/14.

[263] For a strong criticism of the procedural rules of State aid control, also in the light of the SAM reform, see, *inter alia*, Temple Lang J. (2014) EU State Aid Rules – The Need for Substantive Reform. *European State Aid Law Quarterly* **13**(3) 440-453, and Lever S. (2013) EU State Aid Law – Not a Pretty Sight. *European State Aid Law Quarterly* **12**(1) 5-10. For an exhaustive analysis of such rules see, instead, Quigley C. (2015) 'Supervision and Enforcement' and 'Judicial Review of EU State Aid Decisions', in Quigley C. (ed.) *European State aid Law and Policy*. Oxford: Hart Publishing Ltd, Parts III and IV; and Hofmann H. C. H., Micheau C. (2016) State Aid of the European Law. Oxford: Oxford University Press, Parts IV and V.

[264] Regarding the last-mentioned element, generally speaking the reform has transformed into hard law certain relevant provisions of the *Commission Notice on the enforcement of State aid law by national courts*, OJ 2009 C85/1.

Commission has adopted the Notice on the Notion of Aid,[265] which represents the first attempt to provide comprehensive guidance on this notion in order to help both the granting authorities and the national courts to, respectively, comply with and apply EU State aid rules.

Regarding the first objective of the SAM initiative, we have already mentioned that it consisted of facilitating the awarding of – only – what has been defined as "*good aid*"; that is to say, "*aid which is well-designed, targeted at identified market failures and objectives of common interest, and least distortive*".[266] Hence, through the reform, the Commission has purported to incentivise Member States to spend their frequently scarce public resources in a high-quality and efficient way and, thus, to direct public spending and taxpayers' monies only to areas where it is necessary to rectify actual failures of the relevant markets to enhance economic growth.[267] To reach this primary objective the Commission considered it was, first of all, essential to further improve coherence and consistency among the various quasi-regulatory instruments disciplining the compatibility assessment, and to guarantee more transparency, legal predictability and legal certainty. Moreover, it was deemed extremely important to ensure that Member States devised support measures better suiting their underlying relevant objectives and limiting to the minimum the distortive effects of competition and intra-EU trade.[268] Both these goals have been pursued by identifying and defining seven common

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[265] See, Notice on the Notion of Aid, *cit.* We will deal with the notion of aid and, thus, with the Notice on the Notion of Aid in Part III of this doctoral thesis.

[266] See, SAM Communication, *cit.*, section 2.1., in general, and para. 12, in particular. However, as explained in Chapter 2 of this doctoral thesis, this concept is not that new. In a 2005 consultation paper, the State Aid Action Plan, the European Commission had already introduced the slogan "*less and better targeted aid*" (see, Communication from the Commission, S*tate Aid Action Plan-Less and Better Targeted State Aid: A Roadmap For State Aid Reform 2005-2009* (SAAP), COM (2005) 107 final, para 18). This slogan was actually meant to highlight the necessity to adopt a "*refined economic approach*" when addressing a support measure. The so-called 'balancing test' was, therefore, developed in an attempt to better frame the balance between the positive impact of the aid, which is represented by its contribution to an objective of common European interest, and its negative effects on competition and trade. However, it is worth noting that, while the goal of fostering "*better targeted aid*" has been kept under the SAM initiative, the goal related to a quantitative reduction of public financing (*i.e.*, "*less* […] *aid*") has been dropped. For a clear explanation of the relevance and rising role of economic analysis under the European State aid control framework see, *Kühn* K.-U., *Lorincz S.*, Verouden V., Wilpshaar A. (2012*) Economics at DG Competition*, 2011–2012. *Review of Industrial Organisation* **41**(4) pp. 251–270.

[267] See, SAM Communication, *cit.*, paras 10-17. The Commission has, actually, held that, "[b]*y putting an emphasis on the quality and the efficiency of public support, State aid control can also help Member States to strengthen budgetary discipline and improve the quality of public finances – resulting in a better use of taxpayers' money*" (para. 14). In that regard we should also recall that in the SAAP the Commission had already remarked that "*it is important to realise that state aid does not come for free. Nor is state aid a miracle solution that can instantly cure all problems. Tax payers in the end have to finance state aid and there are opportunity costs to it. Giving aid to undertakings means taking funding away from other policy areas. State resources are limited and they are needed for many essential purposes* […]. *It is therefore necessary for Member States to make choices transparently and to prioritise action*". See, SAAP, *cit.*, para. 8.

[268] *Ibidem*, para. 18(a).

principles for the compatibility assessment of most kinds of aid measures, which we will extensively analyse in the next paragraph. More precisely, these common principles now apply equally across the various new guidelines and frameworks that provide the substantive rules for the compatibility analysis of specific aid measures.[269] Nonetheless, the flexibility required for dealing with aid measures that diverge in their objectives and structures has been preserved. Indeed, as we shall see with respect to energy support measures, supplementary compatibility conditions are still specified for each class of aid, although the conditions that were provided under the previous guidelines and frameworks have been clarified and 'modernised'. The same holds true with regard to the additional specific criteria for individually notifiable aid provisions, which have also been made more consistent.

The overall framework of analysis has, therefore, been reshaped in an effort to simplify the compatibility analysis and to achieve greater uniformity among the criteria the Commission should use to evaluate State aid measures, while guaranteeing the efficiency and effectiveness of the State aid control regime. However, as will become apparent in the next paragraph and chapter, in reality the new framework of analysis for the *ex ante* compatibility assessment is much more elaborate and difficult to comply with. This is especially true for notified environmental and energy aid measures.

As a result of the foregoing, as part of the SAM initiative almost all the State aid guidelines and frameworks that provided the substantive rules governing the compatibility assessment of specific aid measures have been consolidated and revised to make them consistent with the abovementioned common principles.[270] More precisely, most of the reshaped soft law communications address the types of aid measures that may be authorised under Article 107(3)(c) TFEU, which is actually the main ground for justifying environmental and energy aid measures,[271] and outline the specific conditions to be satisfied for that purpose. Hence, the reform has also encompassed the adoption of the new guidelines on State aid for environmental protection and energy (EEAG or Guidelines), which set out the criteria for the Commission's *ex ante* assessment of non-exempt environmental and energy aid.[272] As we shall properly

[269] In that regard, see below.

[270] SAM Communication, *cit*., para. 18(b).

[271] Indeed, on the basis of this Treaty provision the Commission may declare compatible with the internal market "*c) aid to facilitate the development of certain economic activities or of certain economic areas, where such aid does not adversely affect trading conditions to an extent contrary to the common interest*" (emphasis added).

[272] Communication from the Commission of 9 April 2014, *Guidelines on State aid for environmental protection and energy 2014-2020* (EEAG), OJ 2014 C200/1.

evidence in the next paragraphs and chapter, the EEAG are far more rigorous and demanding than the previous Guidelines on State aid for environmental protection (EAG).[273] Moreover, their scope has been widened to such a degree that it now covers all the types of aid measures most commonly employed by national granting authorities. Indeed, as is straightaway noticeable from the title of the new guidelines, they also provide rules in new areas such as the field of energy policy. Alongside revisions regarding the perimeter of the EEAG, several innovations have been introduced to clarify certain elements of analysis and address the shortcomings detected with respect to the assessment of those sustainable energy measures already covered by the previous regime.[274] Other examples of soft law instruments that have been reformed as part of the SAM initiative include, *inter alia*,[275] the new framework for State aid for research, development and innovation (R&D&I Framework 2014)[276] and the new guidelines on regional State aid (Regional Aid Guidelines 2014)[277] and State aid for rescuing and restructuring non-financial undertakings in difficulty (Rescue and Restructuring Aid Guidelines 2014).[278] In this respect we should recall that, under certain peculiar circumstances, the previous Commission's communications on the last mentioned fields have also represented grounds for authorization that may potentially apply to aid measures favouring, in some ways, the energy sector.[279] However, while this continues to be true regarding the R&D&I Framework

[273] Notice from the Commission of 23 January 2008, *Community Guidelines on State aid for environmental protection* (EAG), OJ 2008 C82/1.

[274] In that regard see, Chapter 4.

[275] Other new guidelines are those on State aid to promote risk finance investments, on public funding to broadband networks, on the financing of airports and airlines, and on State aid in the agricultural and forestry sectors. See, respectively, Communication from the Commission of 15 January 2014, *Guidelines on State aid to promote risk finance investments*, OJ 2014 C19/4; Communication from the Commission of 18 December 2012, *EU Guidelines for the application of State aid rules in relation to the rapid deployment of broadband networks*, OJ 2013 C25/1; Communication from the Commission of 20 February 2014, *Guidelines on State aid to airports and airlines*, OJ 2014 C99/3; and Notice from the Commission, *European Union Guidelines for State aid in the agricultural and forestry sectors and in rural areas 2014 to 2020*, OJ 2014 C204/1.

[276] Communication from the Commission of 21 May 2014, *Framework for State aid for research and development innovation* R&D&I Framework 2014), OJ 2014 C198/1.

[277] Communication from the Commission of 19 June 2013, *Guidelines on regional State aid for 2014-2020* (Regional aid Guidelines 2014), OJ 2013 C209/1.

[278] Communication from the Commission of 9 July 2014, *Guidelines on State aid for rescuing and restructuring non-financial undertakings in difficulty* (Rescue and Restructuring aid Guidelines 2014), OJ 2014 C249/1.

[279] See, Communication from the Commission of 22 November 2006, *Community Framework for State aid for research and development and innovation* (R&D&I Framework 2007), OJ 2006 C323/1; Communication from the Commission of 21 December 2005, *Guidelines on national regional aid for 2007-2013* (Regional aid Guidelines 2007), OJ 2006 C54/13. Communication from the Commission of 7 July 2207, *Community guidelines on State aid for rescuing and restructuring firms in difficulty* (Rescue and Restructuring aid Guidelines 2004), OJ 2004 C244/2.

2014 and the Rescue and Restructuring Aid Guidelines 2014,[280] the energy sector has been now expressly excluded from the scope of the Regional Aid Guidelines 2014.[281]

It is finally important to highlight that, apart from the revision of existing soft law instruments, the abovementioned coherency goals have also induced the Commission to adopt a new communication to deal with the so-called important projects of common European interest (IPCEIs) (altogether, IPCEIs Communication).[282] More precisely, this Communication sets out, for the first time, common and specific eligibility and compatibility criteria for assessing the public financing of the abovementioned projects, which can be authorised on the basis of Article 107(3)(b) TFEU exemption.[283] These criteria, therefore, apply to all aid granted to promote the execution of IPCEIs, irrespective of the sector and the EU objective the projects concerned are related to. Under the previous regime, instead, there was no general framework providing the principles that guided the Commission's assessment of aid measures fostering similar projects. Moreover, only the EAG and the previous R&D&I Framework laid down any specific provisions on support for IPCEIs,[284] while no indication was available on the analytical path to be undertaken when dealing with projects having an impact on the other sectors and fields covered by Commission's guidelines. As a result of the foregoing reform, the EEAG are now silent on aid measures supporting IPCEIs because, as we shall further see, the new IPCEIs Communication also encompasses environmental and energy-related large projects. That said, we have some reservations about the IPCEIs Communication, which also incorporates the mentioned common principles into the compatibility assessment, although, as we will explain, compared to other guidelines and frameworks a number of flexibilities and simplifications are rightly provided. In contrast with all the other soft law instruments adopted as part of the SAM initiative, in fact, under this Communication the common principles are not addressed in a clear

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[280] With regard to this see, further, Chapter 4.

[281] See, Regional aid Guidelines 2014, paragraph 11 and footnote 14, where the Commission has expressly stated that it "*will assess the compatibility of State aid to the energy sector on the basis of the future energy and environmental aid guidelines, amending the current guidelines on State aid for environmental protection, where the specific handicaps of the assisted areas will be taken into account*". With regard to this see, further, Chapter 4.

[282] Communication from the Commission of 13 June 2014, *Criteria for the analysis of the compatibility with the internal market of State aid to promote the execution of important projects of common European interest* (IPCEIs Communication), OJ 2014 C 188/4.

[283] Indeed, on the basis of this Treaty provision the Commission may declare compatible with the internal market "*(b) aid to promote the execution of an important project of common European interest or to remedy a serious disturbance in the economy of a Member State*" (emphasis added). Hence, Article 107(3)(b) TFEU represents another ground for justifying certain environmental and energy aid measures.

[284] See, EAG, *cit.*, section 3.3., and R&D&I Framework 2007 cit., section 4.

and systematic way and both the titles of the relevant sections and the wording used thereunder do not allow non-experts to properly identify the compatibility criteria addressed.[285] Actually, at first sight, the main basis of assessment seems to be the more traditional balancing test that was applied under the previous regime.

We should now turn to the second objective of the SAM initiative. As mentioned, it consisted of improving the efficiency of the State aid control system by prioritising the scrutiny of aid with the most significant impact on trade and competition over that of measures less distortive and of a local nature.[286] The ultimate goal was an increase of up to 90 per cent in the proportion of public support measures block-exempted or otherwise excluded from the prior notification requirement mandated by Article 108(3) TFEU.[287] This goal was meant to be reached through the introduction of certain procedural and substantive simplifications aimed at boosting Member States' reliance on the general *de minimis* and block exemption regulations.[288] This reform was, in turn, deemed to extend the responsibility and accountability of the granting authorities in ensuring *ex ante* compliance with State aid rules, while reducing their administrative burden and leading to faster access to aid for recipients.[289] Hence, in order to encourage greater reliance on the new General Block Exemption Regulation (New GBER), its scope has been extended to cover new categories of aid measures and new forms of exempted aid within existing categories[290] on the basis of the amended Enabling Regulation.[291] Moreover,

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[285] See, in particular, IPCEIs Communication, *cit.*, sections 4.1. and 4.2., and compare them with the second, third, fourth, fifth and sixth compatibility criteria addressed in the next paragraph.

[286] See, SAM Communication, *cit*., para. 19.

[287] Indeed, the Commission had estimated that three-quarters of the aid measures in place at the time of the reform and more than two-thirds of the aid amounts granted by the Member States thereunder could be exempted thanks to the revision of the block exemption regulation, and that the relevant percentage could increase to 90 per cent should Member States prove able to use the regulation to the full extent. See, European Commission, Memo of 21 May 2014, MEMO/14/369, available at http://europa.eu/rapid/press-release_MEMO-14-369_en.htm (accessed 30 October 2016).

[288] See, SAM Communication, *cit*., para. 20. We should recall that the *de minimis* rule differs from the block exemption concept. Indeed, in the light of the Commission's experience, State support falling below the *de minimis* ceiling is considered to not negatively affect intra-EU trade and distort competition within the EU's borders. Hence, the concerned support measure does not fall foul of Article 107(1)'s prohibition. As a result, while block exemption rules remove the notification obligation with respect to certain categories of aid, *de minimis* rules simply define the scope of this obligation by reducing it.

[289] *Ibidem*, paras 19 and 21.

[290] Commission Regulation (EU) No. 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty (New GBER), OJ 2014 L187/1. See, with that regard, Chapter 4.

[291] Council Regulation (EU) No. 733/2013 of 22 July 2013 amending Regulation (EC) No 994/98 on the application of Articles 92 and 93 of the Treaty establishing the European Community to certain categories of horizontal State aid, OJ 2013 L204/11.

higher notification thresholds and larger aid intensities have been provided for several types of aid and the method for calculating eligible costs has been refined.[292] In the opinion of the Commission, in fact, the limited perimeter of the previous general block exemption regulation (2008 GBER) has resulted in the *ex ante* assessment by the Commission of a large portion of cases under the previous regime.[293] By contrast, the broader scope of the New GBER, coupled with the more complex requirements for *ex ante* compatibility under the new guidelines, should lead to greater use of the block exemption instrument in the period 2014-2020. Importantly, as we shall see in the next chapter, these changes and effects concern also and in particular energy-related aid measures. What remains to be seen is whether the forgoing will result in a greater degree of legal uncertainty to the detriment of beneficiaries, and if it will put temptation in Member States' way to try to abuse the wider scope of the GBER by granting incompatible aid that might pass unnoticed.

Regarding the New General *de minimis* Regulation,[294] though, notwithstanding the extensive debate that preceded its introduction,[295] it has provided only minor adjustments in comparison with its predecessor.[296] Although some of its elements have been clarified or simplified to ease its implementation and provide legal certainty,[297] the thresholds and the more problematic monitoring mechanism have remained unchanged.[298] As per the thresholds, the

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[292] *See*, New GBER, *cit.*, Article 4 and Chapter III.

[293] Commission Regulation (EC) No. 800/2008 of 6 August 2008 declaring certain categories of aid compatible with the common market in application of Articles 87 and 88 of the Treaty (2008 GBER), OJ 2008 L214/3.

[294] Commission Regulation (EU) No. 1407/2013 of 18 December 2013 on the application of Articles 107 and 108 of the Treaty on the Functioning of the European Union to *de minimis* aid (New General *de minimis* Regulation), OJ 2013 L352/1.

[295] For an exhaustive analysis of the requests and considerations put forward by Member States and stakeholders during the consultation process, the main issues and alternative options discussed during this process, the answers and clarifications provided by the Commission with respect to the mentioned requests, issues and options, and the modest modifications of the previous *de minimis* regulation, see Sinnaeve A. (2014) The Complexity of Simplification: The Commission's Review of the *de minimis* Regulation. *European State Aid Law Quarterly* **13**(2) 261-276.

[296] *Commission Regulation* (EC) No. *1998/2006* of 15 December 2006 on the application of Articles 87 and 88 of the Treaty to *de minimis* aid (2006 General *de minimis* Regulation), OJ 2006 L379/5.

[297] For instance, (i) the relevant notion of undertaking has been simplified and the exclusion of undertakings in difficulty from the scope of the *de minimis* rule has been partially rectified, (ii) the safe-harbour concerning loan guarantees has been restricted in its application and a new safe-harbour has been introduced for secured loans, (iii) an explanation of how to apply the ceilings in cases of mergers, acquisitions and splits of undertakings has been provided, and (iv) the rules on cumulations of *de minims* aid have been clarified. See, New General *de minimis* Regulation, *cit.*, respectively, Articles 2(2), 4, 3(8) and (9), 5. For further details on the New General *de minimis* Regulation, in general, and its new provisions/clarifications and omissions, in particular, see Nicolaides P. (2015) 'The New Rules on De Minimis Aid for 2014-2020: regulation 1407/2013', in Nicolaides P. (ed.) State Aid Uncovered: Critical Analysis of Developments in State Aid 2014. Berlin: Lexxion Publisher, pp. 244-248.

[298] Only a modification of the threshold for passenger transport has, in fact, been introduced.

Commission has, in fact, rightly considered that, since *de minimis* aid cannot be regarded as "*good aid*", increasing it would be counterproductive with respect to the first above-addressed objective of the SAM initiative. Indeed, under *de minimis* regulations there are no compatibility conditions to be met for the relevant measures to benefit from the 'exemption' from the notification obligation.[299] Interestingly, however, the reform has extended the scope of the 2006 General *de minimis* Regulation to encompass aid measures for undertakings active in the coal sector as well.[300]

3.2. The New Common Assessment Principles and their Impact on the Evaluation of Energy Aid Measures

In this paragraph we will extensively examine the seven 'new' common principles that should govern the compatibility assessment of all types of aid measures falling within the scope of any communication adopted by the Commission as part of the SAM reform. Our analysis will obviously focus on those characteristics of each compatibility criterion having a major impact on energy aid measures, and on the additional parameters and specifications provided by the Commission under the EEAG and the IPCEIs Communication to deal with these types of aid.

It is, however, first worth clarifying that, for an aid measure to be authorised by the Commission, these criteria have to be met cumulatively and that they replace the three-stage balancing test which was introduced by the SAAP in 2005 to inform the Commission's practice with a clearer economic rationale.[301] Actually, they build on the Commission's experience with

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[299] Moreover, the Commission has noted that *de minims* aid is often granted in the more distortive form of operating aid and that, in practical terms, an increase in the ceilings would not have had a great impact on the ambitious plan to increase the proportion of aid exempted from prior notification. Indeed, the greater parts of the relevant small aid amounts are usually granted under support regimes. For a proper analysis and explanation in this respect see, Commission Staff Working Document of 18 December 2013, Impact Assessment Accompanying the document Commission Regulation (EU) No. 1407/2013 on the application of Articles 107 and 108 of the Treaty on the Functioning of the European Union to *de minimis* aid, SWD(2013) 521 final, sections 5.1.1.3. and 6.1.

[300] See, 2006 General *de minimis* Regulation, Article 1(f).

[301] We should recall that the balancing test was the core element of the 'refined economic approach' adopted by the Commission in the context of the 2005 State Aid Action Plan (see, SAAP, *cit.*). As named, it was meant to verify whether the positive effects of the aid could balance out its negative effects. However, several experts have strongly criticised the Commission for having provided no adequate analytical economic framework for State aid evaluation and for what has been defined as 'economics-illiterate' decisional practice. See, Heimler, A, Jenny F. (2012) The Limitations of European Union Control of State aid. *Oxford Review of Economic Policy* **28**(2) 347-367; Coppi L. (2011) 'The Role of Economics in State Aid Analysis and the Balancing Test', in Szyszczak E. (ed.)

this test.[302] In fact, at first sight, they seem to almost entirely mirror the main stages of analysis under the balancing test,[303] albeit with an extra requirement that aid be transparent and renewed favour towards measures providing for the selection of beneficiaries through a bidding process.[304] However, when examining them in more depth, it appears clear that they have been simplified and better specified. Moreover, as we will explain, some noteworthy substantive changes have been introduced, especially with respect to the incentive effect requirement and the proportionality test. That said, there is another very important distinction between the previous compatibility regime and the new framework of *ex ante* analysis of State aid measures: under the new framework, in fact, the clear-cut separation between standard and detailed assessment has become blurred.[305] This is not only an element of simplification. It actually makes the evaluation of most types of aid more rigorous and demanding. Indeed, in the period 2007-2013 detailed assessment of the balancing test – which corresponds more or less to the new general compatibility test – was not applied to all awards of State aid. Most of the cases were, in fact, subject to a so-called simplified assessment. By contrast, for the period 2014-2020 most notified aid measures are to be analysed using the common assessment principles.

Research Handbook on European State Aid Law. Cheltenham: Edward Elgar Publishing; Heimler A. (2010) 'European State Aid Policy in Search of a Standard: What is the Role of Economic Analysis', in Hawk B. E. (ed.), *International Antitrust Law & Policy: Fordham Competition Law 2009*. Huntington: Juris Publishing; Hildebrand D., Schweinsberg A. (2007) Refined Economic Approach in European State Aid Control – Will it Gain Momentum?. *World Competition* **30**(3) 449-462; Buendía Sierra J.L., Smulders B. (2008) 'The Limited Role of the "Refined Economic Approach" in Achieving the Objectives of State Aid Control: Time for Some Realism', in Rodríguez Iglesias G.C., Van Miert K., Monti M., Kroes N. (eds) *EC State Aid Law: Liber Amicorum Francisco Santaolalla*. The Hague: Kluwer Law International; Jenny F. (2006) The State Aid Action Plan: A Bold Move or a Timid Step in the Right Direction?. *Competition Policy International* **2**(2) 79-91.

[302] For some criticism of the alleged circumstance that no real balancing was carried out by the Commission in the period 2007-2013 see, Nicolaides P. (2016) 'The Economics of State Aid', in Hancher L., Ottervanger T., Slot P.J. (eds) *EU State Aids*. London: Sweet and Maxwell, at p. 45.

[303] More precisely, the balancing test required the following three questions to be answered with regard to the specific measure under scrutiny: (1) is the aid measure aimed at a well-defined objective of common interest? (2) is the aid well designed to deliver the mentioned objective (*i.e.*, does the proposed aid address the relevant market failure or other objectives)? and (3) are the distortions of competition and effect on trade limited, so that the overall balance is positive? Providing an answer to the second abovementioned question, in turn, entailed (i) an analysis of the appropriateness of State aid as an instrument for achieving the relevant policy objective and of the existence of other equally good or even better instruments, (ii) an evaluation of the capability of the aid measure to provide an incentive effect, *i.e.*, to change the behaviour of the beneficiary, and (iii) an assessment of the proportionality of the measure, *i.e.*, of the possibility of obtaining the same change in behaviour with less aid. For an exhaustive analysis of this balancing test and its underlying logic see, *inter alia*, Nicolaides P. (2012) 'The Economics of State Aid and the Balancing Test', in Hancher L., Ottervanger T., Slot P.J. (eds) *EU State Aids*. London: Sweet and Maxwell; and Friederiszick W., Röller L-H, Verouden V. (2007) 'European State Aid Control: An Economic Framework', in Buccirossi P. (ed.) *Handbook of Antitrust Economics*. Cambridge, MA: The MIT Press.

[304] See, for instance, EEAG, *cit.*, para 27.

[305] This division was meant to differentiate – according to the nature of the measure and certain other parameters – the level of detail to be adopted by the Commission when carrying out the compatibility analysis.

This is certainly the case for aid exceeding the thresholds of individual notification provided under New GBER and for all support measures covered by the new frameworks and guidelines, regardless of the amount of the aid.[306] Moreover, on the basis of recent Commission practice, an important assumption seems to be well-grounded: although not explicitly specified, aid measures that do not fall within the scope of any soft law instrument and, thus, have to be directly assessed under the Treaty,[307] will also be addressed on the basis of the common compatibility criteria. Indeed, for instance, notwithstanding that the nuclear sector still falls outside the scope of the EEAG, the Commission applied these criteria in the recent decision on the UK support plan for the construction and operation of the Hinkley Point nuclear power plant.[308]

Turning to the analysis of the common assessment principles, the first compatibility condition the Commission looks at systematically is whether the aid measure *contributes to a well-defined objective of common interest*, in accordance with Article 107(3) TFEU. With specific reference to the energy sector, in line with the primary goal of the SAM initiative to meet the Europe 2020 climate and energy sustainability targets,[309] the EEAG specify that they also encompass aid measures fostering the achievement of these targets.[310] Moreover, expressly covered thereunder are even aid provisions aimed at incentivising investments in those energy networks that are required to adjust the energy system in order to manage the increased share of variable energy from renewable sources.[311] Furthermore, in the mentioned guidelines the Commission has clarified that the first common assessment criterion is also met by aid measures furthering the achievement of the five priorities set out in the 2020 Energy Strategy for the

[306] Under the previous compatibility regime, aid measures falling within the scope of the relevant guidelines were subject to the detailed assessment of the balancing test only when they exceeded certain thresholds.

[307] See, in that respect, Chapter 4.

[308] Commission Decision of 08 October 2014, State aid SA.34947, *Support to Hinkley Point C Nuclear Power Station* (*CfD for Hinkley Point*), OJ 2015 L109/44.

[309] See, Europe 2020 Strategy, *cit.*, p. 11, providing, among the targets to be met by 2020, a 20 per cent reduction in Union greenhouse gas emissions compared to 1990 levels, an increase in the share of Union energy consumption produced from renewable resources to 20 per cent, and a 20 per cent increase in energy efficiency compared to 1990 levels.

[310] See, EEAG, *cit.*, para. 30.

[311] *Ibidem.* The Commission explicitly refers to the objectives provided under the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *A Roadmap for moving to a competitive low carbon economy in 2050* (2050 Roadmap), COM(2011) 112 final, and the Communication from the Commission, Resources Efficiency Roadmap, *cit.*

purpose of ensuring a competitive, sustainable and secure energy system in a well-functioning Union energy market.[312]

Regarding energy aid measures that may be authorised under Article 107(3)(b) exemption, the IPCEIs Communication expressly specifies that the first compatibility condition may be satisfied by any project involving at least two Member States, which is of major importance – either in qualitative or in quantitative terms –[313] for the Europe 2020 Strategy, the 2020 Energy Strategy, the 2030 Climate and Energy Framework, the Energy Security Strategy, the Resource Efficiency Flagship Initiative,[314] and the Trans-European Transport and Energy networks.[315] More precisely, this condition is certainly fulfilled by these kinds of projects when all the other eligibility criteria set out therein are met.[316] The latters include a set of general cumulative conditions and specific criteria for environmental and energy projects. As per the general eligibility criteria,[317] they also encompass the requirement to phase out environmentally harmful subsidies enshrined in the Resources Efficiency Roadmap and several Council conclusions,[318] and the requisite that the project has a significant impact on sustainable growth, competitiveness of the Union and societal challenges.[319] As regards, in particular, the energy-

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[312] *Ibidem.* See, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *Energy 2020 – A strategy for competitive, sustainable and secure energy* (2020 Energy Strategy), COM(2010) 639 final. More precisely, the five priorities established under the mentioned Communication are the following: achieving an energy efficient Europe, limiting energy use in Europe, building a pan-European integrated energy market, empowering consumers and achieving the highest level of safety and security, extending Europe's leadership in energy technology and innovation and strengthening the external dimension of the EU energy market.

[313] That is to say, the project should be either particularly large in size or scope and/or imply a considerable level of technological and financial risk. See, *ibidem*, para. 24.

[314] See, respectively, Europe 2020 Strategy, *cit.*; 2020 Energy Strategy, *cit.*; Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *A policy framework for climate and energy in the period from 2020 to 2030* (2030 Climate and Energy Framework), COM(2014) 15 final; Communication from the Commission to the European Parliament and the Council, *European Energy Security Strategy* (Energy Security Strategy), COM(2014) 330 final; and Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *A Resource-Efficient Europe – Flagship Initiative under the Europe 2020 strategy* (Resource Efficiency flagship initiative), COM(2011) 21 final. The list of Union strategies and programmes is of an open-ended nature.

[315] Regulation (EU) No. 347/2013 of the European Parliament and of the Council of 17 April 2013 on guidelines for trans-European energy infrastructure and repealing Decision No. 1364/2006/EC and amending Regulations (EC) No. 713/2009, (EC) No. 714/2009 and (EC) No. 715/2009, OJ 2013 115/39.

[316] See, IPCEIs Communication, *cit.*, para.15.

[317] *Ibidem*, section 3.2.1.

[318] *Ibidem*, para. 19. See, Communication from the Commission, Resources Efficiency Roadmap, *cit.*, and, for instance, the European Council, Conclusions of 23 May 2013, EUCO 75/1/13, *cit*.

[319] *Ibidem*, para. 14. As per the other general cumulative conditions, the project must be of major importance for the Union programme or strategy its objective relates to, it must involve more than one Member State and has to be co-financed by the beneficiary. Moreover, its benefits – which must be clearly defined in a concrete, clear and

specific eligibility criteria, the projects addressing objectives related to this area of the EU market must either be of great importance for the environmental, energy and security of energy supply strategy of the Union or contribute significantly to the internal market.[320]

The second criterion the Commission should start to properly verify is the *necessity for State aid*. This compatibility condition is fulfilled only by aid measures that bring about material improvements that the relevant market is unable to deliver itself, by addressing equity or cohesion needs or by remedying 'residual' market failures.[321] With specific reference to the energy sector, all market failures hampering a well-functioning, secure, affordable and sustainable internal energy market are considered potential candidates for aid under the EEAG.[322] However, the mere existence of these kinds of market failures is not enough. As mentioned, Member States are allowed to use the aid instrument only to target 'residual' energy market failures; that is to say, market failures that are not tackled by other policies and measures already in place. This might be the case for sectorial regulations, carbon taxes and pricing mechanisms like the EU ETS.[323] The types of environmental and energy market failures the Commission takes into account under the EEAG are negative and positive externalities, asymmetric information and coordination failures.[324] While the last two types of failures typically come up with respect to cross-border or domestic energy infrastructure projects, negative externalities usually arise when pollution is not adequately priced. Regarding positive externalities, with reference to the energy sector they are normally associated with energy infrastructure or generation adequacy measures that benefit many Member States or consumers,

identifiable manner – must extend to a wide part of the Union through positive, identifiable, spillover effects. Hence, they must not be confined to the undertakings, the sector and the Member States concerned (paras 14 and 16-18). Moreover, general positive indicators of the fulfilment of the first compatibility condition are also provided (section 3.2.2.).

[320] See, IPCEIs Communication, *cit.*, para. 23.

[321] This traditional requirement of the Commission assessment of compatibility was clearly endorsed long ago by the Court of Justice: see, Case 730/79, *Philip Morris Holland BV v. Commission*, [1980] ECR 2671, paras 16 and 17, and, more recently, Case C-390/06, *Nuova Agricast Srl v. Ministero delle Attività Produttive*, [2008] ECR I-2577, para. 68, and Joined Cases C-630/11 P to C-633/11 P, *HGA Srl and Others, Regione autonoma della Sardegna, Timsas srl and Grand Hotel Abi d'Oru SpA v. Commission* (*HGA Srl and Others v. Commission*), ECLI:EU:C:2013:387, para. 104. For a strong criticism of the Commission's approach towards the (non) assessment of market failures and of the (lack of) clarifications provided in the context of the SAM reform regarding the economic principles that should guide this assessment see, Temple Lang J. (2014) EU State Aid Rules – The Need for Substantive Reform, *cit.*

[322] See, EEAG, *cit.*, para. 35.

[323] *Ibidem*, para. 36.

[324] *Ibidem*, para. 35. With respect to individually notifiable aid, additional conditions to be satisfied are provided under the EEAG because "*not all undertakings concerned may be confronted with these market failures to the same extent*" (paras 38-39).

and investments in system stability or new renewable technologies. Turning to the deployment of IPCEIs, this often requires significant participation from national authorities because the market cannot finance projects on such a large scale.[325] Hence, the Commission has announced that it may consider that the presence of market failures or other important systemic failures is presumed where the project fulfils the above-addressed eligibility criteria.[326]

The third compatibility condition that the Commission will apparently address better as of now is the greater *appropriateness of the aid measure* under scrutiny compared to the alternative policy tools and aid instruments potentially capable of achieving the targeted objective of common interest. More precisely, it must be shown that the possible alternative options – if available – would be more expensive, distortionary or intrusive than the chosen financial mechanism. Under the IPCEIs Communication this kind of evidence has to be provided with regard to aid in support of projects that are important for the proper development of the European energy market.[327] Importantly, the Commission has explicitly held that, in such cases, the energy security and energy efficiency objectives must be taken into account in the analysis.[328] Regarding the environmental and energy goals covered by the EEAG, though, the Commission has clearly maintained that in most cases regulatory and market-based instruments are better placed to reach them.[329] Actually, it went so far as to state that, for instance, only proper legislation can ensure the full *internalisation of the costs of pollution* by polluters, and that State aid cannot be granted in the field as long as the latter can be identified and held legally liable for an environmental problem generated under existing EU or domestic law.[330] Hence, by applying the same logic to the energy sector, aid measures favouring energy intensive users (EIUs) should be considered as instruments of last resort for dealing with competitiveness and carbon leakage issues, although we will see that they can be authorised when satisfying specific additional compatibility criteria.[331] The same applies to aid for generation adequacy, which is usually granted to conventional sources.

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[325] See, IPCEIs Communication, *cit.*, para. 5.

[326] *Ibidem*, para. 27.

[327] *Ibidem*, paras 36 and 40.

[328] *Ibidem*, para. 37.

[329] See, EEAG, *cit.*, para. 41.

[330] *Ibidem*, para. 43.

[331] See, in that respect, Chapter 4.

With respect to the appropriateness of any new aid measure proposed by a Member State, the Commission has also warned about the potential harms its coexistence with other strongly recommended regulatory and market-based instruments addressing the very same market failures might bring about in terms achieving the policy objective concerned.[332] Under certain circumstances, the same is held to be true when they tackle different market failures, as they might counteract each other. For instance, certain supply-side mitigation aid measures that purposely increase the supply of variable and intermittent power, such as renewable electricity, might raise security of supply problems. These problems might be addressed by implementing the so-called capacity remuneration mechanisms. However, such mechanisms, in turn, hinder the phasing-out of environmentally and economically harmful subsidies.[333] Hence, the Commission has explicitly maintained that security of supply problems might be better remedied through proper regulations disciplining the available interconnection capacity instead of by introducing aid measures for generation adequacy, such as capacity mechanisms.[334] In this regard we might further add that, as we shall see, the latter are far more expensive for taxpayers and might run counter the energy union's goals because they typically compensate certain selected domestic generators for the mere availability of capacity over a certain period of time and, thus, they reserve for them the relevant amount of generation.[335] All these and other issues are to be dealt with when establishing whether energy aid is appropriate or not. Once it is found that State aid is the most appropriate tool for achieving the targeted objective of common interest, the Member State has to demonstrate why alternative less distortive forms of energy aid than the notified one – if any – would not be equally or more effective and efficient.[336] For instance, for the very same reasons provided above, the Commission might find that, in certain circumstances, aid to energy infrastructures could be preferable to aid for generation adequacy in order to deal with security of supply challenges. In this regard it is worth noting that the Commission has explicitly held that, in general, repayable advances are less distortive in comparison to direct grants, which so far have been frequently used to support energy infrastructures. Similarly, it has stressed that tax credits impair the level playing field

[332] See, EEAG, *cit.*, para. 42.

[333] *Ibidem*, paras 43 and 216.

[334] *Ibidem*, para. 226.

[335] Similarly, Biondi A., Righini E. (2015) An Evolutionary Theory of EU State Aid Control, in Arnull A., Chalmers D. (eds) *The Oxford Handbook of European Law*. Oxford: Oxford University Press.

[336] See further, EEAG, *cit.*, section 3.2.3.2.

less than tax reductions,[337] which are, instead, more frequently granted to EIUs in order to deal with competitiveness and carbon leakage concerns.

Turning to the fourth compatibility condition that should be satisfied for an energy aid measure to be authorised by the Commission, the Member State concerned has to demonstrate that the measure in question has an *incentive effect;* that is to say, that the subsidised activity would not be carried out in the absence of the aid. More precisely, the aid must be capable of inducing beneficiaries to change their behaviour to such an extent that they engage in additional activities to assist with achieving the targeted objective of common interest, which they would not undertake or would undertake in a restricted or different manner without it.[338] Hence, as the Court has also confirmed,[339] the Commission is entitled to refuse to authorise an aid measure that simply subsidises activities that the recipient undertaking would carry out anyway or that compensates the undertaking for normal business risks. Actually, this is clearly explicated in the EEAG and the IPCEIs Communication.[340] In order to prove the existence of an incentive effect, the granting authorities have to enter into a credible counterfactual analysis, which should evidence that the counterfactual situation without the aid would not be effective in pursuing the relevant public policy objective.[341] In reality, this substantive incentive effect test was already incorporated through the SAAP reform in the quasi-regulatory framework for compatibility assessment that was applied in the period 2008-2014,[342] with the guidelines preceding this reform merely requiring a rather easy formal check. Hence, since 2008, this formal check has simply been one of the elements of the new more inclusive analysis under the incentive effect criterion. It consists of verifying that the granting authority has complied with

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[337] *Ibidem*, para. 45.

[338] Regarding the relevance of the incentive effect criterion for ensuring the effectiveness of State aid in pursuing public policy objectives and the important connections between the analysis to be carried out under such criterion and the requirement to reduce to the minimum the negative effects on competition and trade any aid measure might generate see, Verouden V. (2016) EU State Aid Control: The Quest for Effectiveness. *European State Aid Law Quarterly* **14**(4) 459-464.

[339] The Commission's prerogatives with that respect have been clearly recognised by the Court of Justice in, for instance, Joined Cases C-630/11 P to C-633/11 P, *HGA Srl and Others v. Commission*, *cit.*, para. 104. See also, Opinion of Advocate General Bot delivered on 21 March 2013 in Joined Cases C-630/11P to C-633/11P, *HGA Srl and Others v. Commission*, *cit.*, paras 47 ff. With specific reference to the Commission's discretionary power in assessing the compatibility of IPCEIs see, Joined Cases C-62/87 and 72/87, *Exécutif regional wallon and SA Glaverbel v. Commission*, [1988] ECR 1573, para. 21.

[340] See, EEAG, *cit.*, para. 68, and IPCEIs Communication, *cit.*, para. 28.

[341] See, IPCEIs Communication, *cit.*, para. 33(a).

[342] Regarding the previous environmental aid guidelines see, EAG, *cit.*, section 1.3.4. For an exhaustive analysis on how the incentive effect was defined and measured at the time see, Nicolaides P. (2009) The Incentive Effect of State Aid: Its Meaning, Measurement, Pitfalls and Application. *World Competition*, 32(4) 579–591.

the requirement to not award the relevant aid to undertakings having already started to implement the supported project before applying for aid; a circumstance that, in fact, indicates, *per se*, that aid is not needed to carry out the project concerned.[343]

Notwithstanding the above considerations, in the Special Report on enforcement and compliance with State aid rules it issued in October 2016, the European Court of Auditors clearly evidenced that the absence of an incentive effect was one of the four most frequent State aid errors detected in the period 2010-2014 and one of the two mistakes that had the greatest financial impact.[344] Hence, in the SAM Communication the Commission explicitly placed greater emphasis on the incentive effect criterion.[345] As a result, this criterion has been given more prominence in all the guidelines adopted thereunder, including the EEAG. Indeed, to avoid the risk of further unnecessary wasting of public resources, the EEAG not only provides more detailed general conditions that all environmental and energy support measures should satisfy with in respect [346] but also lays out additional more stringent prerequisites for individually notifiable aid measures.[347] Positive presumptions of compliance are, however, established with respect to certain categories of aid.[348] Moreover, in line with the renewed favour towards measures providing for the selection of beneficiaries through competitive bidding processes, under the EEAG the Commission has indicated that a positive presumption of compliance also applies to energy aid that is to be awarded on the basis of such processes.

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[343] See, EEAG, *cit.*, para. 50.

[344] See, European Court of Auditors, Special Report 24/2016 of 4 October 2016, More Efforts Needed to Raise Awareness of and Enforce Compliance with State Aid Rules in Cohesion Policy. Luxembourg: Publications Office of the European Union, figure 6 and points 37, 38 and 40. The European Court of Auditors also specified that it had even found cases where aid was granted to projects that had already started before the project applications were submitted (point 41), a rather senseless mistake. That said, it is worth noting that, over the past decade, most of the annual reports of the European Court of Auditors on the implementation of the EU budget have indicated a failure to ensure that aid measures deliverethe required incentive effect among the three most recurrent types of detected State aid errors. The relevant annual reports of the European Court of Auditors are available at http://www.eca.europa.eu/en/Pages/PublicationSearch.aspx (accessed 30 October 2016).

[345] The Commission actually stated that "*State aid will be effective in achieving the desired public policy objective only when it has an incentive effect, i.e. it induces the aid beneficiary to undertake activities it would not have done without the aid.* […] *State aid which does not target market failures and has no incentive effect is not only a waste of public resources but it acts as a brake to growth by worsening competitive conditions in the internal market*". Hence, a "*greater scrutiny of the incentive effect will play an important role in that context to ensure value for money and avoid distortions*". See, SAM Communication, *cit*., paras 12 and 18(b).

[346] For further details with regard to the Commission's assessment of whether an energy aid measure is able to induce the beneficiary to change its behaviour to improve the functioning of a secure, affordable and sustainable energy market see, EEAG, *cit.*, section 3.2.4.1.

[347] see, EEAG, *cit.*, section 3.2.4.2.

[348] *Ibidem*, paras 53-68.

In these cases, in fact, the granting authorities and beneficiaries are not required to comply with either the substantive or formal checks described above.[349]

The choosing of recipients through tenders is also included among the positive indicators of compatibility under the IPCEIs Communication.[350] In addition, with specific reference to the incentive effect, under this Communication the Commission will consider a positive indicator the circumstance that the important project under scrutiny would not in itself be sufficiently profitable for a private undertaking to carry out it but would generate important benefits for society.[351] That said, the IPCEIs Communication distinguishes three broad possible categories of counterfactual scenarios that may be applied alternatively,[352] thus adding an important element of flexibility to the assessment of both the incentive effect and the proportionality of the financial support, which we will now address.

More precisely, the *proportionality of the aid* is the fifth compatibility condition the Commission verifies. On the basis of this condition, which was also addressed under the prior balancing exercise, the amount and intensity of aid must be kept to the minimum necessary to induce the additional investment or activity that allows for achieving the set energy-related objective or to secure a sufficient level of profitability for undertakings involved in IPCEIs.[353] That is to say, the beneficiary shall not be overcompensated. To that effect, the general rule is that the amount of aid granted must be lower than the eligible costs – *i.e.*, the costs that may be subsidised –[354] and, thus, the maximum permissible aid intensities. The latter, in fact, represent a given percentage of the mentioned costs, directly set out in the various guidelines for each category of aid.[355] However, both the annual reports of the past decade of the European Court of Auditors and the special report on State aid recently issued by the same Court have evidenced

[349] *Ibidem*, para. 52.

[350] See, IPCEIs Communication, *cit.*, para. 39.

[351] *Ibidem*, para. 33(b).

[352] More precisely, the first type of scenario is represented by an already considered and effectively feasible comparable alternative project. The second counterfactual situation consists in the circumstance that, without the aid, the recipient would carry out the project outside the EU, in a country where the production costs are lower. In the third one, instead, it would simply not undertake a comparable project.

[353] See, EEAG, *cit.*, para. 69, and IPCEIs Communication, *cit.*, para. 30.

[354] See, EEAG, *cit.*, paras 72-75 and Annex 2, which provide a list of counterfactual scenarios or eligible costs calculations. Regarding important projects of common European interest, the Annex to the IPCEIs Communication also provides a list of eligible costs.

[355] See, EEAG, *cit.*, Annex 1.

that the granting of aid to ineligible costs and the exceeding of maximum aid intensities have always been among the four most frequent State aid errors.[356]

As a consequence of the foregoing, some noteworthy substantive changes to the proportionality test have been introduced, for instance, in the EEAG, in order to provide a more in-depth economic analysis of the needs of potential beneficiaries when assessing environmental and energy-related aid.[357] Indeed, the method for determining the eligible costs has been simplified and slightly amended so as to identify more accurately the real costs of the various investment options open to the beneficiary, thereby reducing the abuses the previous method was deemed to allow.[358] Hence, the eligible costs are now the costs of an identifiably separate environmental or energy-related investment.[359] If the add-on component is not readily identifiable, though, the eligible costs are the investment (and operating, for aid subject to individual assessment) net costs with the aid less the counterfactual net costs.[360] More precisely, the analysis of the environmental and energy aid that should be individually assessed aid is based on calculating the 'net extra costs'; that is to say, the investment and operating costs necessary to meet the relevant objective minus the costs under the counterfactual scenario, where no aid is granted.[361] Since assessing operating benefits and costs is rather complicated, a simplified method has been established for determining the eligible costs for environmental and energy aid schemes: eligible costs are only the extra investment costs.[362] A final important characteristic of the proportionality test provided under the EEAG should be highlighted: as under the previous regime, where environmental and energy aid are granted through competitive bidding processes satisfying certain transparency and non-discriminatory criteria,

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[356] See, for instance, European Court of Auditors, Special Report 24/2016 of 4 October 2016, More Efforts Needed to Raise Awareness of and Enforce Compliance with State Aid Rules in Cohesion Policy, *cit*., points 37-39.

[357] Regarding the novelties introduced by the SAM reform with respect to the cumulation requirements (EEAG, *cit.*, paras 81-82), which should also be addressed under the proportionality criterion, see, Staviczky P. (2015) Cumulation of State Aid. *European State Aid Law Quarterly* **14**(1) 117-129. The article covers not only the general cumulation rules provided under the various new guidelines, but also those provided under the New GBER and the New General *de minimis* Regulation.

[358] For a comment in that respect see, Nicolaides P. (2015) 'The New Guidelines on State Aid for Environmental Protection and Energy, 2014-2020', in Nicolaides P. (ed.) State Aid Uncovered: Critical Analysis of Developments in State Aid 2014, *cit.*, pp. 256-263.

[359] Instead, under the EAG the eligible costs were calculated as the difference between the extra costs of the environmental investment and the costs of investing in a conventional technology or process. See, EAG, *cit.*, section 1.3.5.

[360] See EEAG, *cit.*, paras 72-73.

[361] *Ibidem*, para. 70 and section 3.2.5.3.

[362] *Ibidem*, para. 71.

the aid amount may reach 100 per cent of the eligible costs.[363] That said, the Commission has stated that it will consider environmental and energy aid to meet the proportionality criterion if the eligible costs are correctly calculated and the established maximum allowable rates of aid intensity are respected.[364] All these changes have, however, no impact on the main principle underlying the peculiar method adopted for determining eligible costs under the environmental and energy aid regime and the resulting alleged failure of the covered aid measures to generate the expected incentive effect.[365] Indeed, to the extent that the eligible costs will continue to be limited to the extra costs – thus, covering only a portion of the costs of the investment – and that one straightforward option is to simply avoid these extra costs by investing in cheaper technologies, the financial rationale for environmentally-friendly and energy-related investments appears questionable.[366]

For the purposes of our research it is worth finally noting that an exception to the above general rules is the calculation methodologies provided for aid for generation adequacy and aid for the construction of energy infrastructures and networks falling within the scope of the EEAG. With regard to the first category of support measures, the proportionality requirement is satisfied if the established rate of return can be considered reasonable.[367] As per the funding support for energy infrastructures and networks, though, the aid amount must be limited to the minimum needed to achieve the infrastructure objectives sought. Therefore, since the counterfactual scenario is presumed to be a situation in which the project would not take place, the eligible cost is the so-called funding gap and the aid intensity can reach up to 100 per cent of this gap.[368]

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[363] *Ibidem*, para. 80.

[364] *Ibidem*, para. 79.

[365] While eligible costs for State aid measures traditionally include all the costs to be incurred for the investment to be realised, eligible costs for environmental and energy-related aid are limited to the extra costs directly linked and necessary to the achievement of a higher level of environmental protection or of the energy-related objective.

[366] As has been put forward, the Commission Decision of 16 October 2013, State aid SA.36556, *Netherlands - anti-opt-out scheme water boards*, OJ 2013 C353/3, is one of the few decisions where both the beneficiaries' investments and the related aid measure have proven to be economically rational (see, paras 40-44). However, aid measures in the form of exemption and/or reductions from environmental taxes are obviously exceptional in terms of recipients' economic benefits. Moreover, the above cited is one of the few cases where aid in thid form proved to have an unquestionably positive environmental impact and to be appropriate, necessary and proportional. See, with that respect, Nicolaides P. (2014) In Search of Economically Rational Environmental State aid: the Case of Exception from Environmental Taxes. *European Competition Journal* **10**(1) 155-165.

[367] See, EEAG, *cit.*, paras 228-231. With that respect see, further, Chapter 4.

[368] See, EEAG, *cit.*, paras 76 and 211-213. With that respect see, further, Chapter 4.

Importantly, the funding gap approach has also been rightly extended to the assessment of projects falling within the scope of the IPCEIs Communication.[369] In such case, the methodology for calculating the funding gap depends on which of the three possible counterfactual scenarios that we have mentioned when dealing with the incentive effect criterion has been adopted.[370] In any case, the maximum aid level is to be determined with regard to the identified funding gap in relation to the eligible costs. With that regard, the Commission has also established that, if justified by the funding gap analysis, the aid intensity can reach up to 100 per cent of the eligible costs, thus adding another important element of flexibility to the assessment of IPCEIs projects.[371]

We should now turn to the sixth compatibility requirement. This requirement mandates the *avoidance of undue negative effects* on competition and trade, so as to allow that the overall balance of the measure is positive because the favourable results it produces in terms of attaining the targeted objective of common interest outweigh its negative impacts. Under this criterion, two main potential distortions are to be addressed when dealing with environmental and energy aid under the EEAG: product market distortions and location effects. In this regard the Commission has explained that Member States should take into consideration the potential distortive effects the measure might generate for competitors of the beneficiaries which, without the aid, already engage in activities assisting with the achievement of the relevant environmental and energy objectives.[372] Moreover, the aid measure should not strengthen the market power of the beneficiaries and must avoid preventing the market mechanism from delivering efficient outcomes by interfering with the efficient expansion or entrance into the market of innovative competitors.[373] Furthermore, the Commission has placed great emphasis on the selection process adopted for allocating aid by clearly indicating how selection of the beneficiaries should be conducted for the measure to meet the compatibility condition under

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[369] In the IPCEIs Communication the Commission has also specified that "[t]*he funding gap refers to the difference between the positive and negative cash flows over the lifetime of the investment, discounted to their current value on the basis of an appropriate discount factor reflecting the rate of return necessary for the beneficiary to carry out the project notably in view of the risks involved*". See, IPCEIs Communication, *cit.*, paras. 31.

[370] Under the first type of scenario – where a comparable alternative project exists – the funding gap is the difference between the expected net present values of the two projects. In the second and third counterfactual scenarios – where there is no comparable alternative project – the profitability of the aided project in terms of achievement of the internal or the normal rate of return is considered. See, IPCEIs Communication, *cit.*, paras. 30 and 32.

[371] *Ibidem*, para 31.

[372] See, EEAG, *cit.*, para. 90.

[373] *Ibidem*, para. 91-92.

scrutiny.[374] Both positive and negative presumptions of compliance also seem to be provided with respect to environmental and energy related aid measures. As per the positive rebuttable presumptions, the Commission has, first of all, stated that an inherent feature of aid granted for environmental purposes is that they selectively favour environmentally friendly technologies and products at the expense of more polluting ones and that this should not, in principle, be viewed as an undue distortion of competition.[375] Secondly, it has held that the negative impact of environmental and energy aid measures that have passed the above addressed necessity and proportionality tests is, in principle, more limited. [376] As per the presumptions of incompatibility, they encompass aid going beyond the maximum aid intensities established in the EEAG and aid for environmental and energy objectives that lead to a mere change in location of the economic activity.[377]

Turning to the IPCEIs Communication, the Commission has adopted the so-called "matching clause", already applied in the context of the R&D&I Framework 2007. Hence, it has included within the assessment of the sixth compatibility requirement an important analysis of the potential competitive disadvantage EU undertakings might face with respect to competitors located outside the Union that receive financial assistance.[378] That said, the Commission has indicated that, in the case of the cooperative important projects in question, it will focus its compatibility condition analysis on product market distortions and location effects, paying particular attention to the risk of overcapacity and the risk of subsidy races between Member States.[379] With regard to projects involving the construction of an energy infrastructure, the Commission has specified that non-discriminatory access to the latter should be ensured through compliance with access regulation and unbundling requirements provided under the relevant internal market legislation. Moreover, for the purpose of guaranteeing non-

[374] *Ibidem*, para. 99. Four additional potential negative effects are provided with respect to individually notifiable aid which the Commission should take into account when addressing them under the compatibility criterion being examined. See, EEAG, *cit.*, section 3.2.6.3.

[375] *Ibidem*, para. 90.

[376] *Ibidem*, paras 97-98.

[377] *Ibidem*, paras 94-96.

[378] More precisely, the Commission has stated that, in order to address actual or potential direct or indirect distortions of international trade, it may take into account the fact that, directly or indirectly, competitors located outside the Union have received or will receive aid of an equivalent intensity for projects similar to those under scrutiny. See, IPCEIs Communication, *cit.*, para. 34.

[379] See, IPCEIs Communication, *cit.*, paras 42 and 44.

discriminatory pricing, the energy infrastructure concerned should be subject to internal market tariff rules.[380]

A new compatibility condition has been introduced as part of the SAM initiative which applies to all aid granted on the basis of the New GBER and the new guidelines, including the EEAG and those on IPCEIs:[381] the *transparency requirement*.[382] More precisely, by the end of July 2016, the Member States were required to put in place dedicated national or local websites.[383] Moreover, they have to publish exhaustive and detailed information and acts on these websites regarding all awards exceeding € 500,000 within six months of the grant date.[384] In this regard, under the EEAG the Commission has specified that information on aid schemes granted in the form of reductions in or exemption from environmental taxes and in the form of reductions in the funding support for electricity from renewable energy sources (RES) (altogether, RES-e or green electricity) can be provided in ranges.[385] Given that transparency is now a compatibility requirement, should a Member State not comply with the relevant provisions with respect to a certain aid measure the latter would become incompatible.[386] That said, generally speaking, the Commission has introduced the transparency requirement for the

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[380] *Ibidem*, para. 43 and related footnote.

[381] Although not in the form of a compatibility condition, the transparency of aid measures was also disciplined, in some ways, in a dedicated final section of the previous guidelines and frameworks for compatibility. The EAG, for instance, simply provided a sort of programmatic provision informing the Member States that, when examining notified environmental aid measures, the Commission would have had systematically required the granting authority concerned to publish the full text of the aid scheme on the web and to communicate the internet address. However, publication on the web of block-exempted measures was already a compatibility condition under the 2008 GBER, which directly required Member States to comply with the relevant provisions upon the entry into force of the relevant aid scheme or ad hoc aid. See, EAG, *cit.*, section 7.2., and 2008 GBER, *cit.*, Article 9.

[382] See, EEAG, *cit.*, section 3.2.7, IPCEIs Communication, *cit.*, section 4.3., and New GBER, *cit.*, recital 27 and Article 9. See also, Communication from the Commission of 21 May 2014 amending the Communications from the Commission on EU Guidelines for the application of State aid rules in relation to the rapid deployment of broadband networks, on Guidelines on regional State aid for 2014-2020, on State aid for films and other audiovisual works, on Guidelines on State aid to promote risk finance investments and on Guidelines on State aid to airports and airlines (Transparency Communication), C(2014) 3349/2, n.y.p.

[383] The state aid Transparency public search page, which gives access to state aid individual award data provided by Member States in compliance with the mentioned transparency requirements, is accessible at https://webgate.ec.europa.eu/competition/transparency/public/search/home?lang=en (accessed 30 October 2016).

[384] Such information and acts should be kept published for at least ten years. More precisely, the following information and acts should be published: the full text of the approved or block-exempted aid scheme or of the individual aid granting decision (or a link to them), or certain listed detailed information for block-exempted individual aid; the identity of the granting authority and of the individual beneficiaries; the form and amount of aid granted to each beneficiary; the date of granting; the type of undertaking; the region in which the beneficiary is located and the principal economic sector in which it has its activities. See, EEAG, *cit.*, paras 104 and 107, IPCEIs Communication, *cit.*,, para. 45, and New GBER, *cit.*, Article 9, recital 27 and Annex III.

[385] See, EEAG, *cit.*, para. 105. See also, New GBER, *cit.*, Article 9(2).

[386] Member States will probably be required to publish information with respect to unlawful aid also, within six months of the relevant Commission decision.

following purposes: promoting compliance and accountability,[387] facilitating enforcement for national, regional and local authorities, enabling undertakings to check whether aid granted to competitors is legal, contributing to the creation of a level playing field across Member States and undertakings, and, importantly, simplifying and reducing – if not even eliminating – for the future the annual reporting obligations established under the Commission Implementing Regulation and the various guidelines and frameworks.[388] Notably, moreover, the new transparency requirement also seems to be aimed at counterbalancing the pro-aid reforms of the New GBER. The Commission seems, in fact, to have great confidence in the fact that any risk of abuse of the wider scope of the New GBER by Member States might be avoided thanks to the ability of competitors of beneficiaries of block-exempted aid to detect incorrect applications of the regulation and to complain in these respects.[389] However, this might not be the case.[390]

3.3. Some Problematic Distinctive Features of the New Common Compatibility Conditions for Block-Exempted Energy Aid

The transparency requirement is not the only compatibility criterion the New GBER has in common with the new guidelines and frameworks. A set of common principles that to a certain extent trace the assessment path provided under the abovementioned soft law instruments is provided under the New GBER.[391] Although less clearly defined, and not all exhaustively

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[387] Some esteemed scholars have actually maintained that the transparency requirement could potentially revolutionise State aid control because all levels of Member States' administrations are now accountable to their citizens for how their monies are spent and to whose benefit. See, Biondi A., Righini E. (2015) An Evolutionary Theory of EU State Aid Control, in Arnull A., Chalmers D. (eds) *The Oxford Handbook of European Law*, *cit.*

[388] See, in that respect, Transparency Communication, *cit.*, pp. 3 and 5, and GBER, *cit.*, recital 27. Regarding the annual reporting obligations, see paragraph 3.4.

[389] For instance, this view seems to find, in some way, confirmation in a speech rendered by Commissioner Vestager, who has, in fact, stated that "[s]*o far, we have been talking about the responsibility of the Commission and Member States. However, the money involved is taxpayers' money, and ultimately it is citizens who must hold us all to account for the quality of State support*". See, Speech at High Level Forum of Member States by Margrethe Vestager, Commissioner for Competition, 18 December 2014, available at https://ec.europa.eu/commission/2014-2019/vestager/announcements/speech-high-level-forum-member-states-margrethe-vestager-commissioner-competition-18-december-2014_en (accessed 30 October 2016).

[390] See, with that respect, Nicolaides P. (2015) 'The New General Block Exemption Regulation: The Cornerstone of the State Aid regime, 2014-2020', in Nicolaides P. (ed.) State Aid Uncovered: Critical Analysis of Developments in State Aid 2014, *cit.*, pp. 249-255.

[391] See, GBER, *cit.*, Chapter I.

disciplined, the common cumulative[392] compatibility conditions of the New GBER are, in fact, largely inspired by the assessment criteria for *ex ante* scrutiny of State aid measures we have addressed in the previous paragraph. Indeed, they are also aimed at "*ensur*[ing] *the aid* [concerned] *serves a purpose of common interest, has a clear incentive effect, is appropriate and proportionate, is granted in full transparency and subject to a control mechanism and regular evaluation, and does not adversely affect trading conditions to an extent that is contrary to the common interest*".[393] More precisely, Chapter I of the New GBER sets out, *inter alia*, the rules applicable for verifying the incentive effect, the general principles governing the calculation of eligible costs and aid intensities, and the provisions for the transparency requirement.[394] The relevant objectives of common interests, market failures, eligible costs and maximum aid intensities are directly defined and laid down for each type of covered aid in Chapter III, which provides the specific compatibility conditions applicable to the categories of aid eligible for block exemption. The appropriateness of the aid and the avoidance of undue negative effects on competition and trade should, however, be ensured by compliance with the other general and specific conditions for compatibility.[395] Hence, the Member States are not required to prove the fulfilment of such conditions. As a result of the foregoing considerations, aid measures covered by the New GBER are certainly subject to fewer and simpler principles.[396]

Importantly, in comparison to the previous block exemption regime, the incentive effect requirement has been 'relaxed' to a great extent. Indeed, the substantive incentive effect test for aid to large undertakings under support schemes, which was a key novelty of the 2008 GBER, has been dropped. The requirements for such undertakings under the incentive effect criterion have, therefore, been aligned to those already set out for SMEs, which encompass merely the

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[392] *Ibidem*, recital 5.

[393] *Ibidem*, recital 6. See also, recitals 18, 22, 23 and 25.

[394] *Ibidem*, Articles 6, 7 and 9. Article 4, though, sets out the notification thresholds that should not be exceeded for an aid measure to fall within the scope of the New GBER. Article 8, then, provides the rules on cumulation under different scenarios, which shall be applied to determine whether the mentioned thresholds and the maximum aid intensities set out in Chapter III are respected. Finally, Article 5 establishes that the GBER only applies to transparent aid. This requirement was also present in the 2008 GBER and the successive *de minimis* regulations. This article also contains a list of transparent forms of aid and, contrary to the corresponding list provided in the 2008 GBER, which seemed to be only illustrative, the wording of these provisions might suggest that the new list is exhaustive.

[395] See, *ibidem*, recitals 18 and 22. Regarding energy related measures see, Chapter III, section 7, and recitals 55-68.

[396] As a further example, it might be evidenced that for aid to SMEs it is not necessary to establish the counterfactual scenario without aid.

above-explained formal check of compliance with the timing condition.[397] A – still softer than that provided under the guidelines – substantive test has instead been introduced for *ad hoc* aid awarded to large undertakings,[398] which were not covered by the 2008 GBER and had to be notified for approval under the EAG.[399] Under this test, the Member States have to verify that the beneficiaries produced additional documentation and enter into plausibility checks.[400] Moreover, the positive presumption of compliance with the incentive effect requirement, which was already applicable to, *inter alia*, environmental tax reductions fulfilling the conditions of the Energy Taxation Directive,[401] has been extended to cover additional categories of aid.[402] Finally, it is worth noting that the above-explicated general pro-aid reform of the incentive effect condition has been introduced, notwithstanding that, as mentioned, several reports by the European Court of Auditors have evidenced that mistakes regarding the existence of the incentive effect have always been among the most frequent and financially damaging ones.[403] Indeed, as explained, in the SAM Communication also the Commission has explicitly emphasised the important role that the substantive incentive effect test plays in the effort to improve the effectiveness of State aid and avoid further unnecessary wasting of public resources.[404] In the author's view, therefore, the above-provided amendments to the incentive

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[397] *I.e.*, the granting authority shall not award the aid to undertakings that have started to implement the supported projects or activities before applying for aid. See, New GBER, *cit.*, Article 6(2).

[398] *I.e.*, aid granted to large undertakings that is not part of an aid scheme. With that regard we shall explain that the notion of 'individual aid' encompasses both *ad hoc* aid and awards of aid to individual beneficiaries on the basis of an aid scheme. As per the concept of 'large enterprises' it means undertakings not fulfilling the criteria that are laid down in Annex I to the New GBER.

[399] See, 2008 GBER, *cit.*, recital 23 and Article 1(5).

[400] More precisely, in addition to complying with the general formal conditions, the Member State concerned shall ensure that the beneficiary has analysed, in an internal document, the viability of the aided project or activity with aid and without aid. Such analysis shall, in turn, confirm that aid will result in a material increase in the scope of the project/activity, a material increase in the total amount spent by the beneficiary on the subsidised project or activity or a material increase in the speed of completion of the project/activity concerned. See, New GBER, *cit.*, Article 6(3).

[401] Council Directive 2003/96/EC of 27 October 2003 restructuring the Community framework for the taxation of energy products and electricity (Energy Taxation Directive), OJ 2003 L 283/51.

[402] See, New GBER, *cit.*, Article 6(5). As under the 2008 GBER, a positive presumption is also provided with respect to fiscal measures that satisfy certain specific conditions (Article 6(4)).

[403] See, in particular and recently, European Court of Auditors, Special Report 24/2016 of 4 October 2016, More Efforts Needed to Raise Awareness of and Enforce Compliance with State Aid Rules in Cohesion Policy, *cit.* See, also the annual reports of the last decade of the European Court of Auditors on the implementation of the EU budget, available at http://www.eca.europa.eu/en/Pages/PublicationSearch.aspx (accessed 30 October 2016).

[404] See, SAM Communication, *cit.*, paras 12 and 18(b). *Contra*, Nykiel-Mateo A., Pelin A, Avallone A. (2016) 'General Block Exemption Regulation', in Pesaresi N., Van de Casteele K., Flynn L., Siaterli C. (eds) *EU Competition Law: State Aid – Book Two*. Leuven: *Claeys & Casteels* Publishing, p. 507, where the authors affirm that "[w]*hile creating an administrative burden, the condition* [relating to the existence of the incentive effect] *has very limited enforcement value and is not an effective tool for ensuring the efficiency of public spending on good*

effect criterion are hardly justifiable, even on the basis of the 'simplification' objective that has guided the reform of the 2008 GBER.[405] We can, in fact, recall, that, as has been put forward, aid that provides no incentive effects cannot remedy market failures or address equity or cohesion needs and, thus, is mere operating aid, which, generally speaking, cannot pass the compatibility test.[406]

On a final note, we can stress that, in the EEAG, the Commission has expressly stated that environmental and energy aid schemes that are excluded from the scope of the New GBER only due to their large budget, will be assessed according to the simpler common and type-specific compatibility principles set out under that Regulation. The only exception to the foregoing being the *ex post* evaluation of the aid measures concerned, which will, instead, follow the rules provided under the EEAG.[407] This is certainly a further element of simplification. However, it amounts to a sort of informal revision of the specific ceilings provided under the New GBER. With that regard, it could be argued that, although the Commission has great discretion in assessing aid measures under Article 107(3) TFEU and the guidelines provide only indications on how the analysis will be conducted, the last-mentioned soft law instrument should not provide for 'derogations' from the rules set out under general block exemption regulations. Moreover, to the extent that the very same Commission has established these rules, we might certainly assume that it had valid reasons for excluding from their scope of application aid schemes having budget exceeding certain thresholds.

3.4. The New Provisions on Supranational *Ex Post* Control over Certain Energy Aid Measures: a Critical Evaluation

aid only. That is why that requirement has been simplified […]". Given the evidence provided also in the quoted European Court of Auditor's reports and the relevant above cited statements of the Commission in that respect, we do not agree with these allegations.

[405] This is, in fact, the justification that has been put forward in that respect by some distinguished experts. See, for instance, Verouden V. (2016) EU State Aid Control: The Quest for Effectiveness, *cit.*, and Van de Casteele K. (2016) 'General Block Exemption Regulation', in Hancher L., Ottervanger T., Slot P.J. (eds) *EU State Aids*, *cit.*, at p. 215. Actually, in its article, Vincent Verouden – who was Deputy Chief Economist at DG COMP at the time of the reform – has also stated that "[i]*t is also possible that relaxing the requirements on the incentive effect in GBER has been, politically speaking, the quid pro quo for the Commission to be able to tighten the rules for a number of specific aid categories (notably regional aid and aid in the field of energy) and to demand other stricter requirements under the GBER*" (p. 463).

[406] *Ibidem*.

[407] See, EEAG, *cit.* 244.

We have already explained that one of the objectives of the SAM initiative consisted of prioritising the scrutiny of aid with the most significant impact on trade and competition, and that this objective has been pursued through extensive reform of the 2008 GBER, aimed at facilitating Member States' reliance on it.[408] In order to counterbalance this pro-aid reform of the previous general block exemption regulation and the ensuing decentralization of State aid implementation,[409] several safeguarding mechanisms have been incorporated into the State aid control system as part of the SAM agenda.[410] Indeed, under the revised regime, the Commission has tried to balance the greater responsibility and margin of discretion enjoyed by the granting authorities in designing and implementing aid measures with the need to ensure that it can continue to play its role as guardian of the Treaties, in general, and of fair competition within the single market, in particular. More precisely, the first initiative aimed at guaranteeing that balance is the adoption of the transparency requirements that we have already addressed in the previous paragraph. The other important safeguards that we will analyse in the following pages encompass a clearer definition and enhancement of the Commission's *ex post* monitoring powers and the introduction of an *ex post* evaluation mechanism for certain aid schemes.[411] Hence, on the side of the Commission, the SAM reform represents a partial shift from a State aid control system based on *ex ante* assessments of aid measures towards a system based on *ex post* checks.[412]

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[408] In that respect see paragraphs 3.1. and 3.3.

[409] For some criticism of forms of decentralisation of the State aid control system expressed long before the SAM reform took place see, Ross M. (2004) 'Decentralization Effectiveness and Modernization Contradictions in Terms', in Biondi A., Eeckhout P., Flynn J. (eds) *The Law of State Aid in the European Union*. Oxford: Oxford University Press. It is interesting how forward-looking the author's analysis was with respect to the issue of decentralisation. Indeed, ten years before the SAM reform took place, he expressed concerns and doubts that, *mutatis mutandis*, might be deemed – even more so today – convincing reasons to object to the recent reform towards decentralisation. The author, in fact, rightly maintained that "*particular concerns arise from newly liberalized sectors, especially* [the] *energy* [sector] […], *pointing out that government measures not previously considered as constituting State aid may, in the wake of deregulation, acquire this characteristic*". Hence, in his view, "*too much decentralization in terms of enforcement responsibility may be, at the very least, an invitation to inconsistent or misguided resolution of State aid problems*". He actually, further, notes that it is "*odd that calls for modernization and decentralization of State aid law should be appearing at a time when the larger issues that need resolution could be undermined by such developments*". As a result, he concludes that "[i]*n the field of State aid law, a differentiated pattern of supervision and apportionment of enforcement responsibilities distinct from the trend under Articles 81–82* [now, 101-102 TFEU] *might demand the retention of an unfashionably strong level of centralized control*" (p. 11).

[410] See, SAM Communication, *cit*., paras 19 and 21.

[411] *Ibidem*.

[412] For an interesting proposal that has been put forward for consideration by the Commission in the process of revision of the State aid control regime under the SAM initiative see, *Nicolaides P.* (2012) *State Aid Modernization*: *Institutions for Enforcement of State Aid Rules*. *World Competition* **35**(3) 457-469. The proposal was aimed at to enhancing compliance with State aid rules by the granting authorities. It has not been taken into

As per the *ex post* monitoring and reporting provisions, these were actually also included in the previous general block exemption regulation and guidelines.[413] Their role is to ensure adequate compliance by the Member States with the conditions for exemption and the compatibility criteria, and, thus, increase the effectiveness of Commission enforcement.[414] In essence, the new provisions have not provided great changes with respect to the main instruments for *ex post* control. For instance, under the New GBER both the requirement to transmit summary information about each block-exempted measure and the sanction of withdrawal of the benefit for non-compliance with the condition for exemption have been maintained.[415] Moreover, under both the New GBER and the EEAG, the obligations for the Member States to submit annual reports with exhaustive information on all the aid measures falling within their scope and to maintain detailed records of the relevant documentation for ten years have remained unchanged.[416] However, the relevant rules have been rightly systematised, refined and simplified in order to secure their correct implementation and the proper functioning of the *ex post* control system.[417] Indeed, it seems that under the previous regime they had never been adequately applied. Actually, in the very first special report it issued in 2011 on State aid, the European Court of Auditors dealt precisely with the Commission's *ex-post* monitoring practice, and strongly criticised it by providing data evidencing that the competent European

consideration by the Commission. However, for future reforms it is worth at least mentioning that the author has proposed to implement a system of institutional certification similar to those that exist in other policy areas such as the common agricultural policy and structural funds. Indeed, the author has maintained that, if the use of block exemption regulations or the application of approved aid is made conditional on an *ex ante* certification that covers all the activities of any granting authority, the awarding of incompatible aid should be reduced. Moreover, in the author's view, it would also be easier for competitors to identify and challenge non-notified aid or aid that is incorrectly applied.

[413] See, 2008 GBER, *cit.*, Articles 9-11, and, for instance, EAG, *cit.*, sections 7.1. and 7.3.

[414] Actually, the primary goals of the annual reporting obligation are to increase transparency and provide grounds for monitoring purposes. Moreover, the annual national reports should provide 'reliable' statistics for policy-making and for allowing the Commission to prepare the State Aid Scoreboard.

[415] Cf., New GBER, *cit.*, Articles 11(a) and 10, with 2008 GBER, *cit.*, Articles 9 and 10(3).

[416] Cf., New GBER, *cit.*, Articles 11(b) and 12, with 2008 GBER, *cit.*, Articles 10 and 11. Cf., also, EEAG, *cit.*, section 6, with EAG, *cit.*, sections 7.1. and 7.3. Generally speaking, the annual reporting obligation is established under the Commission Implementing Regulation. The relevant information is then processed by the Commission and published through the annual State aid Scoreboard, which can be accessed at http://ec.europa.eu/competition/state_aid/scoreboard/index_en.html, and on the Eurostat website (http://ec.europa.eu/eurostat)

[417] *Ibidem.* Regarding the New GBER, it is also worth noting that the *ex post* monitoring and reporting provisions have been moved to a chapter other than that dealing with the common compatibility provisions, an amendment that should rightly guarantee that non-compliance with the relevant obligation can be rectified. Indeed, had the monitoring and reporting requirements been properly enforced under the 2008 GBER, since they were included among the common compatibility provisions, this would have meant that all the support measures adopted by a non-compliant Member State would have qualified as unlawful aid.

Institution had never been rigorous enough in that respect.[418] A comparative analysis of the related follow-up performance audit reports and the recently issued second special report on State aid shows that the situation has improved but still not enough, and that one of the most important problems is represented by the insufficient internal coordination and information sharing among the various Directorates-General.[419] Interestingly, the evaluation provided in that respect in the mentioned second special report is also grounded on and confirmed by the results of the monitoring exercise carried out directly by the Commission.[420] Strong evidence in that regard is also provided by the most recent available figures on aid granted for environmental protection and energy-related objectives, which show a great increase in expenditure from 2013 to 2014, amounting to approximately 28.5 billion EUR.[421] This increased amount is due to the circumstance that from 2014 Member States' annual reports include more – but still not all – information on energy-related support schemes.[422] Moreover, regarding block-exempted aid, the results of past monitoring exercises have evidenced a frequent lack of compliance with State aid rules.[423]

The Commission has now tried to rectify the above-evidenced trend by expressly announcing a reinforcement of the *ex post* random scrutiny of a greater number of aid measures.[424] Actually, for instance, the Commission has never applied the related sanctioning system provided under

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[418] See, European Court of Auditors, Special Report 15/2011, Do the Commission's Procedures Ensure Effective Management of State Aid Control?. Luxembourg: Publications Office of the European Union.

[419] See, European Court of Auditors, Special Report 19/2012, 2011 Report of the Follow-Up of the European Court of Auditors' Special Reports. Luxembourg: Publications Office of the European Union; European Court of Auditors, Special Report 19/2013, 2012 Report of the Follow-Up of the European Court of Auditors' Special Reports. Luxembourg: Publications Office of the European Union; European Court of Auditors, Annual Report 1/2014, Annual Report on the Implementation of the Budget, OJ 2014 C398/1, paras 10.53-10.55, where the results for the year 2013 were summarised; European Court of Auditors, Special Report 2/2016, 2014 Report of the Follow-Up of the European Court of Auditors' Special Reports. Luxembourg: Publications Office of the European Union; and European Court of Auditors, Special Report 24/2016 of 4 October 2016, More efforts needed to raise awareness of and enforce compliance with State aid rules in cohesion policy, *cit.*

[420] See, in that respect, European Court of Auditors, Special Report 24/2016 of 4 October 2016, More efforts needed to raise awareness of and enforce compliance with State aid rules in cohesion policy, *cit.*, Annex II. More precisely, the special reports analyse the data available until the end of 2014.

[421] State aid statistics are available in the abovementioned European Commission's State Aid Scoreboard. The relevant figures have been provided by the Eurostat and are available at http://ec.europa.eu/eurostat/tgm_comp/refreshTableAction.do?tab=table&plugin=1&pcode=comp_sa_01&language=en (accessed 30 October 2016).

[422] *Ibidem.*

[423] See, SAM Communication, *cit.*, para. 21. See, in that respect, also, Nicolaides P. (2016) 'Ex Post Monitoring of State Aid', in Nicolaides P. (ed.) State Aid Uncovered: Critical Analysis of Developments in State Aid 2015. Berlin: Lexxion Publisher, pp. 262-269, evidencing an allegedly discovered error rate of 40 per cent.

[424] *Ibidem.*

the 2008 GBER, *i.e.*, the rules on withdrawal of the benefit of the block exemption. In this respect, it is also worth highlighting that this system has now been amended to extend the relevant sanction to breaches of any requirement and condition provided by the New GBER.[425] As per the EEAG, it is, instead, important to note that the reporting obligations have been made uniform for all the covered aid measures. Indeed, the exceptional regime that was applicable when the beneficiaries of the aid were large undertakings, and with respect to aid measures in the form of tax exceptions and reductions, has been abolished. [426] A noticeable incomprehensible exception to the abovementioned generalised systematisation and clarification of the rules governing the *ex post* control system is, however, represented by the new IPCEIs Communication. This Communication, in fact, simply provides that the execution of projects authorised thereunder must be subject to regular reporting.[427]

Turning to the *ex post* evaluation mechanism, which has also been introduced to counterbalance the pro-aid reform of the compatibility framework and the ensuing decentralization of State aid implementation, this is regarded as the major innovation of the SAM initiative.[428] Actually, we might assume that the abovementioned first special report on State aid which the European Court of Auditors issued in 2011 has strongly influenced the adoption of this new mechanism. Indeed, in this report, the Court strongly criticised the fact that the Commission did not have an *ex post* evaluation function.[429] Regarding the role the new evaluation requirements play in the mentioned counterbalancing exercise, it is worth highlighting that it differs from that played by *ex post* monitoring provisions. These requirements, in fact, are not aimed at checking the legality of aid measures implemented by the Member States. Indeed, the Commission has explicitly stated that the results of the evaluation carried out with respect to a certain measure will not affect the compatibility of aid

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[425] See, New GBER, *cit*., Article 10. By contrast, the 2008 GBER provided for the application of such sanctions only in case of non-compliance with the obligation to provide the information needed for *ex post* control. See, 2008 GBER, *cit.*, Article 10(3). Moreover, as opposed to the 2008 GBER, the New GBER rightly provides for possible limitation of the relevant withdrawal of certain types of aid measures, aid favouring certain beneficiaries or support provisions adopted by certain authorities, thus properly targeting the relevant dysfunctions without disrupting the entire support system of the Member State concerned.

[426] Cf., EEAG, *cit*., paras 192-194, with EAG, *cit*., para. 252.

[427] See, IPCEIs Communication, para. 49.

[428] For an analysis of the views expressed and the opinions submitted by the expert and the stakeholders on this innovative mechanism during the State aid public consultation process see, Gaál N., Boutin X. (2014) "Modernising State aid through Better Evaluations" – Insights from Recent Discussions with Stakeholders. *European State Aid Law Quarterly* **13**(1) 67-70.

[429] See, European Court of Auditors, Special Report 15/2011, Do the Commission's Procedures Ensure Effective Management of State aid Control?, *cit.*

already granted thereunder.[430] The evaluation process therefore serves the purpose of providing *ex post* – or better, *ongoing* – evidence of the actual impact the financial mechanisms concerned have on the relevant markets. This should allow Member States to better devise follow-up support measures and should assist the Commission in its future decision making.[431] Actually, for instance, in the EEAG the Commission has expressly specified that, in the future, when Member States decide to implement environmental and energy aid measures having similar objectives to those pursued by other measures that have already gone through the evaluation process, they will have to take into account the results of prior evaluations.[432] We might, thus, assume and hope that this will hold true also when the evaluation process has taken place with respect to an aid measure adopted by another Member State. Indeed, to the extent that the environmental and energy aid instruments most frequently implemented are very similar, and given the publicity obligations established with respect to the evaluation process,[433] this would avoid further wasting of public monies and efforts. The Commission could however, have made this explicit.

As a result of the foregoing, the evaluation process mainly represents a sort of learning-by-doing exercise, based on measuring the effects of aid provisions already implemented. The medium-long term possible achievement of this innovative instrument is a further simplification of the State aid control system through an increase in the grounds for exemption and the introduction of a simplified treatment for financial mechanisms that have undergone extensive evaluations. Meanwhile, this new mechanism allows the promotion of a culture of self-assessment of State aid, which might be highly beneficial for the purpose of fostering more efficient, effective and less distortive aid measures. Indeed, *ex post* evaluations have to be carried out by the Member States and are aimed at verifying in practice all the assumptions that

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[430] See, European Commission, State aid Evaluation – Frequently Asked Questions, December 2014, document available at http://ec.europa.eu/competition/state_aid/modernisation/evaluation_faq_en.pdf (accessed 30 October 2016), p. 2.

[431] See, in that respect, Commission Staff Working Document of 25 May 2014, Common methodology for State aid evaluation (Guidance Paper on Evaluation), SWD(2014) 179 final, pp. 3 and 5. See also, Peduzzi R., Sapi G. (2016) 'State Aid Evaluation', in Pesaresi N., Van de Casteele K., Flynn L., Siaterli C. (eds) *EU Competition Law: State Aid – Book One*. Leuven: *Claeys & Casteels* Publishing, providing interesting insights on the role that the evaluation mechanism already plays in certain EU countries and at the international level in improving policy making and assessing aid programmes.

[432] EEAG, *cit.*, para. 245. Actually, the Commission has also established that, for the purpose of demonstrating the appropriateness of an environmental or energy aid scheme to address the policy objective concerned, Member States can also rely on the results of past evaluations (para. 48).

[433] See, *Ibidem*, para. 243. Regarding what the publicity requirement implies see, Guidance Paper on Evaluation, section 3.8.

have led to the adoption of a certain aid measure and to its clearance by the Commission. The questions to be answered thereunder includewhether the conditions underlying the compatibility of a certain aid measure have been achieved, whether the aid measure in question has provided the required incentive effect, if it has been cost-effective in the light of its policy objective and the most proportionate and appropriate instrument to achieve it, and what its impact has been on competition and trade.[434]

This brings us to the scope of the new *ex post* evaluation mechanism.[435] Evaluation requirements are, in fact, foreseen both by the New GBER and by some of the new Commission communications providing the substantive rules governing the compatibility assessment,[436] including the EEAG.[437] However, first of all, the kinds of schemes that are potentially subjected to evaluation under the New GBER and the new guidelines and the selection criteria provided thereunder are partially different. Secondly, the Commission has considered that, although evaluation obligations could certainly be imposed with respect to every State aid measure, at least in this first learning phase it is worth confining them only to specific types of aid schemes having certain characteristics. This might be justified by the circumstance that extensive assessment of a measure under the evaluation process might be important only with respect to aid schemes that have a potentially severe impact on the internal market and are able to significantly jeopardise the level playing field.[438] Moreover, a proper evaluation is a complex, expensive and time-consuming task that might put a disproportionate burden on the Member State if not properly targeted.[439]

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[434] See, New GBER, *cit*., recital 8, and Guidance Paper on Evaluation, *cit*., section 2.

[435] For a detailed description of this mechanism see also, Boutin X., *Nuotio-Osazee I. (2016)* 'Ex Post Evaluation of Aid', in Werner P., Verouden V. (eds) *EU State Aid Control: Law and Economics.* The Hague: Kluwer Law International.

[436] This is the case for the EEAG, the R&D&I Framework 2014, the Regional aid Guidelines 2014, the Rescue and Restructuring aid Guidelines 2014, the *Guidelines on State aid to promote risk finance investments*, *cit.*, the *EU Guidelines for the application of State aid rules in relation to the rapid deployment of broadband networks*, *cit.*, and the *Guidelines on State aid to airports and airlines*, *cit*.

[437] See, New GBER, *cit*., Article 1(2)(a), and EEAG, *cit.*, section 4.

[438] See, with in respect, EEAG, *cit.*, para. 243, and Guidance Paper on Evaluation, *cit.*, p. 14.

[439] For a criticism of the Commission's decision to confine *ex post* evaluation only to certain large and potentially significantly distortive aid schemes see, Nicolaides P. (2016) 'Ex Post Evaluation of State Aid Measures', in Nicolaides P. (ed.) State Aid Uncovered: Critical Analysis of Developments in State Aid 2015, *cit.*, pp. 294-299. The author, in fact, maintains that *ex post* evaluation should also be carried out with respect to small State aid measures because they might have cumulatively bigger negative effects on the market than large aid schemes, and, in any event, small amounts of monies should also not be wasted. To the extent that a proper evaluation is a complex, expensive and time-consuming task, he suggests that the Commission should introduce a lighter form of evaluation for smaller aid measures. The rationale underlying the proposed extension seems to be that the more

Regarding the New GBER, the safeguarding mechanism under examination has been introduced only for large aid schemes with an average annual budget exceeding EUR 150 million, which are adopted in certain specified fields. Importantly, the covered fields include the environmental category of aid,[440] whose scope has also been widened under the reform to encompass additional energy-related types of measures.[441] However, the New GBER expressly excludes from the evaluation obligation rather distortive aid in the form of reductions in environmental taxes fulfilling the conditions of the Energy Taxation Directive.[442] Moreover, in the Guidance Paper on Evaluation it issued in order to assist the Member States in carrying out evaluations of their aid schemes, the Commission had already stated that it might exceptionally decide not to subject certain large aid schemes to evaluation.[443] The selection of aid regimes exceptionally exempted from the evaluation requirements should be made on the basis of their – unfortunately unspecified – specificities or on the ground that they do not entail any problematic aspect.[444] Regarding the functioning and effects of the evaluation process, the New GBER provides that for the large aid schemes covered by the relevant obligation, exemption from the prior notification requirement is limited to a six-month period.[445] This time frame has, in fact, been considered enough to avoid any delay in the entry into force of the schemes – which can be immediately implemented – while ensuring their effective examination by the Commission.[446] Indeed, during this period the competent European Institution has to properly assess the completeness and appropriateness of the evaluation plan, which the concerned Member States are required give notification of for each covered aid scheme within 20 working days from its entry into force. Exemption from the prior notification requirement may then be extended by the Commission for any specific scheme upon approval of the relevant evaluation

evaluations are carried out in the short term, the more the costs of the evaluation process will swiftly decline and fewer evaluations will be necessary in the future.

[440] See, New GBER, *cit.*, Article 1(2)(a). More precisely, the other aid categories subjected to evaluation requirements are regional aid, aid to SMEs and for their access to finance, aid for R&D&I and aid for broadband infrastructures.

[441] In that regard, see Chapter 4.

[442] Council Directive 2003/96/EC of 27 October 2003 restructuring the Community framework for the taxation of energy products and electricity, *cit*. See, New GBER, *cit*., Article 1(2)(a).

[443] See, Guidance Paper on Evaluation, *cit.*, section 4.1., 2nd paragraph and footnote 14.

[444] *Ibidem*. Regarding large aid schemes not entailing problematic aspects, the Commission has specified that this might, for instance, be the case for "*routine cases, cases where a high number of beneficiaries is each receiving small amounts of aid, and cases where there is no risk of significant changes or when no serious distortions could arise*". See also, New GBER, *cit*., recital 8.

[445] See, New GBER, *cit*., Article 1(2)(a).

[446] See, New GBER, *cit*., recital 8, and Guidance Paper on Evaluation, *cit.*, section 4.1., 4th paragraph.

plan through the adoption of a decision also indicating the duration of the prolongation.[447] If this is the case, once the scheme has come to an end the concerned Member State has to submit ae final evaluation report, which should provide the results of the State aid evaluation of the measure to be carried out during its implementation on the basis of the evaluation plan approved by the Commission.[448] If, instead, the Commission does not approve the evaluation plan, the concerned scheme has to be notified for '*ex ante*' assessment under the relevant State aid guidelines.[449] It is, finally, worth highlighting that the evaluation regime just described also applies to any alterations or successors of the large aid schemes subject to evaluation, unless the relevant modifications cannot affect their compatibility or the content of the approved evaluation plan because they are of a purely formal or administrative nature.[450]

This said, one might argue that the initial evaluation process framed under the GBER might bring back through the back door everything that the reform of the general block exemption regulation threw out of the front. Indeed, while the scope of the New GBER has also been widened in order to reduce Member States' administrative costs and to concentrate the Commission's efforts on more problematic cases, several of the new aid regimes covered by the New GBER might still have to be assessed according to the – now more demanding – compatibility test set out in the new guidelines.

We should now turn to the new evaluation provisions included in the EEAG, which represent the only new guidelines foreseeing evaluation requirements that are relevant for answering our research question. Indeed, notwithstanding that aid to IPCEIs certainly involves a great number of monies and, given their intrinsic cross-border nature, might generate problematic negative effects on the EU energy market as a whole, under the IPCEIs Communication the Commission has only announced that, where appropriate, it may ask for an *ex post* evaluation to be conducted.[451] Neither selection criteria nor indications of how the possible evaluation process should take place are, however, provided.

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[447] See, Guidance Paper on Evaluation, *cit.*, section 4.1., 4th paragraph, and New GBER, *cit.*, Article 1(2)(a).

[448] However, if a proposed extension of the relevant scheme is envisaged, the final evaluation report has to be submitted at least six months before the expiry of the aid scheme. See, New GBER, *cit.*, recital 8; EEAG, *cit.*, para. 245; and European Commission, State aid Evaluation – Frequently Asked Questions, December 2014, *cit.*, p. 5.

[449] See, European Commission, State aid Evaluation – Frequently Asked Questions, December 2014, *cit.*, p. 3.

[450] See, New GBER, *cit.*, Article 1(2)(b) and recital 8, and Guidance Paper on Evaluation, *cit.*, section 4.1., 5th paragraph.

[451] See, IPCEIs Communication, para. 49.

As already mentioned, some of the characteristics of the evaluation process provided under the EEAG and the New GBER differ. The following analysis of the relevant provisions of the EEAG shall, therefore, focus on the most important differences. A first distinction is represented by the criteria adopted for selecting the aid schemes covered by the evaluation obligation. Regarding the support measures notified under the EEAG, any type of energy aid scheme satisfying one of the three selection criteria specified thereunder might potentially be subjected to evaluation, with no exclusions whatsoever. Moreover, the selection criteria are more far-reaching than that provided under the GBER: the evaluation requirements might apply not only to large aid schemes [452] but also to schemes containing novel characteristics which might produce both large benefits and huge distortions, and to schemes potentially affected by significant foreseeable market, technological or regulatory changes.[453] In this regard it is, first of all, important to note that energy aid is frequently granted through large aid schemes. Secondly, in its Guidance Paper on Evaluation, the Commission expressly indicated, as illustrative and sole examples of novel aid schemes, new capacity mechanism in the energy sector, aid to new types of technologies and novel types of support measures for renewable energy sources.[454] The category of aid schemes affected by significant foreseeable changes, though, includes all aid to fast-moving industries, such as the energy industry, where the market environment and the available technologies are developing at a rapid pace. An example is, for instance, provided by the high fluctuation of input and output prices in the case of solar panels.[455]

That said, the evaluation mechanism provided under the EEAG also differs from that provided under the New GBER because the Commission enjoys greater leeway in deciding whether to subject to evaluation notified environmental and energy aid schemes having the above addressed characteristics. Indeed, it has a discretionary power to limit their duration to four years or less – with the possibility of re-notifying their prolongation afterwards – and to require the concerned Member States to submit an evaluation plan.[456] Only a sort of rather

[452] Although no budgetary indication has been provided under the EEAG, the Commission has informally but expressly stated that, for reasons of consistency with the GBER, it will normally consider as candidates for evaluation measures those with an average annual budget exceeding EUR 150 million. See, European Commission, State aid Evaluation – Frequently Asked Questions, December 2014, *cit.*, p. 2.

[453] EEAG, *cit.*, para. 243.

[454] Guidance Paper on Evaluation, *cit.*, section 4.2.

[455] *Ibidem*, section 4.3.

[456] EEAG, *cit.*, paras 28 and 242.

unspecific declaration of intent is provided in this respect: the Commission intends to carry out evaluations of those regimes that may risk significantly restricting or distorting competition if not reviewed in due course. This dissimilarity might be somehow justified by the circumstance that the implementation of notified aid schemes is conditional upon a positive decision about fulfilment of the compatibility conditions. However, we should recall that the purpose of *ex post* evaluation and final evaluation reports is different from that of *ex ante* scrutiny and is much more forward-looking. Moreover, importantly, it cannot be properly accomplished through the examination of block-exempted aid: the most important and problematic financial instruments of energy policy having a State aid nature, in fact, are either not covered by the GBER or do not satisfy the conditions required to be automatically exempt.

Other distinctions between the evaluation mechanisms established under the New GBER and the EEAG, though, stem directly from the different structures of and functions played by block exemption regulations and Commission guidelines within the State aid control system. For instance, the draft evaluation plans for non-exempted energy aid have to be notified together with the related aid measures, and their completeness and appropriateness are to be reviewed as an integral part of the Commission's assessment of the relevant measures under the EEAG.[457] Hence, the precise scope and modalities of each evaluation are also to be defined in any decision approving the aid scheme.[458] This is perfectly understandable given that, in such a case, there is no issue of delayed entry into force of the aid scheme, which, in any event, cannot be implemented before the Commission authorises it. However, in the author's view, an important problem might arise in this respect. As mentioned, in fact, the selection criteria provided under the EEAG are not sufficiently specific for the granting authorities to be able to form a preliminary opinion on whether a domestic aid scheme is subject to evaluation or not, and the Commission enjoys discretion in the field. Hence, in our view, most Member States will not spontaneously submit evaluation plans together with the related notification form. They will, instead, understandably wait for a possible Commission solicitation in that respect. Indeed, the evaluation process is complex, expensive and time-consuming, and it is difficult to imagine that Member States would take into account the benefits it might generate in the distant future. Importantly, when the Commission later judges such cases as subject to evaluation, the above-envisaged Member States' behaviour will cause a great delay in the authorisation process. This,

[457] EEAG, *cit.*, para. 243.

[458] EEAG, *cit.*, para. 245.

in turn, might generate counterproductive impacts on the energy policy objectives the aid measures in question aim to pursue and detrimental effects for the potential beneficiaries. By contrast, in the formulation of complex evaluation plans, over-compliant Member States will incur additional administrative burdens and financial expenses that might eventually turn out to be unnecessary, with a consequent waste of taxpayers' monies.

We should, finally, turn to the key elements that must be addressed and the essential methodologies to be adopted by the independent experts that the Member States have to appoint to conduct an evaluation.[459] In this respect the above-cited Guidance Paper on Evaluation and its annexes provide important insights and indications which are in line with the limited body of literature on the impact of public support in Europe[460] and the best practices and guidelines on evaluation so far adopted at the EU and international levels.[461] As per the mentioned key elements, the Guidance Paper on Evaluation further explicates the minimum information that the New GBER indicates an evaluation plan should contain.[462] Taken together, these minimum

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[459] Regarding the criteria to be used for selecting the body in charge of conducting the evaluation see, Guidance Paper on Evaluation, *cit.*, section 3.7.

[460] See, recently, *Zúñiga-Vicente* J. Á., Alonso-Borrego C., Forcadell F. J., Galán J. I. (2014) *Assessing the Effect of* Public Subsidies on Firm R&D Investment: A Survey. *Journal of Economic Surveys* **28**(1) 36-67; Einiö E. (2013) R&D Subsidies and Company Performance: Evidence from Geographic Variation in Government Funding Based on the ERDF Population-Density Rule. *The Review of Economics and Statistics* **96**(4) 710–728.; Givord P., Rathelot R., P. Sillard (2013), Place-Based Tax Exemptions and Displacement Effects: An Evaluation of the Zones Franches Urbaines programme. *Regional Science and Urban Economics* **43**(1) 151-163; *Takalo T.*, Tanayama T., Toivanen O. (2013) *Estimating the Benefits of Targeted* R&D Subsidies. *Review of Economics and Statistics*, **95**(1) 255–272; Criscuolo C., Martin R., Overman H. G., Van Reenen J. (2012) The Causal Effects of an Industrial Policy. *CEPR Discussion Papers* No. 8818; Gobillon L., Magnac T., Selod H. (2012) Do Unemployed Workers Benefit from Enterprise Zones? The French Experience. *Journal of Public Economics* **96**(9) 881–892; Martini A., Bondonio D. (2012), Counterfactual Impact Evaluation of Cohesion Policy: Impact and Cost Effectiveness of Investment Subsidies in Italy. *Report for European Commission - DG Regio*, available at http://ec.europa.eu/regional_policy/sources/information/evaluations/pdf/impact/ciewp_final.docx (accessed 30 October 2016); Duranton G., Gobillon L., Overman H. G. (2011) Assessing the Effects of Local Taxation Using Micro-Geographic Data. *Economic Journal*, *Royal Economic Society* **121**(555) 1017–1046; Rathelot R., Sillard P. (2008). The Importance of Local Corporate Taxes in Business Location Decisions: Evidence from French Micro Data. *Economic Journal* **118**(527) 499–514; *Rye M.* (*2002*) *Evaluating the Impact of* Public Support on Commercial Research and Development Projects: Are Verbal Reports of Additionality Reliable?. *Evaluation* **8**(2) 227–248.

[461] See, *inter alia*, European Commission – DG EMPLO (2013) Design and Commissioning of Counterfactual Impact Evaluations. Luxembourg: Publications Office of the European Union; European Commission – DG REGIO (2013) EVALSED: The Resource for the Evaluation of Socio-Economic Development. Luxembourg: Publications Office of the European Union; Khandker S R., Koolwal G. B., Samad H. A. (2010) Handbook on Impact Evaluation: Quantitative Methods and Practices. Washington, DC: World Bank; OECD DAC Network On Development Evaluation (2010) Evaluating Development Co-operation: Summary of Key Norms and Standards. Paris: OECD Publishing; UNEG (2005) Standards for Evaluation in the UN System. New York: UNEG Secretariat; World Bank (2003) Independent Evaluation: Principles, Guidelines and Good Practice. Washington, DC: World Bank.

[462] See, New GBER, *cit.*, recital 16, and Guidance Paper on Evaluation, *cit.*, section 3. During the evaluation period the Commission might also request from Member States the additional information it needs to properly carry out

elements, in turn, identify the common methodology that domestic experts have to use to carry out State aid evaluations under both the New GBER and the EEAG and to draft the final reports.[463] We will not linger over the more procedural and practical kinds of information an evaluation plan should provide.[464] As per the more substantive and burdensome elements, any evaluation plan must, first of all, clearly set out the objectives and intervention logic of the aid scheme to be assessed and the evaluation questions. The latter should focus on the direct impact of the aid on its beneficiaries, including an analysis of the incentive effect it provides. The Commission has, however, recommended that such questions also encompass the potential positive and negative impacts of the support measure on competition and trade, and its proportionality and appropriateness.[465] The third identified substantive element of evaluation plans, choosing the so-called result indicators, is strictly connected to the abovementioned first two elements. Result indicators are, in fact, variables that allow for capturing quantitative or qualitative information about achievement of the objectives of the aid scheme and its direct and indirect impacts. Examples of energy-specific result indicators provided by the Commission include certain indicators that should be used to assess the potential negative effects on competition and trade of aid for generation adequacy and aid to energy infrastructures.[466] Result indicators for the first type of measures encompass reinforcement of the fossil fuel lock-in phenomenon, and unsupported or unreal concerns in terms of blackouts and the foreclosure of national electricity markets. Indicators relevant for aid to energy infrastructures include the last-mentioned foreclosure effect and reinforcement of the market power of incumbents.[467]

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assessment of the evaluation plan. See, New GBER, *cit.*, recital 8, and European Commission, State aid Evaluation – Frequently Asked Questions, December 2014, *cit.*, p. 3.

[463] See, EEAG, *cit.*, para. 243, and New GBER, *cit.*, recital 16.

[464] More precisely, the evaluation plan should contain (i) an identification of the databases and the data collection process that will satisfy the data collection requirements, (ii) the precise timing of the evaluation and the date of submission of the final report, (iii) a description of the independent evaluator or of the relevant selection criteria, and (iv) an indication of the modalities for giving adequate publicity to the evaluation and ensuring the involvement of stakeholders in the process. In that respect see, Guidance Paper on Evaluation, *cit.*, sections 3.5.-3.8.

[465] In that regard see, further, Guidance Paper on Evaluation, *cit.*, sections 3.1. and 3.2.

[466] Indeed, Annex II to the Guidance Paper on Evaluation provides an indicative, non-exhaustive, list of result indicators. Other examples of energy-specific result indicators provided by the Commission pertain to measures aimed at pursuing energy efficiency goals and fostering renewable energy sources, and concern evaluating their direct impact at the level of the beneficiaries (e.g. number of households with improved energy consumption classification, decrease of annual primary energy consumption of public buildings, number of additional energy users connected to smart grids, and production share of energy from RES): see, Guidance Paper on Evaluation, *cit.*, Annex II, p. 36.

[467] *Ibidem*, p. 38.

The last substantive element that any evaluation plan should contain represents the crucial and most problematic aspect of the evaluation process. It consists, in fact, of a delineation of the appropriate methodology to be later applied to identify the causal impact of the aid scheme concerned, undistorted by other variables.[468] Indeed, to properly evaluate the effectiveness of a support regime it is necessary to ascertain whether aid recipients have performed better than non-recipients and, thus, what would have happened had the aid not been granted. In order to determine this causal impact, it is, therefore, necessary to compare the performance of the beneficiaries of the aid with that of non-beneficiaries.[469] This means that it is indispensable to devise a hypothetical scenario, the so-called 'counterfactual' situation, on the basis of the most comparable non-aided group of undertakings.[470] This is a very tricky and burdensome task. Indeed, beneficiaries and non-beneficiaries usually differ in more ways than just participation in the scheme. Actually, even the performances of undertakings starting in identical conditions diverge over time due to factors other than aid. These factors may, in fact, influence their behaviour, proper functioning and profits. As a result of the foregoing considerations, a number of statistical methods and techniques of rather difficult practical implementation have been developed by the scientific community to take into account the systematic differences between groups of undertakings and reduce selection and evaluation biases.[471] The Commission has, however, indicated and explained the quantitative methods it considers more reliable for proper *ex-post* assessments of State aid measures.[472] Hence, it has encouraged Member States to rely

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[468] In that regard see, Guidance Paper on Evaluation, *cit.*, section 3.4.

[469] The causal impact is, in fact, represented by the difference between the outcome with the aid and the outcome in the absence of the aid.

[470] In that regard see, Guidance Paper on Evaluation, *cit.*, section 3.4.

[471] For a proper analysis of these methods and techniques see the academic literature on the impact of public support in Europe and the guidelines on evaluation adopted at the EU and the international levels that we have quoted in previous footnotes.

[472] In that regard see, Guidance Paper on Evaluation, *cit.*, Annex I, pp. 19-31. The identified 'golden standard' for evaluation is the so-called *randomised control trials* (*RCTs*) method, which provides for the selection of aid beneficiaries entirely at random. This, in fact, means that there is no selection effect and that the only systemic difference between beneficiaries and non-beneficiaries is represented by the aid. The Commission has, however, explained why this method is difficult to implement in practice, especially when dealing with large existing schemes. The statistical methodologies that have been developed for properly evaluating, *ex post*, the impacts of a policy are the so-called *quasi-experimental methods*, which are used to conduct data-driven evaluations. In the Guidance Paper on Evaluation the Commission listed and explained the most common ones, *i.e.*, the *Difference-in-Difference* (*DiD*) method, the *Instrumental Variables* (*IV*) method and the *Regression Discontinuity Design* (*RDD*) approach. For a proper analysis of these statistical methods and their application to State aid evaluation see also, Boutin X., Peduzzi R. (2015) Serching For 'Good Aid': The Role of Evaluation. *European State Aid Law Quarterly* **14**(2) 250-259; Peduzzi R., Sapi G. (2016) 'State Aid Evaluation', in Pesaresi N., Van de Casteele K., Flynn L., Siaterli C. (eds) *EU Competition Law: State Aid – Book One*, *cit.*, at pp. 106-116; and Buehler B., Koltay G., Boutin X., Motta M. (2014) Recent Developments at DG Competition: 2013–2014. *Review of Industrial*

on them by properly selecting the methodology that is more suitable for their purposes on the basis of the design of the aid measure under evaluation and the available data.

Nonetheless, the fact remains that, not only is this process complex, expensive and time-consuming, but also the Commission has recognised that all the abovementioned methods have limitations and might be deemed valid only when certain assumptions hold.[473] This means that, as has been contended, not only will it be very difficult to establish a credible counterfactual situation in most cases but *ex post* evaluations may also not succeed in generating reliable results with respect to many aid schemes. In this regard, it is important to recall that Member States are required to rely upon these results when devising successive support measures and the Commission should take them into account in its decision-making practice and for framing future block exemption regulations and guidelines. Therefore, in our opinion, any misrepresentation of the effects of the financial mechanisms subjected to evaluation might generate very dangerous knock-on effects throughout European Union's economies.

On a final note, we should highlight what is, in our view, an important point that the Commission has made: the causal impact of multiple aid from several schemes or ad-hoc aid should be also controlled.[474] This is, in the author's opinion, a first step in the right direction. We do, in fact, advocate the establishment of a mechanism for evaluating the interrelationships and assessing the combined effects of the numerous aid measures adopted by each Member State.

Organization **45**(4) 399-415.

[473] See, Guidance Paper on Evaluation, *cit.*, p. 9.

[474] See, Guidance Paper on Evaluation, *cit.*, p. 10.

Chapter 4

Complex Compromises to Deal with Current Challenges

4.1. Multiplying the Compatibility Grounds and Securing Coherence?

4.1.1. *Too Much "Good Aid"?*

In this chapter we will describe the key issues arising out of the application of State aid rules to specific types of energy aid measures, with a particular focus on the recent reforms introduced as part of the SAM initiative.[475] Given the purpose of our research, we will analyse in detail only the kinds of measures that directly influence the functioning of the energy market. However, for the sake of exhaustiveness, in the following subparagraphs we will also briefly address certain categories of measures that, as a result of the intensified link between environmental and energy policies, might in some ways have an indirect impact on the relevant market.[476] Indeed, this paragraph aims to provide an overview of the numerous, complex and strongly connected possible grounds for the compatibility assessment of environmental and energy-related aid, while highlighting the key elements and drivers of the recent reform in terms extending the scope of the main State aid control instruments. In our opinion, in fact, at the end of this chapter the considerable efforts of the Commission to reconcile the conflicting interests and various EU policies that any wide-ranging regulation of government interventions in electricity markets must take into consideration will become apparent. The main challenge in these circumstances is the maintenance of the required coherence among all the provisions and their ultimate goals.

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[475] See, SAM Communication, *cit.* The main innovations introduced in the State aid control system that are applicable across the board and their impact on energy aid measures have already been addressed in Chapter 3.

[476] The reader might easily infer the distinction between the types of measures having a direct influence on the functioning of the energy market and those having only an indirect impact on this market from the wording of the Commission in the 2014 GBER: "[i]*nvestments enabling undertakings to go beyond Union standards or increase the level of environmental protection in the absence of Union standards, investments for early adaptation to future Union standards, investments for energy efficiency measures, including energy efficiency projects in buildings, investments for remediation of contaminated sites and aid for environmental studies do not directly influence the functioning of energy markets. At the same time, such investments may contribute to both regional policy objectives and to the energy and environmental objectives of the European Union*". See, 2014 GBER, *cit.*, recital 34.

In order to understand the drivers of the mentioned major changes introduced by the SAM reform, the Almunia SGEI package and the EU ETS Guidelines,[477] and evaluate the efficacy of the Commission's answers to the detected shortcomings of the previous regime, we should first comprehend the breadth of the topic and problems to be dealt with in terms of public spending and consumers' monies. Indeed, according to the data provided in the Eurostat database, over the period 2003-2014 environmental protection and energy-related objectives repeatedly overtook regional development as the most subsidized horizontal objectives in the EU.[478] That trend has increasingly strengthened in recent years notwithstanding the Commission's stated intention to apply a more rigorous stance towards State support for the energy sector following the opening-up of the energy market.[479]

Actually, the most recent available figures on aid granted for pursuing environmental and energy-related goals and targets cover the year 2014. They show that all the data that have been provided with respect to the preceding years are incorrect because of the failure of Member States to duly report the State aid measures they have implemented in this field. Indeed, they evidence an increase of about 28.5 billion EUR compared to 2013 expenditures, which the Commission has largely attributed to the circumstance that, from 2014, Member States' annual reports include information on more – but still not all – RES-e regimes and other energy aid schemes.[480] In absolute amounts, this means that Member States have declared that in 2014 they spent more than 43.5 billion EUR on environmental protection and energy-related objectives, which represents more than the 0.3 per cent of the EU-28 GDP in the reference year.[481] The mentioned increase in compliance with annual reporting obligations might be attributable to the circumstance that the 2015 State Aid Scoreboard also covered the first six months of

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[477] See, in that regard, paragraph 3.1. of this part of the thesis.

[478]The data on the absolute amounts of aid awarded by the Member States in each of the relevant years for both environmental and energy-related objectives and regional development goals are available at http://ec.europa.eu/eurostat/tgm_comp/refreshTableAction.do?tab=table&plugin=1&pcode=comp_sa_01&language=en (accessed 30 October 2016).

[479] See, European Commission, *DG Competition Report on Energy Sector Inquiry of 10 January 2007*, SEC (2006) 1724, p. 323 ff. This report was published by the Commission at the end of a two-year energy sector inquiry, which was launched in response to concerns raised by consumers and new entrants about an incredible increase in electricity and gas wholesale prices which could not be justified only by a rise in primary fuel costs and environmental obligations. The Commission actually identified several serious shortcomings in the electricity and gas markets which had to be addressed through increased enforcement of EU antitrust and State aid rules.

[480] State aid statistics are available in the European Commission's State Aid Scoreboard, which can be accessed at http://ec.europa.eu/competition/state_aid/scoreboard/index_en.html (accessed 30 October 2016).

[481] The relevant figures on both absolute amounts and in terms of percentage of GDP are available at http://ec.europa.eu/eurostat/tgm_comp/refreshTableAction.do?tab=table&plugin=1&pcode=comp_sa_01&language=en (accessed 30 October 2016).

implementation of the EEAG and the 2014 GBER.[482] However, as has been evidenced, the information provided on the year 2014 was also incomplete. Therefore, we might presume that the data the Commission will process for the years 2015 and 2016 and publish through the annual State Aid Scoreboard will probably be higher.

That said, it is worth noting that the above-provided figures also include information on purely environmental aid, encompass only data on support measures that are covered by the State aid annual reporting obligations, and take 2014 as the reference year, when the SAM reform was already in force. For our purposes it is, therefore, important to consider broader and more energy-related data from 2012 as well. This was, in fact, the year in which the SAM initiative was launched, and in this respect information was more or less available when the final drafts of the EEAG, the IPCEIs Communication and the New GBER were prepared.[483] According to a rather detailed report by Ecofys, in 2012 environmental and energy-related aid accounted for about 24 per cent of all non-crisis aid earmarked for horizontal objectives, and Member States' public interventions in the energy sector amounted to over €122 billion.[484] Needless to say, the greatest proportion of this amount has been employed to expand the share of renewable energy in Member States' energy mix.[485] Moreover, when considering the associated external costs also,[486] this amount might increase to €335 billion.[487] It is finally important to highlight that, apart from the exclusion of the transport sector, the above-provided figures do not take into account certain types of energy aid measures, such as capacity

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[482] Regarding the revised provisions on Member States' annual reporting obligations see, Commission Implementing Regulation, *cit.*, Article 6, New GBER, *cit.*, Articles 11(b) and 12, and EEAG, *cit.*, section 6. For further details see paragraph 3.4. of this part of the doctoral thesis. As per the 2015 State aid Scoreboard, it covers non-crisis aid expenditures made by the Member States from 1 January 2014 to 31 December 2014. In practice, the data do not comprise most of the aid awarded in the form of compensation for SGEIs.

[483] The final versions of the EEAG, the New GBER and the IPCEIs Communication were, in fact, prepared in the time frame between the end of the last consultation periods on the draft guidelines, block exemption regulation and communication – *i.e.*, February 2014– and their adoption – *i.e.*, April-June 2016. The replies to and results of the last consultations are available at the following addresses: http://ec.europa.eu/competition/consultations/2013_state_aid_environment/index_en.html, http://ec.europa.eu/competition/consultations/2014_state_aid_cei/index_en.html, http://ec.europa.eu/competition/consultations/2013_consolidated_gber/index_en.html (accessed 30 October 2016).

[484] The amount of aid to the transport sector is excluded from this figure, which is composed of the value of public interventions in 2012 (€113 billion) and an estimate of direct historic support that has still a direct effect today (€9 billion). See, Ecofys (2014) *Subsidies and Costs of EU Energy – Final Report*, Project number: DESNL14583, a report commissioned by the European Commission – DG ENER.

[485] *Ibidem.*

[486] More precisely, external costs are costs that are not reflected in market prices. Examples include the costs of environmental and health impacts and of the damaging effects of climate change.

[487] See, Ecofys (2014) *Subsidies and Costs of EU Energy – Final Report, cit.*

remuneration mechanisms, and do not reflect fiscal support for energy consumption and the free allocation of emission certificates to the energy industry. Moreover, importantly, they do not reveal the cost to consumers. The last-mentioned shortcoming is due to the fact that the relevant data are based on wholesale/spot prices. Hence, to the extent that, as has been evidenced in other studies,[488] in the period 2008-2012 wholesale energy prices remained stable while retail energy prices increased significantly, one can only imagine what the figures would have been had this and all the above-provided elements been taken into account.

Notwithstanding the above problematic data in terms of public spending and consumer monies, under the SAM initiative the Commission has kept only the goal of fostering "*better targeted aid*" provided under the previous SAAP reform. The goal related to a quantitative reduction of public financing – *i.e.*, "*less* […] *aid*", which was also included in the SAAP reform, has been dropped.[489] Nevertheless, we should recall that the first objective of the SAM initiative consisted of facilitating the awarding of – only – what has been defined as "*good aid*".[490] That said, in the following part of this paragraph we will explain what has been considered energy-related "*good aid*" under the SAM reform, through an overview of the scope of the main State aid control instruments applicable to the relevant sector. Our assessment will trace the progression of the analytical steps any granting authority should undertake when devising an energy support measure in order to evaluate which sets of rules are applicable to the measure concerned.

4.1.2. *A Number of Grounds for Exemption from the Obligation to Notify Energy Aid Measures*

In this subparagraph we will address the first two steps of analysis under State aid rules. Regarding the first step of analysis, we should recall that energy aid measures that meet the conditions set out under the New General *de minimis* Regulation, adopted as part of the SAM initiative, or the SGEI *de minimis* Regulation, included as a new instrument in the Almunia

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[488] See, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 29 January 2014, *Energy Prices and Costs in Europe*, COM(2014) 21/2.

[489] Cf., SAM Communication, *cit*., para. 12, with SAAP, *cit*., para. 18.

[490] That is to say, "*aid which is well-designed, targeted at identified market failures and objectives of common interest, and least distortive*" (SAM Communication, *cit*., para. 12). See, in that respect, paragraph 3.1. of this part of the thesis.

SGEI package, are exempted from the prior notification requirement mandated by Article 108(3) TFEU.[491]

The main requirement for these measures to fall outside the scope of EU State aid control system by virtue of their minor importance is that they do not exceed the ceilings set under the mentioned Regulations. More precisely, the relevant ceilings are 500,000 EUR for SGEI compensation and 200,000 EUR for measures falling outside the SGEI field over any period of three fiscal years.[492]

With regard to the scope of the New General *de minimis* Regulation, it now covers almost all types of energy aid measures. Indeed, the SAM reform has extended the sphere of application of the 2006 General *de minimis* Regulation to encompass aid measures for undertakings active in the coal sector as well.[493] By contrast, in order to benefit from the higher SGEI *de minimis* threshold, the aid provision must expressly entrust the beneficiary undertaking with an energy-related service of general economic interest.[494] While it is currently clear that,

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[491] New General *de minimis* Regulation, *cit*., and SGEI *de minimis* Regulation, *cit*. We should recall that the *de minimis* rule differs from the block exemption concept. Indeed, on the basis of the Commission's experience, State support falling below *de minimis* ceilings shall be considered not to negatively affect intra-EU trade and distort competition within the EU borders. Hence, the support measure concerned does not fall foul of Article 107(1)'s prohibition. As a result, while block exemption rules remove the notification obligation with respect to certain categories of aid, *de minimis* rules simply define the scope of this obligation by reducing it.

[492] *Ibidem*, respectively, Article 3(2) and Article 2(2). For an explanation of the reasons that have determined the Commission not revising the previous general *de minimis* ceiling see paragraph 3.1. of this part of the thesis. As per the reasons justifying the difference in terms of thresholds between the two Regulations under exam see, Sinnaeve A. (2014) The Complexity of Simplification: The Commission's Review of the *de minimis* Regulation, *cit*. Other divergences include the circumstance that the SGEI *de minimis* Regulation does not apply to undertakings in difficulty and that it provides a different notion of 'single undertaking'. Some authors have actually maintained that there is no reason for these and other differences between the SGEI and the General *de minimis* Regulation. See, for instance, Mamdani G., Rapp J. (2016) '*Altmark* and the Communication', in Pesaresi N., Van de Casteele K., Flynn L., Siaterli C. (eds) *EU Competition Law: State Aid – Book Two*, *cit.*, at pp. 1306-1307.

[493] See, 2006 General *de minimis* Regulation, Article 1(f). For further details on the New General *de minimis* Regulation see paragraph 3.1. of this part of the thesis and Nicolaides P. (2015) 'The New Rules on De Minimis Aid for 2014-2020: regulation 1407/2013', in Nicolaides P. (ed.) State Aid Uncovered: Critical Analysis of Developments in State Aid 2014, *cit.*

[494] See, SGEI *de minimis* Regulation, *cit*., recital 6. The concept of SGEIs has not been defined under the Almunia SGEI package because it is an evolving notion and depends on the specific characteristics of the Member States. Indeed, the latter have a wide margin of discretion in defining a given service as an SGEI and the Commission has to check only manifest errors. However, in the SGEI Communication the Commission has provided some clarifications regarding what it considers to be manifest errors which, in turn, guide the Member States when defining a service as a SGEI. For instance, it has made it clear that "*it would not be appropriate to attach specific public service obligations to an activity which is already provided or can be provided satisfactorily and under conditions, such as price, objective quality characteristics, continuity and access to the service, consistent with the public interest, as defined by the State, by undertakings operating under normal market conditions* " (para. 48). With that regard see, further, SGEI Communication, *cit.*, paras 45 ff., and, for an interesting both legal and economic perspective on the topic, Ølykke G. S., Møllgaard P. (2016) What is a Service of General Economic Interest?. *European Journal of Law and Economics* **41**(1) 205-241. See also, *ex plurimis*, Case C-179/90, *Merci convenzionali porto di Genova*, [1991] ECR I-5889, para. 27; Case C-242/95, *GT-Link A/S*, [1997] ECR I-4449,

for instance, the supply of green electricity is not considered a service of general economic interest under the State aid decisional practice, the successive electricity directives applicable from time to time and the EU's past case law have included security of supply obligations imposed by Member States upon prospective candidates for PSO status.[495] However, as we have evidenced in previous chapters and we will further explain in paragraph 4, the relevant types of energy aid measures have so far hardly passed the SGEI test. Moreover, it is also rather difficult for aid for generation adequacy to meet the abovementioned SGEI *de minimis* ceiling. That said, it is however worth noting that, unlike the SGEI Decision and the SGEI Framework – which provide, respectively, the 'block exemption' requirements and the *ex ante* compatibility conditions for the kinds of services under exam,[496] the SGEI *de minimis* regulation requires the provision of much less information for a valid entrustment to occur and no overcompensation checks.[497]

For environmental and energy aid measures that do not qualify for exemption from the notification requirement by virtue of their minor importance, there may still be scope for exemption under the New GBER or the SGEI Decision.[498] In that, therefore, consists the second step of analysis of energy aid measures. In this regard, it is worth mentioning from the outset that, apart from the usual difficulties in proving that the notified measure entails the provision of a genuine SGEI, the annual compensation ceiling provided under the SGEI Decision has been reduced to a great extent in the context of the Almunia reform.[499] Hence, this instrument barely applies to energy aid schemes adopted to rectify market failures that prevent the equating of private and social values of capacity and security of supply. By contrast, in line with the primary objectives of the SAM initiative to encourage greater reliance on the New GBER, we have already explained how the wide-ranging changes introduced thereunder provide more flexibility for national granting authorities that intend to devise environmental and energy aid

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para. 53; Case C-266/96, *Corsica Ferries France SA*, [1998] ECR I-3949, para. 45; and Case C-205/99, *Analir*, [2001] ECR I-1271, para. 71.

[495] See, now, Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC, *cit.*, Article 3**.**

[496] See, SGEI Decision, *cit.*, and SGEI Framework, *cit.*

[497] In that regard see, Commission Staff Working Document of 29 April 2013, *Guide to the application of the European Union rules on State aid, public procurement and the internal market to services of general economic interest, and in particular to social services of general interest*, *SWD(2013) 53 final/2*, para. 76.

[498] New GBER, *cit.*

[499] The annual compensation threshold has in fact been reduced from 30 million EUR to 15 million EUR, precisely for the purpose of bringing more commercial SGEI services within the scope of the SGEI Framework**.** See, SGEI Decision, *cit.*, Article 2(1)(a).

measures complying with the exemption requirements.[500] In this regard it is also important to highlight that the EEAG – which specify the criteria for the Commission's *ex-ante* assessment of non-exempt measures – are far more rigorous and demanding than the previous EAG,[501] and that State measures covered by the New GBER can be implemented without prior Commission scrutiny. Hence, the elements of 'modernisation' introduced under the New GBER are of considerable relevance for both Member States and potential beneficiaries.

From an energy perspective, the scope of the environmental category of aid has been widened to such an extent that the reach of the New GBER extends to grounds very similar to the EEAG.[502] This extension arises in connection with the primary objective of the SAM initiative to facilitate compliance with the Europe 2020 climate and energy sustainability targets.[503] Indeed, the new forms of exempted energy-related aid measures are operating aid for the production of RES-e and the generation of energy from renewable sources in small-scale installations, along with investment aid measures for energy infrastructure, energy efficiency projects in buildings and energy efficient district heating and cooling.[504] All these measures supplement the types of energy-related aid measures that were already covered by the 2008 GBER:[505] that is to say, investment aid measures for the promotion of energy savings and of energy from renewable sources and high-efficiency cogeneration (combined heat and power or

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[500] The main procedural and substantive simplifications introduced under the New GBER that are applicable across the board and their impact on energy aid measures have already been addressed in Chapter 3. More precisely, the common principles and administrative requirements applicable to all the categories of aid covered by the New GBER are spelled out under Chapters I and II of the New GBER. Chapter III, Section 7, then, sets out the specific conditions applicable to the different types of environmental and energy aid measures. When relevant, we will deal with these specific conditions in the following paragraph.

[501] See, EEAG, *cit.*, and EAG, *cit.*

[502] As we shall see, in fact, compared to the EEAG, the New GBER does not cover simply aid granted in the more distortive forms of operating aid – with the noticeable exception of operating aid for the production of RES-e and for small scale RES-e installation - the new type of investment aid for generation adequacy, investment aid in carbon capture and storage, aid measures in the form of tradable permit schemes, and fiscal aid measures in the form of exemptions from environmental taxes and reductions in funding support for RES-e.

[503] See, Europe 2020 Strategy, *cit.*, p. 11, providing, among the targets to be met by 2020, a 20 per cent reduction in Union greenhouse gas emissions compared to 1990 levels, an increase in the share of Union energy consumption produced from renewable resources to 20 per cent, and a 20 per cent increase in energy efficiency compared to 1990 levels. In that regard see, further, paragraph 3.1. of this part of the thesis.

[504] See, New GBER, *cit.*, Articles 39, 42, 43, 46 and 48. New forms of purely environmental aid measures included in the New GBER are, instead, investment aid for the remediation of contaminated sites and investment aid for waste recycling (see, New GBER, *cit.*, Articles 45 and 47). For a proper analysis of the specific provisions of the New GBER on these new forms of purely environmental aid and on those among the new types of energy-related aid measures mentioned above that have only an indirect impact on the energy market see, Könings M. (2016) 'Environmental Aid', in Hancher L., Ottervanger T., Slot P.J. (eds) *EU State Aids*, *cit.*, at pp. 954-992.

[505] See, 2008 GBER, *cit.*

CHP),[506] and environmental tax reductions satisfying the conditions of the Energy Taxation Directive.[507] Apart from the just-provided broadening in scope in terms of types of measures encompassed, the New GBER applies to a greater number of aid provisions than the 2008 GBER, also as a result of the increase in the notification thresholds and the maximum allowable aid intensities. Indeed, while the individual notification thresholds for environmental and energy aid measures that were already covered by the 2008 GBER have been doubled, very high ceilings have been established for the new forms of energy aid measures included in the New GBER.[508] For instance, the threshold established for investment aid in energy infrastructures and that set for operating aid to promote RES-e granted through an open bidding procedure rank among the highest overall.[509] Moreover, as mentioned, the maximum allowable aid intensity for several types of energy-related aid has been raised.[510] In this regard, it is also worth pointing out that, to the extent that the maximum aid intensities are expressed as given percentages of the eligible costs, the revision of the method for calculating these costs with respect to environmental and energy aid measures also have a clear impact on the net amounts of aid permissible under both the New GBER and the EEAG.[511]

Another important enlargement of the scope of the block exemption regime has also been introduced as part of the SAM reform. Generally speaking, as with the previous regime, both aid schemes and individual aid measures are eligible for block exemption under the New GBER. The only exception in this respect has always concerned only fiscal aid measures, which can be exempted only at the level of the scheme.[512] However, the New GBER now allows *ad hoc* energy-related aid granted to large enterprises to be exempted from the prior notification

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[506] See, New GBER, *cit.*, Articles 38, 40, 41. The other non-energy-specific forms of aid that were already covered by the 2008 GBER are investment aid measures for environmental studies, for early adaptation to future Union standards, and for enabling undertakings to go beyond Union standards for environmental protection or to increase the level of environmental protection in the absence of Union standards. See, New GBER, *cit.*, Articles 36, 37 and 49.

[507] Council Directive 2003/96/EC of 27 October 2003 restructuring the Community framework for the taxation of energy products and electricity, *cit*.

[508] See, New GBER, *cit.* Article 4(s)-(x).

[509] Indeed, for investment aid for energy infrastructures the notification cap per undertaking and investment project is 50 million EUR. The notification cap for operating aid to promote RES-e granted on the basis of a competitive bidding process is, instead, 150 million EUR per year. See, New GBER, *cit.* Article 4(x) and (v).

[510] For instance, the intensity of investment aids for RES-e granted through tenders can reach 100% of the eligible costs. Also, the maximum aid intensity for energy efficiency measures has been raised. See, respectively, Articles 41 and 38 of the New GBER.

[511] In that regard see paragraph 3.2. of this part of the thesis.

[512] This principle applies also with respect to the *ex ante* compatibility assessment under the EEAG.

requirement,[513] although they have to satisfy additional conditions as part of the analysis under the incentive effect criterion.[514] By contrast, under the previous regime all individual environmental State aid that was not awarded either to small and medium-sized enterprises (SMEs) or to individual beneficiaries on the basis of a support scheme had to be notified for approval under the EAG.[515]

Regarding the New GBER, it is also important to further stress that, as mentioned, operating aid measures aimed at promoting RES-e have been now included among the types of aid covered thereunder. By allowing exemption from the prior notification obligation for these operating aids, the New GBER has, thus, blurred the traditional distinction between block exemption regulations – which, in this field, have so far only covered investment aid and fiscal aid measures – and guidelines. The reason underlying this distinction was actually sound: generally speaking, operating aid measures are to be regarded as more distortive and requiring a more rigorous and extensive assessment because, unlike investment aid measures, they relieve undertakings of their day-to-day costs.[516] For the very same reason, operating aid measures should be authorised in very exceptional cases. Hence, we do not welcome the abovementioned extension to certain kinds of operating aid of the simplified rules provided under the New GBER for aid measures that can automatically be exempted from the notification requirement.[517] This is especially true because the extension encompasses aid schemes for the production of RES-e, whose improper design by several granting authorities has so far generated serious problems in the EU energy markets, as we shall see.[518] Actually, in the author's view, in the short and medium run these problems cannot be avoided through the implementation of the new safeguards that have been introduced to counterbalance the above

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[513] In that regard we should recall that the notion of 'individual aid' encompasses both *ad hoc* aid and awards of aid to individual beneficiaries on the basis of an aid scheme. As per the concept of 'large enterprises', this encompasses all undertakings that do not fulfil the criteria laid down in Annex I to the New GBER.

[514] See, in that regard, paragraph 3.3. of this part of the thesis and New GBER, *cit.*, Article 6(3).

[515] See, 2008 GBER, *cit*., recital 23 and Article 1(5).

[516] Another distinction consists of the fact that while investment aid measures require a counterfactual analysis, operating aid measures do not. Moreover, generally speaking, when authorising an operating aid measure the Commission usually requires the Member State to structure it in such a way that financial support decreases over time and that not all the operating costs of the subsidised undertakings are covered. In that respect see also, *inter alia*, Case C-459/10 P, *Freistaat Sachsen and Land Sachsen-Anhalt v. Commission*, 2011 [ECR] I-109, para. 34; Case C-113/00, *Spain v. Commission*, [2002] ECR I-7601, para. 70; Case C-86/89, *Italy* v. *Commission*, [1990] ECR I-3891, para. 18; Case C-156/98, *Germany v. Commission*, [2000] ECR I-6857, para. 30.

[517] As per the simplified rules, requirements and assessment criteria provided under the New GBER see Chapter 3.

[518] In that regard see paragraph 4.2.

addressed pro-aid reforms, such as the *ex post* evaluation mechanism applicable to large aid schemes.[519]

That said, other grounds for exemption from the prior notification obligation that might potentially apply to aid measures favouring the energy sector – when different aspects of the relevant measures are predominant over environmental and energy-related ones – include the provisions of the New GBER on aid for research and development and innovation and those on aid to SMEs.[520] By contrast, the New GBER expressly excludes applying the rules on the regional category of aid to support measures that favour energy generation, distribution and infrastructures and activities in the steel and coal sectors.[521] The same holds true regarding the provisions on investment aid for local infrastructures.[522]

On a final note, we should highlight that, to the extent that the main purpose of the above-addressed pro-aid reforms of the New GBER was to encourage Member States' reliance on this instrument, the goal seems to have been reached, at least in the first two years of implementing the new regime. Indeed, in 2014 more than nine out of ten state aid measures were registered under GBER,[523] while in 2015 the Commission decisions on environmental state aid measures numbered less than forty.

4.1.3. *Energy Aid Put to the Compatibility Test: the Broad Scope of the New Environmental and Energy Aid Guidelines*

In this and the following paragraphs we will address the third stage of analysing energy aid measures; that is to say, the *ex ante* compatibility assessment. Indeed, energy aid measures that do not qualify for exemption from the prior notification obligation, either under the *de minimis* regulations or under the New GBER and the SGEI Decision, may still be authorised under Articles 107(3)(b) and (c) TFEU or Article 106(2) TFEU. This even truer when they fall within

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[519] As already explained, in fact, for aid schemes with an average annual budget exceeding EUR 150 million the exemption from the prior notification requirement is limited to a six-month period, which may be extended by the Commission upon approval of an evaluation plan notified by the Member State. For an exhaustive explanation of the *ex post* evaluation mechanism see paragraph 3.4. of this part of this work.

[520] See, New GBER, *cit.*, sections 4 and 2.

[521] *Ibidem*, Article 13(a).

[522] *Ibidem*, Article 56.

[523] See, European Commission, *State aid Weekly e-News*, No. 07/15 of 18 February 2016, and the 2015 State aid Scoreboard available at http://ec.europa.eu/competition/state_aid/scoreboard/index_en.html (accessed 30 October 2016).

the wide range of aid measures covered by the various Commission communications disciplining the compatibility assessment of support provisions that might favour the energy sector. The great majority of environmental and energy aid measures so far authorised have been assessed under Article 107(3)(c) and, in particular, under the criteria set out in the various environmental aid guidelines that have applied over time. In light of the broad scope of the EEAG, this will continue to be true for all aid measures that meet the eligibility criteria and the stricter compatibility conditions set out therein.[524] Hence, we shall start our analysis of the available grounds for authorisation for energy aid measures with the new Guidelines just cited.

As part of the SAM initiative, the scope of the EEAG has been widened to such a degree that it now covers most of the aid measures commonly employed by national granting authorities. Arguably, its application will thus gather further momentum, in particular with respect to the energy sector.[525] As is immediately noticeable from the title of the new Guidelines, in fact, we will see that this sector has attracted significant attention in the context of the revision process.[526] Moreover, these Guidelines apply to all the energy-related sectors governed by the Treaty, including the steel and the coal sectors,[527] albeit with the few exceptions already

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[524] In paragraph 3.2. of this part of the thesis we have already extensively addressed the new common assessment principles that should govern the compatibility appraisal of all types of aid measures and their impact on the evaluation of energy aid measures. While, regarding non-energy-specific types of aid, the general compatibility conditions set out in Chapter 3, sections 3.1. and 3.2., of the EEAG are more or less considered a sufficient basis for assessment, for each and every energy-related type of aid additional conditions are laid down (see, EEAG, *cit.*, Chapter 3, sections 3.3.-3.4. and 3.6.-3.10.). Given that in the following paragraph we will analyse in detail the kinds of measures that directly influence the functioning of the energy market, when relevant we will deal with these specific conditions thereunder.

[525] For an explanation from the inside on how, from the outset, the Commission has thought the objectives of the SAM reform could be transposed in the energy field see, Pesaresi N. 'First Considerations for a New State Aids Regulatory Environment for Energy Markets', in von Sydow H. S. (ed.) *EU Energy Law & Policy: Yearbook 2013*. Leuven: *Claeys & Casteels* Publishing.

[526] As with the previous EAG and the New GBER, both energy aid schemes and individual energy aid measures are eligible for authorisation under the EEAG, with the exception of fiscal aid measures. Moreover, under the EEAG fiscal aid measures can be assessed only at the level of the scheme. See, EEAG, *cit.*, section 3.7., and EAG, *cit.*, section 1.5.12.

[527] See, EEAG, para. 13. More precisely, the non-nuclear energy State aid regime now also covers aid measures for undertakings active in the coal and steel sectors. Indeed, the European Coal and Steel Community (ECSC) Treaty, which contained specific provisions on aid measures in favour of these sectors, expired on 23 July 2002. Actually, the ECSC Treaty provided an absolute prohibition regarding any subsidies, aid or special charges granted by the Member States to foster the coal and steel sectors, with no exceptions whatsoever (Article 4(c) ECSC). However, since this absolute prohibition was unworkable, over the years the Commission applied both Articles 107 and 108 TFEU to all aspects of the relevant sectors that fell outside the scope of the ECSC Treaty and adopted a number of successive special decisions for the coal sector on the grounds of Article 95 ECSC. A protocol annexed to the Treaty of Nice then provided for the transfer of all assets and liabilities of the ECSC to the European Community on 24 July 2002. See, Treaty establishing the *European Coal and Steel Community*, signed at Paris, on 18 April 1951 and in force on 23 July 1952, as amended by subsequent *treaties*, n.p., available at http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:11951K/TXT (accessed 30 October 2016), and Treaty of Nice amending the Treaty on European Union, the Treaties establishing the European Communities and certain related

addressed.[528] More precisely, the only exception with respect to the coal sector is now represented by specific compatibility criteria that have been established for aid measures intended to facilitate the closure of uncompetitive coal mines,[529] which have already been outlined in Chapter 2. Hence, all other forms of aid to this sector that might fall within the categories of aid that – as we shall see – are covered by the EEAG are assessed in accordance with these Guidelines. Interestingly, in fact, the Commission has very recently authorised aid to the coal sector on the basis of the common and specific assessment principles established under the EEAG. This has been the case, for instance, for the support scheme introduced by France in favour of installations producing electricity from mine gas[530] in the form of purchase obligations at prices higher than the market price.[531] This scheme has, in fact, been addressed according to the provisions of the Guidelines on aid for resources efficiency.[532] Other two important examples are provided by the Commission Decisions on the contract for differences (CfD) that the UK government is about to conclude with two coal-fired stations for the conversion of the plants to, respectively, biomass and wood pellets.[533] Both cases have been analysed on the basis of the specific compatibility criteria applicable to operating aid granted for electricity from renewable energy sources.[534]

That said, it is, however, important to highlight that, notwithstanding the extensive debate that preceded the introduction of the EEAG, the nuclear sector still falls outside the scope of

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acts, OJ 2001 C 80/1, Protocol on the financial consequences of the expiry of the ECSC Treaty and on the research fund for coal and steel, Article 1(1). See, also, Communication from the Commission concerning certain aspects of the treatment of competition cases resulting from the expiry of the ECSC Treaty, OJ 2002 C152/5, which contains specific previsions on the control of State aid granted to the steel and coal industries following the expiry of the ECSC Treaty.

[528] As per the steel sector, see, Communication from the Commission, *Rescue and restructuring aid and closure aid for the steel sector*, OJ 2002 C 70/21, and Communication from the Commission, *Multisectoral framework on regional aid for large investment projects*, OJ 2002 C 70/8, para. 27.

[529] Indeed, such aid measures are disciplined by Council Decision 2010/787/EU of 10 December 2010 on State aid to facilitate the closure of uncompetitive coal mines, OJ 2010 L 336/24, which will expire on 31 December 2027.

[530] Mine gas is actually generated from coal production sites.

[531] Commission Decision of 10 December 2015, State aid SA.40713, *Support for installations producing electricity from mine gas*, OJ 2016 C406/7.

[532] *Ibidem*, paras 40 ff.

[533] See, respectively, Commission Decision of 19 December 2016, State aid SA. 38760, *United Kingdom – Investment Contract for Biomass Conversion of the first unit of the Drax power plant*, n.y.p., and Commission Decision of 1 December 2015, State aid SA.38760**,** *United Kingdom – Investment Contract for Lynemouth Power Station Biomass Conversion* n.y.p.

[534] *Ibidem*, respectively, paras 52 ff. and paras 46 ff.

that framework.[535] Nevertheless, interestingly, in the recent decision on the UK support plan for the construction and operation of the Hinkley Point nuclear power plant, the Commission applied the compatibility criteria provided under the EEAG, as we shall see.[536] Moreover, like the coal industry, the nuclear sector may participate in the capacity remuneration mechanisms the EEAG now encompass.

Regarding the broader scope of the Guidelines compared to the EEAG, we should further and more importantly add that, while softening the EU's traditionally favourable stance on renewables by contemplating a gradual phase-out of State measures supporting RES-e,[537] the Commission has introduced new rules to deal with energy aid measures not closely linked to climate change policy. A proper understanding of these substantive changes is crucial. Indeed, with respect to some kinds of covered measures, the EEAG provide an obligation for Member States to align, within explicit deadlines, aid schemes already in place with the new compatibility conditions established therein.[538]

With respect to energy aid measures that directly influence the functioning of the energy market,[539] we should recall that the EAG contained only provisions on investment and operating aid for high-efficiency cogeneration and for the promotion of energy from renewable sources, and rules on fiscal aid measures in the form of reductions in and exemptions from environmental taxes.[540] Under the EEAG the Commission has, first of all, added to the fiscal aid group of measures a new type of aid for the benefit of energy-intensive undertakings, *i.e.*, aid in the form of reductions in the funding support for RES-e.[541] Secondly and importantly,

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[535] The nuclear sector is actually governed by the Treaty establishing the European Atomic Energy Community (Euratom Treaty), OJ 2016 C203/1 (Consolidated version 2016), which is the only remaining sector-specific Treaty. The legal relationship between the Euratom Treaty and the EU State aid regime generates a number of conceptual and practical problems that the competent Courts have not yet clarified (for a proper analysis in that respect see, Hancher L. (2012) 'The Energy Sector', in Hancher L., Ottervanger T., Slot P.J. (eds) *EU State Aids*, *cit.*, at pp. 729-736). The debate is, therefore, still open. However, to the extent that the Euratom Treaty contains no rules on State aid and that the lack of any form of State aid control with respect to an important and mature sector such as the nuclear sector is now unconceivable, the Commission has applied the EU State aid regime in a number of decisions it has adopted regarding support measures for the nuclear industry.

[536] Commission Decision of 8 October 2014, State aid SA.34947, *CfD for Hinkley Point*, *cit.*

[537] See, EEAG, *cit.*, section 3.3.

[538] *Ibidem*, para. 250. Actually, the only exception in that respect is represented by operating aid schemes for renewable energy and cogeneration, which are brought into line with the new regime only when prolonged or modified.

[539] These energy aid measures will be addressed in detail in the next paragraph.

[540] See, EAG, *cit.*, respectively, sections 1.5.7. and 3.1.7., sections 1.5.6. and 3.1.6., and sections 1.5.12. and 4. See, now, EEAG, *cit.*, respectively, para. 151, section 3.3. and section 3.7.1.

[541] See, EEAG, *cit.*, section 3.7.2.

two further types of authentic energy-specific measures have been included in the revised framework: investment aid for energy infrastructures, and investment and operating aid for generation adequacy, the latter encompassing, in particular, the so-called capacity remuneration mechanisms (CRMs).[542] Turning to the categories of measures that might in some ways have an indirect impact on the relevant market, the scope of the EEAG has been widened to include compatibility provisions on CCS, district cooling and building renovation aid measures.[543] Hence, these Guidelines also capture energy-related mitigation measures other than those already covered by the EAG; that is to say, the mentioned forms of aid for energy from renewable sources, aid in the form of tradable permit schemes, and aid for energy savings, cogeneration and district heating.[544] With respect to the new category of aid in support of CCS projects, we should, however, highlight that it might turn out to be rather problematic because it obviously strengthens the position of conventional electricity generators,[545] albeit with the purpose of making them more eco-friendly. Indeed, as explained in Chapter 1, CCS technologies capture carbon dioxide from, *inter alia*, large fossil fuel or biomass point sources. Hence, first of all, widespread deployment of such technologies might further perpetuate fossil fuels' path-dependence, thereby reinforcing the so-called 'fossil fuel lock-in' and creating barriers to the development and diffusion of more efficient climate-friendly technologies.[546]

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[542] See, EEAG, *cit.*, sections 3.8. and 3.9.

[543] See, EEAG, *cit.*, sections 3.6. and 3.4. While CCS measures have been rightly introduced to constitute a new category in itself, the new provisions on district cooling and buildings renovation aid measures have been included, along with the rules on aid measures for energy savings, cogeneration and district heating, within the new wide category of energy efficiency aid measures.

[544] See, EAG, *cit.*, respectively, sections 1.5.6. and 3.1.6., sections 1.5.11. and 3.1.12., and sections 1.5.5., 1.5.7., 3.1.5., 3.1.7., 3.1.8. See, now, EEAG, *cit.*, respectively, sections 3.3., 3.10. and 3.4. As per purely environmental measures, the EEAG still encompass aid measures for the remediation of contaminated sites, for waste management, for environmental studies, for the relocation of undertakings, for early adaptation to future Union standards, and for enabling undertakings to go beyond Union standards for environmental protection or to increase the level of environmental protection in the absence of Union standards (see, EEAG, *cit.*, para. 25 and sections 3.5. and 3.11). Regarding the amendments to the specific provisions on energy-related mitigation measures and purely environmental measures already covered by the EAG and the new specific rules applicable to the energy-related mitigation measures that have been included in the EEAG see, Quigley C. (2015) 'State Aid For Environmental Protection', in Quigley C. (ed.) *European State aid Law and Policy*, *cit.*, at pp. 383-402. See also, Sanden J. (2014) The EEAG 2014-2020 and the Remediation of Contaminated Sites. *European State aid Law Quarterly* **13**(4) 650-664 and Kaur S. (2009) Using State Aid to Correct the Market Failure of Climate Change. *Review of European Community and International Law* **18**(3) 268-285. Interestingly, the last-mentioned author explains why, in his view, the market failure of climate change should be addressed under a new sub-article that should be added under Article 107(3).

[545] See, EEAG, *cit.*, para. 164.

[546] For further explanations on the subject see Chapter 1, paragraph 3, of this doctoral thesis. See also, Vergragt P.J. (2012) 'Carbon Capture and Storage: Sustainable Solution or Reinforced Carbon Lock-in?', in Verbong G., Loorbach D. (eds) *Governing the Energy Transition. Reality, Illusion or Necessity?.* New York: Routledge, pp. 101-124; Markusson N., Haszeldine S. (2008) *How ready is 'capture ready'? – Preparing the UK power industry*

Secondly, we should recall that CCS methods entail risks related to the transport, injection and storage of CO_2.[547] Thirdly, as already explained, biomass power plants raise sustainability concerns.[548]

In the next paragraph we will focus on the abovementioned types of energy aid measures that directly influence the functioning of the energy market, which also represent the most important and problematic elements of reform under the new regime and, thus, the most heavily disputed during the consultation process.[549] This also seems to be confirmed by the circumstance that even the Directorate-General for Energy has finally decided to intervene in some of these kinds of support measures, albeit simply through soft law instruments. Indeed, following up on the draft EEAG and the principles established therein, it has published a sort of guidance on State intervention in the electricity market (DG ENER Guidance) dealing with, *inter alia*, issues related to the required reform of national support schemes for renewables and domestic actions aimed at ensuring generation adequacy.[550]

As we shall further see with respect to support schemes for RES-e and CHP, under the EEAG the rules have been 'modernised' to address the problems arising from the increasing share of renewables in the energy mix and the market and regulatory failures associated with the previous regime.[551] These problems include: (a), cost-inefficiencies, market distortions and overcompensation issues arising out of, *inter alia*, reliance upon administratively-set tariffs, the

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for carbon capture and storage. Edinburgh: Scottish Centre for Carbon Storage, report commissioned by WWF-UK; *Unruh G.C., Carrillo-Hermosilla J. (2006) Globalizing carbon lock-in. Energy Policy* ***34****(10) 1185–1197.*

[547] A recent assessment of all the problems and challenges associated with CCS has been provided in two reports published by the IPCC – Intergovernmental Panel on Climate Change and the IEA – International Energy Agency. See, IPCC (2014) *Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge: Cambridge University Press, ch. 7, ss. 5.5, 6.4, 8-11, and IEA (2013) *Technology Roadmap: Carbon Capture and Storage*. Paris: IEA Publications, pp. 13-21.

[548] These concerns include, for instance, biodiversity losses, the scarcity of arable land and water, the resulting competition with food production and deforestation. In that regard, see, *ex plurimis*, IPCC (2014) *Climate Change 2014: Mitigation of Climate Change*, *cit*., ch. 11, ss. 7, 13, and Rhodes J.S., Keith D.W. (2008) Biomass with capture: negative emissions within social and environmental constraints. *Climatic Change* **87** 321-328.

[549] The replies to and results of the consultations are available at the following addresses: http://ec.europa.eu/competition/consultations/2012_state_aid_environment/index_en.html, http://ec.europa.eu/competition/state_aid/modernisation/energy_environment_en.html, http://ec.europa.eu/competition/consultations/2013_state_aid_environment/index_en.html, (accessed 30 October 2016).

[550] See, Communication from the Commission of 5 November 2013, *Delivering the internal electricity market and making the most of public intervention* (DG ENER Guidance), COM(2013) 7243 final, and the related staff working documents, providing guidance to Member State on state interventions aimed at preventing market distortions and granting secure, sustainable and affordable energy.

[551] In that regard see paragraph 4.2.

lack of adjustment mechanisms allowing for a periodic review of support levels and the lack of progressive integration into the market of increasingly competitive RES. Then, (b), international competitiveness issues, carbon leakage problems and the risk of subsidy races, arising out of high national energy taxes resulting from renewables financial obligations and the lack of EU-wide compatibility criteria on measures aimed at compensating electricity-intensive users for ensuing increases in electricity bills. Finally, (c), security of supply problems triggered by the variable and intermittent nature of renewable power which have, in turn, generated systemic instabilities and resulted in a malfunctioning 'internal' energy market.[552] While the revision of the framework for the assessment under State aid provisions of support schemes for RES-e and CHP is aimed at overcoming all these failures,[553] the introduction of rules on aid in the form of reductions in funding support for RES-e purports to better address the second class of inefficiencies mentioned above. However, as we shall see, although better regulated, the last-mentioned kind of support scheme benefits energy-intensive undertakings. Hence, it falls foul of the *polluter pays* principle and might determine an inefficient distribution of abatement efforts, impair the achievement of the EU sustainable policy goals and generate significant distortion of competition.[554] Finally, the inclusion under the EEAG of provisions on investment aid to energy infrastructure and investment and operating aid for generation adequacy, such as CRMs, is aimed at handling the abovementioned increased risks related to the security of energy supplies in a cost-effective and efficient way. However, as we will explain, while financial supporting of projects to modernise relevant infrastructures also fosters the completion of the European internal energy market, CRMs might run counter the integration goal and hinder the phasing-out of environmentally and economically harmful subsidies.[555] Indeed, most of the CRMs so far developed and implemented by the Member States remunerate domestic conventional electricity generators for capacity availability and activation capacity.

Alongside the above-addressed revisions regarding the scope of the EEAG, we have already explained that the overall framework of analysis provided thereunder has been reshaped in an effort to achieve greater uniformity among the criteria the Commission uses to evaluate the

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[552] In that respect see the facts and figures in the Commission Staff Working Document of 23 June 2014, *Impact Assessment accompanying the document Communication from the Commission – Guidelines on State aid for environmental protection and energy for 2014-2020*, SWD(2014) 139 (Impact Assessment I), SWD(2014) 139, pp. 15-23 and 30-31.

[553] EEAG, *cit.*, section 3.3. In that regard see subparagraph 4.2.1.

[554] EEAG, *cit.*, section 3.7. In that regard see subparagraph 4.2.2.

[555] EEAG, *cit.*, sections 3.8. and 3.9. In that regard see subparagraph 4.2.3.

compatibility of State aid measures and to guarantee the efficiency and effectiveness of the State aid control regime.[556] We have also clearly explicated the additional criteria and elements the Commission has specified it will generally apply and consider when analysing notified energy aid measures under the new common assessment principles and their general impact on financial support for the energy sector.[557] In the next paragraph we will, instead, address in detail the supplementary compatibility conditions set out for those classes of aid covered by the EEAG that, as we have explained, have a direct influence on the functioning of the energy market.[558] Suffice it, therefore, here to add that, compared to those provided under the EAG, the thresholds for the notification of individual aid granted within the context of an approved or block exempted scheme have been increased.[559] Moreover, the EEAG provide an exception from the notification obligation for these individual grants whenever aid recipients are selected through competitive bidding processes.[560] Conversely, all the maximum permissible aid intensities for energy-specific investment aid measures already covered under the EAG have been decreased.[561] If the financial support concerned is awarded through a transparent, properly regulated and non-discriminatory bidding process, however, the aid amount can reach 100 per cent of the eligible costs.[562]

4.1.4. *The Interaction Between the EEAG and a Plurality of Other Grounds for Authorisation*

We have already mentioned that the great majority of environmental and energy aid measures so far authorised have been assessed under the compatibility conditions set out in the successive

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[556] See paragraph 3.1. of this part of the thesis.

[557] These criteria and elements are addressed in section 3.2. of the EEAG. An extensive analysis in that respect has been provided in paragraph 3.2. of this part of the thesis.

[558] That is to say, investment and operating aid for high-efficiency cogeneration and for the promotion of energy from renewable sources, fiscal aid measures favouring energy intensive users, investment aid to energy infrastructure and investment and operating aid for generation adequacy.

[559] Cf. EEAG, *cit.*, para. 20, with EAG, *cit.*, section 3. In that regard it is worth recalling that any individual aid granted on the basis of a scheme that has been previously authorised or is block exempted has to be notified only if the amount awarded to the beneficiary exceeds the thresholds specified in the EEAG. The only exception in that respect has always been provided only for the fiscal aid group of measures covered by the relevant guidelines (see, now, EEAG, *cit.*, para. 21).

[560] Cf. EEAG, *cit.*, para. 20.

[561] Cf. EEAG, *cit.*, Annex I, with EAG, *cit.*, section 3.

[562] See, EEAG, *cit.*, para. 80 and Annex I.

environmental aid guidelines, and that this will be even truer throughout the application period of the EEAG. We will, however, explain in the following pages that other grounds for authorisation are available and provide specific compatibility conditions in the assessment of certain peculiar energy-related measures falling within the scope of the Article 107(3)(c) TFEU exception. Moreover, as we shall see, energy aid measures can, in principle, also be authorised on the basis of the SGEI exception under Article 106(2) TFEU. In addition to the foregoing, we have already mentioned in the previous chapter that, compared to the EAG,[563] the EEAG are silent on aid measures supporting important projects of common European interest covered by the Article 107(3)(b) TFEU exception. Indeed, the framework of analysis for such projects has been comprehensively reformed and made uniform through the adoption, as part of the SAM initiative, of the new IPCEIs Communication,[564] which also encompasses environmental and energy-related large projects.

The adoption of the IPCEIs Communication is actually good news for private investors in the energy sector. Indeed, we have explained in Part I of this work that no measure analysed according to the rules on public financing of IPCEIs previously laid down in the EAG has ever been authorised under Article 107(3)(b) TFEU, as a result of the criteria thereunder being too stringent and complex. Moreover, generally speaking, the past decisional practice and jurisprudence of the competent European Institutions evidence a very restrictive approach towards assessing these kinds of projects under Article 107(3)(b) TFEU. [565] This is notwithstanding their strategic importance for achieving several EU goals, including the completing the European internal energy market and preventing energy shortages. That said, as has been put forward, the adoption of the IPCEIs Communication might be read as a sign of a future more favourable and open stance in this field of application of the State aid regime.[566]

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[563] See, EAG, *cit.*, section 3.3.

[564] In that regard see, further, paragraph 3.1. of this part of the thesis. We should add that the IPCEIs Communication is applicable not only to new notified aid projects but also to alterations of previously authorised projects in respect of which the Commission is called upon to take a decision after 1 July 2014. Moreover, its provisions apply to non-notified aid projects regarding which unlawful aid has been granted since 1 July 2014. See, IPCEIs Communication, *cit.*, section 5.3.

[565] In that regard see, further, Chapter 2 of this doctoral thesis.

[566] See, Cattrysse B. (2016) 'Important Projects of Common European Interest', in Pesaresi N., Van de Casteele K., Flynn L., Siaterli C. (eds) *EU Competition Law: State Aid – Book Two, cit.*, at pp. 1182 and 1197. The author also seems to maintain that the IPCEIs Communication has been conceived as a tool for achieving the policy objectives of the European Fund for Strategic Investments (EFSI), a joint initiative that has been recently launched by Commission President Juncker and the European Investment Bank to overcome the current investment gap in the EU. Interestingly, this initiative primarily targets, *inter alia*, the financing of large-scale infrastructure projects – including energy infrastructures and investments for the expansion of renewable energy and resource efficiency.

This seems even truer when considering that, although the IPCEIs Communication incorporates the common assessment principles introduced as part of the SAM initiative, the compatibility conditions set out thereunder appear to be less demanding than those provided under the other new guidelines and frameworks.[567]

With specific reference to the energy sector, we should recall that the IPCEIs Communication expressly stipulates the eligibility for clearance thereunder of any financial support granted by more than one Member State to projects of major importance for the energy and security of energy supply strategy of the Union or for the completion of the European internal energy market.[568] These projects certainly include all cross-border plans that foster the achievement of the goals and targets delineated under the Europe 2020 Strategy, the 2020 Energy Strategy, the 2030 Climate and Energy Framework, the Energy Security Strategy, the Resource Efficiency Flagship Initiative, and the Trans-European Transport and Energy networks.[569] It is, however, worth noting that these new provisions do not exhaust the spectrum of the grounds of authorisation applicable to the mentioned energy projects. The IPCEIs Communication is, in fact, without prejudice to the analysis of these projects under the EEAG,[570] although it is certainly better placed to deal with large projects of a transversal nature and 'integrated projects'.[571] Moreover, its application might be the preferable option because it allows a greater diversification of support instruments and aid at higher rates than would otherwise apply under the EEAG.[572]

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[567] For an exhaustive assessment of the eligibility and compatibility conditions set out under the IPCEIs Communication see, Chapter 3, paragraph 2, of this part of the thesis.

[568] See, IPCEIs Communication, *cit.*, para. 23.

[569] See, respectively, Europe 2020 Strategy, *cit.*; 2020 Energy Strategy, *cit.*; 2030 Climate and Energy Framework, *cit.*; Energy Security Strategy, *cit.*; Resource Efficiency flagship initiative, *cit.*; Regulation (EU) No. 347/2013 of the European Parliament and of the Council of 17 April 2013 on guidelines for trans-European energy infrastructure and repealing Decision No. 1364/2006/EC and amending Regulations (EC) No. 713/2009, (EC) No. 714/2009 and (EC) No. 715/2009, *cit.* See, IPCEIs Communication, *cit.*, para. 15.

[570] See, IPCEIs Communication, *cit.*, para. 8.

[571] Indeed, the IPCEIs Communication covers both the more traditional and frequently notified single projects and 'integrated projects'. The latter consist of initiatives that comprise several individual projects. More precisely, these projects should be complementary and entirely necessary for the achievement of a common important European objective, inserted in a common structure, roadmap or programme, and based on a coherent systemic approach. *Ibidem*, paras 12-13.

[572] Actually, if justified by the funding gap analysis, aid intensity can reach up to 100 per cent of the eligible costs, which, in turn, are very large in scope. The choice of the most appropriate compatibility basis lies with the Member States concerned (*ibidem*, para. 31 and Annex to the IPCEIs Communication). In that respect see, further, paragraph 3.2. of this part of the thesis.

In addition to the foregoing, we have clearly evidenced in Chapter 3 that, compared to the EEAG, the IPCEIs Communication offers a number of important flexibilities that make it easier for relevant aid measures to pass the compatibility test. Actually, the main obstacle that these measures have to overcome is the preliminary eligibility test.[573] However, several positive indicators of compliance are provided with respect to the relevant requirements within the IPCEIs Communication, especially with reference to energy-related projects.[574] Once the eligibility conditions are met the projects have to go through a compatibility assessment that, compared to that set out in the Guidelines, is much less demanding. Indeed, first of all, the IPCEIs Communication establishes positive presumptions of compliance regarding certain compatibility criteria, such as the necessity for State aid and making a contribution to a well-defined objective of common interest.[575] Secondly, positive indicators of compliance are also provided with reference to the incentive effect condition.[576] Thirdly, to the extent that three broad alternative categories of counterfactual scenarios are foreseen under the IPCEIs Communication, an additional element of flexibility is provided with respect to the assessment of both the incentive effect requirement and the proportionality of the financial support.[577] Finally, and importantly, the inclusion of the so-called "matching clause" in the IPCEIs Communication also allows the Member States concerned to argue that the potential beneficiaries might face a competitive disadvantage in the context of international trade.[578]

As a result of the foregoing considerations it seems that, once the eligibility criteria for IPCEIs are complied with, the only reason for Member States to opt for other grounds of

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[573] Indeed, we should recall that the eligibility requirements include both a set of general cumulative conditions and specific criteria for environmental and energy projects (*ibidem*, section 3.2.1.**)**. Regarding, in particular, the energy-specific eligibility criteria, projects addressing objectives related to this area of the EU market must either be of great importance for the environmental, energy and security of energy supply strategy of the Union or contribute significantly to the internal market. Moreover, they must comply with the general requirement to phase out environmentally harmful subsidies.

[574] *Ibidem*, section 3.2.2.

[575] More precisely, the Commission has announced that it may consider that the presence of market failures or other important systemic failures and a contribution to a European objective is presumed where the project fulfils the eligibility criteria (*ibidem*, para. 27). Unfortunately, however, the IPCEIs Communication does not clearly specify the circumstances where such presumptions will be recognised as fulfilled by the Commission. This is, in the author's view, an important element of uncertainty.

[576] This is, for instance, the case for projects that would not in themselves be sufficiently profitable for a private undertaking to carry out but that would generate important benefits for society (*ibidem*, para. 33(b)).

[577] *Ibidem*, paras 30-32.

[578] *Ibidem*, para. 34. The so-called "matching clause" has already been applied in the context of the R&D&I Framework 2007. It allows the Commission to take into account**,** within the assessment of the sixth common condition, the circumstance that competitors located outside the Union have received or will receive aid of an equivalent intensity for projects similar to those under scrutiny.

authorisation would be the rather unclear and unsystematic presentation of the simplified compatibility conditions provided under the Communication in exam. This is the reason why, in the previous chapter, we have both analysed and tried to reorganise these conditions according to the mentioned common principles. In that context we have also addressed the additional criteria and elements the Commission has specified it will apply and consider when evaluating notified energy-related projects that fall within the scope of the IPCEIs Communication.[579]

Notwithstanding the broad and complementary scope of application of the EEAG and the IPCEIs Communication to aid measures potentially falling within Articles 107(3)(c) and (b) TFEU, specific compatibility grounds have also been recently established and/or maintained in force for certain energy-related aid measures.

Regarding the grounds recently established, we have already mentioned that in May 2012 the Commission adopted the EU ETS Guidelines.[580] These Guidelines provide specific eligibility and compatibility criteria applicable with respect to certain special and temporary forms of aid that have been allowed under the 2009 ETS Directive in connection with electricity generation and consumption.[581] More precisely, they delineate the framework under which Member States can compensate certain sectors and subsectors or power generators particularly affected by the changes to the EU ETS in effect from 2013 onwards. Indeed, being part of the 2020 Climate and Energy Package, the 2009 ETS Directive has amended the 2003 ETS Directive to enact the 20-20-20 targets adopted by the European Council in March 2007, which are also the headline targets of the Europe 2020 Strategy.[582] In particular, the new provisions introduced by the 2009 ETS Directive are aimed at fulfilling the commitment to reduce the EU's overall greenhouse gas emissions to at least 20 per cent below 1990 levels. As a result,

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[579] See, paragraph 3.2. of this part of the thesis.

[580] EU ETS Guidelines, *cit.*, as amended on 6 December 2012 with regard to the electricity consumption efficiency benchmarks (OJ 2012 C 387/5).

[581] 2009 ETS Directive, *cit.*, Articles 10(3), 10a, 10b and 10c. Actually, Article 10a(6) of the 2009 ETS Directive expressly provides that financial measures in question have to be "*in accordance with state aid rules applicable and to be adopted in this area*".

[582] See, 2009 ETS Directive, *cit.*, recitals 3 and 13, and Article 1. See also, Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC, *cit.*; Council of the European Union, Precedency Conclusions of the Brussels European Council of 8/9 March 2007, 7224/1/07 REV 1; and Europe 2020 Strategy, *cit.*, p. 11. More precisely, the targets to be met by 2020 are a 20 per cent reduction in Union greenhouse gas emissions compared to 1990 levels, an increase in the share of Union energy consumption produced from renewable resources to 20 per cent, and a 20 per cent increase in energy efficiency compared to 1990 levels.

alongside other changes, this Directive has provided for a shift to full auctioning of allowances for the electricity sector and CCS, and has established rules on the use of the revenues generated from the auctioning system.[583] The aid measures that have been allowed to remedy the carbon leakage and competitiveness issues raised by the new provisions are as follows. Firstly, operating aid for compensating indirect emission costs –[584] *i.e.*, EU ETS allowance costs passed on in electricity prices – borne by energy-intensive industries active in sectors deemed vulnerable to carbon leakage. Secondly, investment aid for constructing highly efficient power plants such as those that are CCS-ready. Thirdly, aid in the form of transitional free allocations of allowances to the electricity sector for modernising electricity generation.[585] Hence, the EU ETS Guidelines provide specific eligibility and compatibility criteria applicable only to these forms of supply-side and demand-side aid measures.

With respect to the last-mentioned type of aid, we shall highlight that it favours certain electricity generators. More precisely, emission allowances might be granted free of charge to domestic electricity generators only by those Member States that fulfil certain specific conditions. These conditions pertain to the level of GDP per capita and to the interconnectivity of the electricity network or the share of fossil fuels in electricity production.[586] Alongside satisfying other compatibility conditions,[587] the eligible Member States have to submit national plans delineating the investment commitments of recipients and other operators in retrofitting the infrastructures, diversifying their energy mix and sources of supply, and developing clean technologies.[588] Interestingly, most eligible Member States have notified aid measures falling within the scope of these provisions, which have all been authorised by the Commission.[589]

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[583] See, 2009 ETS Directive, *cit.*, Article 10.

[584] In that regard it is worth recalling that, unlike 'investment aid', 'operating aid' relieves undertakings of their day-to-day costs. Hence, it is generally regarded as more distortive.

[585] See, 2009 ETS Directive, *cit.*, Articles 10(3), 10a, 10b and 10c, and EU ETS Guidelines, *cit.*, section 1. Another type of aid allowed under Article 27 of the 2009 ETS Directive and disciplined by the EU ETS Guidelines is aid in the form of excluding small installations from the EU ETS.

[586] *Ibidem*, respectively, Article 10c and section 1.3.

[587] These include compliance with the provisions of the Communication from the Commission, *Guidance document on the optional application of Article 10c of Directive 2003/87/EC*, OJ 2011 C99/9, and the Commission Communication of 29 March 2011 on guidance on the methodology to transitionally allocate free allowances to installations in respect of electricity production pursuant to Article 10c(3) of Directive 2003/87/EC, C(2011) 1983 final. Importantly, aid intensities can reach 100 per cent of the eligible costs.

[588] EU ETS Guidelines, *cit.*, section 1.3.

[589] See, Commission Decision of 27 June 2012, State aid SA.34250, *Cyprus – Allocation of free allowances in the electricity sector under the trading scheme for greenhouse gas emissions after 2012*, OJ 2013 C21/3; Commission Decision of 27 June 2012, State aid SA.33449, *Estonia – Transitional free allocation of greenhouse gas emission allowances for the modernisation of electricity generation installations*, OJ 2012 C382/3; Commission Decision

Turning to the second abovementioned category of financial support, which takes the form of investment aid for the construction of highly efficient power plants,[590] we should make a preliminary remark: in this respect, the EU ETS Guidelines have for a certain period been in partial overlap with the new provisions of the EEAG on aid to energy infrastructures. The only differences in terms of eligibility lies, in fact, in the more limited scope of the EU ETS Guidelines both regarding the types of power plants covered and with respect to the resources used to finance the measure,[591] which had to be ones generated from the auctioning of allowances for a measure to fall within the scope of the EU ETS Guidelines. It is also noteworthy that, as previously explained, aid measures aimed at fostering CCS technologies are not covered by the EU ETS Guidelines but by the EEAG. That said, we should stress that the provisions on the category of aid under exam have just expired.[592]

We shall now address the more problematic form of aid covered by the EU ETS Guidelines; that is to say, aid measures implemented for compensating certain sectors and subsectors exposed to carbon leakage for the so-called indirect emission costs they bear.[593] More precisely, indirect emission costs consist of increases in electricity prices resulting from the circumstance that installations covered by the EU ETS are allowed to pass on the market value of the allowances to consumers via a mark-up on energy prices.[594] The financial compensation in exam, therefore, targets those sectors and subsectors that cannot pass on the mentioned cost

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of 5 December 2012, State aid SA.34753, *Romania – Transitional free allocation of greenhouse gas certificates for electricity producers under Article 10c of the ETS Directive*, OJ 2013 C16/4; Commission Decision of 19 December 2012, State aid SA.33537, *Czech Republic – Transitional free allocation of greenhouse gas emission allowances for the modernisation of electricity generation installations*, OJ 2013 C43/17; Commission Decision of 19 December 2012, State aid SA.34086, *Hungary – Investments aiming at the modernisation of the Hungarian energy sector under Article 10 c) EU ETS Directive*, OJ 2013 C43/13; Commission Decision of 4 December 2013, State aid SA.34385, *Bulgaria – Allocation of free greenhouse gas emission allowances in line with Article 10c of Directive 2003/87/EC in exchange for investments in installations for electricity production and in energy infrastructure (National Investment Plan under Article 10c of the ETS Directive*), OJ 2015 C63/1; Commission Decision of 22 January 2014, State aid SA. 34674[SEP], *Poland – Derogation of Article 10c of Directive 2003/87/EC on emission trading – free allowances to power generators*, OJ 2015 C24/1; Decision Commission Decision of 10 July 2014, State aid SA.34457, *Lithuania – National Investment plan for transitional free allocation of emission allowances under Article 10C(5) of Directive 2003/87/EC*, OJ 2016 C241/1.

[590] See, 2009 ETS Directive, *cit.*, Articles 10(3), and EU ETS Guidelines, *cit.*, sections 1.2. and 3.2.

[591] See also, in that regard, the Commission statement to the European Council in *Addendum to 'I/A' Note from General Secretariat* of the Council to COREPER/COUNCIL *8033/09* ADD 1 REV 1 of 31 March 2009.

[592] Indeed, revenues generated from the auctioning of allowances could be used by Member States to support the construction of highly efficient power plants only until 31 December 2016 (*ibidem*, and EU ETS Guidelines, *cit.*, para. 33(b)).

[593] See, 2009 ETS Directive, *cit.*, Articles 10a(6) and 10c, and EU ETS Guidelines, *cit.*, para. 23.

[594] Hence, indirect emission costs differ from but are strictly connected to direct emission costs in that the latter consist of the costs of buying allowances.

increases to their customers in product prices without incurring a significant loss of market share to less environmentally efficient installations outside the Union.[595] As a result, only EU undertakings active in sectors exposed to global trade and, thus, vulnerable to carbon leakage, as eligible beneficiaries. Actually, this stems from the very objective this form of aid pursues; that is to say, remedying the carbon leakage effects that might arise from the amendments to the 2003 ETS Directive provided under the 2009 ETS Directive to regulate the third trading period of the EU ETS, which runs from 2013 to 2020.[596] The language used by the Commission in the Guidelines actually focuses on the risk of environmental damage worldwide from an increase in global greenhouse gas emissions resulting from the relocation of EU energy-intensive users to outside the Union.[597] One might argue that keeping high-carbon industry within EU borders would, more or less, generate the same effects at global level. However, first of all, in the author's view, these aid measures are evidently aimed at safeguarding Member States' energy security and the international competitiveness of certain sectors of the EU economy.[598] Secondly, in this way the EU can regulate the kinds of costs that can be compensated for and the digressive nature of allowable aid intensities, so as to incentivise the transition of the industries concerned towards low-carbon technologies and to minimise competition distortions.[599]

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[595] See, EU ETS Guidelines, *cit.*, paras 7 and 10.

[596] These include, *inter alia*: the shift in allocation philosophy towards auctioning, implemented from 2013 onwards as the main allocation method for the electricity sector and CCS in order to avoid problems regarding the so-called windfall profits gained by electricity industries under the grandfathering allocation system; a gradual phase-in of auctioning with regard to other sectors, with a view to reaching full auctioning in 2027; the adoption of a EU-wide cap; an annual decrease in the EU-wide quantity of allowances by a linear factor of 1,74 per cent; prohibition of the 'banking' of emission allowances, *i.e.*, the carrying over of unused allowances from one trading period to the following; etc.

[597] We should, in fact, recall that carbon leakage issues arise mainly as a result of the fact that the environmental policies – if any – adopted by most non–EU countries are not as strict as European rules. In the EU Institutions' view, addressing the risk of carbon leakage is necessary to avoid the efforts made within the EU to deal with environmental problems becoming nugatory as a result of increases in greenhouse gas emissions in other regions. See, EU ETS Guidelines, *cit.*, paras 7-8.

[598] For a critical analysis of the EU ETS in light of the safeguards introduced by the 2009 ETS Directive in an attempt to reconcile the effectiveness of the system with carbon leakage and competitiveness challenges see, Prentice J. (2013) Carbon Leakage and Competitiveness under the EU ETS. *European Energy and Environmental Law Review* **22**(4) 132-140.

[599] Indeed, the EU ETS Guidelines, first of all, establish degressive aid intensities over the period 2013-2020 (para. 26). Secondly, they provide a peculiar formula for calculating the maximum aid amount, which is based on the baseline production level of the installation, its baseline electricity consumption level and the CO_2 emission factor of the geographic area where it operates (paras 27-30 and Annexes III and IV). However, the incentive effect requirement is presumed to be met once the above compatibility criteria are satisfied (para. 31).

We should, however, highlight that the form of aid under exam constitutes operating aid – which is intrinsically a highly distortive form of aid – and that, on the basis of the eligibility criteria elaborated by the Commission, only energy-intensive industries are potential beneficiaries of the financial support in question.[600] Hence, as also partially acknowledged by the Commission, this type of aid may be rather problematic. Indeed, first of all, it may determine an inefficient distribution of abatement efforts, thereby generating distortions of competition between market operators and impairing the overall cost-efficiency of the EU ETS. Actually, if the awards are not properly targeted and confined, the costs of reducing emissions will have to be borne mainly by less electro-intensive users, who will face higher carbon and electricity prices. Secondly, and importantly, the form of aid under scrutiny may generate significant distortions of competition between undertakings in different Member States, through uneven treatment of eligible and ineligible undertakings active in the same sector. This effect may arise as a consequence of the different budgetary constraints suffered by Member States.[601] The overall result would, therefore, be a subsidy race among EU countries.[602]

That said, it is finally worth mentioning that, on the basis of the eligibility and compatibility conditions established under the EU ETS Guidelines for financial provisions aimed at compensating EU ETS indirect emission costs, the Commission has already approved a number of aid measures notified by the Member States.[603]

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[600] The 2009 ETS Directive does not establish the eligibility criteria to be applied with respect to this form of aid. It only provides the methodology that shall be used to determine the sectors that can benefit from the free allocation of allowances and, thus, the sectors that can be compensated for their direct emission costs (Article 10a(15-17)). The Commission has, therefore, elaborated on the eligibility criteria for the category of aid for indirect emission costs on the basis of those established within the directive regarding aid for direct emission costs. As a result, only two out of the three quantitative criteria are applied to determine the list of sectors and subsectors exposed to carbon leakage. Additional qualitative criteria have been established, however. In that regard see further, EU ETS Guidelines, *cit.*, Annex II; Commission Staff Working Document, *Impact Assessment Report Accompanying the document Guidelines on certain State aid measures in the context of Greenhouse Gas Emission Allowance Trading Scheme*, SWD(2012) 130 final, Annex 6; and Commission Decision of 24 December 2009 determining, pursuant to Directive 2003/87/EC of the European Parliament and of the Council, a list of sectors and subsectors which are deemed to be exposed to a significant risk of carbon leakage, OJ 2010 L1/10.

[601] In that respect see, also, EU ETS Guidelines, *cit.*, para. 8.

[602] As a result of the foregoing, alternative solutions to carbon leakage have therefore been elaborated by experts. However, the main result of economic analyses seems to be that, to properly address both environmental challenges and carbon leakage and competitiveness issues, a global cooperative solution is required. See, *inter alia*, Antimiani A., Costantini V., Martini C., Salvatici L., Tommasino M.C. (2013) Assessing Alternative Solutions To Carbon Leakage. *Energy Economics* **36**(March) 299-311.

[603] See, *inter alia*, Commission Decision of 2 May 2013, State aid SA.35543, *Compensation for indirect EU ETS costs in the UK*, OJ 2013 C 200/3; Commission Decision of 17 July 2013, State aid SA.36103, *Germany – State aid for indirect CO2 costs*, OJ 2013 C 353/2; Commission Decision of 16 October 2013, State aid SA.37084, *Compensation for Indirect EU ETS costs in the Netherlands*, OJ 2013 C 353/5; Commission Decision of 14 November 2013, State aid SA.36650, *Spain – Compensation for indirect EU ETS costs*, OJ 2014 C17/8;

Other grounds for authorisation under Article 107(3)(c) that may potentially apply to aid measures favouring, in some ways, the energy sector, include the new R&D&I Framework 2014 and the new Rescue and Restructuring Aid Guidelines 2014.[604] More precisely, this may happen when the aspects and elements of the relevant measures that are covered by these Guidelines and Framework are predominant when compared to environmental and energy-related ones. As we have seen in Chapter 2, however, the interactions between different guidelines and frameworks that might be applicable to the same measure in certain cases led to some difficulties before the reform as well. The recent case law seems to show that this will continue to be true. Actually, for instance, the R&D&I Framework 2014 is now even more important for the energy sector than it was previously. Indeed, the European R&I energy strategy has been just included among the five interrelated policy dimensions whose enhanced effectiveness constitutes the main goal of the Energy Union strategy which the Juncker Commission is purporting to implement.[605] Hence, the Commission has already addressed certain energy aid measures under the R&D&I Framework 2014.[606] However, some aid measures fostering demonstration projects for the development and use of innovative energy-related technologies have also been recently assessed and cleared under the EEAG.[607]

Commission Decision of 14 November 2013, State aid SA.37017, *Belgium – Compensation for Indirect EU ETS costs*, OJ 2013 C 354/9; Commission Decision of 30 June 2014, State aid SA.38630, *Compensation of indirect EU ETS costs in Greece*, OJ 2014 C348/22.

[604] See, R&D&I Framework 2014, *cit.* Rescue and Restructuring aid Guidelines 2014, *cit.* For an exhaustive analysis of these Guidelines and Framework see, Bacon K. (2017) Research, Development and Innovation, and Mehta C. (2017) Rescue and Restructuring Aid, in Bacon K. (ed.) European Union Law of State Aid. Oxford: Oxford University Press.

[605] See, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank of 25 February 2015, *A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy* (Energy Union Communication, COM(2015) 80 final, section 2.5.

[606] See, for instance, Commission Decision of 16 September 2014, State aid SA.37178, *Aide de l'ANR au projet de R&D « SuperGrid » dans le cadre du programme d'investissements d'avenir*, n.y.p. In its decision on the case the Commission found that the aid the French State wanted to grant to the Supergrid Institut for supporting a research programme aimed at developing innovative energy transmission networks – designed for large-scale transmission of energy from RES – was in line with the R&D&I Framework 2014. Indeed, it considered that the new technologies in question could be of great help for securing energy supplies and protecting the environment, without unduly distorting competition.

[607] See, for instance, Commission Decision of 23 April 2015, State aid SA.39347**,** *Support scheme for experimental and pre-commercial renewable technologies*, n.y.p., and Commission Decision of 23 April 2015, State aid SA.40227, *Windfloat Project*, n.y.p. **T**he aid scheme and the windfloat project under scrutiny in the mentioned cases are aimed at increasing Portugal's share of renewable energy by developing new generation technologies. More precisely, the scheme purports to support demonstration projects producing renewable energy from the ocean and innovative offshore wind technologies, through a 25-year long feed-in-tariff system that will compensate the beneficiaries for the higher costs of the new technologies. As per the project, it will also benefit from investment aid and funding from NER300, the EU support programme for innovative low-carbon energy demonstration projects.

Moreover, given the growing importance that biofuels are gaining, the new Agricultural aid Guidelines might also be of some relevance for addressing certain energy-related measures under Article 107(3)(c) TFEU,[608] as the previous guidelines in the field have been.[609] Actually, aid granted to foster investments linked to primary agricultural production related to the production of energy from renewable sources or to the production of biofuels on holdings may fall within the scope of these Guidelines.[610] By contrast, notwithstanding that the previous regional aid guidelines were also potentially applicable to aid implemented to promote the energy sector,[611] the Commission has now expressly excluded this sector from the scope of the Regional Aid Guidelines 2014.[612] It has, in fact, clarified that, when assessing energy aid measures under the EEAG, it will also take into account the specific handicaps of the assisted areas. [613] Actually, as we have already explained, while under the previous regime a considerable number of support mechanisms of a purely environmental nature were approved under Article 107(3)(a) TFEU according to the criteria set out in the Regional aid Guidelines 2007, with respect to the energy sector the Commission has always relied mostly on Article 107(3)(c) TFEU and the successive environmental guidelines by examining the peculiar regional circumstances in its assessment under these instruments.[614]

All the above-provided new frameworks for the assessment of energy-related aid measures do not, however, exhaust the array of compatibility rules applicable to energy aid that qualify for derogations under Article 107(3) TFEU. We should, in fact, recall that specific eligibility and compatibility conditions are also established for stranded costs compensation schemes, which also have to be approved under Article 107(3)(c) TFEU.[615] The relevant assessment

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[608] *European Union Guidelines for State aid in the agricultural and forestry sectors and in rural areas 2014 to 2020* (Agricultural aid Guidelines) OJ 2014 C 204/1.

[609] See, for instance, Commission Decision of 18 June 2004, State aid N 295/2003, *UK – Bio-Energy Infrastructure Scheme*, OJ 2005 C316/22.

[610] However, aid awarded to promote more general investments in energy saving, biofuel and energy from renewable sources are expressly excluded from the scope of these Guidelines because they are to be addressed under the EEAG. See, *ibidem*, para. 32 and section 1.1.1.1.

[611] Regional aid Guidelines 2007, *cit.*

[612] Regional aid Guidelines 2014, paragraph 11.

[613] See, *ibidem*, footnote 14, where the Commission expressly stated that it "*will assess the compatibility of State aid to the energy sector on the basis of the future energy and environmental aid guidelines, amending the current guidelines on State aid for environmental protection, where the specific handicaps of the assisted areas will be taken into account*".

[614] In that regard see, further, Chapter 2.

[615] We should recall that stranded costs compensation mechanisms were implemented by many Member States during the electricity and gas markets liberalisation process to offset the losses that incumbent undertakings were suffering as a result of the process. Indeed, they were aimed at compensating these undertakings for past

criteria are, in fact, set out under the Methodology for analysing State aid linked to stranded costs (Methodology),[616] as the mentioned schemes are rightly explicitly excluded from the scope of the EEAG.[617] The less strict State aid rules under the Methodology were supposed to apply on a transitional basis merely to facilitate the liberalisation of domestic energy markets, and it would appear that the transition period has now expired. Nonetheless, they are unfortunately still in place and, as we have already explained in Chapter 2, they potentially allow Member States to award aid to energy market operators that were incumbent undertakings before liberalisation; that is to say, mainly conventional electricity generators and vertically integrated companies. By contrast, as previously clarified, the non-nuclear energy State aid regime now also covers aid measures for undertakings active in the coal and steel sectors.[618] The only exception in this respect is certain non-energy-specific rules on aid to the steel sector[619] and the already addressed peculiar compatibility criteria applicable to aid measures intended to facilitate the closure of uncompetitive coal mines,[620] which have been adopted by the Council on the basis of Article 107(3)(e) TFEU.[621]

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investments that could no longer be exploited commercially due to energy market liberalisation. With regard to this see, further, Chapter 2.

[616] Commission Communication of 26 July 2001, *relating to the methodology for analysing State aid linked to stranded costs* (Methodology), n.p., communicated to the Member States by letter ref. SG (2001) D/290869 of 6 August 2001.

[617] See, EEAG, *cit.*, para. 15(c).

[618] See, New GBER, *cit.*, Article 13(a) and EEAG, para. 13. See, subparagraph 4.1.3. and the decisions quoted thereunder.

[619] As already mentioned, non-energy-specific rules on aid to the steel sector are provided in the following Commission Communications: Communication from the Commission, *Rescue and restructuring aid and closure aid for the steel sector*, *cit.*, and Communication from the Commission, *Multisectoral framework on regional aid for large investment projects*, *cit*. Paragraph 27 of the last mentioned Communication prohibits the awarding of investment aid for projects in the steel industry.

[620] Indeed, as already explained, such aid measures are disciplined by Council Decision 2010/787/EU of 10 December 2010 on State aid to facilitate the closure of uncompetitive coal mines, *cit.*, which will expire on 31 December 2027. This Decision has definitively established that the general State aid rules apply to the coal industry because the previous regime, which provided specific rules for certain categories of aid to EU-based hard coal fields, is no longer justified on security of supply grounds. We should, in fact, recall that under Council Regulation (EC) No 1407/2002 of 23 July 2002 on State aid to the coal industry, OJ 2002 L205/1, which expired on 31 December 2010, certain forms of aid to the coal industry were allowed. Indeed, they were deemed necessary to guarantee access to coal reserves and, thus, the potential availability of EU coal for security of energy supply reasons. In consideration of the small contribution of subsidised coal to the overall energy mix and the Union's policies encouraging a sustainable and safe low-carbon economy, Council Decision 2010/787/EU instead established a path for the definitive closure of uncompetitive mines, which, however, enables Member States to take measures to alleviate the social and regional consequences of closure.

[621] Examples of decisions that have been adopted since the EEAG entered into force include, Commission Decision of 12 February 2015 State aid SA.39570, *Czech Republic – Aid to OKD, a. s. for the closure of the Paskov mine*, OJ 2015 C309/5; Commission Decision of 27 May 2016, State aid SA.34332 *Aid to facilitate the closure of coal mines in Spain*, OJ 2016 C471/1; and Commission Decision of 11 March 2015, State aid SA.40773, *United Kingdom – Closure Aid to Hatfield Colliery Partnerships Ltd*, OJ 2015 C277/7. For previous decisions see Chapter

Environmental and energy aid measures which are not covered by any of the above-analysed Commission Communications and Council Decisions may nonetheless be directly approved under Article 107(3)(c) TFEU or Article 107(3)(b) TFEU.

So far, most of the Commission decisions directly authorising energy-related aid measures under the former Article pertained to kinds of aid not included in the EAG –the Commission not being familiar with such measures – but now covered by the EEAG. This shows, however, that the Article 107(3)(c) TFEU exception might be a valuable tool in future cases concerning innovative measures. Moreover, it is still of paramount importance for aid granted to the coal and nuclear sectors. As per financial support for the first sector, the Commission continues to address, on a case-by-case basis, all the relevant measures that do not fall within the scope of the EEAG and of the Council Decision on aid for the closure of coal mines.[622] The same holds true with respect to the nuclear industry,[623] which still constitutes the 'great excluded', notwithstanding the extensive debate that preceded the introduction of the EEAG. However, from the recent decision rendered on the *Hinkley Point* case, we might infer that the Commission has considered that, whenever possible, it will nonetheless apply the same compatibility requirements provided under the EEAG for capacity remuneration mechanisms.[624]

Turning to the exception under Article 107(3)(b) TFEU, as already mentioned, to date it has almost never been employed with respect to the energy sector – either directly, or indirectly.[625] Actually, it has barely been employed in general. However, apart from the adoption of the IPCEIs Communication, things seem to have also recently changed with respect to the direct

2 of this thesis.

[622] Regarding decisions that have been adopted since the EEAG entered into force see, Commission Decision of 24 July 2015, State aid SA.41939**,** *Aid To UK Coal*, n.y.p. For previous decisions see Chapter 2 of this thesis.

[623] As per decisions that have been adopted since the EEAG entered into force see, Commission Decision of 8 October 2014, State aid SA.34947, *CfD for Hinkley Point*, *cit.*; Commission Decision of 9 October 2015, State aid SA.3496**2**, *United Kingdom – Waste Contract for New Nuclear Power Stations*, OJ 2016 C161/1; and Commission Decision to initiate the formal investigation procedure of 27 May 2016, State aid SA.38454, *Hungary – Possible aid to the Paks nuclear power station* (*Paks II*), OJ 2016 C8/2. For previous decisions see Chapter 2 of this thesis.

[624] Commission Decision of 8 October 2014, State aid SA.34947, *CfD for Hinkley Point, cit.*

[625] The only – temporary – exception has, in fact, been represented by aid measures for the design and manufacture of environmentally friendly products, which are explicitly excluded from both EAG and EEAG coverage. Indeed, Article 107(3)(b) TFEU has been used – albeit on a temporary basis – as a means of authorising aid schemes for the production of green products complying with the conditions provided under the 2009 and 2010 Temporary Framework Communications for State aid measures to support access to finance, which have now expired. See, Communication of the Commission, *Temporary Union framework for State aid measures to support access to finance in the current financial and economic crisis*, OJ 2011 C6/5, para. 2.5., and Communication from the Commission, *Temporary Community framework for State aid measures to support access to finance in the current financial and economic crisis*, OJ 2009 C83/1, para. 4.5.

application of Article 107(3)(b) TFEU. Indeed, first and foremost, the Commission has for the first time directly applied the second leg of the two-pronged exception provided under the mentioned Treaty provision to the energy sector, *i.e.*, "*aid* […] *to remedy a serious disturbance in the economy of a Member State*". In view of the exceptional circumstances that the Greek energy sector is facing it has, in fact, authorised certain aid granted by the Greek State to various operators in the electricity and natural gas market.[626] Regarding the first leg of Article 107(3)(b) TFEU,[627] however, although it has never been applied with respect to the energy sector an interesting development worthy of attention is represented by a recent case concerning the construction of a road and rail bridge connecting Denmark to Sweden.[628] The decision in the case was adopted directly under Article 107(3)(b) TFEU because the IPCEI project in exam was financed before the entry into force of the IPCEIs Communication. However, at the time of the relevant decision the IPCEIs Communication had been already adopted. Interestingly, in fact, the decision was heavily inspired by the mentioned Communication.[629] When considering this case together with the *Hinkley Point* case, one might argue that a trend may be detected: the Commission's efforts to simplify and reach a high level of uniformity among the rules applicable in the context of the State aid control system are going far beyond the scope of the SAM reform. It might well be that a path towards a future positive harmonisation of this field of EU law has been launched.

We shall finally recall that, in principle, energy aid measures can be authorised also on the basis of the SGEI exception under Article 106(2) TFEU and, thus, according to the new SGEI Framework.[630] Indeed, in previous chapters of this thesis we have explained that the successive electricity and gas directives applicable from time to time have included both the obligations imposed by the Member States related to security, regularity, quality and price of supplies and

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[626] See, for instance, Commission Decision of 31 July 2014, State aid SA.36323 *Liquidity support to Greek PPC*, OJ 2014 C 348/7**,** Commission Decision of 5 February 2013, State aid SA.34986, *Greece- Liquidity support in the energy sector**:** DEPA*; Commission Decision of 25 June 2014, State aid SA.36871, *Extension of liquidity support to Greek DEPA*, OJ 2014 C 348/9. For an exhaustive analysis of these cases see, Farantouris N. E. (2015) Liquidity Problems of the Greek Energy Market and State Aids. European State aid Law Quarterly **14**(4) 503-509.

[627] *I.e.*, "*aid to promote the execution of an important project of common European interest*".

[628] Commission Decision of 15 October 2014, State aids SA.36558 and SA.38371 – Denmark, State aid SA.36662 – Sweden, *Aid granted to Øresundsbro Konsortiet*, OJ 2014 C437/2-3 and OJ 2014 C418/8.

[629] See, *ibidem*, paras 111 ff. For further details on the case see, Nicolaides P. (2015) 'Projects of Common European Interest: The Øresund Fixed Link', in Nicolaides P. (ed.) State Aid Uncovered: Critical Analysis of Developments in State Aid 2014, *cit.*

[630] SGEI Framework, *cit.*

those pertaining to environmental protection[631] upon prospective candidates for PSO status.[632] However, we have clarified that these directives also contemplate that, to the extent that measures adopted by Member States to fulfil PSOs constitute State aid, they fall within the scope of the State aid regime and have to be notified to the Commission for approval.[633] With that regard, we have evidenced that the Commission has always adopted a very strict approach to the application of Article 106(2) TFEU exception with respect to aid measures promoting energy-related objectives. Actually, as explained, it has for instance constantly refused to use that ground for justifying State aid for renewable electricity and, in certain decisions on support schemes for RES, it has given clear indications on the reasons underlying the choice to rule out this option.[634] Over the years, in fact, only a small number of Member States have successfully invoked Article 106(2) TFEU as a justification for energy aid measures and mainly with reference to early stranded costs compensation systems[635] and the very few notified financial mechanisms aimed at ensuring security and reliability of electricity and gas supply.[636] Hence, to the extent that the EEAG now encompass also specific provisions that deal with the financial

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[631] Environmental protection has been explicitly considered to encompass energy efficiency, energy from renewable sources and climate protection.

[632] See, now, Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC, *cit*., Article 3, and Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC, OJ 2009 L211/94, Article 3.

[633] *Ibidem*, recital 46.

[634] See, for example, Commission Decision to initiate the formal investigation procedure of 2 February 2005, State aid NN 80/2004 (then, C 7/2005), *Slovenian FIT & FIP scheme*, OJ 2005 C63/2.

[635] See, Commission Decision of 25 July 2001, State aid N 34/1999, *Austrian Stranded Costs & CRM*, OJ 2002 C5/2; Commission Decision of 25 July 2001, State aid NN 49/1999, *Spanish Stranded Costs & CRM*, OJ 2001 C268/7; and Commission Decision of 2 February 2005, State aid SI 7/2003, *Slovenian Stranded Costs*, OJ 2005 C63/2. *Contra*, *inter alia*, Commission Decision of 25 September 2007, State aid C 43/2005 (ex N 99/2005**),** *Polish PPAs & Stranded Costs Compensations*, OJ 2009 L83/1, and Commission Decision of 4 June 2008, State aid C 41/2005 (ex NN 49/2005), *Hungarian PPAs*, OJ 2009 L225/53, upheld on appeal on the relevant point by both the General Court and the CJ. See, Case T-179/09, *Dunamenti Erőmű v. Commission*, ECLI:EU:T:2014:236, Case C-357/14 P, *Electrabel and Dunamenti Erőmű v. Commission* ECLI:EU:C:2015:642, and Case T-468/08, *Tisza Erőmű kft v. Commission*, ECLI:EU:T:2014:235.

[636] E.g., Commission Decision of 29 Sep. 2010, State aid N 178/2010, *Public service compensation linked to a preferential dispatch mechanism for indigenous coal power plants* (*Spanish indigenous coal power plants*), OJ 2010 C312/6, upheld on appeal in Case T-57/11, *Castelnou Energía v. Commission*, ECLI:EU:T:2014:1021; Commission Decision of 30 October 2001, State aid N 6/A/2001, *Public service obligations imposed on the Electricity Supply Board concerning electricity generated out of peat* (*Ireland Peat Electricity*), OJ 2002 C77/26; Commission Decision of 20 November 2013, State aid SA.36740, *Aid to Klaipėdos nafta – LNG terminal* (*Lithuania LNG terminal*), OJ 2016 C161/2, now under appeal in Case T-417/16, *Achemos Grupė and Achema v. Commission*, for issues related to the compatibility assessment. For an isolated example where a capacity remuneration mechanism has been considered to fulfil the *Altmark* criteria at the level of the selectivity criterion see, Commission Decision on 16 December 2003, State aid N 475/2003, *Public Service Obligation in respect of new electricity generation capacity for security of supply* (*Irish CADA*), OJ 2003 C34/7.

support to energy infrastructure and generation adequacy issues, in the author's opinion also the types of energy aid measures that have so far hardly passed the SGEI test will be justified only under Article 107(3)(c) TFEU, when satisfying the relevant compatibility conditions thereunder. Actually, as previously evidenced, the Court has relied on this Treaty provision also in past – albeit exceptional – cases on measures aimed at enhancing the security of electricity or gas supply in the concerned Member State.[637] The assumption we have put forward above might be deemed all the more valid if we considered that, as already mentioned, apart from the problems concerning the definition of SGEI, the conditions for approval of SGEI compensation foreseen under the new SGEI Framework are more challenging than those that were provided under the prior framework.[638] Indeed, in the few cases on nuclear power[639] and capacity remuneration mechanisms addressed by the Commission after the EEAG have entered into force, the Member States have unsuccessfully invoked Article 106(2) TFEU.[640] Moreover, interestingly, in a recent ruling the General Court has even held that an obligation imposed by law to guarantee security of supply is merely a general obligation and, thus, as such, is not sufficient to qualify as SGEI.[641]

4.2. The New Energy-Specific Compatibility Conditions Addressing Current Challenges

[637] E.g., Commission Decision of 14 June 2010, State aid N 675/2009, *Tender for Aid for New Electricity Generation Capacity (LV)* (*Latvian CRM*), OJ 2010 C213/1; Commission Decision of 20 July 2010, State aid N 718/2009, *Netherlands - Development of marginal offshore gas fields*, OJ 2010 C270/1; Commission Decision of 23 June 2010, State aid N 660/2009, *Aid to PGNiG for underground gas storage in Poland*, OJ 2010 C213/53.

[638] For instance, the SGEI Framework now requires a more detailed assessment of the risks of distortion of competition also when there is no overcompensation.

[639] Please note that aid to the nuclear sector can pursue a number of objectives, such as security of supply, decarbonisation and the promotion of nuclear energy.

[640] See, Commission Decision of 8 October 2014, State aid SA.34947, *CfD for Hinkley Point*, *cit.*, para. 343, and the paragraphs quoted therein; Commission Decision to initiate the formal investigation procedure of 13 November 2015, State aid SA.40454, *Tender for additional capacity in Brittany* (*CRM in Brittany*), OJ 2016 C 46/69, paras 106-107**,** and the paragraphs quoted therein; Commission Decision of 8 November 2016, State aid SA.39621, *French Country-wide Capacity Mechanism II*, n.y.p.**,** paras 129 ff., although, in such case, the issue as to whether the notified measure entailed the provision of a genuine SGEI or not has been addressed in the context of its assessment under the selectivity criterion.

[641] Joined Cases T-80/06 and T-182/09, *Budapesti Erőmű v. Commission*, ECLI:EU:T:2012:65, para. 90.

4.2.1. *Sustainability vs Overcompensation, Cost-Inefficiencies, Market Distortions, Market Fragmentation: the Revised Framework for Aid to RES*

The rationale for a comprehensive review of the compatibility conditions for aid to RES provided under the EAG and the 2008 GBER has been clearly described by the Commission in a number of documents and consultation papers distributed in preparation for,[642] or in connection with,[643] the publication of the EEAG. As we shall explain, however, in our view, the amendments to the 2008 GBER provided under the New GBER with respect to these types of aid do not fit well with the intended rationale.

The starting point of the Commission analysis – which has employed an empirical approach based upon the experience gained during the term of the EAG application –[644] has been a recognition of the increased significance of subsidised RES in the energy market, and the rapid and radical economic and technological changes reshaping the relevant industry and market since the introduction of the EAG. More precisely, the combination of strong national support

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[642] Regarding the documents produced by DG COMP in preparation for or in connection with the EEAG and the New GBER see, Consultation paper of 11 March 2013 on Environmental and Energy Aid Guidelines 2014-2020 (Consultation Paper), available at http://ec.europa.eu/competition/state_aid/legislation/environmental_aid_issues_paper_en.pdf (accessed 30 October 2016); Impact Assessment I, *cit.*; and Commission Staff Working Document of 23 June 2014, *Executive summary of the Impact Assessment accompanying the document Communication from the Commission – Guidelines on State aid for environmental protection and energy for 2014-2020*, SWD(2014) 140 (Impact Assessment II); European Commission, *Draft GBER – Explanatory Memorandum*, available at http://ec.europa.eu/competition/consultations/2013_gber/index_en.html (accessed 30 October 2016).

[643] As mentioned, in fact, the Directorate-General for Energy has finally decided to intervene in some of these kinds of support measures, albeit through mere soft law instruments. Following up on the draft EEAG and the principles established therein, it has published a sort of guidance on State intervention in the electricity market, dealing with, *inter alia*, issues related to the required reform of national support schemes for renewables and the domestic actions aimed at ensuring generation adequacy. See, DG ENER Guidance, *cit.* See also some of the related staff working documents, providing guidance to Member States on state interventions aimed at preventing market distortions and granting secure, sustainable and affordable energy: Commission Staff Working Document of 5 November 2013, *European Commission Guidance for the design of renewables support schemes accompanying the document Communication from the Commission – Delivering the internal market in electricity and making the most of public intervention* (Guidance on RES Schemes), SWD(2013) 439 final; Commission Staff Working Document of 5 November 2013, *Guidance on the use of renewable energy cooperation mechanism accompanying the document Communication from the Commission – Delivering the internal market in electricity and making the most of public intervention* (Guidance on Cooperation Mechanisms), SWD(2013) 440 final; and Commission Staff Working Document of 5 November 2013, *Generation Adequacy in the internal electricity market – Guidance on public interventions accompanying the document Communication from the Commission – Delivering the internal market in electricity and making the most of public intervention* (Guidance on GA Measures), SWD(2013) 438 final.

[644] In the Consultation Paper, *cit.*, page 2, the Commission remarks that "[w]*ith* [its] *substantial experience in the application of the current EAG, the EAG and the relevant provisions of the* [2008 GBER] *can be better targeted and simplified*".

for renewables[645] and the considerable decrease in the costs of some of the technologies concerned has determined a massive rollout of energy generated from renewable sources and has significantly increased their share in the energy mix of the Member States. In 2014, in fact, their share in the EU-28 gross final energy consumption reached 16 per cent, up from 8.3 per cent in 2004,[646] and, according to the 2030 and 2050 projections,[647] it will continue to rise substantially. This has certainly put the EU on track for meeting its 2020 renewables target.[648] However, it has also led to, *inter alia*, further market fragmentation, market distortions and distortions between Member States, the latter generated by the unsustainability of the the support costs for some of them.[649] Moreover, as we shall explain, it has also exacerbated competitiveness and carbon leakage issues, short-term network instabilities and long-term generation adequacy concerns.[650]

On the basis of the foregoing, the Commission has identified a set of principal problems it has purported to address in the context of revising the compatibility framework for assessment, which we will outline in this and the next subparagraphs alongside the changes it has instigated.

In particular, regarding the issues that have led to changes to the framework applicable to the financial support of RES under the State aid regime, the first problem detected was the cost-inefficiency of most of the RES-e schemes implemented thus far. Their cost-inefficiency was

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[645] Indeed, in the year when the SAM reform was launched, the largest amounts of public support went to renewable energy sources (about 41 billion EUR), followed by public interventions for energy demand (about 27 billion EUR) and support for energy efficiency (about 9 billion EUR). Among renewable energy sources, solar energy received the most support in 2012 (about 15 billion EUR), followed by wind (about 11 billion EUR) and biomass (about 8 billion EUR). See, Ecofys (2014) *Subsidies and Costs of EU Energy – Final Report, cit.*, figures S-2 and 3-1, table 3.1., and pp. ii and 21.

[646] The relevant figures have been provided by the Eurostat and are available at http://ec.europa.eu/eurostat/statistics-explained/index.php/Energy_from_renewable_sources. (accessed 30 October 2016).

[647] By exploring a number of decarbonisation scenarios – *i.e.*, different possible pathways for Europe towards the decarbonisation of the energy system, including the scenarios of the International Energy Agency and those put forward by Member States and stakeholders – the Commission has reached the conclusion that, under all the scenarios considered, the share of renewable energy will reach around 30 per cent in gross final energy consumption in 2030 and at least 55 per cent in gross final energy consumption in 2050. Actually, under the High Renewables Scenario, the strong support measures for RES will increase their share in the energy mix to such an extent that shares of RES in gross final energy consumption and electricity consumption will, in 2050, reach 75 per cent and 97 per cent, respectively. See, 2030 Climate and Energy Framework, *cit.*, and Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 15 December 2011, *Energy Roadmap 2050*, COM(2011) 885 final, graph 1 and pp. 5 and 7.

[648] The relevant target consists of an increase of the share of Union energy consumption produced from renewable resources to 20 per cent. See, Europe 2020 Strategy, *cit.*, p. 11.

[649] As a result, for instance, the Spanish government has reduced financial support for RES drastically and retroactively, while the Czech Republic has cancelled any form of support.

[650] In that respect, see the facts and figures in the Impact Assessment I, *cit.*, pp. 15-23 and 30-31.

in turn considered to be the product of a number of factors. These include, first of all, a reliance upon administratively-set tariffs (*i.e.*, under FIT schemes),[651] which tend to suffer from information asymmetries between the regulator and the producers ultimately benefiting from the support.[652] Secondly, a lack of adjustment mechanisms allowing for a periodic review – normally, decrease – of support levels to account for the growing maturity of certain renewable energy technologies and the resulting technology-prompted costs reductions. Thirdly, the absence of competitive struggle among the mentioned technologies, which would have encouraged the establishment of more efficient facilities.[653] The above characteristics of the traditional financial support granted to generators of energy from renewable sources has, in turn, led to overcompensation for beneficiaries and distortions of competition in the internal electricity market. More precisely, these distortions have arisen as a result of RES-e producers having limited exposure to price and market signals and being discharged from responsibilities to maintain a balance between electricity supply and demand. In addition to the foregoing, the Commission has detected an increased fragmentation of the energy market along national borders in the period 2008-2013, attributed to both the national nature of RES-e aid schemes and the lack of cooperation mechanisms. Moreover, it has also been deemed to be a result of the large differences between the support instruments and levels across Member States and technologies.[654] The Commission has even noted that the last-mentioned differences might further encourage the so-called 'subsidy shopping' phenomenon.

In recognition of the maturity of certain renewable technologies, and the significance of RES-e in the EU-wide energy mix, the Commission has revised the framework for assessment

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[651] In the year when the SAM reform was launched, the largest volumes of support were channelled through feed-in tariffs (about 27 billion EUR), followed by investment grants (about 13 billion EUR), and exemptions from energy taxes (about 12 billion EUR). See, Ecofys (2014) *Subsidies and Costs of EU Energy – Final Report*, *cit.*, table 3-2 and p. 21. For an extensive analysis of these types of schemes and a wide array of examples of cases see, Chapter 6, paragraph 3.3., of this doctoral thesis.

[652] Impact Assessment I, *cit.*, section 2.2.1., presents three case studies – in particular, the German FIT scheme in place until 2012, a Dutch technology-specific FIP, and the Spanish FIT – illustrative of over-deployment risks associated with administratively-set support levels.

[653] The Commission has, in fact, recommended that additional requirements be introduced when designing support schemes in the form of competitive elements able to determine support levels through bidding processes and to foster competition between technologies, while allowing for the development of a variety of technologies. See, Guidance on RES Schemes, pp. 10-11.

[654] In that respect, see Impact Assessment I, *cit.*, figure 1, p. 17, and figure 2, p. 18, showing not only that many Member States spend large amounts on financial support for RES but also that the unitary support levels vary largely across Member States and on the basis of the technology, with solar photovoltaic coming first (source: CEER (2013) *Status Review of Renewable and Energy Efficiency Support Schemes in Europe*, Ref: C12-SDE-33-03). Cf. with the comparable data provided on CEER (2015), *Status Review of Renewable and Energy Efficiency Support Schemes in Europe in 2012 and 2013*, Ref: C14-SDE-44-03.

under State aid provisions of investment and operating aid for the promotion of green energy.[655] In principle, the reform is based upon the policy objective of achieving integration of renewables in the energy market and minimising the above-described problems and competition distortions.

Regarding the rules on financial support for investments fostering the generation of energy from renewable sources, no specific compatibility conditions are provided under the EEAG.[656] Therefore, the new common assessment principles that we have analysed in detail in the previous chapter apply.[657] The same holds true regarding investment aid measures for RES that fall within the scope of the New GBER and, thus, are exempted from *ex ante* notification.[658] Hence, we will not linger over this form of support for producers of renewable energies. We shall, in fact, focus on what seems to be one of the most significant and criticised policy changes in State aid history: the comprehensive overhaul of the framework applicable to the more distortive form of operating aid granted in favour of RES-e generators.[659]

As explained in the previous subparagraph, while this form of aid was already covered by the EAG,[660] operating aid for the production of energy from renewable sources and the generation of RES-e in small scale installations are among the new types of exempted energy-

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[655] EEAG, *cit.*, section 3.3., and New GBER, Articles 41-43.

[656] See, Chapter 3, subparagraph 2, of this part of the thesis. The Guidelines only specify that investment aid to foster food-based biofuels can no longer be granted. See, EEAG, *cit.*, para. 113.

[657] EEAG, *cit.*, para. 119.

[658] In that regard see also, Chapter 3, subparagraph 3, of this part of the thesis. In that respect, it is, however, worth mentioning that the notification threshold for individual aid awarded under a scheme has been increased to 15 million EUR. Moreover, pursuant to Article 41 of the New GBER, investment aid may only be granted to a new installation and no aid may be extended or disbursed after the installation commences operations; also, aid shall be independent from the output. Moreover, regarding biofuels, the New GBER clarify that investment aid may be only granted to the extent that the aided investments are used for the production of sustainable biofuels other than food-based biofuels. Investment aid to convert existing food-based biofuels plants into advanced biofuel plants may be granted, however, provided that the food-based production would be reduced *pro rata* to the new capacity. It is also worth highlighting that, under the New GBER, the maximum allowable rates of aid intensity established for this form of aid may vary depending upon certain factors, including, *inter alia*, whether or not the investment aid is granted in connection with a bidding process, the method for the calculation of eligible costs and the location of the investment.

[659] To the extent that, as with the previous regime, operating aid for highly efficient CHP has to fulfil the same conditions as operating aid for RES-e (see, EEAG, *cit.*, para. 151), the considerations provided below apply, *mutatis mutandis*, to this form of aid. In this regard it is worth noting that the definitions of RES and CHP have been aligned with those provided under the Renewable Energy Directive and the Energy Efficiency Directive. See, *Directive 2009/28/EC* of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC**(**Renewable Energy Directive**)**, OJ 2005 L140/16, and Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC (Energy Efficiency Directive), OJ 2012 L315/1.

[660] EAG, *cit.*, sections 1.5.6. and 3.1.6.

related measures included in the New GBER in the context of the SAM initiative.[661] In the opinion of the Commission, in fact, the limited perimeter of the 2008 GBER with respect to aid measures to promote green energy has resulted in a requirement for an *ex ante* assessment of a large portion of cases that involve small amounts of aid. In this regard we should, first of all, highlight that, although the above consideration might be deemed to be true in abstract terms, the data provided by the Commission itself seems to prove that, in practical terms, this has not been the case. Indeed, the most recent available figures on aid granted for environmental protection and energy-related objectives show a great increase in expenditure from 2013 to 2014, amounting to approximately 28.5 billion EUR.[662] 85 per cent of this increased amount is due to the fact that from 2014 Member States' annual reports include information on more – but still not all – RES-e schemes.[663] Most support measures filling the information gap are, therefore, certainly non-notified aid; otherwise they would have been taken into consideration in previous State aid Scoreboards. Actually, a lion's share of the expenditure in the last fifteen years has been granted under a relatively few large support schemes, many of which have not even been notified, as we shall evidence at a later stage.[664] In addition, we shall further stress that operating aid measures require a more rigorous and extensive assessment because, unlike investment aid measures, they relieve undertakings of their day-to-day costs and, thus, are more distortive. By contrast, the simplified and – in our opinion, as we shall see – not at all exhaustive conditions and criteria provided under the New GBER do not definitely provide granting authorities with the required instruments and information to enter into a similar assessment. Moreover, the extension of the scope of the New GBER encompasses precisely those types of aid schemes whose improper design by several granting authorities has generated the above-analysed serious energy market problems that the reform was meant to solve. Hence, it might run counter to the very goals of the reform. Indeed, we have already explained that, in our view, in the short and medium terms this outcome cannot be avoided through the implementation of the new safeguards that have been introduced to counterbalance the above addressed pro-aid

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[661] See, New GBER, *cit.*, Articles 42 and 43.

[662] State aid statistics are available in the European Commission's State Aid Scoreboard, which can be accessed at http://ec.europa.eu/competition/state_aid/scoreboard/index_en.html. The relevant figures have been provided by the Eurostat and are available at http://ec.europa.eu/eurostat/tgm_comp/refreshTableAction.do?tab=table&plugin=1&pcode=comp_sa_01&language=en (accessed 30 October 2016).

[663] *Ibidem.*

[664] In that regard see, Chapter 6, paragraph 3.1.

reforms, such as the *ex post* evaluation mechanism applicable to large aid schemes.[665] In any event, even if this is the case, a six-month postponement of the assessment of measures falling within the scope of the New GBER will certainly not diminish the case-overload and investigation onus that the European Commission's DG COMP is confronting. As a result of the foregoing considerations we do not welcome this element of the reform, unless properly transposed in a more detailed, clear, far-reaching and all-inclusive legislative act also able to trigger infringement procedures.

That said, we shall turn to analysing the new framework applicable to operating aid in favour of generators of electricity from renewable sources. Indeed, as opposed to investment aid measures promoting renewable installations, in addition to the new common assessment principles specific criteria should be complied with for these operating aid measures to pass the compatibility test under the EEAG or to be block-exempted according to the New GBER.[666] More precisely, these criteria purport to implement a gradual transition of renewables towards full market exposure and the transformation of producers of electricity from RES into normal market players.[667] In particular, this is achieved through the introduction of a set of conditions to be fulfilled only by new, modified or prolonged aid schemes and measures implemented as of 1 January 2016.[668] Indeed, a sort of grandfathering clause has been introduced in the revised framework: as an exception to the general rule applicable to other measures,[669] the new provisions neither affect RES-e aid schemes that were already approved or block-exempted in July 2014 –[670] when the reformed framework entered into force - nor have any effect on new

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[665] As already explained, in fact, for aid schemes with an average annual budget exceeding EUR 150 million the exemption from the prior notification requirement is limited to a six-month period which may be extended by the Commission upon approval of an evaluation plan notified by the Member State. For an exhaustive explanation of the *ex post* evaluation mechanism see paragraph 3.4. of this part of this work.

[666] See, EEAG, *cit.*, section 3.3.2., and New GBER, *cit.*, Article 42. The criteria provided under the GBER essentially follow the provisions of the EEAG.

[667] Regarding the EEAG, in this subparagraph we will focus on the more complex and important compatibility conditions provided for operating aid for electricity from renewable sources. However, we shall note that the EEAG set forth both less demanding conditions applicable to aid for energy from renewable sources other than electricity and *ad hoc* provisions in connection with aid for biofuels and biomass (sections 3.3.2.2. and 3.3.2.3.). The New GBER, instead, provides specific criteria applicable in respect of operating aid for the promotion of energy from renewable sources in small scale installations (Article 43). Small scale installations are defined as installations with an installed capacity less than 500KW for the production of energy from all renewable sources other than wind and biofuels, in respect of which certain specific thresholds and conditions apply: aid to wind energy installation may be granted where the installed capacity is less than 3MW or where the installation has fewer than 3 generation units. The threshold applicable to biofuel installations is 50,000 tonnes per year.

[668] See EEAG, para. 124.

[669] *Ibidem*, paras 247 and 250.

[670] *Ibidem*, para. 250.

or amended RES-e schemes covered by the scope of the new Guidelines and implemented in the first one and a half year of their application.[671] Renewable energy generators can, thus, continue to receive aid on the basis of these schemes until they expire. This was deemed necessary to maintain investors' legitimate expectations of investment returns. A general maximum ten-year-period of validity has, however, been established for both existing and new aid schemes falling within the scope of the EEAG, after which Member States have to re-notify them.[672]

The main condition applicable to new, modified or prolonged aid schemes consists of a departure from support mechanisms revolving around feed-in tariffs and guaranteed purchases (*i.e.*, FIT schemes)[673] towards so-called 'market-based instruments'. An exception from this general rule is, however, provided for small installations.[674] As per the other installations, while under the GBER Member States may only implement feed-in premium (FIP) systems,[675] under the EEAG they have also the option to adopt tradable green certificates (TGC) schemes.[676] However, the requirements established in the Guidelines for these two types of market mechanisms to pass the compatibility test differ significantly, the rules applicable to TGC schemes being – surprisingly – much less demanding.[677] Hence, we shall analyse them in turn, starting from the more challenging provisions for FIP schemes.

Regarding FIP schemes, two sets of rules apply.[678] A first set of rules provides for three cumulative conditions to be satisfied which purport to integrate renewables into the electricity market. The first condition stems from the very structure of FIP schemes, under which, we shall recall, aid is granted in the form of a mark-up (*premium*) on the price at which generators sell electricity on the market. Hence, for approval of this kind of aid measure RES-e generators are forced to sell their electricity directly on the market.[679] The second condition consists of

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[671] *Ibidem*, para. 124.

[672] *Ibidem*, paras 121 and 250.

[673] For an extensive analysis of these types of schemes and a wide array of examples of cases see, Chapter 6, paragraph 3.3., of this doctoral thesis.

[674] EEAG, *cit.*, para 125, and New GBER, *cit.*, Article 42(9).

[675] See, New GBER, *cit.*, Article 42(5).

[676] See, EEAG, *cit.*, paras 124 and 135. For an extensive analysis of these types of schemes and a wide array of examples of cases see, Chapter 6, paragraphs 3.3. and 3.4. of this doctoral thesis.

[677] Cf. sections 3.3.2.2. and section 3.3.2.4. of the EEAG

[678] See, EEAG, *cit.*, section 3.3.2.1., and New GBER, *cit.*, Article 42.

[679] *Ibidem*, respectively, para 124(a) and Article 42(5).

applying standard balancing responsibilities to aid beneficiaries,[680] except if certain circumstances of market illiquidity arise.[681] Last, and with the clear purpose of increasing renewables' exposure to market signals, measures shall be established to ensure that RES-e installations are not incentivised to produce electricity at negative prices[682] because the latter indicates an oversupply of electricity.[683] In addition to the foregoing, both the EEAG and the New GBER stipulate that aid may only be granted until such time as when the plant generating electricity from renewable sources is fully depreciated, any previous investment aid having been deducted.[684]

A second set of rules that should be applied by the Member States in the context of implementing FIP schemes pertains to the methodology for allocating the aid. Indeed, in order to avoid distortions of competition and to increase the cost effectiveness of the support measures by limiting the aid to the minimum necessary, the EEAG and the New GBER provide that, in principle, beneficiaries are to be selected through competitive bidding processes which, in turn, should satisfy certain requirements.[685] These processes should, indeed, be based upon clear, transparent and non-discriminatory criteria and be open to all generators producing

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[680] More precisely, this means that RES-e installations are obliged to compensate for short-term deviations from their delivery commitments which are scheduled in advance.

[681] EEAG, *cit.*, para 124(b), and New GBER, *cit.*, Article 42(6). However, balancing responsibilities may be outsourced to other undertakings.

[682] EEAG, *cit.*, para. 124(c), and New GBER, *cit.*, Article 42(7).

[683] The Commission has so far found that all the relevant notified aid measures met these three conditions. See, for instance, Commission Decision of 23 July 2014, State aid SA.36196, *United Kingdom Electricity market reform – Contract for Difference for Renewables* **(***UK CfD for RES-e*), OJ 2014 C393/2, para. 65**;** Commission Decision of 23 July 2014, State aid SA.38758, SA. 38759, SA.38761, SA.38763 and SA.38812, *United Kingdom Support for five Offshore Wind Farms: Walney, Dudgeon, Hornsea, Burbo Bank and Beatrice*, OJ 2014 C393/7, para. 66; Commission Decision of 28 October 2014, State aid SA 36023, *Support scheme for electricity produced from renewable sources and efficient co-generation*, OJ 2015 C44/2, para. 105; Commission Decision of 6 November 2014, State aid SA.38428, *Individual aid to off-shore wind farm demonstration project*, OJ 2014 C460/6, para. 36; Commission Decision of 7 April 2015, State aid SA.39399, *Modification of Dutch SDE+ RES scheme*, OJ 2015 C234/2, paras. 56-57; Commission Decision of 16 April 2015, State aid SA.39723, *Windpark Offshore Nordsee One*, OJ 2015 C292/7; Commission Decision of 1 December 2015, State aid SA.38762, *Lynemouth Biomass Conversion*, n.y.p., para 57.

[684] Article 42(11) of the New GBER, and EEAG, *cit.*, para. 129, which also clarify that depreciation of the installation shall be established in accordance with generally accepted accounting principles. The Commission has also proved to be flexible in addressing this element. For instance, it has also accepted aid lasting 20 years. See, Commission Decision of 24 October 2014, State aid SA.36204, *Danish FIP – PV and RES-e*, OJ 2015 C94/1.

[685] While tenders have been introduced as the only permitted means of granting operating aid for RES-e under the New GBER, a gradual introduction of competitive bidding processes for allocating public support under the EEAG was foreseen. This was deemed necessary in consideration of the complexities that the devising and implementation of adequate tender systems entail and in order to take into account domestic circumstances. This pilot phase, however, expires in January 2017 (para. 126).

electricity from renewable sources.[686] However, a number of flexibilities have been introduced in that respect to factor in national circumstances and to allow Member States to deviate from competitive procedures where the application thereof may lead to sub-optimal outcomes. For instance, upon certain circumstances – associated with the pursuance of important policy objectives and in respect of which Member States need to perform a thorough assessment, to be reported to the Commission – the bidding process may be limited to specific technologies[687] where it is established that opening the process to all producers may generate sub-optimal results.[688] Moreover, the tender procedure may be dispensed with in respect of an installation having an installed electricity capacity not exceeding certain specified thresholds or demonstration projects.[689] Further, the EEAG provide additional kinds of exemptions from the bidding process' obligation which are also aimed at avoiding sub-optimal results.[690]

We shall now briefly turn to the second option in terms of implementable market-based instruments, which is provided only for those large support measures that fall under the scope of the EEAG: TGC schemes.[691] As mentioned, the requirements established in the Guidelines for this type of scheme to be authorised are significantly less challenging than those provided with respect to FIP systems. This is *per se* rather bizarre because, in contrast to the EEAG, the DG ENER Guidance seems to indicate a preference for FIP schemes.[692] This possibly denotes a lack of cooperation among the various Directorates-General which have important

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[686] EEAG, *cit.*, para. 126, and New GBER, *cit.*, Article 42(2). The Commission has so far generally considered renewable bids under notified aid measures to satisfy these requirements. This is also in peculiar cases where criteria other than the acceptance of the cheapest offer have been adopted to select the beneficiaries. See, for instance, Commission Decision of 6 November 2014, State aid SA.38428, *Individual aid to off-shore wind farm demonstration project*, *cit.*, para. 38.

[687] The Commission has authorised all the so-far-notified aid measures providing for technology specific tenders. See, for instance, Commission Decision of 1 December 2015, State aid SA.38762, *Lynemouth Biomass Conversion*, n.y.p., para. 75; Commission Decision of 22 January 2015, State aid SA.38796, *Teesside CHP biomass plant*, OJ 2016 C406/3, para. 75; Commission Decision of 7 April 2015, State aid SA.39399, *Modification of Dutch SDE+ RES scheme*, OJ 2015 C234/2, paras 60-64. The only exception has been one of the three groups of technologies differentiated under the UK Contract for Differences support scheme. The Commission rightly established that individual aid falling within this group had to be notified because the beneficiaries concerned were only four existing plants using fossil fuels. See, Commission Decision of 23 July 2014, State aid SA.36196, *UK CfD for RES-e*, *cit.*, paras 72-76**.**

[688] In particular, pursuant to Article 42(3) of the New GBER and para. 126 of the EEAG, circumstances justifying limitation of the bidding process to specific technologies include the longer-term potential of a given new and innovative technology, the need to achieve diversification, network constraints and grid stability, system (integration) costs, and the need to avoid distortions in the raw material markets from biomass support.

[689] Article 42(8) of the New GBER and para. 127 of the EEAG.

[690] See, paras 126 and 130 of the EEAG.

[691] EEAG, *cit.*, section 3.3.2.4.

[692] See, Guidance on RES Schemes, *cit.*

complementary expertise with respect to the energy sector – *i.e.*, DG ENER, DG COMP, DG ENV and DG CLIMA.

That said, regarding the compatibility conditions it is sufficient for a TGC scheme to pass the Commission's assessment that the Member State concerned provides sufficient evidence that the support is essential to ensure the viability of the renewable energy sources covered by the measure, it does not lead to the overcompensation of the beneficiaries, and it does not dissuade RES generators from becoming more competitive.[693] Regarding the above-addressed first set of rules established with respect to FIP schemes – which are rather important for the purposes the reform was meant to address – these apply only "*when technically possible*".[694] This is a rather vague statement which leaves the Member State with a great margin for manoeuvre and discretion when explaining the reasons justifying their choice to not comply with the relevant conditions. Certainly, it does not encourage them to increase renewables' exposure to market signals when devising TGC schemes. Actually, and importantly, in a footnote of the EEAG the Commission provides a strong signal of its – not clearly justified – generous attitude towards TGC schemes. Indeed, it allows Member States to impose on electricity suppliers purchase obligations with respect to green certificates.[695] This is notwithstanding that guaranteed purchases have been among the most problematic elements of FIT schemes that have urged the Commission to provide for their gradual replacement with market-based instruments. Regarding the new framework for TGC systems, it is also very important to highlight that the above-analysed second set of rules on the methodology for allocating aid are not at all applicable: that is to say, there is no obligation to select beneficiaries through competitive bidding processes. By contrast, the long list of related exceptions, provided with respect to FIP schemes to avoid sub-optimal results, are rightly applicable under TGC schemes to allow Member States to differentiate between RES technologies in terms of support levels.[696] Still, however, excluding the requirements regarding bidding processes represents another important missing element of the reform. We should, in fact, recall that this element is crucial for ensuring the avoidance of both national-wide and EU-wide distortions of

[693] *Ibidem*, para. 136.

[694] *Ibidem*, para. 137.

[695] More precisely, the footnote reads as follows: "*such mechanisms can for instance oblige electricity suppliers to source a given proportion of their supplies from renewable sources*". See, EEAG, *cit.*, footnote 69.

[696] EEAG, *cit.*, para. 137.

competition. Indeed, in order for tender procedures to be not discriminatory, they should in principle also be open to RES generators from other Member States.

This brings us to another gap in the reform that, in the author's opinion, should be bridged as soon as possible: the unclear role that cooperation mechanisms should play in the assessment of RES-e support measures. In this regard, we should recall that the three types of cooperation mechanisms envisaged by the Renewable Energy Directive are statistical transfers, joint projects between Member States or with third countries, and joint support schemes.[697] The rationale and importance of a widespread use of these mechanisms is clear. First of all, they enhance the efficacy of national aid schemes because they facilitate cross-border support and the cost of the support is reduced when shared between Member States. This is especially true with respect to RES-e financial mechanisms. Indeed, renewable energy sources are volatile and intermittent in nature, and they are situated in different locations because they depend on physical phenomena. Hence, it is better to exploit the resources available in larger areas. Secondly, the implementation of cooperation mechanisms allows minimisation of EU-wide distortions of competition and allows for building a resilient and *integrated energy* market across the EU. Notwithstanding the foregoing, however, the EEAG only refer briefly to cooperation mechanisms, providing that the Commission will positively consider domestic support schemes that are open to other countries.[698] Actually, one might argue that the EEAG were not the more adequate place to fill the mentioned gap, which comes as a result of the lack of clear legislation in the field. In our view, in fact, it should again be for DG COMP and DG ENER to jointly formulate a legislative proposal definitively governing at least these instruments. Indeed, the Renewable Energy Directive has simply introduced cooperation mechanisms on an optional basis,[699] recognising that, together with national support schemes, they are essential for ensuring the achievement of the 2020 national renewables targets on the best cost-benefit basis.[700] However, a report reviewing the application of this Directive with

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[697] The first form of cooperation mechanism consists of an agreement among Member States whereby one of them undertakes to transfer, for target compliance purposes, the statistical value of a quantity of RES-e produced in its territory to another Member State. As a result of a co-financed joint project between States/Countries, instead, the renewable energy amounts emanating from the project are shared between the parties, with or without a physical flow of the energy produced. Finally, joint support schemes consist of, for instance, common FIT, FIP or TGC schemes. In such cases, both the financial burden as well as the value of the quantity of RES-e produced within the scheme – for target compliance purposes – are shared between Member States. See, further, Renewable Energy Directive, *cit.*, Articles 6, 7, 9 and 11, and Guidance on Cooperation Mechanisms, *cit.*

[698] EEAG, *cit.*, para. 122.

[699] See, Renewable Energy Directive, *cit.*, Articles 6, 7, 9 and 11.

[700] *Ibidem*, recitals 25 and 28(3)(c).

respect to, *inter alia*, the effectiveness of the cooperation mechanisms will be presented only in 2021.[701] A more exhaustive explanation of how these mechanisms might be structured in the context of national support schemes has been more recently provided in one of the documents accompanying the DG ENER Guidance, in view of – we assume – the close entry into force of the EEAG.[702] However, this is just a staff working document, which neither has binding nature nor is structured and formulated as a quasi-legislative instrument.

Apart from all the above considerations, it is worth mentioning that, generally speaking, both the sections of the EEAG under exam and the DG ENER Guidance have been extensively criticised by distinguished economists and lawyers for not being economically and legally sound, coherent, clear, environmentally-oriented and mutually consistent, or for being biased by favouritism towards support schemes implemented by certain Member States.[703] We might actually agree with some of these critics. However, first of all, the EEAG are far more intelligible than the previous Guidelines. Secondly, we do believe that the main issue lies with soft law instruments not being the proper instruments to deal with certain concerns, especially when adopted in the field of State aid law. As mentioned, in fact, in our opinion a more detailed, clear, far-reaching and all-inclusive directive, also able to trigger infringement procedures, should be adopted to properly regulate the design of renewables support schemes, based upon the extensive experience already gained in the field by a number of Directorates-General. This joint effort would allow the Commission to take into account all the variables and concerns that each type of scheme has evidenced over the years and to combine data on similar measures adopted by different Member States, to the benefit also of the latter. That said, we should

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[701] *Ibidem*, Article 23(10).

[702] See, Guidance on Cooperation Mechanisms, *cit.*, and Commission Staff Working Document of 5 November 2013, *Annex to the Commission Staff Working Document – Guidance on the use of renewable energy cooperation mechanism accompanying the document Communication from the Commission – Delivering the internal market in electricity and making the most of public intervention* (Guidance on Cooperation Mechanisms), SWD(2013) 441final.

[703] See, *ex plurimis*, *Neuhoff K. Fabra N.*, Glachant J-M., Green R., von Hirschhausen C., Leprich U., Newbery D., Lorenzoni A., Mitchell C., del *Río P.* (2014) *Open letter of European economists on market premiums to Commissioner Günther Oettinger and Joaquín Almunia*, *available at* https://www.diw.de/documents/dokumentenarchiv/17/diw_01.c.441719.de/open_letter_neuhoff.pdf (accessed 30 October 2016); Callaerts R. (2015) State Aid for the Production of Electricity from Renewable Energy Resources. *European Energy and Environmental Law Review* **24**(1) 17-26; Rusche M.T. (2015) '2013 to 2015 – Years of Upheaval', in Rusche M.T. (ed.) *EU Renewable Electricity Law and Policy: From National Targets to a Common Market*. Cambridge: Cambridge University Press; Sandberg L., Davies L., Cockroft C. (2014) 'The Creeping Scope of State Aid in Relation to Energy Taxes and Charges', in von Sydow H. S. (ed.) *EU Energy Law & Policy: Yearbook 2014*. Leuven: *Claeys & Casteels* Publishing; Wiesbrock A. (2015) 'Sustainable State Aid: a Full Environmental Integration into the EU's State Aid Rules?', in Sjåfjell B., *Wiesbrock A.* (eds) *The Greening of European Business under EU Law: Taking Article 11 TFEU Seriously*. Abingdon/New York: Routledge.

specify that this means that we do not agree with the abovementioned and other experts when criticising the Commission for allegedly being too prescriptive, having allowed limited exceptions or even having intruded on areas reserved to the Member States, such as their right to choose their energy mix guaranteed by Article 194(2) TFEU.[704] Indeed, first of all, the Treaty itself establishes that State aid is in principle prohibited as being incompatible with the internal market and that the Commission enjoys a wide margin of discretion in authorising aid measures. Secondly, as previously put forward, in our opinion the EEAG provide a number of flexibilities and exceptions to factor in to national circumstances. Thirdly, further flexibility is represented by the new provisions allowing State interventions in the form of reductions in funding support for RES-e, which can be implemented to the benefit of EIUs.[705] Fourthly, the above-addressed grandfathering clause in practice implies that most Member States will, in principle, have several years to adapt their aid regimes to the new framework. Fifthly and unfortunately, Member States still have the option to devise TGC schemes which are not only almost all unqualified but also allow them to impose purchase obligations on electricity suppliers as under FIT schemes.

It is worth making a final important self-explanatory point in this respect. An incredible number of notified State aid measures adopted in the last one and a half years and promoting the generation of green electricity and CHP[706] have so far passed the compatibility test under the EEAG.[707] Actually, save for a few exceptions, for most of them the Commission has not even opened the formal investigation procedure.[708] This means either that – as above evidenced

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[704] More precisely, Article 194(2) TFEU reads as follows: "[s]*uch measures shall not affect a Member State's right to determine the conditions for exploiting its energy resources, its choice between different energy sources and the general structure of its energy supply*".

[705] We will deal with this type of fiscal aid in the next subparagraph.

[706] Regarding the Commission's decisional practice under previous Guidelines see Chapter 2.

[707] We should recall that, as mentioned, the requirements provided for aid to RES-e apply, *mutatis mutandis*, to aid for CHP.

[708] See, Commission Decision of 23 July 2014, State aid SA.36196, *UK CfD for RES-e*, *cit.*; Commission Decision of 23 July 2014, State aid SA.38758, SA. 38759, SA.38761, SA.38763 and SA.38812, *United Kingdom Support for five Offshore Wind Farms: Walney, Dudgeon, Hornsea, Burbo Bank and Beatrice*, *cit.*; Commission Decision of 28 October 2014, State aid SA 36023, *Estonia - Support scheme for electricity produced from renewable sources and efficient co-generation, cit.*; Commission Decision of 6 November 2014, State aid SA.38428, *Individual aid to off-shore wind farm demonstration project, cit.*; Commission Decision of 7 April 2015, State aid SA.39399, *Modification of Dutch SDE+ RES scheme*, *cit.*; Commission Decision of 16 April 2015, State aid SA.39723, *Windpark Offshore Nordsee One*, *cit.*; Commission Decision of 1 December 2015, State aid SA.38762, *Lynemouth Biomass Conversion*, ***cit.***; Commission Decision of 22 January 2015, State aid SA.38796, *Teesside CHP biomass plant*, ***cit.***; Commission Decision of 7 April 2015, State aid SA.39399, *Modification of Dutch SDE+ RES scheme*, ***cit.;*** Commission Decision of 24 October 2014, State aid SA.36204, *Danish FIP – PV and RES-e*, *cit.*; Commission Decision of 28 October 2014, State aid SA.37122, *Danish FIP – Wind Turbines*, OJ 2015 C277/1; Commission

– the competent European Institution has been so far very flexible with regard to the assessment of the relevant compatibility requirements or that the latter are not that challenging for the Member State to comply with, or that both of these statements are true. Indeed, in practice, the Commission usually assumes that both the contribution to a well-defined objective of common interest criterion and the incentive effect requirement are fulfilled with respect to RES-e and CHP schemes. Positive presumptions of compliance are, instead, directly provided under the EEAG for the necessity, appropriateness and avoidance of undue negative effects requirements.[709] The proportionality criterion has always represented the hardest condition to meet and the most analysed. Still, the Commission has always found it is fulfilled by RES-e schemes and, in any case, a positive presumption is now provided for aid allocated through competitive auctions.[710]

Decision of 26 February 2015, State aid SA.40305 *Horns Rev 3 offshore wind farm*, OJ 2015 C219/6**;** Commission Decision of 23 July 2014, State aid SA.38632, *Germany EEG 2014 – Reform of the Renewable Energy Law*, OJ 2015 C325/4**;** Commission Decision of 16 December, State aid SA.36659 2015, *Denmark - Aid for all forms of biogas use – B*, OJ 2016 C/241**;** Commission Decision of 28 April 2016, State aid SA.43756, *Italy - Support to electricity for renewable sources in Italy*, OJ 2016 C/258**;** Commission Decision of 8 August 2016, State aid SA.43719, *France - CHP support scheme*, OJ 2016 C/341; Commission Decision of 11 August 2016, State aid SA.40250, *Finland - Operational aid to wind power in Åland in 2013-2015*, OJ 2016 C/341**;** Commission Decision of 26 August 2016, State aid SA.43128, *Luxembourg - Modification du soutien aux SER au Luxembourg*, OJ 2016 C/369**;** Commission Decision of 25 August 2016, State aid SA.43442, *Netherlands - SDE+: Biomass co-firing*, JOCE OJ 2016 C/425**;** Commission Decision of 22 August 2016, State aid SA.43451, *Czech Republic - Support to heat production from biogas*, n.y.p.; Commission Decision of 22 August 2016, *State aid SA.43182, Czech Republic - Support to small hydro power plants up to 10 MW*, n.y.p.; Commission Decision of 11 April 2016, State aid SA.42498, *Denmark - Modification of the support to household wind turbines*, n.y.p.; Commission Decision of 4 August 2016, State aid SA.44840, *Bulgaria - 2011 Bulgarian RES support scheme*, OJ 2016 C/425**;** Commission Decision of 2 August 2016, State aid SA.37345, *Polish Green Certificates for RES-e and Reductions for EIUs*, n.y.p; Commission Decision of 22 August 2016, State aid SA.43451, *Czech Republic - Support to heat production from biogas*, n.y.p.; Commission Decision of 10 October 2016, *State aid SA.42393, Germany - Reform of support for cogeneration in Germany*, OJ 2016 C/425**;** Commission Decision of 10 October 2016, State aid SA.41998, *Slovenia - A) Support to electricity from renewable energy sources and combined heat and power installations, and B) Support for electro- intensive users in the form of reductions in electricity support scheme contributions*, OJ 2016 C/425**;** Commission Decision of 26 August 2016, State aid SA.43995, *Malta - Competitive Bidding Process for RES in Malta*, OJ 2016 C/369; Commission Decision of 28 September 2016, State aid SA.36518, *Poland - Certificates of origin for CHP in Poland*, n.y.p.; Commission Decision of 27 September 2016, State aid SA.44626, *Denmark - Pilot tender for solar energy*, n.y.p.; Commission Decision of 12 December 2016, State aid SA.46898, *France - Mécanisme de soutien aux installations de production d'électricité utilisant le biogaz produit par la méthanisation et aux installations de production d'électricité utilisant l'énergie extraite de gîtes géothermiques*, n.y.p.; Commission Decision of 8 December 2016, State aid SA.45867, *Belgium - The Belgian federal regime governing renewable energy certificates (the REC Regime) and two individual plants*, n.y.p.; Commission Decision of 28 November 2016, State aid SA.40171, *Czech Republic - 2006 RES support scheme*, n.y.p.; Commission Decision of 16 November 2016, State aid SA.44666, *Greece - New operating aid scheme for the production of electricity from RES and CHP*, n.y.p.; Commission Decision of 16 December 2016, State aid SA.38760, *Drax 3rd Unit Biomass Conversion*, n.y.p.

[709] See, EEAG, *cit.*, paras 115, 116 and 126.

[710] See, EEAG, *cit.*, para. 109.

4.2.2. *Competitiveness, Carbon Leakage and Subsidy Races: Aid for Energy Intensive Users*

Energy is a key component of several industrial processes and, thus, its cost may heavily affect Europe's international competitiveness. Several studies and reports evidence that in the period 2008-2012, when the previous Guidelines were applicable, wholesale electricity prices dropped significantly in the EU and wholesale gas prices remained stable. Nonetheless, retail energy prices increased considerably. This increase in final prices also came about as a result of the rise in energy taxes and levies imposed by Member States to finance energy and climate policies – including the promotion of energy efficiency and renewable energy production, which now represent a significant part of retail energy bills, especially in certain Member States.[711] The data confirm that, as a consequence of the foregoing, in recent years the energy prices gap between the EU and its major economic partners – which was already quite significant – has further increased[712] Moreover, they evidence that this has generated problems, especially for European energy-intensive industries *vis-à-vis* their international competitors which operate in countries where concerns for the environment are not as relevant.[713]

In this regard it is, first of all, important to note that, contrary to those of other climate and energy-related policies, EU ETS costs are not reflected in the retail but in the wholesale element of energy prices. We have already analysed the specific eligibility and compatibility criteria that the new EU ETS Guidelines provide for the special and temporary forms of aid introduced to compensate, *inter alia*, EIUs particularly affected by the changes to the EU ETS in effect from 2013 onwards.[714] We have also mentioned that these aid measures have been allowed to

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[711] For instance, in the period 2008-2012 the costs of funding support for electricity from renewable sources added to retail prices constituted approximately 6 per cent of the average EU household electricity price and about 8 per cent of the EU industrial electricity price. This was before taking exemptions into account. However, the costs of renewable energy as a share of final consumer prices diverged substantially between Member States. While in the reference period Spanish and German shares reached, respectively, 15.5 per cent and 16 per cent of household electricity prices, in Ireland, Poland and Sweden shares were less than 1 per cent. See, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 29 January 2014, *Energy Prices and Costs in Europe*, *cit.*, section 1. Regarding the share of energy costs in the production costs of EU energy intensive industries see the figure provided on p. 11 of the mentioned report.

[712] For recent data on the share of energy costs in the production costs of EU energy intensive industries, as compared to those imposed on their international competitors see, J.A. Moya, A. Boulamanti (2016) *Production costs from energy-intensive industries in the EU and third Countries*, EUR27729EN, doi:10.2790/056120, a report published by the Joint Research Centre, the European Commission's in-house science service, and Ecofys (2015) *Electricity Costs of Energy Intensive Industries: An International Comparison*, Project number: DESDE12379, a report commissioned by the German Ministry of Economic Affairs and Energy.

[713] *Ibidem*.

[714] See, ETS Guidelines, *cit.*, as amended on 6 December 2012 with regard to the electricity consumption efficiency benchmarks (OJ 2012 C 387/5). In that respect, see subparagraph 4.1.4.

remedy the carbon leakage and competitiveness issues raised by the new provisions that have been introduced by the 2009 ETS Directive.[715]

Within the abovementioned 'tax/levy' element of energy retail prices it is, though, important to distinguish between general energy tax measures and energy-system related costs financed by levies. Indeed, two different sets of rules are provided under the EU State aid regime for dealing with the fiscal aid measures adopted by several Member States. The purpose of these is to address the competitiveness and carbon leakage concerns that have arisen as a result of the increase in industrial electricity prices generated by, respectively, energy tax measures and levies imposed for financing energy and climate policies. Each of the mentioned sets of rules shall, therefore, be discussed in turn. However, it is worth mentioning from the outset that, while Member States more frequently rely on fiscal aid, tax credits impair the level playing field less and, thus, would be a preferable option, as emphasized also by the Commission.[716] Showing favour toward tax relief is, however, generally justified with arguments related to Member States' budgetary constraints, although some scholars have maintained that and explained why fiscal aid might worsen budgetary positions more than tax credits.[717]

Regarding the first set of rules, we have already mentioned that the previously applicable quasi-regulatory State aid framework – resulting from the combination of the 2008 GBER and the EAG – already contemplated types of fiscal aid measures for the benefit of certain energy intensive undertakings, with a view to minimising carbon leakage and international competitiveness issues. More precisely, under the EAG these measures took the form of reductions in, or exemption from, environmental and energy-related taxes,[718] and they are still covered by the EEAG.[719] As with the previous framework, however, the New GBER only encompasses environmental tax reductions satisfying the conditions of the Energy Taxation Directive.[720]

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[715] See, 2009 ETS Directive, *cit.*

[716] EEAG, *cit.*, para. 45.

[717] See, *inter alia*, Nicolaides P. (2015) Grants versus Fiscal Aid: In Search of Economic Rationality. *European State Aid Law Quarterly* **14**(3) 410-416.

[718] See, EEG, *cit.*, sections 1.5.12. and 4.

[719] EEAG, *cit.*, section 3.7.1. For an extensive and all-encompassing evaluation of the framework of analysis applicable to these forms under the State aid regime see, Pasquale Pistone, Marta Villar Ezcurra (2016) *Energy Taxation, Environmental Protection and State Aids: Tracing the Path from Divergence to Convergence*. Amsterdam: IBFD.

[720] See, New GBER, *cit.*, Article 44, and Council Directive 2003/96/EC of 27 October 2003 restructuring the Community framework for the taxation of energy products and electricity, *cit.*

In this regard, it is important to recall that environmental taxes target negative externalities and are imposed to increase the costs of environmentally harmful conduct in order to nudge a change in the behaviour of the economic operators concerned. Hence, generally speaking, the forms of fiscal aid measures under exam fall foul of the *polluter pays* principle, and might impair the achievement of the EU sustainable policy goals and generate significant distortion of competition. However, an illustration of the rationale for these forms of fiscal aid measures is provided in the EEAG. In particular, while the Commission recognises that these reductions in or exemptions from environmental taxes may adversely impact the objectives of discouraging environmentally harmful behaviours and increasing the level of environmental protection, it maintains that they "*may nonetheless be needed where the beneficiaries would otherwise be placed at such a competitive disadvantage that it would not be feasible to introduce the environmental tax in the first place*".[721] What this means, however, is unclear. Nether it is clear how these forms of fiscal aid measures "*can at least indirectly contribute to a higher level of environmental protection*" by "*facilitating a higher general level of environmental taxes*".[722] In fact, if anything, this means that these types of aid generate problematic distortions of competition by increasing the financial burden for less heavy polluters and, thus, determining an inefficient distribution of abatement efforts. Moreover, the EEAG do not request that Member States either prove that it would be otherwise unfeasible to impose environmental taxes or demonstrate that the tax exemptions/reductions in favour of EIUs and the mentioned – possible – higher taxes for less heavy polluters balance out.[723] What is clear, however, is that allowing aid measures is the only way to ensure the international competitiveness of the EU industry, albeit, as mentioned, it would be better for the Member States to rely on tax credits. Hence, given the importance of the issue, the significant experience gained in the field by the Commission since the 1994 Environmental Aid Guidelines,[724] and the more detailed provisions that would be required to address all the variables that need to be

[721] See, para. 167 of the EEAG, *cit.*

[722] See, para. 168 of the EEAG, *cit.*

[723] For a criticism with that respect based on economic grounds and formulas see, Nicolaides P., Kleis M. (2014) A Critical Analysis of Environmental Tax Reductions and Generation Adequacy Provisions in the EEAG 2014-2020. *European State Aid Law Quarterly* **13**(4) 636-648.

[724] Indeed, environmental and energy-related tax reductions and exemptions were already covered by both the 1994 EAG and the 2001 EAG. See, Information from the Commission, *Community guidelines on State aid for environmental protection* (1994 EAG), OJ 1994 C72/3, section 1.5.3., and Information from the Commission, *Community guidelines on State aid for environmental protection* (2001 EAG), OJ 2001 C37/3, paras 22-24 and section E.3.2.

balanced out to make sure that these forms of aid are properly targeted and do not hamper the effectiveness of EU environmental policy's objectives, reliance on a formal legal basis might be more appropriate.[725]

That said, as with previous environmental aid guidelines, under the EEAG the tax exemptions and reductions under discussion may be authorised for maximum periods of ten years, after which the aid may be re-notified by the Member State for prior re-assessment of the appropriateness thereof. Regarding the scope of the Commission's analysis of the proposed aid, both under the EEAG and under the New GBER a simplified assessment is provided for reductions in energy taxes falling within the perimeter of the Energy Taxation Directive.[726] An in-depth evaluation of the necessity and proportionality of the aid is, though, required under the Guidelines for exemptions and reductions introduced with respect to all the other kinds of energy taxes. [727] In connection with the foregoing, it is also worth highlighting that, as opposed to the EAG's provision of a positive presumption of compliance for the support in favour of EIUs with respect to the first limb of the necessity test – *i.e.*, the substantial cost increase[728] - no such presumption applies under the EEAG. Finally, it is important to note that the EEAG now provide specific compatibility conditions with respect to the relief of carbon taxes or other excises imposed on fossil fuels for addressing negative externalities.[729] Indeed, in this case, the tax provision might be designed in such a way that it would generate the very same indirect emission costs borne by energy-intensive industries as a result of EU ETS allowance costs passed on in electricity prices. Hence, EIUs can be aided according to criteria similar to those established under the EU ETS Guidelines.[730]

As mentioned, in addition to the excise relief measures already covered by the previous compatibility regime, under the EEAG – only – the Commission has added a new set of rules

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[725] For a criticism of the Commission's reliance on State aid guidelines to deal with these types of fiscal aid measures instead of providing binding rules see, for instance, Ezcurra M. V. (2014) EU State Aid and Energy Policies as an Instrument of Environmental Protection: Current Stage and New Trends. *European State Aid Law Quarterly* **13**(4) 665-674.

[726] For instance, a positive presumption of compliance with the incentive effect requirement is provided. Moreover, under the New GBER they are expressly excluded from the new evaluation obligation. See, EEAG, *cit.*, paras 176 ff. and Articles 44 and 1(2)(a) of the New GBER, *cit.*

[727] See, EEAG, *cit.*, paras 172.

[728] See, EAG, *cit.*, footnote 55.

[729] See, EEAG, *cit.*, paras 179-180.

[730] See, ETS Guidelines, *cit.*, as amended on 6 December 2012 with regard to the electricity consumption efficiency benchmarks (OJ 2012 C 387/5). In that respect, see, further, subparagraph 4.1.4. For an example of a case where this approach has been applied see, Commission Decision of 21 May 2014, State aid SA.35449, *UK – Aid for indirect carbon price floor costs*, OJ 2014 C348/3.

to govern aid in the form of reductions in the funding of RES support,[731] which might also be granted as fixed annual compensation compensations calculated on the basis of historic data. [732] These aid measures are specifically aimed at dealing with the international competitiveness and carbon leakage challenges resulting from renewables' financial obligations, which may put EIUs at a significant disadvantage. This is the case when they are excessively burdened by increases of retail prices stemming from the high energy levies that have been introduced by several Member States to fund support for RES.[733] Indeed, renewable energy support schemes are financed through para-fiscal levies, which are charged to energy final consumers on top of electricity prices. More precisely, compulsory contributions are directly or indirectly imposed on final consumers through energy suppliers, who are burdened with purchase obligations with respect to renewable energy (*i.e.*, FIT schemes) or green certificates (*i.e.*, TGC schemes), and usually pass the additional costs that they face as a result on to their customers.[734] The reform has been prompted by the circumstance that several Member States were adopting these kinds of aid measures, although only a couple of schemes were notified before the adoption of the EEAG.[735] EU-wide rules were, thus, necessary to avoid trade distortions among Member States generated by subsidy races caused by attempts to attract undertakings that would represent a financing base for RES support schemes.

With respect to the newly introduced type of fiscal aid measure under exam it is, however, important to note that it may produce a number of problematic outcomes if not properly targeted and limited to the minimum necessary. First, it might be deemed to be intrinsically contradictory because it evidently represents a subsidy that limits the scope of another subsidy.

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[731] EEAG, *cit.*, section 3.7.2. For an extensive and all-encompassing evaluation of the framework of analysis applicable to these forms under the State aid regime see, Antón Á. A. (2016) 'Energy Taxes and Promotion of Renewable Energy Sources (RES): Combination of Excise Reliefs and Supply Obligations of RES Seen from the State Aid Perspective', in Pasquale Pistone, Marta Villar Ezcurra (eds) *Energy Taxation, Environmental Protection and State Aids: Tracing the Path from Divergence to Convergence*, *cit*.

[732] EEAG, *cit.*, para. 192.

[733] See, paras 181 and 182 of the EEAG, *cit.*

[734] For an extensive analysis of these types of schemes and a wide array of examples of cases see, Chapter 6, paragraphs 3.3. and 3.4. of this doctoral thesis.

[735] Only a negative decision has been adopted by the Commission with respect to these types of measures. This is the case for the Austrian scheme, which, however, provided for RES-e surcharges exemptions, not reductions. See, Commission Decision of 8 March 2011, State aid C 24/2009 (ex N 446/2008), *Austrian Green Electricity Act 2008 – EIUs*, OJ 2011 L/235. The General Court upheld the Commission Decision under appeal in Case T-251/11, *Austrian Green Electricity Act 2008*, ECLI:EU:T:2014:1060. The formal investigation procedure with respect to the French fiscal aid scheme notified to the Commission in 2013 is, instead, still pending. See, Commission Decision to initiate the formal investigation procedure of 27 March 2014, State aid SA.36511, *France – Mécanisme de soutien aux énergies renouvelables et plafonnement de la CSPE*, OJ 2014 C 348/05

Secondly, and as a result, it might jeopardise the effectiveness of RES support and, thus, the achievement of the 2020 renewables targets. Thirdly, it might generate distortions of competition between Member States and with respect to different sectors within a single Member State. Fourthly, and as a consequence of the foregoing, it might frustrate all the efforts made thus far to foster public acceptance of public support for RES.

All the mentioned potentially dangerous outcomes that reducing green levies might generate seem to be recognised by the Commission as well.[736] However, in the author's view, the Commission has not properly devised the newly introduced provisions so as to deal with them. A number of contradictions may, in fact, be detected between the objectives which the European Institution aim to achieve and the new framework that has been established.

First and foremost, as with the previously analysed fiscal aid measures, the EEAG do not explain how severe the competitive pressures faced by EIUs and the unsustainability levels of the RES regime need to be to trigger support. Secondly and consequently, Member States do not have to prove that the foregoing circumstances are occurring. Actually, they have simply to demonstrate that there is a causal link between the additional costs borne by the potential beneficiaries of the parafiscal charges in question.[737] Thirdly and importantly, the Commission has established *ad hoc* requirements that must be fulfilled for the form of aid under discussion to be authorised, and has explicitly excluded applying the common assessment principles but for the transparency obligations.[738] However, rather than being specific compatibility conditions, the criteria provided to assess the aid measures at issue are simply eligibility criteria. As we shall further see, these criteria are, in fact, solely aimed at individuating sectors – generally and not specifically, *i.e.*, on the basis of the RES support scheme in question – exposed to the risk of relocation or international competitive disadvantage as a function of their electro-intensity and their exposure to international trade. As a result, not only do reductions in green levies not have to meet the intensive effect requirement but a presumption of compliance with respect to the necessity and proportionality conditions also seems to be implicitly established for aid measures satisfying the eligibility criteria and the maximum allowable reduction established under the Guidelines. As mentioned, in fact, Member States are not required to prove that the extent of the disadvantage faced by the beneficiaries is problematic

[736] See, para 181 of the EEAG, *cit.*

[737] EEAG, *cit.*, para. 184.

[738] EEAG, *cit.*, para. 183.

and, thus, that the aid is necessary. Neither are they required, in order to determine the amount of the aid, to take into account the specific cost increases of the undertakings concerned and to balance them out with the costs that they may absorb and those that could be passed on to consumers. As a result, in our view, not only is it the case that the fiscal relief measures implemented by the Member States may well be not properly targeted and limited to the minimum necessary but they may also generate windfall profits.

Turning to the fourth and the fifth potentially problematic elements of the new provisions, these are strictly connected to the abovementioned. Indeed, while the third one consists of the eligibility criteria set by the EEAG, the fourth one is represented by the maximum allowable reduction established thereunder. In an extreme effort of simplification – we assume - the Guidelines adopt a 'one-size-fits-all' approach in these respects. Eligible beneficiaries are intensive electricity users exposed to global trade, which the EEAG identifies as undertakings either belonging to the energy-intensive sectors listed therein[739] or, although operating in non-listed sectors, fulfilling the minimum electro-intensity and trade intensity requirements established thereunder. With respect to the latter, Member States have broad discretion and do not have to prove that specific circumstances require extending the financial advantage to additional sectors.[740] Regarding reduction/compensation, this may be only partial and cannot cover all the costs resulting from the funding of RES support. However, the level of the aid is deemed to be proportionate where the beneficiaries bear only 15 per cent of the additional cost incurred as a result of the RES-e scheme.[741] Moreover, the possibility of further limiting the levies to be paid is provided under certain circumstances. The above percentage is, in fact, subject to possible adjustments with respect to undertakings that are deemed to be particularly affected, and Member States may even limit the amount they have to pay to 0.5 per cent of their Gross Value Added, which is a rather low amount for heavy polluters.[742] In addition, also in this respect, Member States are not required to demonstrate that the situation demands a further reduction of the financial burden for certain EIUs. As has been put forward, as a consequence

[739] See, EEAG, *cit.*, para. 185 and Annex 3, which encompass 68 heavily polluting sectors of the European economy.

[740] See, EEAG, *cit.*, 186. More precisely, undertakings falling within the sphere of discretion of the Member States are those that have an electro-intensity of at least 20 per cent and belong to a sector with a trade intensity of at least 4 per cent at Union level. For the calculation of the electro-intensity of the undertaking, Annex 4 provides a rather complex formula.

[741] See, para 188 of the EEAG, *cit.*

[742] See, paras 189 and 190 of the EEAG, *cit.*

of the provisions of the EEAG regarding the eligibility criteria and the maximum allowable reduction, most energy-intensive users will probably end up paying almost nothing.[743]

In the author's opinion, all the above-addressed provisions governing the new form of fiscal aid measure under scrutiny do not definitely ensure that fiscal relief will be limited to the minimum necessary, that the effectiveness of RES support regimes will be guaranteed, that great distortions of competition will not arise, and that public acceptance of support for RES will not be hampered. In this respect, it is worth recalling that this form of aid may threaten the Europe 2020 climate and sustainable energy targets and fall foul of the polluter pays principle. Hence, in our view, these provisions should already be reformed. In this case, however, reliance on a formal legal basis should not be advocated during this pilot phase. Indeed, positive harmonisation might not be appropriate given the lack of experience in the field.

In addition to the foregoing, we should highlight that, as opposed to the above-addressed provisions on reductions in environmental and energy taxes, reductions in green levies are – incomprehensibly – not subject to a specific time limit. Moreover, it is worth noting that, with respect to this form of financial support to the benefit of EIUs, the EEAG provide a delayed entry into force of the provisions for new aid schemes and a peculiar and unprecedented retroactive application of the rules established thereunder to the benefit of existing schemes. Indeed, first of all, a transitional regime is provided for new aid schemes until 1 January 2019.[744] Secondly and importantly, the Guidelines provide a positive presumption of compatibility with respect to unlawful aid granted in the form of reductions in green levies before January 2011.[745] As per unlawful aid awarded after that day and before the entry into force of the EEAG, they could be cleared if the Member States concerned had notified a transitional adjustment plan for renewable surcharges reductions already granted.[746] More precisely, the adjustment plan had to foresee a progressive application of the new criteria for the period preceding July 2014 with a view to achieving full compliance with the new regulatory framework by 1 January 2019.[747] *Ad hoc* transitional provisions have been even introduced in connection with aid schemes under

[743] For a numerical demonstration of this statement based on three possible scenarios see, Nicolaides P., Kleis M. (2014) A Critical Analysis of Environmental Tax Reductions and Generation Adequacy Provisions in the EEAG 2014-2020, *cit.*

[744] See, Section 3.7.3 of the EEAG, *cit.*

[745] EEAG, *cit.* para. 248.

[746] *Ibidem*, paras 248 and 196-197.

[747] *Ibidem*, paras 248 and 196.

which beneficiaries do not satisfy the eligibility criteria provided under the EEAG.[748] This peculiar regime seems to be at odds with the case law in the field, provides a further incentive for Member States to not notify aid that might be judged as incompatible, and results in uneven and unfair treatment of compliant Member States.[749] A clear explanation for this derogation from the general rule has not been provided. The Commission has only stated that the progressive application of the new criteria under the adjustment plans is aimed at preventing the new provisions from having too abrupt an impact.[750]

In this regard it is, however, interesting to note that one Member State started to negotiate its adjustment plans while the Commission was still drafting the EEAG and notified them before the latter entered into force. Its adjustment plans have actually been almost entirely cleared.[751] No other Member State has notified an adjustment plan before the abovementioned

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[748] *Ibidem*, para. 197.

[749] We should recall, in fact, that aid granted in violation of the standstill and notification obligations provided under Article 108(3) TFEU are unlawfully granted and, thus, should be recovered. A recent very clear explanation of the reasons why retroactive exemption is not allowed for unlawful aid has been provided by the General Court in Case T-150/12, *Greece v. Commission*, ECLI:EU:T:2014:19. Indeed, in paragraph 156 of the judgment the Court stated that "*De surcroît, il y a lieu de rappeler que, aux termes d'une jurisprudence constante, les dérogations au principe général d'incompatibilité des aides d'État avec le marché intérieur énoncé à l'article 107, paragraphe 1, TFUE, doivent faire l'objet d'une interprétation stricte. Cette interprétation stricte exige, elle aussi, de limiter l'application d'une dérogation en matière d'aides d'État à la période postérieure à son entrée en vigueur, à tout au moins si les aides en question ont déjà été versées (voir arrêt du Tribunal du 15 avril 2008, SIDE/Commission, T-348/04, Rec. p. II-625, point 62, et la jurisprudence citée). Considérer qu'une aide non notifiée peut être déclarée compatible avec le marché intérieur en vertu d'une dérogation qui n'était pas en vigueur lors du versement de ladite aide reviendrait à avantager l'État membre l'ayant octroyée par rapport à d'éventuels États membres qui auraient voulu accorder une aide similaire et qui y auraient renoncé, faute d'une dérogation le permettant. De même, l'État membre en cause serait avantagé par rapport à tout autre État membre qui, désirant octroyer une aide pour la même période, l'aurait notifiée avant l'entrée en vigueur de la dérogation en question et, en conséquence, aurait obtenu de la Commission une décision constatant l'incompatibilité de l'aide avec le marché intérieur. Cela constituerait une incitation à ce que les États membres ne notifient pas les aides qu'ils jugent incompatibles avec le marché intérieur, en l'absence de dérogation qui leur serait applicable, dans l'espoir qu'une telle dérogation puisse être adoptée par la suite (arrêt SIDE/Commission, précité, point 67)*" (emphasis added).

[750] EEAG, *cit.* para. 195.

[751] See, Commission Decision of 23 July 2014, State aid SA.38632, *Germany EEG 2014 – Reform of the Renewable Energy Law*, *cit.*, notified on 17 April 2014 and also providing a gradual replacement of FITs by feed-in premiums. In this decision the Commission cleared the German adjustment plan for reductions in RES funding costs granted to EIUs and covering the period as of 2014. The adjustment plan for the similar form of aid awarded to EIUs during the years 2013 and 2014 under the previous German aid scheme was, instead, addressed in Commission Decision of 25 November 2014, State aid SA.33995, *Support of renewable electricity and reduced EEG surcharge for energy-intensive users* (*EEG 2012*), OJ 2015 L250/122. According to para. 248 of the EEAG it has been assessed under the more pro-surcharge reductions EEAG. Most of the reductions have also been approved in this case. For a specific focus on the fiscal aid measure addressed under second just-mentioned decision see, Nicolaides P. (2016) 'Energy Aid: Energy-Intensive Users', in Nicolaides P. (ed.) State Aid Uncovered: Critical Analysis of Developments in State Aid 2015, *cit.* For a more in-depth analysis of these two cases see Chapter 6, paragraph 3.3. of this doctoral thesis.

deadline.[752] Some Member States have, however, notified new aid measures in the form of reductions in the funding of RES support, which have been all authorised by the Commission without even opening the formal investigation procedure.[753]

4.2.3. *Security of Supply, Systemic Stability and Market Integration? Aid to Energy Infrastructures and for Generation Adequacy*

Article 194(1) TFEU provides that, with a view to establishing a well-functioning internal market, "*Union policy on energy shall aim, in a spirit of solidarity between Member States, to* [*, inter alia,*] *ensure the functioning of the energy market* […], *ensure security of energy supply in the Union* […] *and* […] *promote the interconnection of energy networks*". However, it seems that Europe is still not on track to reach these goals.

According to the projections, about 30 per cent of capacity generation will be switched off by 2020[754] and fourteen EU countries will probably have a reserve margin below 15 per cent in the reference year if no new investments in dispatchable plants[755] take place. The reserve margin will further decrease in the decade 2020-2030 in all Member States, with the result that it will reach levels below the abovementioned percentage in almost all European countries. Failure to deliver the required investments in new modern infrastructures will even render the capacity adequacy situation of certain countries more critical.[756] This, in turn, will further increase

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[752] The formal investigation procedure with respect to the French fiscal aid scheme notified to the Commission in 2013 is still pending. It seems, however, that France has not notified an adjustment plan in the meantime. See, Commission Decision to initiate the formal investigation procedure of 27 March 2014, State aid SA.36511, *France – Mécanisme de soutien aux énergies renouvelables et plafonnement de la CSPE*, cit.

[753] See, Commission Decision of 15 October 2014, State aid SA.39042, *Romania – RES support reduction for energy-intensive users*, OJ 2015 C/44; Commission Decision of 27 May 2015, State aid SA.41381, *Germany – Relief from the EEG surcharge for companies in NACE sectors 25.50 and 25.61*, OJ 2015 C/234; Commission Decision of 31 August 2015, State aid SA.42424, *Denmark – Reduced contribution to financing of RES support for energy-intensive users*, OJ 2015 C/369; Commission Decision of 4 August 2016, State aid SA.45861, *Bulgaria – Support to energy intensive users in Bulgaria*, OJ 2016 C/425; Commission Decision of 28 September 2016, State aid SA.36518, *Poland - Certificates of origin for CHP in Poland*, *cit.*; Commission Decision of 10 October 2016, State aid SA.41998, *Slovenia - A) Support to electricity from renewable energy sources and combined heat and power installations, and B) Support for electro- intensive users in the form of reductions in electricity support scheme contributions, cit*; Commission Decision of 12 December 2016, State aid SA.44863, *Denmark – State aid for electricity-intensive undertakings*, n.y.p.

[754] See, Commission Staff Working Document of 28 May 2014, *In-depth study of European Energy Security Accompanying the document Communication from the Commission to the Council and the European Parliament European Energy Security Strategy*, COM(2014) 330 final.

[755] That is to say, base load plants, CCGT plants, peak units and CHP, and dispatchable RES plants.

[756] See, Cowi, Thema, E^{3}MLab (2013) *Capacity mechanisms in individual markets within the IEM*, study commissioned by the European Commission and available at

Europe's dependence on imports to meet its internal energy demand and, thus, its vulnerability to and reliance on foreign countries' policies. Actually, eighteen Member States still import more than 50 per cent of the energy consumed at the national level.[757]

In respect of the foregoing, two main strictly connected problems have been identified, stemming from the integration of energy and climate objectives: insufficient investments in electricity generation and insufficient investments in energy infrastructure.[758] The observed lack of investment, in turn, arises as a result of a number of factors. We shall, first, briefly address the key drivers of the inadequate level of investment in electricity generation, and then move to the reasons underlying scarce infrastructural investments.

Regarding the decreasing levels of investment in electricity generation, these are first of all caused by the previously addressed increase in retail energy prices in Europe,[759] which do not provide any incentive to invest in generation capacity through traditional fuels. Conventional electricity generation is, instead, necessary, at least in the short term, until adequate infrastructures are in place. Indeed, the volatile and intermittent nature of renewables requires base-load or back-up capacity in conventional fuels that can be stored and dispatched at short notice. Secondly, renewable energy sources generally have lower marginal costs than conventional sources, which need fuel to operate. Thirdly, the increasing expansion of renewables and the overcompensation of RES-e generators under national support schemes have determined a drop in wholesale electricity prices.[760] All the above have resulted in conventional fuels being unattractive in terms of investments, and the situation has worsened due to the phasing-out of ageing power plants. Fourthly, also as a consequence of the increased supply of intermittent renewable energy, 'energy-only' markets are unable to ensure the stability of the network. Given that, at times of extreme scarcity, demand and supply in 'energy-only' markets do not necessarily meet, the so called 'missing money' problem has arisen and

https://ec.europa.eu/energy/sites/ener/files/documents/20130207_generation_adequacy_study.pdf (accessed 30 October 2016).

[757] See, Commission Staff Working Document of 28 May 2014, *In-depth study of European Energy Security Accompanying the document Communication from the Commission to the Council and the European Parliament European Energy Security Strategy*, *cit.*

[758] See, Commission Staff Working Document of 22 January 2014, *Impact Assessment accompanying the document Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – A policy framework for climate and energy in the period from 2020 up to 2030*, SWD(2014) 15 final.

[759] See, Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 29 January 2014, *Energy Prices and Costs in Europe*, *cit.*

[760] See, Impact Assessment I, *cit.*

has been aggravated by regulated retail prices and wholesale price caps. This means that investments are less likely to be profitable.[761] The consequent security of energy supply challenges have, in turn, increased short-term network instabilities and long-term generation adequacy concerns, which may generate systemic instabilities and result in a malfunctioning internal energy market.[762]

The above challenges are made more serious by the lack of appropriate investment in energy infrastructures and interconnection of energy networks, increasing the fragmentation of the internal market along national borders. Significant obstacles to an interconnected and integrated cross-border European energy market persist and certain Member States will continue to remain isolated. In fact, the average interconnection level in Europe amounts to about 8 per cent.[763] Conversely, the Commission has found that achieving full integration of Europe's energy networks and systems and opening up energy markets are essential for tackling Europe's energy and climate challenges while ensuring secure and affordable supplies.[764] According to the estimates provided, the investment in modern transmission and distribution infrastructures of European importance required to reach these goals amounts to 200 billion Euro.[765] That said, it is worth also noting that promoting the interconnection of energy networks is also discouraged by the circumstance that Member States have, so far, addressed security of supply and system stability concerns by devising and resorting to purely national measures, such as capacity remuneration mechanisms. These financial mechanisms are, in fact, increasingly employed to ensure the generation of adequate levels of capacity or the maintenance of existing plants. However, they block high percentages of generation to the benefit of only one undertaking.

As a result of the foregoing, the Commission has considered that some of the causes underlying the insufficient level of investment in electricity generation and energy

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[761] See, DG ENER Guidance, *cit.*

[762] In that respect, see the facts and figures in Impact Assessment I, *cit.*, pp. 15-23 and 30-31.

[763] See, Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 13 October 2014, *Progress towards completing the Internal Energy Market*, COM(2014) 634 final.

[764] See, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 15 December 2011, *Energy Roadmap 2050*, *cit.*, and Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 15 November 2011, *Making the internal energy market work*, COM(2012) 663 final.

[765] See, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee the European Court of Justice, the Court of Auditors, the European Investment Bank, the European Economic and Social Committee, and to the Committee of the Regions of 19 October 2011, *A growth package for integrated European infrastructures* COM(2011) 676 final.

infrastructure are market failures that can be addressed by well-designed and targeted State aid measures.[766] In that respect, it has identified an important issue associated with the EAG: their neglect, as a result of an emphasis on increasing levels of environmental protection, and of security of supply and infrastructural needs among the policy objectives to be achieved. The inclusion under the EEAG of provisions on investment and operating aid for generation adequacy and,[767] under both Guidelines and the New GBER, of rules on investment aid to energy infrastructures is aimed at filling the gap and accommodating the above-described concerns. [768] However, while financial support for projects to modernise the relevant infrastructures also fosters the completion of the European internal energy market, capacity remuneration mechanisms (CRMs) may run counter to the integration goal because they might lead to higher fragmentation of the internal market, cause distortions of competitions and generate foreclosure effects. Indeed, the last-mentioned financial mechanisms reserve generation capacity for a few pre-determined actors and are often applied on a national basis. Moreover, they mainly promote the use of fossil fuels such as coal. Therefore, support will still be granted to carbon-based sources. This will further hinder the phasing-out process regarding of environmentally and economically harmful subsidies, fall foul of the *polluter pays* principle, and may threaten the achievement of the Europe 2020 climate and sustainable energy targets. Finally, as mentioned, CRMs might clearly discourage the construction of new cross-border infrastructures and interconnectors. Hence, as we shall see, not only have generation adequacy measures not been included in the New GBER but the approach adopted under the EEAG with respect to this form of aid and the financial support of energy infrastructures also differs significantly. The new sets of provisions will, thus, be analysed in turn.

In addition to the foregoing considerations, the introduction of *ad hoc* provisions governing the granting of aid to energy infrastructures under the New GBER and EEAG was instigated by the judgment rendered by the Court of Justice in the *Leipzig-Halle* case, which emphasised that the granting of public aid in favour of an infrastructure and for the exploitation thereof generally amounts to State aid.[769] According to the Commission, the problem of State aid in the

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[766] See, Impact Assessment I, *cit.*

[767] EEAG, *cit.*, section 3.9.

[768] EEAG, *cit.*, sections 3.8., and New GBER, *cit*., Article 48.

[769] Case C-288/11 P, *Mitteldeutsche Flughafen and Flughafen Leipzig-Halle v. Commission*, ECLI:EU:C:2012:821. For further details on the case see, Wilson T. (2014) Infrastructure Financing and State Aid Post Leipzig-Halle. *European State Aid Law Quarterly* **13**(1) 24-27.

field of energy infrastructure was merely an issue of codification; that is to say, transposing the principles established in case practice into compatibility criteria.[770] Prior to the inclusion of the form of aid under scrutiny in the New GBER and EEAG, in fact, aid measures for the benefit of energy infrastructures were already analysed on a case-by-case basis under Article 107(3)(c) TFEU.[771] However, such case-by-case assessment rendered the authorisation process for aid to energy infrastructures rather onerous and was deemed to potentially jeopardise support for new technological developments.[772] Nonetheless, as opposed to the new provisions on CRMs, the introduction with respect to energy infrastructures of *ad hoc* compatibility criteria was facilitated by a developing case practice and a progressively complex and granular regulatory framework.[773] Moreover, as we shall see, the provisions under both the EEAG and the New GBER evidence a favourable approach towards these forms of aid. Actually, the notification threshold established for investment aid in energy infrastructures ranks among the highest overall.[774]

In terms of the identification of an objective of common interest, the EEAG recognise the instrumental role of energy infrastructures[775] in strengthening the internal energy market and enhancing system stability, generation adequacy, integration of different energy sources and energy supply in under-developed networks. [776] Therefore, a positive presumption of

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[770] See, Impact Assessment I, *cit.*, p. 25.

[771] Actually, in the period between the entry into force of the EAG and July 2013, when the Commission started to draft the EEAG, it adopted 15 no objections Decisions under Article 107(3)(c) of the TFEU. Examples of cases it has dealt with include Commission Decision of 13 July 2009, State aid N 55/2009, *Aid for constructing and modernisation of electricity connection networks for renewable energies in Poland*, OJ 2009 C206/1; Commission Decision of 17 December 2010, State aid N 629/2009, *Grants for investment in electricity and natural gas transmission networks*, OJ 2011 C37/1; Commission Decision of 6 January 2011, State aid N 542/2010, *Construction of interconnection and cross-border power line between Poland and Lithuania*, OJ 2011 C92/4; Commission Decision of 16 October 2013, State aid SA. 35977, *2nd Upgrade of LNG Terminal at Revithoussa* OJ 2014 C/117/3; Commission Decision of 20 November 2013, State aid SA. 36740, *Aid to Klaipedos Nafta – LNG Terminal*, OJ 2016 C161/8.

[772] See, European Commission (2014) *Competition policy brief: Improving State Aid for Energy and the Environment*, 16(October) available at: http://ec.europa.eu/competition/publications/cpb/2014/016_en.pdf (accessed 30 October 2016).

[773] For an exhaustive analysis of internal market legislation on energy infrastructures see, Vinois J.-A. (2014) *EU Energy Law: The Energy Infrastructure Policy of the European Union.* Leuven: *Claeys & Casteels* Publishing.

[774] Indeed, for investment aid for energy infrastructures the notification cap per undertaking and investment project is 50 million EUR. See, New GBER, *cit.* Article 4.

[775] Paragraph 19(31) of the EEAG provides a detailed definition of energy infrastructures which largely borrows from the definition employed under Regulation (EU) No. 347/2013 of the European Parliament and of the Council of 17 April 2013 on guidelines for trans-European energy infrastructure and repealing Decision No. 1364/2006/EC and amending Regulations (EC) No. 713/2009, (EC) No. 714/2009 and (EC) No. 715/2009, *cit.*

[776] See, para. 202 of the EEAG, *cit*.

compliance seems to be provided with respect to this first compatibility condition. By the same token, the New GBER emphasises that a modern energy infrastructure is crucial both for an integrated energy market and to enable the Union to meet its climate and energy goals.[777]

Regarding the necessity of aid requirement, the EEAG recognise that energy infrastructure investments are often characterised by market failures of two principal kinds: coordination problems, which are due to diverging interests among investors, and asymmetric distribution among market participants of the costs and benefits of the relevant infrastructure.[778] In addition to compulsory tariffs, the granting of aid is identified as an instrument for addressing the abovementioned market failures.[779] In this respect, the Guidelines describe three principal scenarios, with different degrees of need for intervention and, therefore, different degrees in the Commission's assessment of the condition under scrutiny. Indeed, a positive presumption of compliance applies to the public financing of trans-European energy infrastructure projects,[780] smart grids and energy infrastructure investments in assisted areas.[781] By contrast, a negative presumption regarding the existence of a market failure is, instead, provided with respect to aid to oil infrastructures.[782] A case-by-case assessment is required with respect to all the other types of infrastructures.[783] It is, finally, important to note that, regarding aid measures falling within the perimeter of the New GBER, only aid granted in respect of energy infrastructures in assisted areas may be exempted from the notification requirement. Moreover, aid for investment in electricity and gas storage projects and oil infrastructures falls outside its scope.[784]

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[777] New GBER, recital 67.

[778] EEAG, *cit.*, para 203.

[779] *Ibidem*, para 205.

[780] These projects are defined pursuant to Regulation (EU) No. 347/2013 of the European Parliament and of the Council of 17 April 2013 on guidelines for trans-European energy infrastructure and repealing Decision No. 1364/2006/EC and amending Regulations (EC) No. 713/2009, (EC) No. 714/2009 and (EC) No. 715/2009, *cit*. They consist of projects intended to facilitate faster development and interoperability of trans-European energy networks (TEN-E). In particular, they purport to help with identifying projects of common European interest needed to implement priority corridors and areas that fall under a number of energy infrastructure categories, such as electricity transmission and storage, gas transmission and storage, LNG and CNG infrastructures, smart grids, carbon dioxide transport, and oil infrastructure. Moreover, they are aimed at streamlining and accelerating the process of granting permits, providing rules and guidance for cross-border allocation of costs and risks-related incentives, and determining the conditions for projects of common European interest eligible to receive Union financial assistance.

[781] See, paragraph 206 of the EEAG, *cit.*

[782] *Ibidem*, para. 208.

[783] *Ibidem*, para. 207.

[784] See, Articles 48(6) and (2) of the New GBER, *cit.*

Turning to the appropriateness criterion, the EEAG emphasise that State aid may be considered an appropriate instrument to finance the energy infrastructure in whole or in part where market failures prevent reliance upon tariff regulation and the underlying "user pays" principle. A positive presumption of compliance with that requirement again seems to be provided with respect to trans-European energy infrastructure projects, smart grids and energy infrastructure investments in less developed regions.[785] Moreover, for the very same reasons provided above, we might assume and hope that the Commission will find that, when possible, aid to energy infrastructures is preferable to aid for generation adequacy in order to deal with security of supply challenges, although it should have made that explicit.

As per the proportionality condition, the funding gap approach already addressed in the previous paragraph with respect to the IPCEIs Communication has been rightly extended to assessing the type of aid under exam. Therefore, the counterfactual scenario is presumed to be a situation in which the project would not take place, the eligible cost is the funding gap and the aid intensity could reach up to 100 per cent of this gap.[786] On the other hand, the New GBER approaches the proportionality assessment in a somewhat stricter fashion: eligible costs, in fact, are limited to the investment costs, and operating profits need to be discounted.[787]

Last, the test employed to assess the effects of infrastructure aid on competition and trade consists of determining the extent to which the aided project is subject to internal market legislation. In particular, a positive presumption of compliance with the compatibility condition in question seems to be established both under the EEAG and under New GBER where full tariff and access regulations apply.[788] On the other hand, the competitive effects of aid on infrastructures exempted from, or not subject to, the internal energy legislation, are to be assessed by the Commission on a case-by-case basis.[789]

On the basis of the above-described grounds for justification, the Commission has already authorised a number of aid measures.[790]

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[785] See, Section 3.8.3. of the EEAG, *cit.*

[786] *Ibidem*, paras 76 and 211-213.

[787] See, Articles 48(4) and (5) of the New GBER, *cit.*

[788] *Ibidem*, Article 48(3), and EEAG, *cit.*, para. 214.

[789] EEAG, *cit.*, para. 215.

[790] Commission Decision of 17 July 2015, State aid SA.39050, *Aid to gas infrastructure in Poland*, OJ 2015 C325/1; Commission Decision on 3 March 2016, State aid SA.43879, *Transadriatic pipeline*, n.y.p.; Commission Decision of 23 July 2014, State aid SA.38632, *Germany EEG 2014 – Reform of the Renewable Energy Law*, *cit.*, which covers also grants for interconnectors and energy networks; Commission Decision of 10 July 2014, State aid SA.36290, *Extension of Northern Ireland Gas Pipeline to West and North West*, 2014 C348/1; Commission

We shall now turn to addressing the second, more problematic, set of new rules aimed at addressing security of supply concerns, *i.e.* the compatibility conditions established for aid to generation adequacy, in general, and CRMs, in particular. Before addressing the provisions established under the EEAG, it is however important to briefly explain what these mechanisms consist of and evidence the scale of the notification deficit that a lack of proper rules in that respect has generated. Indeed, several Member States have adopted CRMs to tackle challenges they were – or were not – facing in relation to ensuring electricity generation capacity was sufficient to meet national demand.

First of all, it is important to explain that CRMs can be adopted not only to encourage producers to build new generation capacity or maintain existing plants but also, for instance, to reward consumers for reducing consumption during peak hours. On the basis of the reports and studies addressing CRMs,[791] two broad categories of capacity remuneration mechanisms can be identified: "targeted" and "market-wide" mechanisms. Both purport to ensure sufficient capacity to meet a reliability standard. However, while targeted mechanisms only remunerate extra capacity, additional to that produced by the market, market-wide mechanisms reward all market participants required to meet a reliability standard. Within the abovementioned broad categories, further subdivisions may be made. In particular, there are three main types of targeted mechanisms: strategic reserves[792], tenders for new capacity[793] and price-based mechanisms.[794] There are also three types of market-wide mechanisms: central buyer models[795], decentral obligation schemes[796] and price-based capacity payments.[797]

Decision of 3 February 2015, State aid SA.38918, *Loans to network operators to facilitate connection of renewable electricity production*, OJ 2015 C277/3.

[791] See, for instance, ACER (2013) *Capacity Remuneration Mechanisms and the Internal Market for Electricity*, available at http://www.acer.europa.eu/official_documents/acts_of_the_agency/publication/crms%20and%20the%20iem%20report%20130730.pdf (accessed 30 October 2016); *CREG* (2012) *Capacity remuneration Mechanisms*, Ref: 1182; European Commission, *Staff Working Document Accompanying the Interim Report of the Sector Inquiry on Capacity Mechanisms*, of 13 April 2016, *cit.*

[792] In particular, under the strategic reserves model, a certain portion of capacity is stored outside of the market, to be employed in emergency situations.

[793] Tenders of new capacity consist of the granting of support to investment projects, often located in a specified region or area.

[794] Price-based capacity payments are administrative payments made to a subset of capacity in the market.

[795] Under a central buyer model, a centralised buyer acquires the required capacity on behalf of suppliers and/or consumers.

[796] In particular, in decentralised obligation schemes suppliers are under an obligation to arrange for their required capacity.

[797] Under a price-based capacity payments model, administrative payment is available to all market participants.

The types of capacity mechanisms outlined above have also been identified on the basis of several aid schemes implemented by Member States before the adoption of the EEAG without prior notification – but for a few exceptions notified and cleared either under the *Altmark* conditions or under Article 106(2) TFEU.[798] This has been the case, *inter alia*, for strategic reserve mechanisms and interruptibility schemes, which are two sides of the same coin, the first having as beneficiaries big plant operators while the second has energy-intensive users.[799] Non-notified strategic reserve mechanisms have been in place, for instance, in Sweden and Finland for a long time, and have been more recently introduced in Germany, Belgium and Poland. Non-notified interruptibility schemes are being operated in Spain, Italy, Portugal, Poland, Germany and Ireland.[800] Importantly, price-based capacity payment schemes – which normally take the form of direct payments financed from the State budget – have also been implemented over the years without prior notification by several Member States. Examples include the targeted capacity payment regimes still in force in Italy,[801] Greece,[802] Spain,[803] Portugal and

[798] See, Commission Decision of 16 December 2003, State aid N 475/2003**,** *Irish CADA*, *cit.*; Commission Decision of 14 July 2004, State aid N 143/2004, *Public Service Obligation – Electricity Supply Board*, OJ 2005 C242/5; and Commission Decision of 14 June 2010, State Aid N 675/2009, *Latvian CRM***,** ***cit***. See also, Commission Decision of 23 March 2011, State aid SA.30531 (ex N 78/2010), *Aid for Capacity Payments for Oil-Shale Fuelled Electricity Production (ET)* (*Estonian CRM*), n.y.p. However, regarding the last case, since Estonia withdrew the measure the Commission has closed the proceedings. For further details on these cases see Gonzàlez-Dìaz F. E. (2015) 'EU Policy on Capacity Mechanisms', in Hancher L., de Hauteclocque A., Sadowska M. (eds) *Capacity Mechanisms in the EU Energy Market – Law, Policy, and Economics*. Oxford: Oxford University Press.

[799] Generally speaking, under strategic reserve mechanisms eligible generators have to keep their plants in stand-by until capacity shortfalls arise, and they have to reactivate them when instructed to do so by the TSO. In exchange for their reserve services they usually receive both availability payments and an activation payment. Interruptibility schemes, instead, deal with demand response capacity. Under such schemes energy intensive users must agree to be automatically disconnected when needed by the TSO, and they are usually paid a fixed amount of monies for each MW made available for demand response and a fixed price for demand reductions made.

[800] For an extensive analysis in that respect see, Hancher L., de Hauteclocque A., Sadowska M. (2015) *Capacity Mechanisms in the EU Energy Market – Law, Policy, and Economics*, *cit.*

[801] The Italian authorities have introduced capacity payments for dispatchable generators with Legislative Decree No 379/2003, as a temporary system managed and regulated by the Italian energy regulator. Under the system an administered fee – determined by the regulator according to certain criteria – is paid to plants selected according to their reliability as remuneration for the fact that they make their capacity available to the TSO in the day-ahead market.

[802] The Transitional Capacity Assurance Mechanism was introduced by amending the Grid Code in 2005.

[803] Spain currently operates three capacity payments schemes, two of which were adopted in 1997 and notified in their original version as part of the Spanish stranded cost compensation mechanism. However, these schemes were later amended and incremented both by the Electricity Sector Act 2007 (also, Ministerial Order 2794/2007) and Royal Decree 9/2013. Notification was not given of these amendments, although some new elements, such as capacity payments for availability services, almost certainly constituted State aid.

Poland,[804] and the market-wide capacity payment mechanism still in place in Ireland.[805] The strong favour towards price-based capacity payment schemes is rather worrisome. Indeed, as we shall explain, at the end of November 2016 the Commission published a final report presenting the key findings of the sector inquiry it launched in the spring of 2015 with respect to the electricity markets of eleven Member States (Report on Sector Inquiry) which have implemented, or plan to introduce, capacity mechanisms.[806] In this report it stressed, *inter alia*, that capacity payments should be presumed generally unlikely to be an appropriate tool because of their dependence on administratively-set prices, which impede the market's ability to adjust in a competitive manner and entail a significant risk of over-compensating and failing to achieve the proposed objective.[807]

That said, notwithstanding the above-evidenced large scale of notification deficits, it seems that, since the entry into force of the EEAG, the Commission has been notified of only six new CRMs adopted by four Member States, with five already decided on having all been cleared, albeit with a request for certain modifications thereof.[808] This is also probably due to the circumstance that – contrary to the case of aid in the form of reductions in the funding support for RES-e – the Commission has not required Member States to notify adjustment plans.

We should now turn to addressing the new set of provisions introduced under the EEAG that have provided the grounds for assessing the abovementioned six CRMs. Based on a somewhat *a priori* assumption that CRMs *per se* constitute State aid and hinder the phasing-out of

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[804] In Portugal two targeted capacity payments schemes have been in place since 2010, *i.e.* 'availability' and 'investment' incentive schemes. In Poland, instead, a sort of targeted capacity payment has been in place since 2014. Indeed, at the end of 2013 the state-owned TSO in charge of managing the operating capacity reserve system modified the rules of this system: currently, the generators concerned not only receive not only a given amount of monies for MWh effectively dispatched from the TSO but also a fixed remuneration for the availability of capacity.

[805] This mechanism was introduced in 2007 to remunerate all capacity providers for the fixed costs they incur during the trading periods in which they are available. Foreign capacity providers are granted a capacity payment on top of the Irish electricity price. The value of capacity payments is set administratively by the Irish and Northern Irish regulators.

[806] Commission Staff Working Document of 30 November 2016 accompanying the Report from the Commission: Final Report of the Sector Inquiry on Capacity Mechanisms, SWD(2016) 385 final (Report on Sector Inquiry).

[807] For an in-depth analysis of the foregoing, see para. 6.3 of the Report on Sector Inquiry, *cit*.

[808] Commission Decision of 23 July 2014, State aid SA.35980, *United Kingdom Electricity market reform – Capacity market* (*UK Capacity Mechanism*), OJ 2014 348/5; Commission Decision to initiate the formal investigation procedure of 13 November 2015, State aid SA.40454, *CRM in Brittany*, *cit*.; Commission Decision of 31 March 2016, State aid SA.38968, *Greece – Transitory electricity flexibility remuneration mechanism***,** OJ 2016 C241/1; Commission Decision of 24 October 2016, State aid SA.43735, *Germany – Interruptibility scheme AbLaV*, OJ 2016 C471/5; Commission Decision of 8 November 2016, State aid SA.39621, *French Country-wide Capacity Mechanism II*, *cit.*; Commission Decision of 5 December 2016, State aid SA.44475, *Supplementary Capacity Auction in GB*, n.y.p.

environmentally and economically harmful subsidies, the Commission formulated compatibility criteria,[809] with which Member States had to comply by January 2016, where necessary amending the CRMs they had already implemented.[810] Actually, the criteria provided are not that strict, being very general, probably due to the lack of experience and EU legislation in the area. Indeed, rather than being prescriptive in character regarding the construction and assessment of measures – the word "*should*" being broadly employed - the EEAG set forth a number of general principles.

Regarding identifying the objective of common interest, the EEAG recognise that measures for generation adequacy can be designed in a variety of ways, in the form of investment and operating aid, and can pursue different objectives, of both short or long-term natures.[811] It is, therefore, the responsibility of the relevant national authorities to clearly identify and quantify the generation adequacy concern that the aid purports to confront.[812] The way this assessment is carried out is rather important because it also determines the size of the problem and, thus, might allow for avoiding over-estimation and consequent overcompensation issues. However, no common or specific adequacy analysis method is provided by internal market legislation and, in fact, the EEAG make reference to the adequacy analysis entered into by the European Network of Transmission Operators (ENTSO-E).[813]

A more detailed 'quasi'-framework of assessment is, instead, provided under the EEAG with respect to the necessity of aid element. In particular, Member States 'should' analyse and quantify in detail the nature and causes of a generation adequacy problem and provide clear evidence why the market cannot be expected to deliver adequate capacity in the absence of intervention.[814] In addition to the foregoing, the EEAG spell out the elements to be considered by the Commission in its assessment. These elements are rather important because they include (a) the impact of variable generation, (b) the impact demand-side participation – including a description of measures to encourage demand-side management, (c) the actual or potential

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[809] For an analysis of these provisions in the light of the Commission's Decisions on the *UK Capacity Mechanism* see, Rodríguez P. D. (2016) Electricity Generation and State Aid: Compatibility is the question. *European State Aid Law Quarterly* 15(2) 207-227.

[810] EEAG, *cit.*, section 3.9. and para. 250.

[811] *Ibidem*, para. 219.

[812] *Ibidem*, para. 220.

[813] *Ibidem*, paras 221. See, Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No 1228/2003**,** OJ 2009 L 211/15.

[814] *Ibidem*, paras 222 and 223.

existence of interconnectors – including a description of the relevant projects, and (d) other elements which might cause or exacerbate the generation adequacy problem, such as regulatory or market failures.[815]

The appropriateness criterion appears to be a key element in the assessment of generation adequacy measures. In particular, the EEAG specify a number of important principles that 'should' be complied with by the proposed measures. More precisely, (a) only availability, not actual generation, may be rewarded. Then, (b), the measures 'should' be open to generation from other Member States when physically possible, and (c) provide incentives in favour of both existing and future generators. Further, (d), they 'should' be "technology neutral", and (e) Member States should consider substitutable technologies, such as demand-side response or storage solutions. Finally, (f), they should also analyse whether interconnection capacity might also remedy the generation adequacy problem and, thus, be more appropriate.[816]

Regarding the proportionality element, the amount of aid 'should' be calculated so that beneficiaries earn a reasonable rate of return.[817] The EEAG 'recommend' the adoption of a competitive bidding process as the preferred allocation mechanism. However, in contrast to the provisions concerning other forms of aid, the foregoing does not have prescriptive character; as such, alternative schemes or solutions may be designed.[818] Member States 'should', however, design the measure with built-in mechanisms preventing windfall profits.[819]

In terms of avoiding undue negative effects on competition and trade, the measure 'should' be designed in a manner allowing any capacity which has the potential to effectively contribute to addressing the generation adequacy problem to participate in the measure. A key assessment criterion in connection with the foregoing is again technology neutrality. In particular, the EEAG clarify that the measure should be open to generators using different technologies, provided that insufficient technical performance constitutes grounds for restricting participation to generators using certain technologies only.[820] Moreover, the EEAG again stipulate that the measure 'should' be open to the participation of a sufficient number of generators, including

[815] *Ibidem*, para. 224.

[816] *Ibidem*, paras 225 and 226.

[817] *Ibidem*, para 228.

[818] *Ibidem*, para 229.

[819] *Ibidem*, para 230.

[820] *Ibidem*, para. 232(a).

on a cross-border basis when physically possible.[821] In addition to the foregoing, the measure should not generate negative effects on planned infrastructures or other planned investments.[822]

All the principles outline above are further specified in a staff working document in one of the documents accompanying the already-addressed DG ENER Guidance and in the abovementioned recently published Report on Sector Inquiry.[823] Actually – and weirdly – as opposed to the DG ENER staff working document, the DG COMP report is rather detailed. However, we, unfortunately, again note that neither of the two documents is binding, nor might they even be deemed to be quasi-regulatory instruments. Moreover, although the Report on Sector Inquiry and the final papers on the related working groups label those principles provided by the EEAG as 'requirements', as evidenced above, this seems to be in contrast with the very wording of the Guidelines.[824] Nonetheless, it is important to note that the mentioned report has been presented together with a package of legislative proposals, as part of the work to create an EU Energy Union with a forward-looking climate change policy. The package includes proposals for improving national generation adequacy policies which build on the findings of the sector inquiry and which, in the Commission's view, should reduce the need for CRMs in the future.[825]

It is, therefore, worth highlighting the principles established under the Report on Sector Inquiry. The objective of the inquiry was to gather information from a variety of sources, including energy regulators, public bodies and market participants, with a view to gaining a better understanding of, *inter alia*, the extent to which State aid is necessary to ensure security of supply, and the characteristics rendering capacity mechanisms more suitable for procuring the security of supply objective, without compromising competition and the functioning of the

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[821] *Ibidem*, para. 232(b).

[822] *Ibidem*, para. 233.

[823] See, Guidance on GA Measures, *cit*., and Report on Sector Inquiry, *cit.*

[824] More precisely, the package includes a proposal for a new Regulation on risk-preparedness in the electricity sector repealing Directive 2005/89/EC. The package furthermore includes revisions of Regulations (EC) No. 713/2009 and 714/2009 as well as of Directive 2009/72/EC. See, Directive 2005/89/EC of the European Parliament and of the Council of 18 January 2006 concerning measures to safeguard security of electricity supply and infrastructure investment, OJ 2006 L 33/22; Regulation (EC) No 713/2009 Of The European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators, OJ 2009 L211/1; and Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No 1228/2003, OJ 2009 L211/15. For an extensive analysis of internal market legislation dealing with security of supply energy issues see, Vinois J.-A. (2012) *EU Energy Law: The Security of Energy Supply in the European Union.* Leuven: *Claeys & Casteels* Publishing.

[825] The final papers on the relevant working groups http://ec.europa.eu/competition/sectors/energy/state_aid_to_secure_electricity_supply_en.html#3.

single market for energy.[826] The report, therefore, presents the key findings of the inquiry and discusses, *inter alia*, when capacity mechanisms involve State aid and the Commission's stance towards capacity mechanisms in light of the State aid framework.

The Commission's initiative was prompted by the recognition that, although on a Euro-wide basis the market is currently experiencing overcapacity, certain Member States appear to be facing genuine security of supply challenges. Such challenges may be exacerbated in the near future as a result of the prevailing low levels of profitability of traditional generation capacity; extra profits generated through periods of scarcity being a key factor in operators' investment decisions.[827]

As a result of the findings of the inquiry, the Commission identifies a number of market reforms that may alleviate security of supply concerns. A first set of recommended measures involves rectifying mechanisms inhibiting or altering the fluctuation of prices as a factor of market demand: excessively low price caps should, therefore, be removed and balancing market rules should be improved with a view to a fair redistribution of imbalance costs to out-of-balance market participants.[828] Based upon the findings of the inquiry, the Commission further argues that the market might be able to develop solutions to manage the risk that implementing the above-described reform might prejudice retail prices.[829] A second reform recommended by the Commission is removing barriers and encouraging the participation of demand response providers in the market. In particular, the market ability to respond to prices in real time is a key factor in flattening demand peaks and reducing the need for additional generation capacity.[830] Last, the Commission recommends revisiting the perimeters of bidding zones so that, through the formation of local prices, investment in capacity may be stimulated in those areas where it is much needed.[831]

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[826] A detailed description of the inquiry may be found in section 1 of the Report on Sector Inquiry, *cit*.

[827] For a thorough discussion regarding the key findings of the abovementioned inquiry in terms of the status of the European energy market and generation adequacy concerns, see section 2 of the Report on Sector Inquiry, *cit*.

[828] For an in-depth discussion of the foregoing, see para 2.3.1. of the Report on Sector Inquiry, *cit*.

[829] In particular, through the development of *ad hoc* hedging products, see para 2.3.1. of the Report on Sector Inquiry, *cit*.

[830] See, para 2.3.1.2 of the Report on Sector Inquiry, *cit*.

[831] See para 2.3.1.3 of the Report on Sector Inquiry, *cit*., emphasising that "*for electricity prices to appropriately signal local scarcity the market area or bidding zone needs to reflect the technical limits of the transmission system. The price in a very large zone may not indicate with sufficient precision where additional generation capacity is most needed and transmission constraints may cause insufficient plants to run instead of more efficient ones*".

By advocating market reforms, the Commission also emphasises that such reforms should be the primary resource for Member States to address their adequacy concerns. Capacity mechanisms[832] should not, in the opinion of the Commission, serve as a substitute for reform but only be a supplement to it. It is also fundamental, in the opinion of the Commission, that Member States conduct an accurate adequacy assessment, based upon clear reliability standards, to detect and quantify security of supply risks and identify the scale of any capacity mechanism.[833] In particular, four broad categories of capacity adequacy problems have been identified based upon the findings from the inquiry: long-term adequacy concerns, temporary adequacy concerns, local concerns, and concerns about the ability of energy consumers to manage electricity demand and security of supply. The type of capacity mechanism likely to be the more suitable, in fact, may vary as a result of the characteristics and type of adequacy concern identified.

On the basis of the findings of the inquiry, the Commission concludes that market-wide capacity mechanisms appear to be the most suitable public support instrument for confronting long-term risk scenarios, while a strategic reserve model is likely to suit temporary risks situations better. Regarding local adequacy concerns, pending the implementation of *ad hoc* structural market reforms (including improving grid connectivity and revisiting the perimeters of bidding zones), various mechanisms (including strategic reserves and tenders for new capacity) may be employed on an interim basis. Last, as mentioned, capacity payments are presumed by the Commission to be generally unlikely to be an appropriate tool, regardless of the specific concern identified. In particular, this is a factor of their dependence on administratively-set prices, which impede the market's ability to adjust in a competitive manner and entail a significant risk of over-compensating and failing to achieve the proposed objective.[834]

In addition to the adequacy assessment and the identification of the most appropriate capacity mechanism, the Commission emphasises the importance of accurate design choices

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[832] It is worth highlighting that the Commission provides an illustration of measures likely to be considered capacity mechanisms subject to prior approval under the State aid framework. In particular, the key characteristics of measures amounting to capacity mechanisms are (a) the measure being initiated by or involving the government, (b) the key aim of the measure being guaranteeing security of supply, and (c) remuneration being given under the scheme to capacity providers, in addition to revenues generated by selling electricity on the market. See, Section 3.2 of the Report on Sector Inquiry, *cit*.

[833] See, Section 4 of the Report on Sector Inquiry, *cit*.

[834] For an in-depth analysis of the foregoing, see para. 6.3 of the Report on Sector Inquiry, *cit*.

for the measure in terms of eligibility and allocation of resources, regarding both price setting and selecting capacity providers, and obligations and penalties imposed thereon. Based upon the findings of the inquiry, the Commission advocates opening capacity mechanisms to a variety of potential capacity providers and competitive price-setting processes, with a view to minimising the price paid for capacity. Capacity mechanisms should also provide incentives for reliability and be able to co-exist with electricity scarcity prices to avoid trade distortions and domestic overcapacity. Lastly, in the opinion of the Commission market-wide mechanisms should be designed in such a manner as to be open to cross-border participation, to incentivise continued investment in interconnection, and to minimise distortions to cross-border competition and trade.

PART III

The State Origin Criterion: Overstepping into Areas within the Precinct of Other Elements of the State Aid Analysis

A Brief Overview

This part of this doctoral thesis consists of an extensive analytical review of the judgments of the EU Courts and decisions of the Commission on energy aid measures that have elaborated on the notion of aid by narrowing down its scope. The critical evaluation focuses on what is deemed to be the most problematic element of this test with respect to national energy aid measures: the State origin criterion. An explanation of why the other elements of the notion of aid are of somewhat minor importance in the assessment so far provided by the EU's jurisprudence and decisional practice regarding energy aid measures is included. The analysis aims to provide extensive practical evidence on how certain approaches to interpreting the notion of aid have set strict boundaries to the supranational jurisdiction over energy support regimes, and have overstepped into areas within the precinct of other elements of this notion and of the compatibility assessment. The resulting legal uncertainty and notification deficit are also addressed through a comparative analysis of the case law of the previous and new millennium. Future, and potentially risky, paths within the context of assessing the imputability criterion are also detected through an analysis of cases on aid measures other than those aimed at promoting the energy sector. In an effort to systematise the conundrum of case law in the field, and our findings thereunder, national support provisions have been categorised and relevant analysis conducted on the basis of the structures of the measures they implement.

Chapter 5

The Concept of Imputability: a New Safe Haven for Energy Support Measures?

5.1. General Features of the Imputability Criterion and their Impact on Energy Support Measures

One of the essential elements of the first condition for State aid under Article 107(1) TFEU is the attributability or imputability of the measure to the State, which has almost always been considered a – or the – constituent of this condition and, thus, of the definition of aid.[835] Interestingly enough, the European Court of Justice ("CJ" or "Court") conceived the concept of imputability in the *Van der Kooy* judgment, which dealt with a preferential tariff for natural gas charged by a private law company.[836] However, the fact that the support measure has to be the result of a Member State's action has been clear from the outset because it is also evidently provided for by the title of the State aid section of the Treaty, *i.e.* "*Aids granted by States*".[837]

Actually, until fifteen years ago, a general test to determine whether the State was in control of directing the initiative that led to the adoption of a certain support measure had not been established. As a result, several distinguished experts and advocates general had pointed out that there had been some tension between early cases as to the required intensity of review

[835] See, *ex plurimis*, Case C-482/99, *France v. Commission* (*Stardust Marine*), [2002] ECR I-4397, para. 24; Case C-126/01, *Ministère de l'Économie, des Finances et de l'Industrie v. GEMO SA* (*GEMO*), [2003] ECR I-13769, para. 24; Case C-345/02, *Pearle BV, Hans Prijs Optiek Franchise BV and Rinck Opticiëns BV v. Hoofdbedrijfschap Ambachten* (*Pearle*), [2004] I-07139, para. 35; Case C-677/11, *Doux Élevage and Coopérative agricole UKL-ARREE* (*Doux Élevage*), ECLI:EU:C:2013:348, para. 27; Case C-262/12, *Association Vent De Colère! And Others v. Ministre de l'Économie, des Finances et de l'Industrie* (*Vent De Colère*), ECLI:EU:C:2013:851, paras 16-17; Case T-358/94, *Compagnie nationale Air France v. Commission* (*Air France*), [1996] ECR II-2109, paras 55-56; Case T-351/02, *Deutsche Bahn AG v. Commission* (*Deutsche Bahn*), [2006] ECR I-1047, para. 101; Joined Cases T-50/06, T-56/06, T-60/06, T-62/06, T-69/06, *RENV – Ireland, France, Italy, Eurallumina SpA and Aughinish Alumina Ltd v. Commission* (*RENV – Ireland v. Commission*), ECLI:EU:T:2012:134, para. 74; Joined Cases T-186/13, T-190/13 and T-193/13, *Netherlands and Others v. Commission*, ECLI:EU:T:2015:447, para. 63.

[836] Joined Cases 67/85, 68/85 and 70/85, *Kwekerij Gebroeders van der Kooy BV and Others v. Commission* (*Van der Kooy*), [1988] ECR 219, para. 28.

[837] See, Opinion of Advocate General Jacobs of 13 December 2001 in Case C-482/99, *Stardust Marine*, *cit.*, para 54.

under the imputability condition.[838] Indeed, while in a few cases the Court had allegedly considered it necessary to establish *in concreto* that the measure under scrutiny was the result of an action of the State,[839] in many others it had relied directly and solely on the status of the institution distributing or administering the aid to find that the imputability requirement was met.[840] However, in some cases it had already established that this condition was fulfilled on the basis of indirect evidence, and, as we shall see, these include some of the few judgments on preferential energy tariffs rendered during the last century.[841]

Nonetheless, the requirement that the aid has to be granted or imposed by a public authority for a measure to qualify as aid has never been doubted.[842] Neither has the role of this requirement in the definition of aid been explicitly or implicitly called into question under any of the understandings the State origin criterion provided so far. It cannot even be alleged that its fundamental attributes change according to the approach we opt for when interpreting this criterion. Hence, we will now provide the general features of the imputability criterion. Then we will turn to addressing the leading cases where the Court of Justice of the European Union ('CJEU' or 'Court') has elaborated on them – mainly related to sectors other than the energy sector – meanwhile examining the implications for the energy sector of the relevant judgments.

First and foremost, we should highlight that the main question to be answered under the imputability assessment is whether the State has exercised its control over the adoption of the support measure under scrutiny or the body that has taken it. This is slightly different from analysing the control that the State might have over the funds used to finance the relevant measure, which should instead be carried out when addressing this measure under the State

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[838] *Ibidem*, paras 58-64.

[839] *E.g.*, Case 290/83, *Commission v. France* (*Poor Farmers*), [1985] ECR 439, para. 15.

[840] CASES.

[841] Examples of cases where there was no direct evidence that the measure had been established under the influence of the State include, Joined Cases 67/85, 68/85 and 70/85, *Van der Kooy*, paras 35-38; Case C-56/93, *Belgium v. Commission*,[1996] ECR I-723; Case C-303/88, *Italy v. Commission* (*Eni-Lanerossi*), [1991] ECR I-1433, para. 12; Case C-305/89, *Italy v. Commission* (*Alfa Romeo*), [1991] ECR I-1603, para. 14; and Case T-358/94, *Air France*, *cit.*, paras 58-62.

[842] Some scholars (see, for instance, Maqueda E.C., Conte G. (2016) 'State Resources and Imputability', in Pesaresi N., Van de Casteele K., Flynn L., Siaterli C. (eds) *EU Competition Law: State Aid – Book One*. Leuven: Claeys & Casteels Publishing) have quoted the judgment delivered in Case C-44/93, *Namur-Les Assurances du Crédit SA v. Office National du Ducroire and Belgium*, [1994] ECR I-3829, as an example of judgment where the Court made no reference to the imputability of the measure to the Belgian State. However, in paragraph 31 of this ruling the Court has mentioned the imputability requirement and explained that "*even on the assumption that* [the decision under scrutiny was] *wholly attributable to the State*", it could *"*[…] *not be regarded as constituting the granting or alteration of aid*" for the reasons provided in the previous paragraphs. In any event, the attributability condition was certainly met by the measure in question because the board of directors of the public credit insurance establishment was required by law to follow the policy set the public authorities.

resource criterion.[843] However, the CJEU has frequently conflated these separate assessments and this attitude has generated several problematic outcomes.[844] Importantly enough, as we shall see, the Court has applied the very same confusing stance when dealing with energy support measures, such as the stranded costs compensation system addressed in the *Essent* case.[845]

Another preliminary point we should make with reference to the attributability requirement is that it is currently undisputed that the notion of a Member State is a wide one. Therefore, this requirement certainly extends to actions undertaken by any public authority, regardless of whether it is a legislative or an administrative authority, whether it is a central, regional or local body, and whether it enjoys legal autonomy.[846] In this respect we shall also stress that State imputability has always been deemed assumable where a straightforward State initiative is behind the measure, although, as we shall later see, things have recently turned out to be more complicated in that respect. This is the case, for instance, of measures taken by public authorities through the adoption of legislation – legislative power being one of the constitutional powers of States –[847] and enacted by public authorities themselves. The circumstance that the

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[843] See, in this respect, Chapter 6.

[844] See, in that regard, Rubini L. (2009) 'The Forms of Governmental Action Covered by EC State Aid Rules', in Rubini L. (ed.) *The Definition of Subsidy and State Aid: WTO and EC Law in Comparative Perspective*. Oxford: Oxford University Press, at pp. 157 ff. Examples include Case C-345/02, *Pearle*, *cit.*, para. 37, where the arguments pertaining to the lack of control by the State over the funds concerned were used to establish that the imputability requirement was not fulfilled; and Case T-136/05, *EARL* Salvat *père & fils, CIVDN and CNIV v. Commission* (*Salvat*), [2007] ECR II-4063, paras 129-164, where the imputability to the State of the relevant measures was not contested by the applicants but, nonetheless, the elements to establish imputability were used to establish that the State resources criterion was met.

[845] See, Case C-206/06, *Essent Netwerk Noord and Others v. Aluminium Delfzijl BV* (*Essent*) [2008] ECR I-5497, paras 65-75.

[846] In this respect see, *inter alia*, European Commission (1972) *First Report on Competition Policy*, Office for Official Publications of the European Communities: Brussels – Luxemburg, paras 158-159; Joined Cases 6/69 and 11/69, *Commission v. France*, ECR [1969] 523, paras 20-21, where preferential interest rates granted by the national bank to the energy industry met the imputability condition; Case 248/84, *Germany v. Commission*, [1987] ECR 4013, para. 17; Case T-358/94, *Air France*, *cit.*, para. 56-62, where the conduct of a body belonging to the public sector had been considered imputable to the French State although this body enjoyed legal autonomy from the political authorities; Joined Cases T-228/99 and T-233/99 *Westdeutsche Landesbank Girozentrale and Land Nordrhein-Westfalen v Commission*, [2003] ECR II-435, para. 27; Case C-88/03, *Portugal v. Commission* (*Azores*), [2006] ECR I-7115, para. 55; Joined Cases T-267/08 and T-279/08, *Région Nord-Pas-de-Calais and Communauté d'agglomération du Douaisis v Commission*, [2011] ECR II-1999, para. 108. See also, *Commission Notice on the notion of State aid as referred to in Article 107(1) of the Treaty on the Functioning of the European Union* (Notice on the Notion of Aid), OJ 2016 C262/1, para. 39. For an assessment of the impact this broad understanding of the notion of State under the EU State aid regime has on traditional guarantees of fiscal autonomy see, Schön W. (2012) 'State Aid in the Area of Taxation', in Hancher L., Ottervanger T., Slot P.J. (eds) *EU State Aids*. London: Sweet and Maxwell.

[847] Joined Cases C-182/03 and C-217/03, *Belgium and Forum 187 ASBL v. Commission*, [2006] ECR I-5479, para. 128; Case C-262/12, *Vent De Colère*, *cit.*, para 18; Case T-358/94, *Air France*, *cit.*, para. 59.

support measure in question takes the form of State-imposed cross-subsidisation between private entities or different classes of consumers should have no impact in this respect; the problematic issues in these cases lie in the assessment of the second leg of the State origin criterion, *i.e.* the State resources element.[848]

As a result of the foregoing considerations, the imputability condition is certainly met, for instance, whenever a public authority directly establishes that a low energy tariff has to be charged to certain consumers or adopts financial mechanisms to ensure the generation of green energy. The same holds true with respect to systems implemented by national or local governments to reserve to selected companies, or for the dispatch of green energy, storage facilities, interconnectors, electricity networks, capacity in pipelines, etc. Also, capacity remuneration mechanisms are not exempt from this principle, as the *Estonian CRM* case proves.[849] Neither is the public funding of energy infrastructures having an economic use, such as transmission, distribution and storage infrastructures for electricity, gas and oil.[850] Nor, certainly, stranded costs compensation mechanisms or fiscal concessions and loans granted in favour of State-owned energy market operators in distress.[851]

An exception to the principle that public authorities' actions certainly meet the imputability requirement is, however, represented by measures adopted with the sole purpose of complying with Member States' obligation to implement acts of the Union legislature that leave no margin of discretion to the States.[852] Nonetheless, this exception does not apply when Union law simply

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[848] In that respect see, further, Chapter 6.

[849] Commission Decision of 23 March 2011, State aid SA.30531 (ex N 78/2010), *Aid for Capacity Payments for Oil-Shale Fuelled Electricity Production (ET)* (*Estonian CRM*), n.y.p., where the Commission has found that the notified CRM certainly constituted State aid and raised doubts as to the compatibility of the measure with the internal market. Hence, it opened the formal investigation procedure. The CRM plan took the form of twenty-years' pre-determined capacity payments, to be granted by the public authorities to the publicly-owned and fully vertically integrated incumbent energy company for the operation of two newly-constructed oil-shale power plants. Since Estonia withdrew the measure the Commission has closed the proceedings.

[850] *E.g.*, Commission Decision 17 July 2002, State aid N 124/2002, *Northern Ireland Gas Pipeline*, OJ 2002 C 309/14; Commission Decision of 15 March 2010, State aid N 594/2009, *Aid to Gaz-System SA for gas transmission networks in Poland*, OJ 2010 C101/9; and Commission Decision 10 July 2014, State aid SA.36290, *Extension of Northern Ireland Gas Pipeline to West and North West*, OJ 2014 C 368/6.

[851] See, for instance, Commission Decision of 21 April 2015, State aid SA.41318, *Rescue aid to Complexul Energetic Hunedoara*, OJ 2015 C203/3; and Commission Decision of 16 December 2003, State aid C 68/2002, *Edf – Corporate Tax Exemption I*, OJ 2005 L49/9, annulled by the GC ruling only on the grounds that the Commission had not properly carried out the market investor test, as confirmed by the CJ (See, Case T-156/04, *EDF v. Commission*, [2009] ECR II-4503, and Case C-124/10 P, *Commission v. EDF*, ECLI:EU:C:2012:318), and later readopted by the Commission (Commission Decision of 2 May 2013, State aid SA.13869, *Edf – Corporate Tax Exemption II*, OJ 2016 L34/152, now on appeal in Case T-747/15, EDF v. Commission).

[852] See, in this respect, Notice on the Notion of Aid, *cit.*, paras 44.

allows a certain national measure, leaving a margin of appreciation to the Member States on whether to adopt it or how to frame those aspects of the measure that are relevant from a State aid perspective.[853] Interestingly enough, this exception was explicitly applied for the first time by the Commission when assessing the National Allocation Plans (NAPs) adopted by the Member States to comply with Directive 2003/87/EC,[854] which established the EU ETS system. Indeed, under this Directive, Member States were bound to allocate at least 95 per cent of emissions allowances free of charge in the first trading period and 90 per cent in the second.[855] Hence, the Commission has clarified that, with regard to the percentages of allowances that the Directive prescribed to be distributed for free, the pertinent national provisions were not imputable to Member States because the latter had no discretionary power over them.[856] Importantly, this Commission's approach to the imputability question was then confirmed for the first time by the General Court in the *Deutsche Bahn* case, which dealt with a tax exemption provided by German law for energy products supplied for use as aviation fuel.[857] Since the national support measure was simply implementing a clear and precise obligation established under the Mineral Oil Directive,[858] the Court found that it could not be regarded as attributable

[853] *Ibidem.* para.45.

[854] Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse emission allowance trading within the Community and amending Council Directive 96/61/EC as amended by Directive 2004/101/EC (2003 EU ETS Directive), OJ 2003 L 275/32.

[855] *Ibidem*, Article 10.

[856] See the joint letter of the Director-Generals of DG Environment and Competition dated March 17, 2004 and published in DG Environmental website, http://ec.europa.eu/dgs/environment/index_en.htm. See also the Commission Decision on the *second Slovakian NAP* of 29 November 2006, C(2006) 5616 final. *Contra*, Merola M., Crichlow G. (2004) State Aid in the Framework of the EU Position after Kyoto: An Analysis of Allowances Granted under CO2 Emissions Allowance Trading Directive. *World Competition* **27**(1) 25-51; Seinen A.T. (2007) State Aid Aspects of the EU Emission Trading Scheme: The Second Trading Period. *Competition Policy Newsletter* **3** 100-105. However, other elements of certain NAPs certainly did meet the attributability criterion, as the General Court has later acknowledged (see, the above cited joint letter of the Director-Generals. See also, Commission Decision on the *first French NAP* of 20 October 2004, C (2004) 3982/7 final, and Case T-374/04, *Germany v. Commission*, *cit.*, para. 145). This was the case, for instance, in the over-allocation of emission credits and the allocation free of charge or below their market value of tradable emission allowances falling within the percentages for which Member States retained discretion in choosing the allocation methodology. For an exhaustive and critical analysis of these topics and other related relevant issues see, Rusche T.M. (2006) 'Emissions Trading', in Rydelski M.S. (ed.) *The EC State Aid Regime: Distortive Effects of State Aid on Competition and Trade*, *cit.*, pp. 349-388, Weishaar S. (2007) The European Emissions Trading System and State Aid: An Assessment of the Grandfathering Allocation Method and the Performance Standard Rate System. *European Competition Law Review* **28**(6) 371-381; de Sépibus J. (2009) The European Emission Trading Scheme Put to the Test of State Aid Rules, *cit.;* Catti De Gasperi G. (2010) Making State Aid Control "Greener": The EU Emissions Trading System and its Compatibility with Article 107 TFEU, *cit.*

[857] Case T-351/02, *Deutsche Bahn*, *cit.*

[858] Council Directive 92/81/EEC of 19 October 1992 on the harmonisation of the structures of excise duties on mineral oils (Mineral Oil Directive), OJ 1992 L 316/12, Article 8(1).

to the German State because it stemmed from an act of the EU.[859] This principle has since been confirmed by the CJ in cases dealing with other Union acts, where the Member States concerned enjoyed no discretion in transposing the mandatory EU provisions in question.[860] When, however, the measures under consideration derive directly from national legislation that has implemented the rules established by a Union act, they have to be addressed under the EU State aid regime. An example of the problems this might generate is again offered by certain cases concerning eco-tax and energy tax systems. Indeed, although the relevant systems established tax reliefs for energy-intensive users, they actually complied with Article 4(2) of the Energy Taxation Directive,[861] which established the level of taxation of energy products and electricity.[862] The Energy Taxation Directive has also provided the grounds for the CJ to definitively establish, in the *Alumina* case, that a support measure has to be considered an act attributable to the State whenever the latter is not compelled but simply authorised to implement it by a EU Institution.[863]

Finally, it is worth highlighting that the CJEU has not yet explained how the imputability criterion should be dealt with when confronting support measures adopted jointly by several Member States. Only the Commission has addressed this issue in one recent decision, finding that the measure under scrutiny in the relevant case was attributable to all the Member States concerned.[864] The same should, therefore, apply when the measure is taken jointly through an

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[859] See, Case T-351/02, *Deutsche Bahn*, *cit.*, paras 101-106.

[860] See, Case C-460/07, *Sandra Puffer v. Unabhängiger Finanzsenat, Außenstelle Linz* (*Puffer*), [2009] I-3251, paras 69-70; Case T-475/04, *Bouygues SA and Bouygues Télécom SA v. Commission*, [2007] ECR II-2097, para. 111, upheld on appeal in Case C-431/07 P, *Bouygues SA and Bouygues Télécom SA v. Commission*, [2009] I-2665; and Commission Decision of 19 November 2009, State aid NN 55/2009, *Alleged state aid within German insolvency law*, OJ 2009 C323/5, para 3.1.

[861] Council Directive 2003/96/EC of 27 October 2003 restructuring the Community framework for the taxation of energy products and electricity (Energy Taxation Directive), OJ 2003 L 283/51.

[862] As per these relevant problems see, for instance, Commission Decision of 11 June 2003, State aid NN 3/B/2001, *Energy tax scheme*, OJ 2003 C189/03, where the Commission decided to initiate the formal investigation procedure. See also, with that respect, Lannering J., Renner-Loquenz B (2003), State Aid and Eco-Taxes: Bundling of Eco-Taxes for State Aid Assessment. *Competition Policy Newsletter* **3** (Autumn) 75-76.

[863] See, Case C-272/12 P, *Commission v. Ireland and Others* (*Alumina*), ECLI:EU:C:2013:812, paras 45-53. More precisely, the measures under scrutiny in the judgment were certain exemptions from excise duties on primary energy sources for alumina producers, which had been granted by some Member States according to a Council Decision that explicitly authorised them to introduce these exceptions. For a critical analysis of this judgment and of the numerous rulings delivered with respect to these measures, see Nicolaides P. (2015) 'The Roles of EU Institutions on State Aid', in Nicolaides P. (ed.) State Aid Uncovered: Critical Analysis of Developments in State Aid 2014. Berlin: Lexxion Publisher, pp. 35-38.

[864] See, Commission Decision of 26 February 2010, State aid C 9/2009 (ex NN 45/08, NN 49/08 and NN 50/08), *Restructuring of Dexia***,** OJ 2010 L274/54, para. 125, on the emergency measures for Dexia implemented by Belgium, France and Luxembourg.

institutional body created for that purpose. Should the Court confirm this principle, it will have a great impact with respect to energy support regimes because, as already explained in Part 2 of this doctoral thesis, Member States will have to increasingly make use of cooperation mechanisms to introduce cross-border support.

We should now turn to addressing cases where State imputability is less evident or more problematic to establish. In this regard it is, first of all, important to mention that the CJEU long ago rightly extended the notion of State attributability to cover actions carried out by private and public undertakings or bodies and financial institutions, when certain conditions are satisfied. This extension traces its origin back to a very early ruling of the CJ. Indeed, it was provided long ago in abstract terms in the *Steinike & Weinlig* case and then further specified in following judgments.[865] More precisely, in the *Steinike & Weinlig* judgment the Court explicitly applied the effect-based approach to the first condition for the applicability of Article 107(1) TFEU to rule that this condition might also be met when the aid is granted by private or public bodies established or appointed by the State to administer it.[866] Indeed, according to the CJEU, "*in applying article* [107 TFEU] *regard must primarily be had to the effects of the aid on the undertakings or producers favoured and not the status of the institutions entrusted with the distribution and administration of the aid*" (emphasis added).[867] In more recent Court and Commission words, in fact, stating the contrary would allow Member States to circumvent State aid rules by designating autonomous private or public bodies to allocate aid.[868]

Importantly, the above provided extension now has great implications for the energy sector. As we shall evidence in paragraph 3 of this chapter, in fact, it is not at all unusual for private or public entities to play, in essence, the role of granting authorities under the energy-related support schemes devised by the Member States. Indeed, the more these schemes become

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[865] Case 78/76, *Steinike & Weinlig v. Federal Republic of Germany* (*Steinike & Weinlig*), [1977] ECR 595. Similarly, *ex plurimis*, Case 290/83, *Poor Farmers*, *cit.*, paras. 14; Joined Cases 67/85, 68/85 and 70/85, *Van der Kooy*, *cit.*, para. 35; Case 57/86, *Greece v. Commission*, *cit.*, para. 12; Case C-303/88, *Eni-Lanerossi*, *cit.*, para. 11; Case C-305/89, *Alfa Romeo*, *cit.*, para. 13; Case C-126/01, *GEMO*, para. 23; Case C-345/02, *Pearle*, *cit.*, para. 34; Case T-136/05, *Salvat*, *cit.*, para. 139.

[866] Case 78/76, *Steinike & Weinlig*, *cit.*, para. 21. Interestingly, although in this case the fund appointed to administer the aid was established by law and was an institution governed by public law and partly financed through federal grants (Case 78/76, *Steinike & Weinlig*, *cit.*, p. 598), the Court did not miss the chance to extend to private law companies and bodies one of the main guiding principles of the imputability assessment established thereunder.

[867] *Ibidem*. See also, *ex plurimis*, Case T-613/97, *Ufex*, *cit.*, para. 66.

[868] Case C-482/99, *Stardust Marine*, *cit.*, para. 23; Case T-251/11, *Austria v. Commission* (*Austrian Green Electricity Act 2008*), ECLI:EU:T:2014:1060, para. 54, and Notice on the Notion of Aid, *cit.*, para. 39. Similarly, Case T-358/94, *Air France*, *cit.*, para. 62.

complex, the more it turns out to be necessary to entrust intermediate bodies with operational, administrative and control tasks in order to ensure their proper functioning. Although in such cases the imputability requirement should be considered met because State initiative is certainly behind the measure, as we will later see things have recently turned out to be more complicated in that respect.

Assessment under the attributability criterion is currently even more complicated with regard to support measures directly adopted by public undertakings.[869] This has great implications with respect to energy-related aid measures. Indeed, many Member States still own or control portions of their domestic energy companies. Actually, the notion of attributability gains even more importance as the EU progresses towards energy market liberalisation because this process increase the burden on public undertakings to operate in the same market as private enterprises.[870] At the same time, however, the very same structure of EU gas and electricity markets, as framed by the relevant internal market legislation,[871] incentivises Member States' control over the actions of the most relevant operators of such markets for very good reasons. Let us just think about the Transmission System Operators (TSOs), the Distribution System Operators (DSOs) and the Liquefied Natural Gas (LNG) system operators. Under EU internal market legislation Member States are required, *inter alia*, to appoint these undertakings, to impose on them several obligations and crucial system responsibilities, and, thus, to exercise control over their compliance.[872] Actually, the tasks of these undertakings frequently go beyond

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[869] As already explained, public undertakings are those private or public law companies over which public authorities might directly or indirectly exercise a dominant influence by virtue of their ownership of them, their financial participation therein, or the rules which govern them. This is the definition of public undertaking provided under Article 2(b) of the Commission Directive 2006/111/EC of 16 November 2006 on the transparency of financial relations between Member States and public undertakings as well as on financial transparency within certain undertakings (OJ L 318, 17.11.2006, p. 17–25), and it is now the reference point for all EU legislation applicable to public undertakings. It follows from this definition that the dominant influence of a public authority over an undertaking, and not its public ownership, is now considered to be the main criterion for identifying public undertakings. Actually, the very same definition was provided by the previous directive on the topic, as later amended (Commission Directive 80/723/EEC of 25 June 1980 on the transparency of financial relations between Member States and public undertakings OJ 1980 L195/35).

[870] This is clearly explained, although in general terms not related to the energy sector, in Alexis A. (2002) Notion d'aide d'Etat: Remarques sur l'arrêt Stardust Marine du 16 mai 2002. *European State Aid Law Quarterly* **1**(1) pp. 149-154.

[871] See, *inter alia*, Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC, OJ L 211, 14.8.2009, p. 55–93 (Electricity Directive), and Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC, OJ L 211, 14.8.2009, p. 94–136 (Gas Directive).

[872] For a proper analysis with that respect see, for instance, Bjørnebye H. (2010) 'Defining Roles and Responsibilities in Electricity Generation Investment Decisions', in Bjørnebye H. (ed.) *Investing in EU Energy*

what is required by internal energy market provisions.[873] Importantly enough, in fact, they also encompass the promotion of new investments, including electricity generation and supply investment incentives, and the calculation of tariffs.[874] This is especially true for TSOs, which are publicly owned and under public control in several Member States,[875] while in others they are even organised as part of the government structure,[876] with the result that most of their essential actions have to be approved by the State. Indeed, as we shall see, several times the Commission has found itself investigating the conduct of State-owned TSOs under State aid rules.

As a result of the forgoing considerations, in the next two paragraphs we will address the abovementioned two situations where State imputability has proved to be more problematic to establish, through an overview of the most relevant EU judgments and decisions that have been rendered with respect to energy support measures.

5.2. Energy Aid Granted by Public Undertakings: Overlaps with Other Elements of the State Aid Analysis

As mentioned, the notion of State imputability was rightly extended long ago to cover support measures directly adopted by public undertakings. It goes without saying that public undertaking initiatives that generate the same economic effects of aid arising out of acts of public authorities do not meet the imputability requirement when these undertakings operate freely in the market with a view to making profit.[877] However, if public authorities exercise a dominant influence over the public undertakings concerned, the decisions they adopt that result in the granting of aid might be imputed to the State itself under certain circumstances although, as we shall see, addressing these cases has always been quite difficult. Hence, given that

Security: *Exploring the Regulatory Approach to Tomorrow's Electricity Production*, *cit.*, PP. 169-195, and Waloszyk M. (2014) 'EU Gas Market Structure', in Waloszyk M. (ed.) *Law and Policy of the European Gas Market*. Cheltenham: Edward Elgar Publishing, pp. 96-129.

[873] This is the case, for instance, of the Danish TSO Energinek.dk, which is also entrusted with a number of public service obligations of a public-law nature that go beyond what is required by internal energy market provisions.

[874] Interestingly enough, Member States are actually required to exercise their control over the calculation of tariffs under certain circumstances: see, for instance, Article 23 of the Electricity Directive.

[875] *E.g.*, the Danish TSO Energinek.dk.; the French TSO RTE, which is also a subsidiary of the EDF Group.

[876] *E.g.*, the Swedish TSO Svenska Kraftnet.

[877] As we shall see, in fact, in the *Stardust Marine* judgment the CJ explicitly stated that measures taken by public undertakings are not *per se* imputable to the State. Case C-482/99, *Stardust Marine*, *cit.*, paras 51-52.

numerous public undertakings still operate in and preside over the electricity and gas markets, the jurisprudence that we will analyse in this paragraph has great implications for the energy sector.

Before focusing on energy-related measures adopted by publicly controlled energy enterprises, it is important to highlight that, before the *Stardust Marine* judgment was rendered,[878] the Commission and the Court had already addressed several measures concerning financial supports granted by public undertakings. The degree of control necessary to establish imputability was, however, unclear. Hence, in some cases the competent European Institutions had relied simply on the control that public authorities could potentially exercise over the undertakings concerned and their resources to establish that such authorities had dominant influence over them and, thus, their decisions were attributable to the State.[879] This meant that the existence of mere organic links with public authorities and the fact that the relevant transactions involved certain resources subject to some form of public control had sometimes been considered enough to impute measures taken by public undertakings to the State. Whether the latter usually acted under the decisive influence of public authorities was, therefore, not examined.[880] Nonetheless, it is worth noting that the approach adopted in the last century with reference to measures implemented in favour of certain at the time relevant sectors was quite different. Indeed, in the pertinent cases the Court and the Commission relied on appropriate indirect indicators that clearly evidenced that the public undertakings concerned could not adopt decisions such as those contested without taking into account the directives or requirements of the public authorities.[881]

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[878] Case C-482/99, *Stardust Marine*, *cit.*

[879] An exception to this trend is represented by one peculiar decision where the Court assessed whether in the actual case the support granted was the result of a specific action of the State; an assessment that, however, is not required even under the *Stardust* test: see, Case 290/83, *Poor Farmers*, para. 15.

[880] See, for instance, Case T-358/94, *Air France*, *cit.*, paras 55-68, where the Court ruled that the financial support granted to Air France by a French private law company was imputable to the State on the basis of indirect evidence: the private law company was independent from but still owned by the Caisse des Dépôts et Consignations, which in turn was a special public body established and regulated by statute. In the Court's view, its findings on the attributability requirement could not be undermined by the facts that the Caisse enjoyed legal autonomy from the political authorities, it had a special statute in relation to the Cour des Comptes and a special accounting and fiscal regime, and the appointment of its Director-General was irrevocable. Actually, to reach its conclusion the Court had not even examined whether public authorities had any influence on the decisions taken by the Caisse because it stated that, when other elements are present, the finding of State aid does not presuppose the existence of approval of the public authorities. The approach undertaken by the General Court in this case was then endorsed by the CJ in the Ladbroke case: see, Case C-83/98 P, *French Republic v. Ladbroke Racing Ltd and Commission (Ladbroke)*, [2000] ECR I-3271.

[881] *E.g.*, Case 303/88 *Eni-Lanerossi*, *cit.*, paras 11-12; Case C-305/89, *Alfa Romeo*, *cit.*, paras 13-14, where the Court considered not only that the State indirectly owned the capital of the undertakings that made the capital

Importantly, as we shall see, the last-mentioned approach was also endorsed by the Court in important rulings concerning energy-related measures and rendered before the *Stardust Marine* judgment. Actually, establishing State imputability with regard to these measures had not been that difficult in the very few cases where the Court and the Commission had applied State aid rules to the energy sector during the last century. As already explained, in fact, that period was marked by a long-lasting deadlock along the liberalization path of the European energy markets, which were States-driven. Actually, the most relevant judgments and decisions delivered at that time with respect to the energy sector pertained to tariff systems adopted by public undertakings. This was the case, for instance, of the *Van der Kooy* ruling, where, as previously mentioned, the concept of imputability was coined.[882] In its judgment on the case the Court encountered no difficulty in reaching the conclusion that the decision to apply a very low tariff for natural gas to selected large consumers, adopted by the Dutch gas supplier Gasunie, was imputable to the Dutch State.[883] This finding was based on the fact that, although Gasunie was a private law company, the Dutch government held capital shares in it,[884] appointed the supervisory board and enjoyed veto rights.[885] Hence, not only did the government exercise organic control over Gesunie but its prior approval was also necessary for the gas supplier to validly adopt commercial decisions.[886] The very same reasoning had already been provided by the Commission for establishing State imputability with reference to preferential tariffs practised in favour of another energy-intensive industry in a decision it had rendered in 1984, which was later annulled by the Court in the *Cofaz* judgment only with respect to the findings

injection and appointed their boards of directors and management, but also that those undertakings had to act in accordance with the directives issued by a public authority, which also concerned budgetary allocations.

[882] Joined Cases 67/85, 68/85 and 70/85, *Van der Kooy*, *cit*., para. 28. Interestingly, as with other cases, the issue was brought before the Court only in the mid-1980s because the Commission had been passive with regard to the previous tariff for more than one decade and had adopted a decision in that respect only in December 1981 (Commission Decision 82/1973 of 15 December 1981, OJ 1982 L 37/29). The challenge against this decision was dropped because the Commission had to repeal it: meanwhile, a new tariff had been, in fact, negotiated, which would then become the object of the new Commission decision challenged in the *Van der Kooy* case (Commission Decision of 13 February 1985 on the preferential tariff charged to glasshouse growers for natural gas in the Netherlands, OJ 1985 L 97/49).

[883] Joined Cases 67/85, 68/85 and 70/85, *Van der Kooy*, *cit*., paras 35 and 38.

[884] Interestingly, Gasunie is now fully owned by the State.

[885] Joined Cases 67/85, 68/85 and 70/85, *Van der Kooy*, *cit*., para. 36. The Court's conclusion on the imputability element was rightly not undermined by the State's allegation that the low tariff was of paramount importance for preventing the gas users concerned switching coal heating, with the consequences thereon in terms of pollution.

[886] *Ibidem*, para. 37.

on compatibility.[887] Moreover, it had then been confirmed by the CJ in *Belgium v. Commission* with regard to the very same preferential energy tariffs.[888] Similarly, there had been no doubts that the imputability condition was fulfilled in the *Alumix* case, where the measure examined was the very low tariff which a State-owned electricity supplier, ENEL, charged two smelters owned by Alcoa. Indeed, the level of the tariff in question was one of the conditions of the purchase agreement entered into by the Italian government and Alcoa for the acquisition by the latter of Alumix, a State-owned company.[889] The fact that the Commission then found that, given the peculiar circumstances of the case and the market concerned, the preferential tariff did not meet the economic advantage criterion, does not change the relevance of its findings on the imputability requirement.[890] At the very most it proves what we will maintain when addressing the *Stardust Marine* case: that is to say, that the elements to be analysed under these two conditions for the applicability of Article 107(1) TFEU differ and shall differ. The same holds true with regard to the *2000 EDF decision*, where the Commission dealt with the legality of the rebates made by EDF on the price of the electricity supplied to five paper mills that agreed to purchase electrical infrared drying equipment.[891] At the time EDF had a vertically integrated monopoly in France, was wholly owned by the French State and its prices had to be approved by the Finance Ministry. Hence the abovementioned preferential tariffs were certainly imputable to the State.[892]

In the wake of the new millennium the CJ has finally rendered the abovementioned *Stardust Marine* judgment, which is considered the landmark decision on the imputability criterion. Indeed, in this judgment the Court has tried to establish the outer parameters of this criterion with regard to support measures taken by public undertakings. More precisely, it has tried to strike a balance between the necessity of more legal certainty and the need to avoid any circumvention of the State aid rules. It has done so by clearly establishing the two opposite

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[887] See, Case C-169/84, *Société CdF Chimie azote et fertilisants SA and Société chimique de la Grande Paroisse SA v. Commission* (*Cofaz*), [1990] ECR I-3083.

[888] Case C-56/93, *Belgium v. Commission*, *cit.*

[889] See, Commission Decision, State aid C 38/1992 (ex NN 128/1992), *Italian State aid to Alumix* (*Alumix*), OJ 1996 C288/04.

[890] For a proper assessment of the application of the market investor principle in this and other energy cases of the 20th century, see Slot J.P. (1999) 'State Aid in the Energy Sector in the EC: The Application of the Market Economy Investor Principle', in Nicolaides P., Bilal S. (eds) *Understanding State Aid Policy in the European Community*. The Hague: Kluwer Law International, pp. 143-157.

[891] See, Commission Decision of 11 April 2000, State aid C 39/1998, *Aide de la part d'EDF à certaines firmes de l'industrie papetière* (*2000 EDF decision*), OJ 2001 L95/18.

[892] *Ibidem*, paras 10 and 65-67.

extremes of the attributability assessment and by providing a collection of indirect demonstrations of imputability to be applied to middle-ground situations. In this respect we shall preliminarily note that, under the energy-related cases analysed above the European Institutions had already inferred imputability on the basis of the indirect indicators then provided in the *Stardust Marine* judgment, where the Court did, in fact, make reference to some of those cases.[893] Nonetheless, as we shall see, the implications for the energy sector of this judgment are of some relevance.[894] Hence, before addressing the most important decisions on energy support measures rendered by the competent European Institutions from 2002 onwards, we shall analyse the principles established by the Court in *Stardust Marine*. In doing so we will of course highlight the aspects of the ruling that have had an impact on the later assessment of energy support measures.

In *Stardust Marine* the CJ has, first of all, clarified that, for the imputability condition to be fulfilled, it is not necessary to provide direct evidence of the actual involvement of public authorities in the adoption by a public undertaking of the specific measure under scrutiny.[895] However, it has also explicitly rejected the idea that economic advantages granted by public undertakings can be deemed *per se* imputable to the State, and that mere proof that State resources have been deployed under the relevant transaction provides enough additional evidence to reach such a conclusion. Evidence of the actual exercise of a dominant influence over the operations of the public undertaking concerned, arising from a proper assessment of the circumstances of the case and the context in which the measure in question has been taken, has, therefore, to be provided for the imputability condition to be met.[896] This has been actually a good point to make given the trend undertaken by the Commission in previous decisions on measures supporting sectors other than the energy sector, including the decision contested in

[893] This is the case, for instance, in the *Van der Kooy* judgment, where the Court inferred imputability, *inter alia*, from the fact that Gasunie could not have adopted the contested decision without taking into account the requirements of the public authorities. See, Case C-482/99, *Stardust Marine, cit.*, para. 55.

[894] Some scholars actually maintain this and explain why the judgments and decisions on certain types of energy measures rendered prior to *Stardust Marine* now provide limited guidance as to whether these measures might be imputable to the State. See, Hancher L. (2012) 'The Energy Sector', in Hancher L., Ottervanger T., Slot P.J. (eds) *EU State Aids, cit.*, at p. 778.

[895] Indeed, given the privileged relations existing between States and public undertakings, it would be very difficult for third parties to satisfy a similar prerequisite and this would, in turn, incentivise attempts to circumvent State aid rules by adopting non-transparent conduct. See, Case C-482/99, *Stardust Marine, cit.*, paras 53-54.

[896] Case C-482/99, *Stardust Marine, cit.*, paras 51-52 and 55.

the *Stardust Marine* case.[897] However, the Court has gone further by providing a non-exhaustive list of indirect indicators of imputability that can point towards an actual exercising by the Member States of their dominant influence over the companies concerned.[898] While, as mentioned, some of them are simply those from which imputability has already been inferred in the previously addressed energy cases, others might be deemed both unclear and dangerous. On the one side, for instance, stating that "*any other indicator showing* […] *the unlikelihood of* [public authorities] *not being involved*" may be relevant under the imputability assessment is such a vague assertion that it might provide room for attempts to bring back through the back door everything that the *Stardust Marine* ruling threw out at the front.[899] On the other side, instead, the inclusion among the relevant factors that should be taken into account of other elements somehow distinguishing private law undertakings from public law companies could easily allow the re-emergence of a formalistic approach to the imputability question, as the subsequent case law that we will analyse in some ways confirms. This is the case for indicators such as the "*legal status of the undertaking (in the sense of its being subject to public law or ordinary company law)*", the "*nature of its activities*" and the "*exercise of the latter on the market in normal conditions of competition with private operators*". Indeed, although these indicators should in principle be coupled with other elements pointing in the same directions, by making reference to their potential relevance the Court seems to endorse a further step away from the effects-based approach.[900] Moreover, the more the EU progresses towards energy market liberalisation, the greater the risk that this might have an impact on future energy cases:

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[897] See, Commission Decision of 8 September 1999, State aid C 73/1997, *Aid granted by France to Stardust Marine*, OJ 2000 L 206/6. In this negative decision the Commission based its allegations on imputability only on certain organic links – which could allegedly allow the French State to exercise indirect control over the undertaking concerned – and on the fact that the contested transaction involved State resources. Importantly, the chain of control involved four levels.

[898] The list of possible indicators is provided at paragraphs 55 to 57 of the *Stardust Marine* judgment. See, also, Notice on the Notion of Aid, *cit.*, para. 43.

[899] Some scholars have gone even further by stating that all the factors listed in the *Stardust Marine* judgment are essentially organic criteria and, thus, their strict application would get the European Institution's findings back to the Commission's original starting point, *i.e.* it would lead to the automatic conclusion that the contested measure meets the imputability requirement whenever the undertaking that has adopted it is publicly controlled. See, *inter alia*, Lubbig T., von Merveldt M. (2003) Stardust Marine: Introducing Imputability into State Aid Rules - Plain Sailing into Calm Seas or Rowing Back into Shallow Waters?. *European Competition Law Review* **24** (12) 629-633.

[900] This is actually confirmed, in general, by a statement made by AG Jacobs in his Opinion that, as mentioned, had a great influence on the findings of the judgment: he maintained that the effect-based approach should not apply to the imputability test as such but only to the following stages of analysis provided under Article 107(1) TFEU, which actually involve an assessment of the effects of the measure. See, Opinion of Advocate General Jacobs of 13 December 2001 in Case C-482/99, *Stardust Marine*, *cit.*, para. 75.

for example, whether grid operators are governed by public or private law has no impact on the tasks they are assigned and the control that Member States might exercise over them. Furthermore, as we shall explain, the analysis under the imputability condition of the second and third factors mentioned above also determines an unnecessary overlap of assessment with the 'market investor' test to be applied under the economic advantage criterion and the compatibility evaluation. Importantly, these stages of the State aid control analysis certainly provide better tools to address the relevant elements.[901] Hence, not including these factors within the attributability appraisal would not generate great damage as, in any event, the measures would not fall within the definition of aid or would be authorised by the Commission.[902] This is, for instance, clearly evidenced by the above analysed *Alumix* and *2000 EDF* decisions. By contrast, as we shall see, the following decisions on energy measures, rendered on the grounds of the *Stardust Marine* jurisprudence, are characterised by the 'intrusion' under the imputability assessment of factors that should instead have been considered relevant only when examining the relevant measures under other constituents of the State aid control analysis.

Notwithstanding the above considerations, the *Stardust Marine* judgment has certainly represented a step forward. First of all – not without exceptions – it has granted a proper identity to the imputability element, which was previously either not properly addressed or conflated with the State resources element. Secondly, the parameters of imputability have proved to be perfectly fit to deal with more or less 'standard' cases which are not too complicated and are

[901] This has actually been acknowledged with respect to other indicators also by AG Jacobs in the Opinion he has delivered in the case (See, Opinion of Advocate General Jacobs of 13 December 2001 in Case C-482/99, *Stardust Marine*, *cit.*, para. 67), notwithstanding that his Opinion represents the greatest source of inspiration for the *Stardust Marine* judgment and the list of indicators provided therein. *Contra*, Hancher L. (2003) Case C-482/99, *French Republic* v. *Commission* ("Stardust Marine"), judgment of the full court of 16 May 2002. *Common Market Law Review* **40**(3) 739–751. The author clearly evidences and develops on the relevant overlap but explains also how, in her view, the outcomes of the assessments of the very same factors under the imputability and economic advantage tests might diverge given that these tests are directed to the conduct of different subjects, *i.e.*, respectively, the State and the undertaking or financial institution concerned. However, in our opinion, this would render the existence of two tests addressing the same issues even more confusing and would require the competent European Institutions to reconcile the different outcomes of the two tests in some way, the main goals always being legal certainty, transparency and coherence.

[902] Indeed, the transactions under scrutiny have to be subsequently evaluated under the well-established case law on the market investor principle or one of its progeny (*i.e.* the market debtor test, the market creditor test, etc.). See, for instance, Case T-196/04, *Ryanair Ltd v. Commission*, [2008] II-3643, paras 53, 63 and 101-103, where the General Court has held that the measure under scrutiny, which was certainly imputable to the State, would have probably not met the economic advantage criterion had the Commission properly applied the market investor test.

not characterised by peculiarities not envisaged by the Court in the case.[903] This holds true also with respect to several energy-related measures that, by following the *Stardust Marine* jurisprudence, the European Institutions have found to be attributable to the States concerned. To be fair, however, this outcome has come about mainly as a result of the fact that, in the very same period in which the *Stardust Marine* judgment was rendered, the liberalisation and privatisation process of electricity and gas markets has started properly, with the consequences thereon in terms of the more proactive approach of the European Institutions in controlling the conduct of the numerous public undertakings that still operate in and preside over the energy sector.

Examples obviously include several decisions on preferential energy tariffs. For instance, the Commission has recently attributed to the State certain tariffs applied by EDF to large and medium-sized consumption sites of non-household customers.[904] Actually, in this case it was not that difficult to establish State imputability. Indeed, first of all, EDF was a public enterprise where the French State held the vast majority of capital shares. Moreover, the financial mechanisms under scrutiny were established and implemented by laws and regulations, the tariffs' levels were set by ministerial decree, and EDF was required to apply the mentioned statutory and regulatory decisions.[905] Another example is provided by the more peculiar *Aluminium of Greece* case.[906] The measure in question was the low electricity tariff applied in 2007 and 2008 to Aluminium S.A. by the Public Power Corporation (PPC), a State-owned company. The Commission did not base its finding on State imputability simply on PPC's

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[903] Examples include, Case T-613/97, *Union française de l'express, DHL International SA, Federal express international SNC and CRIE SA v. Commission* (*Ufex II*), [2006] ECR II-153; Case T-8/06, *FAB Fernsehen aus Berlin GmbH v. Commission*, ECLI:EU:T:2009:386; Case T-442/03, *SIC v. Commission*, [2008] ECR II-1161; Case T-384/08, *Elliniki Nafpigokataskevastiki AE Chartofylakeiou, Howaldtswerke-Deutsche Werft GmbH and ThyssenKrupp Marine Systems AG v. Commission*, ECLI:EU:T:2011:650; Case T-387/11, *Nitrogénművek Vegyipari Zrt v. Commission*, ECLI:EU:T:2013:98; Case T-305/13, *SACE and Sace BT SpA v. Commission*, ECLI:EU:T:2015:435; Joined Cases T-186/13, T-190/13 and T-193/13, *Netherlands and Others v. Commission, cit.*; Case T-507/12, *Slovenia v. Commission*, ECLI:EU:T:2016:35. Apart from the *SIC v. Commission* case – where the measure did not evidently satisfy the imputability condition – the measures at issue in these cases have been found to be clearly attributable to the State on the basis of the direct and/or indirect indicators provided in the *Stardust Marine* judgment.

[904] Commission Decision of 12 June 2012, State aid SA.21918 (C 17/07) (ex NN 17/2007), *Tarifs réglementés de l'électricité en France*, OJ 2012 C398/10.

[905] *Ibidem*, paras 124-126.

[906] Commission Decision of 13 July 2011, State aid SA.26117 (C 2/2010) (ex NN 62/2009), *Aluminium of Greece*, OJ 2012 L166/83. The Decision has been annulled by the General Court only on the ground that the Commission has classified the aid as 'new aid' instead of 'existing aid' (see, Case T-542/11, *Alouminion AE v. Commission*, ECLI:EU:T:2014:859). The General Court's judgment is now under appeal before the Court of Justice (Case C-590/14 P, *DEI v. Alouminion tis Ellados and Commission*, n.y.p.).

strong organic links with public authorities and on other elements that evidenced that PPC could not have applied the tariff at issue without taking into account the requirements of the Greek Ministry of Environment, Energy and Climate Change.[907] The main relevant element for State imputability was, in fact, considered to be the circumstance that the decision to prolong the reduced tariff was adopted by a domestic court;[908] hence, by a body of the State.[909]

The imputability requirement has also been properly addressed in some PPAs cases. In that regard, we recall that PPAs are long-term contracts usually concluded in the context of energy market privatisation processes led by the States. Moreover, they are normally entered into by electricity generators with a State-owned company which undertakes, *inter alia*, to purchase a fixed quantity of the electricity generated by the companies concerned at a fixed price for several years.[910] Hence, the circumstances in which they are signed normally require the involvement of the State. Nonetheless, for example in its famous decision on the *Polish PPAs & Stranded Costs Compensations* case, the Commission has rightly provided an exhaustive assessment of the relevant measures under the attributability criterion according to the *Stardust Marine* jurisprudence.[911] The fulfilment of the imputability condition has been, thus, established on the basis of several factors: the Polish electricity network operator at issue was a company entirely owned and controlled by the Treasury, whose Minister had the full authority of the general assembly of shareholders. The Polish Ministry of Industry and Trade had launched and was involved in the procedure that led to the conclusion of the PPAs. Public authorities were involved defining the basic rules governing these agreements. The Polish electricity regulator retained the right to review the prices and reject excessive or unjustified

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[907] More precisely, the Greek State is the majority shareholder of PPC, can appoint the majority of the members of its board, and is directly represented by the Greek Ministry of Environment, Energy and Climate Change, which has, in turn, supervisory powers over the company.

[908] Indeed, the preferential tariff in question was among the privileges granted by the Greek State to the company's predecessor at its establishment and was due to expire in 2006. However, Aluminium SA challenged the termination of the preferential rate by PCC before a Greek first instance court, which, in turn, ordered PPC to resume the preferential rate pending a judgment on the substance.

[909] Commission Decision of 13 July 2011, State aid SA.26117 (C 2/2010) (ex NN 62/2009), *Aluminium of Greece*, *cit.*, para 28.

[910] For an in-depth critical analysis of the most relevant PPAs under the State aid regime see Hancher L. (2011) 'Long-term Contracts and State Aid: A New Application of the EU State Aid Regime or a Special Case?', in Glachant J-M., Finon D., de Hauteclocque A. (eds) *Competition, Contracts and Electricity Markets: A New Perspective*. Cheltenham: Edward Elgar Publishing.

[911] Commission Decision of 25 September 2007, State aid C 43/2005 (ex N 99/2005), *Polish PPAs & Stranded Costs Compensations*, OJ 2009 L83/1. The Commission Decision on the Polish PPAs also addresses the stranded costs compensation scheme notified by Poland for Commission's approval, which was aimed at compensating electricity generators for the termination of PPAs. We will address this and similar schemes in the next chapter.

charges.[912] Finally, although in our view this element should not be relevant for establishing imputability, the Commission also took into consideration the fact that the Polish government admitted in the comments it submitted that the PPAs were signed for, *inter alia*, security of supply and energy infrastructures' modernisation objectives.[913]

The issue of the imputability of public undertakings' conduct to the State has also arisen with respect to the CRM addressed in the *Latvian CRM* case.[914] The measure under scrutiny in the case was financial support in the form of ten-year capacity payments to be awarded to the winner of a tender for the construction and operation of new base-load capacity in the form of a solid fuel or LNG thermal power plant.[915] In finding that the measure was attributable to the State the Commission expressly recalled the *Stardust Marine* judgment.[916] Indeed, it noted that, although the financial support was to be provided by the TSO and the funds necessary to finance the measure were to be raised through parafiscal charges imposed on Latvian transmission system users by the very same TSO, the TSO was publicly owned. It was, in fact, a 100 per cent subsidiary of the State-owned electricity utility.[917] Moreover, all the rules and conditions disciplining the parafiscal tariff system and the following payments to the beneficiary were set up by the State.[918]

However, less clear-cut cases provide evidence of how certain shortcomings of the *Stardust Marine* judgment might have an impact on the assessment of energy-related measures. Indeed, the main general problem of this judgment is that the actual standard of proof necessary for establishing imputability has not been provided. The Court has, in fact, left open a number of questions in that respect. It is, for instance, unclear what precisely the Commission has to prove

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[912] *Ibidem*, paras 168, 176-182.

[913] *Ibidem*, para. 178.

[914] Commission Decision of 14 June 2010, State aid N 675/2009, *Tender for Aid for New Electricity Generation Capacity (LV)* (*Latvian CRM*), OJ 2010 C213/1. For further details on the case see, Van de Casteele K. (14 June 2010) The European Commission authorizes aid that Latvia intends to grant by way of tender for the construction and operation of a 400 MW thermal power plant. *e-Competitions Bulletin Energy & State Aids*, Art. N° 70733.

[915] *Ibidem*, para 2. Capacity payments mechanisms are the simplest types of CRMs that have so far been put in place in the EU to ensure an adequate level of security of supply. They are price-based CRMs, where pre-determined fees – fixed or variable – are set up by the regulator and paid to providers of new generation capacity for a certain number of years. See, further, ACER (2013) *Report on Capacity Remuneration Mechanisms and the Internal Market for Electricity*, para. 3.5. and Annex A, section A.5. available at http://www.acer.europa.eu/official_documents/acts_of_the_agency/publication/crms%20and%20the%20iem%20report%20130730.pdf.

[916] See, Commission Decision of 14 June 2010, State aid N 675/2009, *Latvian CRM*, *cit*., para. 18 and footnote 8.

[917] *Ibidem*, paras 12 and 18.

[918] *Ibidem*.

regarding most of the indirect indicators provided thereunder, the minimum level of State involvement required, which indirect indicators can be considered sufficient to discharge the burden of proof and which should instead be reinforced by other indirect and/or direct indicators, the intensity of the Court's review, etc.[919] As a result, the following EU decisional practice has sometimes provided divergent and weird outcomes.

A clear example is represented by a very complex case concerning a package of measures to support the rescuing and restructuring of British Energy (BE). In its decision on the case the Commission also analysed the renegotiation of prices and other arrangements under the fuel supply and spent fuel management contracts concluded by BE and British Nuclear Fuel Limited (BNFL).[920] Since BNFL was a publicly owned nuclear fuel processing company and the UK Government was its sole shareholder, the Commission had to assess whether BNFL's interventions in BE's restructuring plan were imputable to the State. In doing so it rightly recalled all the principles and criteria established by the Court in *Sturdust Marine*.[921] However, none of these criteria have been addressed in concrete terms by the Commission. Indeed, no assessment of the elements delineating the relationship between the UK Government and BNFL in the period in which the contracts were renegotiated has been provided. Only two, in our view immaterial, arguments have been, in fact, put forward to conclude that the new contractual arrangements between BNFL and BE could not be attributed to the State. Interestingly enough, these arguments are emblematic of how 'elastic' certain principles and indicators provided by the CJEU in *Sturdust Marine* might be. The first one was based on a chronological analysis of certain facts: the Commission found that the circumstance that BNFL decided to make concessions to ensure the ongoing solvency of BE before the UK government took part in the restructuring plan was enough to evidence that the latter did not instigate the publicly controlled company to behave as it did.[922] Interestingly, this fact can be also interpreted in the opposite way and might simply be considered as confirmation that, in an effort to work out BE's solvency problems, the UK government undertook the two following attempts: at first it thought that the intervention of BE's largest creditor, BNFL, was enough. As this was not the case, it

[919] With that respect, see also, Colin-Goguel C. (2003) Le Caractère Public d'un Avantage en Droit Communautaire: Après les Arrêts PreussenElektra et Stardust. *Competition Policy Newsletter* **3**(Autumn) 26-32.

[920] See, Commission Decision of 22 September 2004, State aid C 52/2003 (ex NN 45/2003), *Aid in favour of British Energy PLC* (*British Energy*), OJ 2005 L142/26, paras 48 ff.

[921] *Ibidem*, para. 293.

[922] *Ibidem*, para. 294.

then announced its involvement in the restructuring plan. The fact – also put forward by the Commission to reinforce its view – that BNFL did not agree to participate in the restructuring plan before the UK government announced its involvement[923] might be simply interpreted as proof of the strong connection between the public authorities and the public undertaking, which was well aware of the government's intentions. Otherwise it might simply be the consequence of the increasing financial difficulties BNFL was facing at the time.[924] Of course, these are only conjectures. However, they help us to highlight how the Commission's appraisal of the measure in question under the attributability requirement has been not only deficient but also defective. Turning to the second argument the European Institution has relied on to exclude State imputability in the case, it has stressed that, according to UK law, BNFL's directors were obliged to act in the best commercial interests of BNFL.[925] This is actually not surprising because any public undertaking should, in principle, act in such way. In any event, this is an element the Commission should properly analyse when addressing a measure under the market investor test.[926] Moreover, it says nothing regarding the influence that public authorities might have exercised over BNFL at the time of the relevant renegotiation.

The *British Energy* decision might be contrasted, for instance, with the *Hungarian PPAs* case.[927] Indeed, in this case the assessment of the relevant contracts under the attributability criterion was even too detailed.[928] This notwithstanding, it is not that difficult to establish State imputability in PPA cases, as we have already explained. Actually, as we shall see, in the *Hungarian PPAs* decision the Commission seemingly considered that, in order to rule that the

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[923] *Ibidem*.

[924] It is, indeed, noteworthy that the UK government started BNFL's divestment process in those years.

[925] *Ibidem*, para. 295.

[926] Actually the Commission complied with its duty in that respect also in this case: see, *ibidem*, paras. 258 ff.

[927] Commission Decision of 4 June 2008, State aid C 41/2005 (ex NN 49/2005), *Hungarian PPAs*, OJ 2009 L225/53. At the time, the Hungarian government had not made any provision for future stranded costs compensations. Indeed, unlike the Polish similar decision, the *Hungarian PPAs* decision had been subject to four separate appeals, which did not target the Commission's imputability assessment, however. In 2009, though, the Hungarian government announced a scheme aimed at compensating those companies whose PPA contracts were terminated following the former negative decision rendered by the Commission in the Hungarian PPAs case. See, Commission Decision of 27 April 2010, State aid N 691/2009, *Hungarian Stranded Cost Compensation Scheme*, OJ 2010 C213/2.

[928] *Contra*, Wollmann H. (2015) Long-Term Power Purchase Agreements and Market Liberalization – Annotation on the Judgments of the General Court of 30 April 2014 in the cases Tisza Erömü (T-468/08) and Dunamenti Erömü (T-179/09). *European State Aid Law Quarterly* **14**(2) 284-290. The author criticises, *inter alia*, the findings on imputability in the General Court's judgment – that has, in turn, confirmed the Commission's reasoning by stating that they were based only on one immaterial argument. See, Case T-468/08, *Tisza Erőmű kft v. Commission*, ECLI:EU:T:2014:235, paras 168-179.

imputability condition was met, it had to provide direct evidence of the actual involvement of the public authorities in adopting the specific measures under scrutiny, a requirement that the Court explicitly excluded in the *Stardust Marine* judgment.[929] It was, apparently, not sufficient that the 'single buyer' was a 99.9 per cent State-owned electricity wholesaler and that its board of directors was in practice elected by the State. Nor it was enough, as additional evidence of State imputability, that the mentioned board exclusively followed the directives of the State. Actually, with respect to the PPAs under scrutiny, these directives were even expressed in governmental decrees, government decisions and guidelines by public authorities. The Commission seems to have considered even the circumstance that the PPAs were the result of National Power Plant Construction Plans, which the concerned electricity wholesaler was required by law to submit to the Hungarian government and parliament and to put into effect after their approval, as not sufficient for a finding of State attributability.[930] It in fact expressly alleged that, in order to establish imputability, it was still necessary to examine in detail the process of concluding the PPAs.[931] Hence, went through a long and in-depth assessment of this process, thereby providing direct evidence of the actual involvement of several public authorities, regulators and governmental bodies in the adoption and successive revisions of the contracts under scrutiny.[932] Moreover, the Commission stressed in several paragraphs that the State-owned electricity wholesaler was required by law to ensure the security of supply at least cost, the restructuring of the power sector and the modernisation of energy infrastructures, and that the relevant PPAs were signed by the mentioned undertaking for pursuing these objectives.[933] In this way, the Commission has also taken into account the policy and economic intentions underlying the contracts under scrutiny, which are elements that should be considered relevant only when addressing aid measures under the compatibility assessment. Indeed, under appeal, the General Court has found itself trying to justify the Commission's

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[929] See, Case C-482/99, *Stardust Marine*, *cit.*, paras 53-54.

[930] See, Commission Decision of 4 June 2008, State aid C 41/2005 (ex NN 49/2005), *Hungarian PPAs*, *cit.*, paras 293-295, 297-303, and 306.

[931] *Ibidem*, para. 292.

[932] *Ibidem*, paras 297-316. In brief, the process started at the initiative of the government and was entirely regulated by governmental acts. The entire procedure for the preparation of the PPAs was led by the Hungarian electricity regulator and several Ministries, governmental bodies and public authorities. The latter were also involved in the adoption of guidance on the drafting of the PPAs and the price setting mechanism, which was then also used to establish a uniform model of PPA in the following re-negotiation phase.

[933] See, for instance, Commission Decision of 4 June 2008, State aid C 41/2005 (ex NN 49/2005), *Hungarian PPAs*, *cit.*, paras 294-296 and 304-305. This was actually specified by the Hungarian government in the comments it submitted during the State aid procedure.

attitude in that respect in some ways.[934] Unfortunately, it also then intruded on the area reserved for appraising the support measure under the economic advantage criterion by addressing the consistency of the electricity wholesaler's behaviour with that of a private market operator as part of the imputability assessment.[935] This is a result that we have already envisaged when analysing certain indirect indicators provided in *Stardust Marine* and that can certainly be imputed to the CJ's overly inclusive attitude in this context.

Although the path undertaken by the Commission in the *Hungarian PPAs* and other cases might be ascribed to the fact that the CJEU had quashed some of its prior decisions on the ground that its statement of reasons concerning the imputability condition was inadequate,[936] an excess in the other direction might pave the way for dangerous outcomes. In our view, an example of how such approach can be taken to the extreme, and thus provide divergent outcomes with respect to similar energy support measures adopted by the very same public undertaking, is provided by the five decisions recently rendered by the Commission on certain long-term contracts signed by Hidroelectrica S.A. [937] Under these contracts the largest Romanian State-owned hydropower producer, Hidroelectrica S.A., had committed to selling electricity to several electricity traders and industrial clients at prices below market levels and purchasing it from two thermoelectricity producers at prices above market levels. So far, the only final decision that has been published is the decision on the last-mentioned electricity purchase agreements, where the preferential electricity tariffs at issue have been considered

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[934] See, Case T-468/08, *Tisza Erőmű kft v. Commission*, *cit.*, para. 173.

[935] *Ibidem*, para. 178.

[936] This was the case, for instance, iwth the judgment rendered by the General Court in Case T-68/03, *Olympiaki Aeroporia Ypiresies AE v. Commission* (*Olympiaki Aeroporia*), [2007] ECR II-2911, where the Commission's negative decision was annulled (See, Commission Decision of 11 December 2002, State aid C 19/2002 (ex NN 133/2000), *Aid granted by Greece to Olympic Airways*, OJ 2003 L132/1). The conduct under consideration in the case consisted, *inter alia*, of tolerating the persistent delay in the payment of different charges due by Olympic Airways to Athens International Airport – a private company of which 55 per cent was, however, owned by the Greek State. In finding that the imputability condition was satisfied in the case, the Commission recalled the *Stardust Marine*'s criteria and simply stated that the Athens International Airport was not autonomous financially, was funded by the State budget and that all the income derived from its activities was attributed to the State budget (see paragraph 210 of the Commission Decision). The General Court thus ruled that, in the absence of a specific analysis by the Commission in that respect, all those elements were not enough to impute to the State the Airport's indulgence or inertia (see paragraphs 312 to 318 of the Court's ruling).

[937] Commission Decision of 20 April 2015, State aid SA.33475, *Preferential tariffs in contracts between Hidroelectrica S.A. and thermoelectricity sellers*, OJ 2015 L275/46; Commission Decision of 12 June 2015, State aid SA.33451, *Preferential tariffs in contracts of Hidroelectrica SA with electricity traders*, n.y.p.; Commission Decision of 12 June 2015, State aid SA.33581, *Preferential tariffs in contracts of Hidroelectrica SA with industrial producers*, n.y.p; Commission Decision of 12 June 2015, State aid SA.33623, *Preferential electricity tariffs for ArcelorMittal Galați – Romania*, n.y.p; Commission Decision of 12 June 2015, State aid SA.33624, *Preferential electricity tariffs for ALRO Slatina – Romania*, n.y.p.

unlawful and incompatible aid.[938] The Commission has, indeed, found that the conclusion of the contracts under scrutiny in this case is attributable to the Romanian State.[939] However, it has stated that, according to the *Stardust Marine* jurisprudence, the strong organic links between Hidroelectrica S.A. and the Romanian authorities, and the control certainly exercised by these authorities over the public undertaking's operations, are not enough to establish State imputability.[940] Hence, it has again gone further to provide direct evidence of the actual involvement of the Romanian Ministry of Economy and Trade in the conclusion and maintenance in force of the contracts at issue and in the modification of the prices established thereunder.[941] A further element it has provided in support of its findings is the alleged lack of an economic rationale characterising the relevant decisions of Hidroelectrica S.A., an element that, in our view, should be addressed under the economic advantage criterion.[942] As per the other abovementioned four decisions, they have not been published yet.[943] However, the content of the pertinent press release raises questions as to the standard of legal proof used by the Commission with reference to the imputability requirement, which will hopefully be solved with the publication of the non-confidential decisions.[944] Indeed, from the few arguments available in the press release we might evince, first of all, that the European Institution has concluded that none of the sale contracts under examination involved state aid. With respect to three out of four decisions the Commission has apparently found that the concerned contracts fulfilled the imputability requirement,[945] probably on the same grounds provided with regard

[938] See, Commission Decision of 20 April 2015, State aid SA.33475, *Preferential tariffs in contracts between Hidroelectrica S.A. and thermoelectricity sellers*, *cit.*, paras 106-107 and 110.

[939] *Ibidem*, para. 100.

[940] *Ibidem*, paras 94 and 96.

[941] *Ibidem*, para. 97.

[942] *Ibidem*, paras 98 and 99.

[943] Commission Decisions of 12 June 2015 on State aid SA.33451, *Preferential tariffs in contracts of Hidroelectrica SA with electricity traders*, on State aid SA.33581, *Preferential tariffs in contracts of Hidroelectrica SA with industrial producers*, on State aid SA.33623, *Preferential electricity tariffs for ArcelorMittal Galați – Romania*, and on State aid SA.33624, *Preferential electricity tariffs for ALRO Slatina – Romania*, n.y.p.

[944] The relevant press release is available at http://europa.eu/rapid/press-release_MEX-15-5178_en.htm (accessed 30 October 2016)

[945] Commission Decisions of 20 April 2015 on State aid SA.33451, SA.33623 and SA.33624, *cit*. These decisions concern the contracts concluded by Hidroelectrica S.A. with several electricity traders and Romania's two largest industrial consumers of electricity, *i.e.*, ArcelorMittal Galaţi, the Romania's largest steel producer, and ALRO Slatina S.A., the only producer of primary and alloy aluminium products in Romania.

to the above addressed negative decision.[946] However, this was not the case regarding the contracts signed with two industrial producers,[947] which have been addressed in the fourth decision.[948] Hence, we should assume that the Commission has found no specific evidence of direct involvement by the Romanian Ministry of Economy and Trade in the conclusion of these two contracts. If this is the case, one might certainly argue that the outcome of the imputability assessment should not vary on the basis the existence of this kind of direct evidence, which is not even required according to the *Stardust Marine* jurisprudence.[949]

Given the shortcomings and problems we have detected regarding the Commission's assessment of certain more complex or less standard energy-related measures implemented by public undertakings, and the too strict approach it seems to have recently sometimes applied to the imputability question, we should now briefly turn back to the CJEU. The questions to be answered are, indeed, has the Court has provided further guidance on how the *Stardust Marine* jurisprudence should be applied in concrete terms to actions carried out by public undertakings? What is its position nearly fifteen years after its landmark judgment on the topic?

We do believe that, in order to answer such questions, it is sufficient to quote the recent judgment rendered by the CJ in the *Commerz Nederland* case.[950] Although this ruling does not deal with measures implemented to support the energy sector or energy-related activities and objectives, in our view it provides a 'clear' picture of the *status quo*. Moreover, it might have significant implications for the assessment of border-line or less clear-cut energy cases, which will progressively increase in number along with the liberalisation of the energy sector. More precisely, the measures under scrutiny in the *Commerz Nederland* case were certain guarantees provided by a port wholly owned by the municipality of Rotterdam. The latter actually appointed the members of the public undertaking's supervisory board, which was chaired by a municipal councillor whose approval was required for the provision of guarantees such as those

[946] The press release does not mention the imputability requirement with respect to the measures under scrutiny in these decisions. However, it seems that the Commission has ruled that these measures did not constitute State aid as they did not meet the economic advantage criterion.

[947] That is to say, S.C. Electrocarbon S.A. Slatina and S.C. ELSID Titu S.A.

[948] Commission Decisions of 12 June 2015 on State aid SA.33581, *cit*. From the wording of the press release we might infer that, according to the Commission, the measures under scrutiny in this decision met the economic advantage criterion.

[949] See, Case C-482/99, *Stardust Marine*, *cit.*, paras 53-54.

[950] Case C-242/13, *Commerz Nederland NV v. Havenbedrijf Rotterdam NV* (*Commerz Nederland*), ECLI:EU:C:2014:2224.

at issue in the case.[951] However, important circumstances pointed towards excluding the attributability of the measures under scrutiny to the municipality of Rotterdam: the port authority's sole director, who provided the contested guarantees, acted arbitrarily and disregarded the public undertaking's statutes by failing to seek the approval of the supervisory board. Moreover, he kept the provision of those guarantees deliberately secret because there were evident grounds for believing that the municipality of Rotterdam would have opposed the decision. Hence, he was forced to resign from his position and was convicted of criminal offences for his actions.[952]

That said, it is important to note that, in the author's view, this case clearly evidences that all the concerns we have so far raised with respect to the *Stardust Marine*'s parameters of imputability and the following Commission decision-making practice are concrete and still actual. First of all, the way the referring court has formulated its request for a preliminary ruling demonstrates that the path undertaken by the Commission in the above analysed energy decisions and other cases has certainly also generated doubts with regard to one of the clearest principles established in *Stardust Marine*,[953] *i.e.* that no evidence of the direct involvement of the public authority in the adoption of the measure is required to establish State imputability.[954] Secondly, it is important to highlight that, in the case under consideration, the Commission, the interested parties and the Advocate General have submitted that the existence of the above-listed organisational links tends to demonstrate the unlikelihood of public authorities not being involved in the provision of the guarantees at issue.[955] This corroborates the concerns we manifested when analysing the *Stardust Marine* judgment with regard to the dangerousness of

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[951] *Ibidem*, para. 15. As mentioned several times, the circumstance that the objective assigned to the publicly owned port by its statute was not simply that of a purely commercial undertaking is, in our view, immaterial for the purpose of establishing imputability.

[952] *Ibidem*, paras 18, 21, 22, 36 and 37.

[953] The referring court has, indeed, stated that two different interpretations could be provided of the Court's ruling in *Stardust Marine*, which, in turn, could generate two completely divergent outcomes with respect to the imputability question in the case at issue. Indeed, it has held that if the *Stardust Marine* ruling was to be interpreted to the effect that imputability can be inferred from a body of indicators evidencing that the public authority generally determines the decision-making process to be applied within the public undertaking for adopting measures like the contested ones, the measure at issue in the *Commerz Nederland* case was to be judged as attributable to the State. The opposite outcome would have, instead, resulted from an understanding of *Stardust Marine* as establishing that it is necessary to provide evidence that the public authority was involved in the adoption of the measure concerned in real and concrete terms. See, Case C-242/13, *Commerz Nederland*, *cit.*, paras 20-21.

[954] The Court has actually also confirmed this in the ruling under discussion. See, Case C-242/13, *Commerz Nederland*, *cit.*, para. 32.

[955] See, Case C-242/13, *Commerz Nederland*, *cit.*, para. 35, and Opinion of Advocate General Wathelet of 8 May 2014 in Case C-242/13, *Commerz Nederland*, *cit.*, para. 79.

the related vague assertion provided by the Court thereunder.[956] Unfortunately, the Court has confirmed its statement in that respect also in the *Commerz Nederland* ruling by endorsing the above-provided allegation.[957] Importantly, this simple assertion has granted the mentioned organisational links sufficient dignity to enable them to be juxtaposed and contrasted with the above-described strong factual evidence pointing towards excluding the involvement of the municipality of Rotterdam in providing the guarantees under consideration. As a result, although the Court has explicitly considered the last-mentioned circumstances relevant for addressing the imputability question, it has ruled that they were not enough to exclude State attributability in the case.[958] Hence, it left the *de facto* assessment of all the available elements to the referring court. This leads us to our last critical point: not is only the standard of proof required for establishing imputability still uncertain but the Court has never explained which direct or indirect indicators can be considered sufficient to exclude imputability. Neither has it taken the chance to clarify these issues in this case.[959]

The only certainty we are left with is that, given the structural reforms the EU energy market is going through, similar border-line and peculiar cases will surely arise before the national courts and the European Institutions with respect to energy-related measures, and their outcomes will be unpredictable.

5.3. Energy Aid Granted through Intermediaries: a Path Full of Obstacles towards the Reorganisation of Energy Markets

We have already explained in paragraph 1 of this chapter that, according to settled case law, private and public bodies might also play, in essence, the role of granting authorities. This is the case when the financial support in question has been conceived or imposed by a public authority but has then been granted by intermediate entities, established or designated by the

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[956] See, Case C-482/99, *Stardust Marine*, para. 56, where the Court has stated that "*any other indicator showing* […] *the unlikelihood of* [public authorities] *not being involved*" can be relevant under the imputability assessment.

[957] See, Case C-242/13, *Commerz Nederland*, *cit.*, para. 35.

[958] *Ibidem*, para. 39.

[959] *Contra*, Ghazarian L. (2015) Imputability to the State – Annotation on the Judgment of the Court of Justice of the EU of 17th September 2014 in Case C-242/13, Commerz Nederland NV v Havenbedrijf Rotterdam NV. *European State Aid Law Quarterly* **14**(2) 174-177, although the author recognises that the judgment has established a presumption of involvement that is very difficult to rebut.

State for administering it.[960] In all such situations the support measure certainly has to be considered imputable to the State. This now has important implications for the energy sector. Indeed, as we shall see, several energy-related support schemes devised by the Member States are now managed through intermediate bodies entrusted with operational, administrative and control tasks.

All the above seem easy statements. However, as we will later provide, in certain extreme or simply peculiar situations it is not that easy to establish whether the initiative for adopting the measure comes from the public authorities or from the granting intermediate entity. This is, for instance, the case where private law companies are appointed by concession to administer certain activities that then result in the granting of financial support.[961] Actually, if not properly interpreted and defined, the very term "initiative" might generate some confusion and cause dangerous outcomes. This is clearly evidenced by certain borderline cases, not related to the energy sector, where, in our view, private entities have played the role of granting authorities. We will exhaustively address these cases at the end of this subparagraph. Indeed, although the abovementioned problem has not so far invested energy-related support measures because they are usually clearly set by law, things will certainly change in the near future, once the EU energy market is fully liberalised, reorganised and, thus, the energy sector is more mature. Indeed, as we shall see, under the reading of the State initiative criterion provided in the leading *Pearle* case and in following judgments,[962] such as the *Doux Élevage* ruling,[963] the organisational model chosen by a Member State for the administration and development of certain sectors and activities does, actually, represent the key element for determining the applicability of the State aid control regime to such sectors and activities. Hence, imputability arguments might easily soon become the new safe haven for Member States to circumvent State aid rules with respect to energy support measures, also. It would be, in fact, enough for them to properly delegate their authority to corporative bodies or other entities entrusted either with the task of properly

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[960] Case 78/76, *Steinike & Weinlig*, *cit*. See, similarly, *ex plurimis*, Case 290/83, *Poor Farmers*, *cit.*, paras. 14; Case 57/86, *Greece v. Commission*, *cit.*, para. 12; Case C-303/88, *Eni-Lanerossi*, *cit.*, para. 11; Case C-379/98, *PreussenElektra AG v. Schleswag AG* (*PreussenElektra*), [2001] ECR I-2099, para. 58; Case C-126/01, *GEMO*, para. 23; Case C-345/02, *Pearle*, *cit.*, para. 34; Case T-136/05, *Salvat*, *cit.*, para. 139.

[961] For a recent problematic example with that respect see, Case T-182/10, *Associazione italiana delle società concessionarie per la costruzione e l'esercizio di autostrade e trafori stradali v. Commission* (*Aiscat*), ECLI:EU:T:2013:9.

[962] Case C-345/02, *Pearle*, *cit.*

[963] Case C-677/11, *Doux Élevage*, *cit.*

carrying out certain activities in the energy sector or with binding legal powers that allow them to pursue energy-related objectives.

Turning back to the energy-related measures so far addressed by the European Institutions where statutory-designated or established entities are entrusted with administrative tasks, we might first quote a number of decisions the Commission has adopted with respect to preferential tariffs granted to Italian energy-intensive industries. This is the case, for instance, for the *Terni*, the *Alcoa* and the *Portovesme, ILA & Euroallumina* decisions.[964] All the undertakings involved has been granted, for a long time, reduced electricity prices by Enel, a State-owned company.[965] Some changes, however, occurred over time. During the gradual liberalisation of the Italian electricity market Enel lost its monopoly position and, thus, the financial burden arising from the preferential tariff systems was transferred to electricity users. A parafiscal levy system to finance the measures was, therefore, established and the charges were obligatory, having been imposed by means of a decision of the Italian Electricity and Gas Authority implementing a national legislation. Although under the reformed preferential tariff schemes the companies concerned were charged the market price for the supply of electricity, they were then partially reimbursed through the revenues generated by the parafiscal levy system. Importantly, a public body, the Equalisation Fund for the Electricity Sector, was later appointed by decision of the Italian Electricity and Gas Authority to administer these schemes and their compensatory components in place of the local electricity distributors, on the basis of precise instructions laid down in the decisions of the Authority. As a result, the measures at issue in the *Terni*, *Alcoa* and *Portovesme, ILA & Euroallumina* were considered imputable to the State.[966]

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[964] Commission Decision of 20 November 2007, State aid C 36/A/2006 (ex NN 38/2006), *State aid in favour of ThyssenKrupp, Cementir and Nuova Terni Industrie Chimiche* (*Terni*) OJ 2008 L144/37; Commission Decision of 19 November 2009, State aid C 38/A/2004 (ex NN 58/2004) and C 36/B/2006 (ex NN 38/2006), *Preferential electricity tariff in favour of Alcoa* (*Alcoa*), OJ 2010 L227/62, where the prior Commission Decision to initiate the formal investigation procedure was upheld by both the General Court in Case T-332/06, *Alcoa Trasformazioni Srl v. Commission*, 2009 II-00029, and the CJ in Case C-194/09 P *Alcoa Trasformazioni, cit.*; Commission Decision of 23 February 2011, State aid C 38/B/2004 (ex NN 58/2004) and C 13/2006 (ex N 587/2005), *Preferential electricity tariff in favour of Portovesme, ILA & Euroallumina* (*Portovesme, ILA & Euroallumina*), OJ 2011 L309/1, upheld on appeal in Case T-308/11, *Eurallumina SpA v. Commission*, ECLI:EU:T:2014:894, and Case T-291/11, *Portovesme Srl v. Commission*, ECLI:EU:T:2014:896, the latter now, in turn, under appeal before the CJ in case Case C-606/14 P, *Portovesme v. Commission*, n.y.p., for issues other than the imputability question.

[965] See, in that respect, the assessment of the *Alumix* case we provided in the previous paragraph.

[966] See, Commission Decision of 20 November 2007, State aid C 36/A/2006 (ex NN 38/2006), *Terni, cit.*, paras 101-107; Commission Decision of 19 November 2009, State aid C 38/A/2004 (ex NN 58/2004) and C 36/B/2006 (ex NN 38/2006), *Alcoa, cit.*, paras 160-179; and Commission Decision of 23 February 2011, State aid C 38/B/2004 (ex NN 58/2004) and C 13/2006 (ex N 587/2005), *Portovesme, ILA & Euroallumina, cit.*, paras 118-137. For an analysis of other important substantial and procedural elements of the *Alcoa* case and the related judgments see, Raimond E. (2014) Recovery of Unduly Received State Aids: The Court of Justice Remains (Too?)

Actually, in these cases, the fact that the legal basis for the tariffs was laid down in national legislation, in conjunction with decisions of the Authority, which is a public body, was enough to establish imputability. Indeed, in its preliminary ruling on the *AEM* case the CJ had already raised no doubt about the fulfilment of the attributability requirement by a measure administered by the Equalisation Fund for the Electricity Sector but established by decree.[967] More precisely, the support measure at issue imposed an increased charge on undertakings generating and distributing electricity from hydroelectric or geothermal installations for access to and use of the national electricity transmission system, in order to offset the advantage created for those undertakings by the liberalisation of the market in electricity. The same holds true with respect to the stranded costs compensation system at issue in the General Court ruling in the *Iride* case, which was set out in a series of national legislative provisions and where the mentioned Equalisation Fund was in charge of handling the related financial flows through a special account opened for that purpose by decision of the Electricity and Gas Authority.[968]

It is, however, in the *Essent* judgment that the Court has actually, under the imputability assessment, contrasted the stranded cost compensation mechanism under scrutiny with the measure at issue in the problematic *Pearle* case.[969] Although we will analyse the *Pearle* judgment at a later stage, it is worth noting that, according to the CJ, the elements that differentiated the two cases mainly consisted in the legislative nature of the intermediate body. Indeed, the entity in charge of the collection and redistribution of the revenues arising from the price surcharge imposed by national law on purchasers of electricity was a statutory-designated company which was not entitled to use the relevant proceeds for purposes other than those provided for by Dutch law.[970] Interestingly, a few months after the *Doux Élevage* judgment was rendered, the Commission found itself confronting the Court's findings on imputability in this

Inflexible. *European State Aid Law Quarterly* **13** (2) 331-335.

[967] Joined Cases C-128/03 and C-129/03, *AEM*, *cit.*

[968] See, Case T-25/07, *Iride and Iride Energia v. Commission* (*Iride*) [2009] ECR II-245, which upheld the Commission Decision of 8 November 2006, State aid C 11/2006 (ex N 127/2005), *Stranded costs for the municipalizzate*, OJ 2006 L366/62, and was, in turn, appealed. The appeal was then dismissed by Order of the Court of 21 January 2010, which, however, did not touch on the paragraphs pertaining to the State origin question (Case C-150/09 P, *Iride SpA and Iride Energia SpA v. Commission*, ECLI:EU:C:2010:34).

[969] Case C-206/06, *Essent*, *cit.* Actually, the Commission had already found itself having to distinguish, when addressing several measures under the imputability element, the *Pearle* judgment from the cases under scrutiny. Examples include Commission Decision of 1 December 2004, State aid N 490/2000, *Italian Stranded Costs*, OJ 2005 C 250/10, Commission Decision of 22 September 2004, State aid N 161/2004, *Portugal Stranded Costs*, OJ 2005 C 250/9, Commission Decision of 24 April 2007, State aid C 7/2005 (ex NN 80/2004), *Slovenian FIT & FIP scheme*, OJ 2007 L219/9.

[970] *Ibidem*, para. 73.

judgment and in the *Pearle* rulings when addressing the infrastructure aid measure at issue in the *Lithuania LNG terminal* case.[971] A package of investment and operating measures had been, in fact, implemented for defraying the costs of the company responsible for the construction and operation of the Klaipeda LNG terminal, which was necessary to ensure security of supply of natural gas in Lithuania. The TSO – which at the time was under the private ownership of AOA Gazprom and E.ON Ruhrgas – was entrusted with operational and administrative duties with respect to one of the elements of the mentioned package, the LNG Supplement, *i.e.* a levy imposed as a supplement to the natural gas transmission price.[972] In that respect the Commission found that, in contrast to the *Pearle* and *Doux Élevage*judgments, the LNG Supplement did not result from a TSO initiative but from the State and served to finance a policy of the State.[973]

The Court's analysis under the attributability criterion in the *Vent De Colère* judgment rendered in the very same year was, though, more straightforward.[974] The measure under consideration was a mechanism established by law for offsetting in full the additional costs incurred by certain distributors due to a statutory obligation to purchase wind-generated electricity at a price higher than the market price. That mechanism consisted essentially of compulsory contributions imposed on final consumers of electricity and managed by the Caisse des Dépôts et Consignations (CDC), a public body appointed by the State.[975] Regarding State imputability, the CJ simply stated that the requirement was fulfilled because the offset mechanism in question was established by law.[976] This has led some scholars to fill the gap by confronting the measure under scrutiny in *Vent De Colère* with those in question in *Doux Élevage*.[977]

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[971] Commission Decision of 20 November 2013, State aid SA.36740, *Aid to Klaipėdos nafta – LNG terminal* (*Lithuania LNG terminal*), OJ 2016 C161/2, now under appeal in Case T-417/16, *Achemos Grupė and Achema v. Commission*, but for issues related to the compatibility assessment.

[972] *Ibidem*, paras 46 ff.

[973] *Ibidem*, para. 96.

[974] Case C-262/12, *Vent De Colère, cit.* See, with that regard, Sánchez Graells A. (19 December 2013) The EU Court of Justice rules that a mechanism for offsetting in full the additional costs imposed on undertakings because of an obligation to purchase wind-generated electricity at a price higher than the market price is imputable to the state (Association Vent De Colère / Ministre de l'Écologie). *e-Competitions Bulletin Energy & State Aids*, Art. N° 70762.

[975] *Ibidem*, paras 11-14.

[976] *Ibidem*, para. 18. See, in the same vain, Case C-275/13, *Elcogás SA v Administración del Estado and Iberdrola SA* (*Elcogás*), ECLI:EU:C:2014:2314, para. 23.

[977] See, *inter alia*, Clayton M., Segura Catalan M. (2015) The Notion of State Resources: So Near and yet so Far. *European State Aid Law Quarterly* **14**(2) 260 – 270.

Only recently has the CJEU properly clarified the required intensity of review under the imputability condition with respect to energy-related aid granted through intermediary bodies established or appointed by the State, in general, and statutory-designated private entities, in particular. In the *Austrian Green Electricity Act 2008* case,[978] in fact, the General Court not only upheld the Commission's finding that this condition was satisfied by the regime under scrutiny[979] but further developed on it. Two measures were addressed by the Court under the attributability criterion in the case.[980] The first one consisted of a revision of the FIT scheme previously established by the *Austrian Green Electricity Act 2003*.[981] Under the new FIT mechanism the parafiscal levy – which had already been instituted by the Austrian legislature for financing the costs of the purchase obligation – was managed by a private law entity appointed by concession, the ÖMAG. Acting as a settlement centre, the latter was in charge of buying the entire production of green electricity, at a price fixed each year by the competent Austrian minister. Electricity suppliers were then bound to purchase all the green electricity from the ÖMAG at a price also set by the minister but were allowed to pass on to their customers the additional costs which they thereby incurred.[982] However, the increase in retail prices due to the funding support of RES-e had already caused, under the previous regime, the competitiveness and carbon leakage concerns that we have addressed in Part II of this doctoral thesis. Hence, in order to deal with these issues, the *Austrian Green Electricity Act 2008* introduced a second measure: a compensation mechanism to the advantage of energy-intensive

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[978] Case T-251/11, *Austrian Green Electricity Act 2008*, *cit*.

[979] See, both Commission Decision of 22 July 2009, State aid N 446/2008, *The Austrian Green Electricity Act – Aid to the Producers of Green Electricity and Aid to Large Electricity Consumers* (*Austrian Green Electricity Act 2008 – FIT* scheme), OJ 2009 C217/12, and Commission Decision of 8 March 2011, State aid C 24/2009 (ex N 446/2008) *State aid for energy-intensive businesses under the Green Electricity Act in Austria* (*Austrian Green Electricity Act 2008 – EIUs*, OJ 2011 L235/42.

[980] In reality, only the exemption mechanism for energy-intensive businesses formed the subject-matter of the action that led to the General Court's judgment. However, the Court considered that this mechanism had to be analysed against the background of the overall structure of the energy support regime provided for under the *Austrian Green Electricity Act 2008* (See, Case T-251/11, *Austrian Green Electricity Act 2008*, *cit*., para 32). Thus, in its assessment it also covered the elements of the Austrian measure that the Commission had already authorised. Indeed, in July 2009 the Commission had adopted a hybrid decision (see footnote above): while it approved the amendments to the previous Austrian FIT scheme under the 2008 EAG, it initiated the formal investigation procedure with respect to the newly established compensation mechanism for EUIs. At the end of this procedure it adopted a negative decision on the latter mechanism (see footnote above), which was challenged before the General Court. The Court in turn dismissed the action.

[981] As per the previous regime, see Commission Decision of 4 July 2006, State aid NN 162/A/2003 and State aid N 317/A/2006, *Support of electricity production from renewable sources under the Austrian Green Electricity Act (feed-in tariffs)* (*Austrian Green Electricity Act 2003*), OJ 2006 C221/8.

[982] For a detailed description of this RES-e support mechanism see Commission Decision of 22 July 2009, State aid N 446/2008, *Austrian Green Electricity Act 2008 – FIT scheme*, *cit.*, paras 6-29.

users, who therefore benefited from lower electricity prices, to be calculated by the ÖMAG according to parameters established by law.[983] Interestingly enough, the General Court in some ways ruled that State imputability is assumed with respect to measures like those under scrutiny, although the economic advantage is granted, in essence, by a private entity.[984] Actually, the Court stated that, since the energy support regime in question was instituted by law,[985] it was attributable to the State and there was no need to engage in further examination of the control exercised by public authorities over the company appointed by concession to administer the aid regime. More precisely, it explicitly specified that it was unnecessary to scrutinise indicators of imputability such as the legal status of the ÖMAG, the nature of its activities, whether it was integrated into the structures of the public administration or whether it was a State-controlled private entity.[986] For the sake of exhaustiveness the Court then went on to explain that all the above-listed and other indicators of imputability were present in the case.[987] This, however, does not change the relevance of the above-provided presumption of imputability.

We do not contest the outcome of the foregoing CJEU judgments and Commission decisions. Indeed, with respect to the relevant energy-related measures so far adopted, State initiative has always been evident because Member States still want to keep a high degree of regulatory power in the energy sector. However, this might change in the medium-short run. Also, the above case law and the arguments put forward by the interested parties in the cases prove that the most prominent issue has not been solved: the *Pearle* and *Doux Élevage* ghosts still flutter over our heads looking for some room to insinuate themselves into the assessment of energy support schemes. Room that, as mentioned, in the author's view they will certainly find as soon as the EU gas and electricity markets are sufficiently mature that the Member States are ready

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[983] For a detailed description of this exception mechanism favouring energy-intensive users see Commission Decision of 8 March 2011, State aid C 24/2009 (ex N 446/2008), *Austrian Green Electricity Act 2008 – EIUs*, *cit.*, paras 13-19.

[984] Generally speaking, initiatives by private entities that generate the same economic effects of aid arising from acts of public authorities do not meet the imputability requirement. Indeed, acts by private undertakings that might alter the conditions of competition within the EU borders can only be addressed under EU antitrust law.

[985] See, similarly, the Commission's more recent decision on the following Austrian Scheme: Commission Decision of 8 February 2012, State aid SA.33384, Austria Ökostromgesetz 2012 (*Austrian Green Electricity Act 2012*), OJ 2012 C156/1, para. 67.

[986] Case T-251/11, *Austrian Green Electricity Act 2008*, *cit.*, para 87.

[987] *Ibidem*. More precisely, the Court made reference to its previous assessment of the *Austrian Green Electricity Act 2008* under the State resources criterion to find that the ÖMAG was integrated into a structure regulated by law, which established the nature of its activities and how to exercise them, predetermined its scope for manoeuvre in the performance of its concession, and provided a system of *ex post* control over its activities by the competent public authorities. As a result, the ÖMAG could not in any case be regarded as a private operator acting freely in the market with a view to making profit.

– or will be forced, as a last step along the liberalisation path – to properly delegate their authority to corporative bodies or other entities. At that point the 'principles' established in judgments such as *Pearle*, *Doux Élevage* and *Aiscat* will certainly have an impact on the evaluation of measures fostering the energy industry.[988] Hence, given that our research purports to address the role that the State aid control regime should play in the energy sector, also and particularly in perspective terms, we shall now necessarily linger over these judgments.

The first case to be analysed is the landmark *Pearle* case.[989] The considerations we will make regarding the Court's reasoning in this judgment might have no impact on the final outcome of the case. However, they might provide grounds for reconsidering its standing and the findings of the CJEU in other judgments rendered on its basis, thus helping to avoid future dangerous mistakes. Indeed, it is no longer enough to hope – as many experts did – that the findings of the Court in *Pearle* were due and confined to the specific circumstances of the case.[990] The analysis of the recent jurisprudence proves, in fact, that this judgment may also have a negative impact on the assessment of less border-line cases. In *Pearle* the Court examined a levy imposed by a public law trade association on its members which was paid to this public body and earmarked to finance a collective advertising campaign for opticians' businesses.[991] The CJ, however, found that, since the levy and the campaign were both adopted at the request of a private association for opticians, the support measure had to be 'imputed' to this private entity.[992] Indeed, in its view, the public law trade association served merely as a 'vehicle' of private action, *i.e.* for levying and allocating the funds. The fact that the compulsory contributions were aimed at financing an initiative that, as predetermined by the trade association, had a purely commercial goal and did not pursue public policy objectives, was considered an additional element for rejecting the State imputability allegations.[993] First of all, it is worth noting that, as was put forward, in its judgment the Court appears to have implicitly considered that, in order to fulfil the imputability condition, evidence of the actual involvement of public authorities in

[988] Case T-182/10, *Aiscat*, *cit.*

[989] Case C-345/02, *Pearle*, *cit.*

[990] See, with that respect, Alain Alexis (2004) La Cour de justice précise les notions de ressources d'État et d'imputabilité à l'État: l'affaire Pearle BV. *Competition Policy Newsletter* **3**(Autumn) 24-29.

[991] *Ibidem*, paras 14-15. For an analysis of other aspects of the case see Gambaro E., Nucara A., Prete L. (2005) Pearle: So Much Unsaid!. *European State Aid Law Quarterly* **4**(1) 3-15.

[992] Case C-345/02, *Pearle*, *cit.*, para. 37.

[993] *Ibidem*.

the adoption of the specific measure under scrutiny is required.[994] However, this would fall foul of the explicit and properly reasoned statement it provided two years before in the *Stardust Marine* judgment.[995] Moreover, in our view, the measure in question was to be attributed to the public law trade association and not to the private association for opticians. Indeed, the fact that a measure is adopted by a public body at the request of a private entity does not mean that the 'initiative' comes from this entity for the purposes of the State aid regime.[996] Stating otherwise would, in fact, exclude *de jure* the fulfilment of the imputability conditions with respect to several kinds of aid measures, such as those adopted for the rescuing and restructuring of distressed undertakings.[997] As a result, the Court has erred in not addressing the relationship between the trade association and public authorities according to the *Stardust Marine*'s criteria and indicators. Of course, the circumstance that the Netherlands legislature had set up the trade association and conferred it with legally binding powers over the undertakings within the sector of activity concerned, including the power to impose mandatory levies on them,[998] would not be enough to establish imputability and other indicators would have to be considered.[999] However, as mentioned when analysing the negative effects certain *Stardust Marine*' criteria might have had on the future cases, the purposes for which these powers have been used – *i.e.*, public or purely commercial objectives – should not be among the relevant indicators of attributability. A similar approach would amount to endorsing a sort of 'reversed' rule of reason approach under the imputability assessment, and would conflict with the well-established objective nature of the concept of aid, the principle of the irrelevance of the aim the measure pursues and, thus, the effect-based approach.[1000] Moreover, if any, these features of the support measures are to be indirectly addressed in the context of the market investor test. Instead, all the arguments provided in *Pearle* about the lack of control by the State over the way the funds concerned were used are relevant only when addressing the measure in question under the State resources criterion. However, in its reasoning on the first condition for State aid the Court again

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[994] With that regard see, Hancher L. (2012) 'The General Framework', in Hancher L., Ottervanger T., Slot P.J. (eds) *EU State Aids, cit.*, at p. 71.

[995] See, Case C-482/99, *Stardust Marine, cit.*, paras 53-54.

[996] *Contra, inter alia*, Hancher L. (2004) A Pearl of Wisdom. *European State Aid Law Quarterly*, **3**(3) 363-364.

[997] See, with that respect, also Opinion of Advocate General Wathelet of 31 January 2013 in C-677/11, *Doux Élevage, cit*., para. 91.

[998] Case C-345/02, *Pearle, cit.*, paras 7-10.

[999] Hence, we do not even subscribe to the Commission's standpoint on the matter, as it inferred from these elements only that the measure was imputable to the State.

[1000] See, extensively in that respect, Chapter 2.

conflated the assessments under the two elements of this condition,[1001] with the problematic consequences already addressed in the previous paragraphs.

The *Pearle* jurisprudence has already brought about dangerous consequences with respect to measures adopted in sectors other than the energy sector. In the author's view this is clearly illustrated by the recent ruling delivered by the CJ in *Doux Élevage*.[1002] In this case the Court was invested with the imputability question with reference to a system of compulsory contributions which were levied by an inter-trade organisation for the purpose of financing common activities apparently decided on by that organisation. Taking a different view from that sustained by the Commission, and subscribing to the opinion of AG Wathelet,[1003] the Court put – only some of – the facts of the case to the test of the *Stardust Marine* and *Pearle* jurisprudence to conclude that the actions of the mentioned private entity could not be attributed to the State.[1004] As previously mentioned, the circumstance that the private-law association in question had been recognised as an inter-trade organisation by the competent administrative authority was certainly not enough to establish State imputability. However, according to the above-addressed jurisprudence on energy-related measures, the fact that the inter-trade agreement that introduced the contributions had been extended to and made mandatory for all traders in the industry concerned with the decisions of this administrative authority should have been considered enough for that purpose.[1005] Moreover, in this case there was no chain of control to be assessed according to the *Stardust Marine* criteria, as a direct intervention by the competent administrative authority had been necessary to make the industry contributions in question compulsory. Nonetheless, according to the Court, the above-provided elements were not sufficient to trace the contributions under scrutiny back to the State.[1006] In its view, in fact,

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[1001] This is clearly evidenced by the extensive body of articles by experts dealing with *Pearle* as a relevant judgment with reference to the State resources criterion, which has also led some of them to confront this judgment with the *PreussenElektra* ruling (see, *inter alia*, Kroes N. (2005) Reforming Europe's State Aid Regime. *European State Aid Law Quarterly* **4**(3) 387-390). However, we instead subscribe to those distinguished scholars and judges who have stated that the arguments put forward in the critical paragraphs 37 and 38 of the judgment pertain to the imputability requirement: see, Biondi A. (2006) Some Reflections on the Notion of "State Resources" in European Community State Aid Law, *cit.*, and Vesterdorf B. (2005) A Further Comment on the New State Aid Concept as this Concept Continues to be Reshaped: Pearle – A Further Piece of the State Aid Puzzle?. *European State Aid Law Quarterly* **4**(3) 393-399.

[1002] Case C-677/11, *Doux Élevage, cit.*

[1003] Opinion of Advocate General Wathelet of 31 January 2013 in Case C-677/11, *Doux Élevage*, *cit*., paras 63 ff.

[1004] Case C-677/11, *Doux Élevage, cit*., paras 33-44.

[1005] Please note that voluntary systems of levies, as they were initially in the system under scrutiny, do not generate any concern under State aid rules.

[1006] Case C-677/11, *Doux Élevage, cit*., para. 41.

the State had simply acted as a 'vehicle' in order to make the contributions in question compulsory, while the inter-trade organisation retained the initiative of levying them and directed the ensuing funds to its trade-related objectives rather than to public policy goals.[1007] In this respect we should, first of all, recall all what we have stated with reference to the *Pearle* case. Secondly, it is worth highlighting that several elements of the then applicable French legislation, which were not examined by the Court, pointed towards the conclusion that a dominant influence over the inter-trade organisation was generally and specifically exercised by the competent ministers and administrative authorities, which was, in essence, not at all free to not direct its efforts and the funds raised to specific public interest objectives.[1008]

As a result of the foregoing considerations, in the author's opinion the judgment rendered in the *Doux Élevage* case provides a clear example of how the reasoning in the *Pearle* ruling can lead to extreme consequences. Unfortunately, after struggling against the CJEU's attitude towards State imputability in border-line cases, the Commission finally endorsed it in a recent decision on a measure having the same features of the compulsory system addressed in *Doux Élevage*.[1009]

Interestingly enough, in the Opinion he delivered in the *Doux Élevage* case, AG Wathelet stated that the outcome of the case would have been "*different had the* [State] *had the possibility of making its favourable decision conditional upon the sums being used for activities specified by the public administration*".[1010] Unfortunately, however, this very last hope also seemed to vanish few months later, when the General Court rendered the *Aiscat* judgment.[1011] In this

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[1007] Case C-677/11, *Doux Élevage, cit.*, paras 36-40. See also Opinion of Advocate General Wathelet of 31 January 2013 in C-677/11, *Doux Élevage, cit.*, para. 90, where the Advocate General also considered that the facts of the case were quite similar to those of *Pearle*. For an in-depth analysis of the case see, Tomat F. (2014) State Resources and Imputability to the State: A Clarification on the Scope of the Pearle Judgment?. *European State Aid Law Quarterly* **13**(3) pp. 540-547, explaining also why *Doux Élevage* has not clarified the scope of *Pearle*.

[1008] Let us just give some examples: in order to apply for recognition as inter-trade organisations the consortia had to pursue certain listed public policy objectives which were, in fact, transposed in the constitution of the trade association in question. Inter-trade organisations had to contribute to the implementation of national and community economic policies and could enjoy priority in the allocation of public aid. Certain relevant agreements had to be notified to the competent minister and other authorities. Agreements such as those at issue in the *Doux Élevage* case could be extended and made compulsory by the competent authority only when they pursued certain public policy objectives. Certain public authorities could also be involved in the levying of certain contributions. Inter-trade organisations had reporting obligations, and the subsequent powers of control and of withdrawal of recognition the competent public authority could exercise were established by law (see, Case C-677/11, *Doux Élevage*, paras 5-15).

[1009] See, Commission Decision of 29 May 2015, State aid SA.39652, *Fonds de Promotion de l'Aquaculture et de la Pêche*, OJ 2015 C219/4.

[1010] Opinion of Advocate General Wathelet of 31 January 2013 in C-677/11, *Doux Élevage, cit.*, para. 69.

[1011] Case T-182/10, *Aiscat, cit.*

respect we should, first of all, note that this case is emblematic of the damaging effects on the State aid control system that might be generated by the tendency of the CJEU to start its analysis by addressing the measure in question under the State resources criterion.[1012] Indeed, in the *Aiscat* judgment the State resources condition took the lead and, after a not at all exhaustive assessment of the measure under this condition, the Court only stated that it was superfluous to examine the other constituents of the notion of aid because the first one was not satisfied.[1013] More precisely, it simply ruled that the measure under scrutiny did not pass the State character test because it involved a direct transfer of monies between private companies, without even considering whether the Italian public authority was actually exercising control over the relevant resources through the private entity it had appointed by concession to administer them.[1014] Hence, important elements that would have certainly indicated both the public origin of the measure and the public control over resources directed to public policy objectives were not even addressed. These include, first of all, the fact that the construction of the motorway section in question was decided by the Italian public authority to solve public policy issues.[1015] Secondly, the concession for building and managing the section was awarded to a private company by law, without a call for tenders. Thirdly, the duty to proceed with the payment of tolls, the amount of the toll applicable in the new motorway section and the toll level increase on the alternative motorways were set by law. Finally, the very same concession agreement provided that the mentioned increase served to finance the construction of the new section and that the related revenues were to be collected – as with the other tolls – by the abovementioned concessionaire, which otherwise would have had to pay for the works with its own monies.[1016]

[1012] The first, natural, element of the State origin criterion is, in fact, the imputability element. This also seems to be the opinion of the Commission, which rightly placed the section on the imputability requirement before the section on the State resources criterion in its recent Notice on the Notion of Aid. See, Notice on the Notion of Aid, *cit.*, sections 3.1. and 3.2. *Contra*, Vesterdorf B. (2005) A Further Comment on the New State Aid Concept as this Concept Continues to be Reshaped: Pearle – A Further Piece of the State Aid Puzzle?, *cit.*, who provides a four-step methodology to address the first condition for State aid, where the State resources criterion takes the lead and the imputability assessment become "*superfluous*" when the mentioned criterion is not met.

[1013] For a critical assessment of other problematic aspects of the case in terms of *locus standi* see, Heise S. (2014) Admissibility of Third Parties' Legal Actions in State Aid Cases: One Step Forward, Two Steps Back – Annotation on the Judgment of the General Court of 15 January 2013 in Case T-182/10 *Aiscat v Commission*. *European State Aid Law Quarterly* **13**(3) 574-581.

[1014] See, Case T-182/10, *Aiscat*, paras 102-107. In that respect see, extensively, Chapter 6.

[1015] Although, as mentioned, in the author's view the fact that a measure is directed to public policy goals should not be a relevant aspect to be taken into consideration when dealing with the imputability requirement.

[1016] See, Case T-182/10, *Aiscat*, *cit.*, paras 1-5 and 91-101.

What else should be provided for a measure to be imputable to the State and, actually, to constitute State aid?

Some scholars have alleged that cases such as *Pearle*, *Doux Élevage* and *Aiscat* are another signal of what seems to be the trend undertaken in the new millennium by the European jurisdiction with respect to the first condition for the applicability of Article 107(1) TFEU. These judgments are, in fact, 'consistent' with its line in the notorious *PreussenElektra* case.[1017] Hence, they might represent a further attempt by the CJEU to put an end, in a way or another, to the European Commission's extensive definition of aid.[1018] This should be a more than welcome goal. However, it should not be pursued randomly without following a clear pattern that establishes well-defined criteria and considers the impact each judgment might have on following rulings and different sectors. Otherwise the concept of aid will continue to be reshaped according to contingent needs and will increasingly become more complicated and uncertain.

The questions to be answered now are: how long will it take for the Member States to understand that pretending to lose some management powers with respect to energy support measures might mean gaining power in essence? How long will it take for the Member States to reorganise the energy sector in such a way that it is for private law entities to pursue energy-related objectives according to their articles of association or concession agreements with the required approval and under the control of the States?

[1017] Case C-379/98, *PreussenElektra*, *cit.*

[1018] For instance, this is the interpretation of the *Doux Élevage* judgment provided in Gadbin D. (2013) Les Contributions Volontaires Obligatoires Exclues du Contrôle des Aides d'État. *Revue de Droit rural* **416** pp. 56-59, and of the *Pearle* ruling provided in Hancher L. (2004) A Pearl of Wisdom, *cit.* As per a critical analysis of the *Aiscat* see, Clayton M., Segura Catalan M. (2015) The Notion of State Resources: So Near and yet so Far, *cit.*

Chapter 6

The Concept of State Resources: the Main Tool for Energy Aid to Escape Compatibility

6.1. The Path towards a Narrow Notion of 'State Control' and its Impact on Energy Support Measures

We have already mentioned that the State character of the measure continues to be the most controversial among Article 107(1)'s requirements when assessing domestic support regimes adopted in the energy sector. In this chapter we will focus on the more problematic and heavily disputed leg of the State character test, *i.e.* the State resources criterion. As we shall see, this criterion and the methodology embraced for its interpretation in fact have a decisive impact on the qualification of energy support measures as State aid. This is, first of all, due to the way energy financial mechanisms are frequently devised and framed by the granting authorities. Secondly, it is also a result of the general approach adopted by the competent European Institutions regarding the assessment of domestic measures under the other conditions for the applicability of Article 107(1) TFEU.

To the extent that the current official position of the CJEU, as provided in *PresussenElekra*, is that the transfer of State resources is a constituent element of the notion of State aid, and that the debate has been apparently put to rest, we will deal with the relevant controversy only at a later stage. We do, in fact, believe that a thorough evaluation of the EU jurisprudence of the last fifteen years on energy support measures, which we will enter into in paragraph 3, will provide straightforward answers to most of the complex issues raised by the experts who have been involved in the debate. In this paragraph we shall, therefore, address the main, general elements of the State resources criterion and highlight their impact on the energy sector. Indeed, this analysis will help us to understand the case law provided in paragraph 3.

The main question to be answered under the State resources criterion is whether the State – in its broad meaning –[1019] can exercise control over the funds used to finance the relevant support measure. The concept of control is, therefore, decisive for establishing whether certain

[1019] See, in that respect, Chapter 5, paragraph 1. See also, Notice on the Notion of Aid, *cit.*, para. 48.

financial means can be considered State resources. Hence, at least in principle, it is not the origin of the resources that impacts on the qualification of a measure as aid. However, the concept of control has been construed in both wide and narrow terms. Although this statement might seem contradictory, it will become apparent from the analysis provided in paragraph 3 that these two divergent trends in the case law represent precisely the cause of the problems addressed thereunder. We should, therefore, start with the elements of the concept of control that leave the competent European Institution an ample margin to show that the State resources requirement is met, and progressively address the principles that have been established by the jurisprudence to narrow down the broad reading of the notion of State resources.

In this respect we shall, first of all, mention that the required control over the resources used to fund support measures is certainly established when the advantage is financed *directly* from the State budget, *i.e.*, when the direct burden of financing a measure falls on the public sector.[1020] As we have seen in Chapter 2, the concept of *direct* involvement of State resources may take several forms. Moreover, no actual transfer is required. Indeed, according to settled case law, State resources are also involved when public authorities forego revenues that would otherwise have accrued to them. This is, for instance, the case for tax exemptions or reductions, waivers of penalties and the provision of assets, services, licences, concessions and access to activities at undervalue.[1021] The same holds true when the use of public resources is only *potential*, such as in the case of State guarantees, soft loans and announcements or promises of loans.[1022] As a result of the above principles, no doubts have ever arisen regarding the State aid

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[1020] The notion of the public sector has been construed in wide terms to include intra-State entities also, whatever degree of legal autonomy they enjoy. In that respect see, *inter alia*, Joined Cases 6/69 and 11/69, *Commission v. France*, *cit.*; Case 248/84, *Germany v. Commission*, *cit.*; Case T-358/94, *Air France*, *cit.*; Joined Cases T-228/99 and T-233/99 *Westdeutsche Landesbank Girozentrale and Land Nordrhein-Westfalen v Commission*, *cit.*; Case T-92/00 and T-103/00, *Diputación Foral de Álava v. Commission*, 2002 ECR II-1385; Case C-88/03, *Portugal v. Commission* (*Azores*), *cit.*; Joined Cases T-267/08 and T-279/08, *Région Nord-Pas-de-Calais and Communauté d'agglomération du Douaisis v Commission*, *cit.*

[1021] See, *inter alia*, Case C-387/92, *Banco Exterior de España*, *cit.*; Case C-404/97, *Commission v. Portugal*, [2000] ECR I-4897; Joined Cases T-204/97 and T-270/97, *EPAC v. Commission*, [2000] ECR II- 2267; Case C-390/98, *H.J. Banks & Co. Ltd v. The Coal Authority* (*Banks v. The Coal Authority*), [2001] ECR I-6117; Case C-83/98 P, *Ladbroke*, cit.; Case C-172/03, *Wolfgang Heiser v. Finanzamt Innsbruck* (*Heiser*), [2005] I-1627; Case C-279/08 P, *Commission v. Netherlands (Dutch NOx)*, [2011] ECR I-7671. *Contra*, Case C-518/13, *Eventech Ltd v. The Parking Adjudicator*, ECLI:EU:C:2015:9. As regards the wide range of tax incentives that might fall within the scope of State aid law see, Micheau C. (2014) *State Aid, Subsidy and Tax Incentives under EU and WTO Law*. The Hague: Kluwer Law International.

[1022] *E.g.*, Joined Cases C-62/87 and 72/87, *Exécutif régional wallon and SA Glaverbel v. Commission*, [1988] ECR 1573;Case C-387/92, *Banco Exterior de España*, *cit.*; Case T-16/96, *Cityflyer Express Ltd v. Commission*, [1998] ECR II-757; Joined Cases T-204/97 and T-270/97, *EPAC v. Commission*, *cit.*; Case C-275/10, *Residex Capital IV CV v. Gemeente Rotterdam*, [2011] ECR I-13043; Case C-672/13, *OTP Bank Nyrt v. Magyar Állam and Magyar Államkincstár*, ECLI:EU:C:2015:185; and Case T-384/08, *Elliniki Nafpigokataskevastiki AE Chartofylakeiou*,

nature of those energy support measures financed directly out of the public budget. This is certainly the case for reductions/exemptions from or compensation for energy/environmental taxes and regimes granted to certain energy market operators or end consumers.[1023] Other examples include direct investment aid for energy infrastructures and other energy-related projects,[1024] certain stranded costs compensation systems[1025] and capacity remuneration mechanisms,[1026] and some unusual FIP schemes where the premium is paid by energy market authorities.[1027]

On a final note we should highlight that the Commission has recently stated that a transfer of State resources is also present when the funds financing a given support measure are at the

Howaldtswerke-Deutsche Werft GmbH and ThyssenKrupp Marine Systems AG v. Commission, *cit.*; and Joined Cases C-399/10 P and C-401/10 P, *Bouygues SA and Bouygues Télécom SA v. Commission and Others* (*Bouygues*), ECLI:EU:C:2013:175.

[1023] Examples include Commission decision on 28 March 2001 State aid N 123/2000 (then, for one different aspect of the scheme, C 18/2001), *UK Climate Change Levy*, OJ 2001 C 185/22; Commission Decision of 1 August 2002, State aid NN 75/2002, *Aid to energy intensive companies*, OJ 2002 C309/3, and the following Decision on amendments to the scheme of 11 December 2002, State aid N 74a/2002, OJ 2003 C104/9; Commission Decisions of 23 April 2003, State aid N 466/2002, *Danish Electricity Production Grant I*, OJ 2003 C 175/8; Commission Decision of 9 November 2005, State aid N 602/2004, *Reorganisation Danish Electricity Sector*, OJ 2006 C21/6, only as regards the price supplement compensating RES for the CO_2 tax on electricity; Commission Decision of 21 December 2007, State aid N 567/2007, *Danish Electricity Production Grant II*, OJ 2008 C149/5; Commission Decision of 19 March 2003, State aid N 74/B/2002, *Aid to power plants*, OJ 2003 C148/11, and the following Commission Decision of 25 June 2007, State aid N 893/2006, *Amendment & Prolongation of Aid to Power Plants*, OJ 2007 C218/4; Commission Decision of 2 August 2016, State aid SA.37345, *Polish Green Certificates for RES-e and Reductions for EIUs*, n.y.p; Commission Decision of 25 November 2014, State aid SA.33995, *Support of renewable electricity and reduced EEG surcharge for energy-intensive users* (*EEG 2012*), OJ 2015 L250/122; Case T-251/11, *Austrian Green Electricity Act 2008*, *cit*.; Case T-172/14 R, *Stahlwerk Bous GmbH v. European Commission* (*Stahlwerk Bous*), ECLI:EU:T:2014:558

[1024] Examples include Commission Decisions of 21 June 2002, State aid N 75/2002, *Aid Scheme for the Energy sector*, OJ 2002 C271/3, and its Decision on following amendments to the scheme of 30 November 2007, State aid N 359/2007, OJ 2008 C16/1; Commission Decision of 28 November 2001, State Aaid N 504/2000, *UK Renewables Obligation and Capital Grants*, OJ 2002 C30/12; Commission Decisions of 11 September 2007, State aid N 6/2007, *Polish horizontal aid for investments related to RES*, OJ 2007 C298/5; Commission Decisions of 19 May 2009, State aid N 66/2009, *Swedish State aid scheme for solar cells*, OJ 2009 C160/2; Commission Decisions of 17 October 2012, State aid SA.33984, *UK Investment Bank*, OJ 2012 C 370/2.

[1025] Examples include Commission Decision of 25 July 2001, State aid N 597/1998, *Netherlands Stranded Costs*, OJ 2001 C268; Commission Decision of 16 October 2002, State aid N 133/2001, *Greek Stranded Costs*, OJ 2003 C9/6; Commission Decision of 2 February 2005, State aid SI 7/2003, *Slovenian Stranded Costs*, OJ 2005 C63/2; and Commission Decision of 27 April 2010, State aid N 691/2009, *Hungarian Stranded Cost Compensation Scheme*, *cit.*

[1026] Commission Decision of 23 March 2011, State aid SA.30531 (ex N 78/2010), *Estonian CRM*, *cit.*

[1027] This is the case of the *Finnish FIP schemes* addressed in Commission Decision of 15 March 2011, State aid SA.31107, *Operating aid for wind power and bio gas electricity*, OJ 2011 C180/4, and Commission Decisions of 22 March 2011, State aid SA.32470, *Fixed operating aid for power plants using renewable energy sources*, OJ 2011 C189/2, and State aid SA.31204, *Operating aid for small wood fired CHP-plants and forest chips fired power plants*, OJ 2011 C153/2. Examples include also Commission Decision of 14 July 2015, State aid SA.35486, *Danish FIP – CHP*, OJ 2015 C277/1.

joint disposal of several Member States who decide jointly on their use.[1028] Should the Court confirm this principle, it will have great impact with respect to energy support regimes because, as already explained in Part 2 of this doctoral thesis, Member States will have to increasingly make use of cooperation mechanisms to introduce cross-border support.

Notwithstanding the positive considerations so far provided, we shall stress that, first of all, most of the above-addressed support measures represent the typical tools of fiscal policy – that is to say, financial transfers and tax measures.[1029] These tools constitute familiar territory in the State aid field and are usually construed so that public authorities directly act to provide financial assistance to the beneficiaries. Secondly, it is worth noting that the Court has narrowed down the notion of forgone revenues in two different ways. On the one side, as we shall properly explain in the following pages, it has ruled that this notion does not cover losses of revenues that are an "*inherent feature*" of the system established by the concerned domestic provision.[1030] On the other side, it has conceived the concept of 'hypothecation', which provides that, in order to fall within the remit of the State aid control regime, tax and parafiscal charges provisions shall constitute the instruments for financing aid schemes. More precisely, State resources are not involved whenever the tax or parafiscal charges system does not directly influence the amount of alleged aid, and it is not clearly established that it forms an integral part of a support measure and that its proceeds are to be reinvested in such measure. Hence, for instance, whenever the amount of the aid is capped by decree or a committee is left with some degree of discretion as to the specific sum each recipient will be granted, the measure does not pass the State aid test.[1031] Importantly, we will evidence in the following paragraphs that these

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[1028] Commission Decision of 26 February 2010, State aid C 9/2009 (ex NN 45/08, NN 49/08 and NN 50/08), *Restructuring of Dexia*, where Belgium, France and Luxembourg were all involved in the scheme, OJ 2010 L 274/54.

[1029] For an extensive analysis of energy tax measures under the lens of the State aid regime see, Pistone P., Ezcurra M. V. (2016) *Energy Taxation, Environmental Protection and State Aids: Tracing the Path from Divergence to Convergence*. Amsterdam: IBFD.

[1030] See, *inter alia*, Joined Cases C-72/91 and 73/91, *Firma Sloman Neptun Schiffahrts AG v. Seebetriebsrat Bodo Ziesemer (Sloman Neptun), [1993] ECR I-887*, para. 21, Case C-200/97, *Ecotrade Srl v. Altiforni e Ferriere di Servola SpA (Ecotrade), [1998] ECR I-7907*., para. 36, and Case C-379/98, *PreussenElektra*, *cit.*, para. 62.

[1031] See, *inter alia*, Joined Cases C-261/01 e C-262/01, *van Calster and Cleeren*, [2003] I-12249, para. 52; Case C-174/02, *Streekgewest Westelijk Noord-Brabant v. Staatssecretaris van Financiën*, [2005] ECR I-85, paras. 25-26; Case C-175/02, *F. J. Pape v. Minister van Landbouw, Natuurbeheer en Visserij*, [2005] ECR I-127, paras. 14-15; Joined Cases C-128/03 and C-129/03, *AEM*, *cit.*, paras 45-47; Joined Cases C-266/04 to C-270/04, C-276/04 and C-321/04 to C-325/04, *Distribution Casino France SAS and Others v. Organic*, [2005] ECR I-9481, para. 34; Case C-206/06, *Essent*, *cit.*, paras. 89-90; Case C-333/07, *Société Régie Networks v. Direction de contrôle fiscal Rhône-Alpes Bourgogne*, [2008] ECR I-10807, paras 99 ff.; and Case T-533/10, *DTS Distribuidora de Televisión Digital SA v. Commission I*, ECLI:EU:T:2014:629, currently under appeal in case Case C-449/14 P *DTS Distribuidora de Televisión Digital SA v. Commission II*, n.y.p.

restrictions of the concept of control over *direct* State resources also have an impact on the assessment of energy support measures.

On a final note, we should add that the Court has rightly ruled that resources awarded by European Union or international financial institutions are not to be considered State resources when national public authorities have no discretionary power over them.[1032]

Turning back to the jurisprudence that has adopted an extensive notion of use of State resources, according to settled case law this notion also covers advantages financed *indirectly* through State resources. It is in this respect that the concept of control becomes decisive for determining whether private funds financing a measure can be considered State resources within the meaning of Article 107(1) TFEU. As we shall see, the Court has, in fact, established that what is crucial for a measure to fulfil the State resources requirement is that public authorities are found to control the monies used to finance the measure and to influence their employment: hence, at least in principle, the public or private nature of the relevant funds has no impact on such assessment [1033]. This reading of the State resources criterion has paramount importance with respect to energy-related aid measures for two main reasons. First of all, as already explained, many Member States still own or control portions of their domestic energy companies.[1034] Secondly, as we will evidence, since the beginning of the new millennium it has become rather common to adopt regulatory measures to foster critical goals in European energy markets. This circumstance has great relevance because, as opposed to the more conventional types of support measures addressed at the beginning of this paragraph, under this kind of aid scheme public authorities usually place the financial burden directly on energy consumers or

[1032] In that respect see, extensively, Hancher L., Ottervanger T., Slot P.J. (2012) *EU State Aids*, *cit.*, at pp. 74-76. See also, Notice on the Notion of Aid, *cit.*, para. 60. For examples of cases where the Commission has found that the relevant aid to energy infrastructures was financed from structural funds of the EU, whose transfer was subject to the discretion of the State, see Commission Decision of 15 March 2010, State aid N 594/2009, *Aid to Gaz-System SA for gas transmission networks in Poland*, *cit.*, and Commission Decision of 19 December 2012, State aid SA.35255, *Aid to PSE Operator S.A. for the construction of Stanisławów power station*, OJ 2014 C117/2.

[1033] For statements to that effect see, recently, *ex plurimis*, Case C-677/11, *Doux Élevage*, *cit.*, para. 34; Joined Cases C-399/10 P and C-401/10 P, *Bouygues*, *cit.*, para. 100; and Case C-262/12, *Vent De Colère*, *cit.*, para. 19.

[1034] See, with that regard, Chapter 5.

market operators.[1035] As a result, any restrictive reading of the concept of *indirect* control has significant implications with respect to energy support regimes.[1036]

The CJEU's initial approach towards the abovementioned regulatory measures went well beyond the expectations of experts at the time. Indeed, in the judgment it rendered in the early 1970s on the *Italian textile* case, the Court ruled that a partial exemption from certain social security charges granted by law to the undertakings of a specific sector constituted State aid.[1037] More precisely, in this case the resulting loss of revenues for the State was offset through a statutory system of compulsory contributions imposed on employers under another social security system. The Court held that, although the proceeds of these contributions were not administered directly by public authorities but by a fund, they had to be considered State resources because the relevant charges were introduced by legislation, and they were levied and apportioned according to such legislation.[1038] Shortly afterwards the CJ further developed this rationale in the *Steinike & Weinlig* case, where the support measure under scrutiny provided for a similar financial methodology. Indeed, in this judgment the Court explicitly applied the effect-based approach in order to rule that the required controlling influence of the State over private resources can be presumed whenever an intermediary is established or appointed by the public authorities for administering financial transfers between private undertakings on the basis of instructions set by the very same authorities.[1039] The CJ also clarified that this presumption applies not only when the statutory-designated intermediate body is a public entity but also when it is privately owned.[1040] In such circumstances, in fact, the economic advantages are considered to be granted *indirectly* through State resources. The very same dictum has been

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[1035] For an interesting analysis of the distinction between regulatory measures and what he has named 'financial assistance', the related government's prerogatives and the consequences the CJEU jurisprudence on the State origin criterion has brought about with respect to regulatory measures see, Rubini L. (2009) 'Introduction: Governmental Intervention in the Economy and Subsidies', in Rubini L. (ed.) *The Definition of Subsidy and State Aid: WTO and EC Law in Comparative Perspective*, *cit.* pp. 91-104.

[1036] [This has been partially acknowledged also by those scholars having a more optimistic view of the effects the Court's case law narrowing down the concept of *indirect* control can have in general on energy support measures. This sentence unclear] See, for instance, Hancher L., Salerno F. (2011) 'State aid in TFEU', in Jones C. (ed) *EU Energy Law: EU Competition Law and Energy Markets*. Leuven: Claeys & Casteels Publishing, Part 5, ch. 3, at p. 629.

[1037] Case 173/73, *Italian textiles*, *cit.*, para. 16.

[1038] *Ibidem*. In a similar vein, Case C-206/06, *Essent*, *cit.*, para. 66. Indeed, in the very early *France v. Commission* case the Court had already stated that the method of financing the support measure cannot be separated from the aid as such if these two elements, when jointly considered, can render the whole system incompatible with the common market. See, Case 47/69 *France v Commission*, [1970] ECR 487, para 4.

[1039] Case 78/76, *Steinike & Weinlig*, *cit.*, para. 21.

[1040] *Ibidem*.

restated, in a way or another,[1041] in all the judgments rendered to date on support measures financed by private undertakings or end consumers.[1042]

In the *Air France* and *Ladbroke* judgments the CJEU then clarified that, for a finding of State aid, it is not relevant that the funds used to finance the support measure are the result of taxes, parafiscal charges or other mandatory contributions imposed on private entities.[1043] According to the Court, in fact, the concept of State resources covers all the financial means by which public authorities may actually support undertakings, irrespective of whether or not they are permanent assets of the public sector. The only important element is that the relevant sums remain constantly at the disposal of these authorities.[1044] Hence, even private monies over which the State acquires at some point in time the faculty to establish how they should be used or that never become its property are to be categorised as State resources.[1045] Moreover, according to the CJEU, the circumstance that the aid is financed through voluntary private contributions that might be withdrawn at any time can have no impact on this finding.[1046] On account of this broad reading of the concept of State control, and following the suggestion of AG Jacobs,[1047] the Court for the first time expressly ruled in the *Stardust Marine* judgment that the budgets of public undertakings qualify as State resources because they are always at the disposal of public authorities.[1048] Hence, whenever support is granted by this kind of

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[1041] In some of the judgments quoted in the next footnote the formula used by the Court to identify aid granted by statutory-designated private and public entities is "*granted* […] *indirectly through State resources*".

[1042] Examples include, Case 82/77, *Openbaare Ministerie of the Netherlands v. Jacobus Philippus van Tiggele* (*Van Tiggele*), [1978] ECR 25; Case 290/83, *Commission v. France*, *cit.* 14; Joined Cases C-72/91 and 73/91, *Sloman Neptun*, *cit.*, para. 19; Case C-189/91, *Petra Kirsammer-Hack v. Nurhan Sidal* (*Kirsammer-Hack*), [1993] ECR I-6185, para. 16; Case C-200/97, *Ecotrade*, *cit.*, para. 35; Joined Cases C-52/97, C-53/97 and C-54/97, *Epifanio Viscido and Others v. Ente Poste Italiane* (*Viscido*), [1998] ECR I-2629, para. 13; Case C-295/97, *Industrie Aeronautiche e Meccaniche Rinaldo Piaggio SpA v. International Factors Italia SpA and Others* (*Piaggio*), [1999] ECR I-3735, para. 35; Case C-379/98, *PreussenElektra*, *cit.*, para. 58; Case C-677/11, *Doux Élevage*, *cit*., para. 26; Case C-262/12, *Vent De Colère*, *cit.*, para. 20.

[1043] Case T-358/94, *Air France*, *cit.*, para. 67, and Case C-83/98 P, *Ladbroke*, *cit.*, para. 50. See also, *inter alia*, Case C-482/99, *Stardust Marine*, *cit.*, para. 37, and Joined Cases T-267/08 and T-279/08, *Région Nord-Pas-de-Calais and Communauté d'agglomération du Douaisis v Commission*, *cit*., para. 111.

[1044] *Ibidem.* See also, Case C-206/06, *Essent*, *cit.*, para. 70; Case T-139/09, *France v. Commission* (*Oniflhor*), ECLI:EU:T:2012:496, paras 63-64; Case C-677/11, *Doux Élevage*, *cit*., para. 34; Case C-262/12, *Vent De Colère*, *cit.*, para. 21.

[1045] See, in that respect, Case T-358/94, *Air France*, *cit.*, paras. 65-67, and Case C-83/98 P, *Ladbroke*, *cit.*, paras 46-50, to be read in conjunction with paras 76 to 82 of Case T-67/94, *Ladbroke Racing*, *cit.*

[1046] In that regard see, *inter alia*, Case T-358/94, *Air France*, *cit.*, para. 65, and Case T-139/09, *Oniflhor*, *cit.*, paras 63-64.

[1047] See, Opinion of Advocate General Jacobs of 13 December 2001 in Case C-482/99, *Stardust Marine*, *cit.*, paras 43 to 46.

[1048] See, Case C-482/99, *Stardust Marine*, *cit.*, para. 38, to be read in conjunction also with paras 36-37 and 24.

undertaking the State resources criterion is readily identifiable, a finding implicitly already provided in earlier rulings on the basis of a case by case analysis.[1049] As we shall see, with regard to energy support provisions this approach was confirmed in the *Tisza Erőmű kft* judgment, where the measures under scrutiny were the Hungarian PPAs we have analysed in Chapter 5.[1050] We have, in fact, already explained that in such cases the problematic issues lie in assessing the imputability element, as a result of the strict approach adopted by the Court in that respect precisely in *Stardust Marine*.[1051]

In the CJEU's and AG Jacobs' words, the above-provided wide understanding of the concept of *indirect* State control is necessary to avoid the danger that Member States circumvent State aid rules by either using public undertakings as a vehicle for distributing aid or designating autonomous private or public bodies to allocate aid.[1052] However, in the author's opinion, through its case law the Court has afforded the Member States a number of tools for lawfully circumventing the State aid control regime. The first one is provided by its not at all convincing reasoning in the *Pearle* judgment, which has already brought about dangerous consequences in the *Doux Élevage* case.[1053] Owing to the fact that in both these rulings the CJ substantially conflated the assessments under the two elements of the first condition for State aid, in Chapter 5 we have already extensively addressed its analysis under the State resources requirement.[1054] Suffice it here to stress that, as we have already maintained with respect to the imputability element, the more the Member States proceed with the ongoing reorganisation of the energy

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[1049] See, *inter alia*, Case 234/84, *Belgium v. Commission*, [1986] ECR 2263; Case C-261/89, *Italy* v *Commission*, [1991] ECR I-4437; Case C-305/89, *Alfa Romeo*, *cit.* 305/89; Joined Cases T-126/96 and T-127/96, *BFM and EFIM v. Commission*, [1998] ECR II-3437; Case T-123/97, *Salomon SA v. Commission*, [1999] ECR II-2925; Case T-296/97, *Alitalia v. Commission*, [2000] ECR II-3871. *Contra*, Opinion of Advocate General Jacobs delivered on 26 October 2000 in Case C-379/98, *PreussenElektra*, *cit.*, paras 172-173, where the Advocate General has maintained that in *Ecotrade* and *Piaggio* the Court has not stated that the financing of a support measure through reduced earnings of publicly-owned undertakings could be viewed as financing through State resources, although he has since admitted that he is unsure about how to interpret these two judgments.

[1050] Case T-468/08, *Tisza Erőmű kft v. Commission*, *cit.*

[1051] See, in that respect, extensively, Chapter 5.

[1052] Case C-482/99, *Stardust Marine*, *cit.*, para. 23; Case T-251/11, *Austrian Green Electricity Act 2008*, *cit.*, para. 54. Similarly, Case T-358/94, *Air France*, *cit.*, para. 62. See also, Opinion of Advocate General Jacobs of 13 December 2001 in Case C-482/99, *Stardust Marine*, *cit.*, paras 44 and 47.

[1053] See, Case C-345/02, *Pearle*, *cit.*, paras 36-39, and Case C-677/11, *Doux Élevage*, *cit.*, paras 30 ss.

[1054] We have also clearly explained why, in our view, the facts of these two cases diverge to such an extent that only the final outcome in the *Doux Élevage* case is inconsistent with the above provided guiding principle of the State resources criterion. More precisely, we have evidenced how the *Pearle* and the *Doux Élevage* cases diverged in terms of degree of intervention of the public authorities in the definition of the measures, the method of financing them and the activities for which the proceeds of the relevant compulsory contributions were to be used. *Contra*, Opinion of Advocate General Wathelet of 31 January 2013 in C-677/11, *Doux Élevage*, *cit.*, where the Advocate General considered that the facts of the case were quite similar to those of *Pearle*.

markets to achieve the EU Energy Union Package's objectives, the more both these cases will have an impact on the assessment of energy support measures under the State resources condition. Another case where the CJ narrowed down the concept of *indirect* control was the early *Van Tiggele* case, where it definitively excluded the qualification of State-set minimum prices as aid.[1055] In our view, this approach towards price-control regulatory measures is not *per se* that problematic. Actually, Member States should be left some leeway in carrying out their prerogative to regulate the economy. The problem is that, in excluding these types of regulatory measures from the purview of State aid law, the Court has relied on the State resources criterion instead of on the economic advantage and the distortion of competition conditions. As we shall see, this has generated problematic consequences which would not have arisen had the CJ more properly relied on the last-mentioned condition. Indeed, as long as consumers are not locked in through, for instance, purchase or payment obligations, and the market offers affordable substitutable products or services that are not subject to price-control rules, these kinds of measures do not alter the level playing field in favour of the producers or service providers of concern to the regulatory measure. On the contrary, the latter might lose market shares. Things are obviously different when fixed minimum prices provisions are combined with other distortive elements, such as statutory purchase and quota obligations, parafiscal levy systems or other compulsory contributions; a distinction that cannot be properly addressed under the State resources criterion.[1056] This brings our analysis of the case law restricting the notion of *indirect* State control to the landmark *PrussenElektra* judgment.

As already mentioned in Chapter 2, the *PrussenElektra* ruling concerned certain modifications provided by law in 1998 (StrEG 1998) to the first feed-in tariff law ever adopted in Europe, the *Stromeinspeisungsgesetz* (StrEG 1990).[1057] The StrEG 1990 essentially imposed a purchase obligation on national DSOs in both public and private ownership, which were bound to buy all green electricity produced within their area of supply at a fixed minimum price

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[1055] See, Case 82/77, *Van Tiggele*, *cit.*, 24-26.

[1056] Some authors seems to actually maintain that this distinction also has great relevance under the State resources criterion. See, for instance, Cruz B. J., de la Torre F. C. (2001) A Note on PreussenElektra. *European Law Review* **26**(5) 489-501, at p. 492.

[1057] Germany, *Act on Feeding Renewable Energies into the Grid* (*Gesetz über die Einspeisung von Strom aus erneuerbaren Energien in das öffentliche Netz – Stromeinspeisungsgesetz*) of 7 December 1990, Federal Law Gazette (BGBI) 1990 I, pp. 2663 ff. (StrEG 1990), last amended by Germany, *Law reforming the Law on the Energy Supply Industry* (*Gesetz zur Neuregelung des Energiewirtschaftsrechts*) of 24 April 1998, Federal Law Gazette (BGBI) 1998 I, pp. 730 ff (1998 Law), section 3(2) (StrEG1998).

higher than the market price for the RES-e concerned.[1058] A vaguely formulated hardship clause then provided for privately and publicly owned TSOs to take over the distribution undertakings' obligation in case of "*inequitable hardship*".[1059] The StrEG 1990 was, therefore, duly notified for Commission approval before its adoption. The European Institution easily found that it constituted State aid but decided not to raise objections to its implementation.[1060] Under the StrEG 1998 the abovementioned hardship clause was then replaced by a new, less vaguely formulated, compensation mechanism, also established to the benefit of the DSOs affected by the scheme.[1061] In short, this mechanism entitled them to be reimbursed by the TSOs for the costs incurred in puchasing the amount of green electricity that exceeded certain ceilings established by law.[1062] Importantly, the new compensation mechanism has since become one of the central elements of the *PreussenElektra* proceedings. In this context the Commission has strongly fought for a pronouncement of a breach of the Article 107(1) TFEU prohibition, by submitting several allegations to that effect.[1063] However, by dismissing all the arguments put forward by the Commission and the referring court, and embracing the approach suggested by AG Jacobs, the CJ concluded that the measure under scrutiny did not constitute State aid.[1064]

[1058] StrEG 1990, *cit.*, section 2. More precisely, the minimum purchase price was set as a percentage of the average retail price paid for electricity by the final consumer in the second preceding fiscal year, and the percentages established for different renewable technologies differed (see, *ibidem*, section 3). However, all the percentage values were high enough to ensure that the ensuing fixed prices were greater than the real economic price of the RES-e concerned and, thus, in effect provided an economic advantage to green electricity generators. Indeed, the established percentages ranged from 65 to 90 per cent.

[1059] *Ibidem*, section 4. This hardship clause was, however, never triggered.

[1060] Commission Decision of 19 December 1990, State aid N 442/90, *Stromeinspeisungsgesetz* (*German StrEG 1990*), notified with letter SG(90) D/91464. See, with that respect, Chapter 2.

[1061] The amendments to the StrEG 1990 are provided in section 3(2) of the 1998 Law, *cit.* However, in the following assessment of the German FIT scheme we will directly refer to the relevant sections of the StrEG 1998. For an unofficial translation of the StrEG 1998 see http://www.wind-works.org/cms/index.php?id=191&tx_ttnews[tt_news]=1195&cHash=19081d41c39f3e7cb6f70cdf7a9d2682 (accessed 30 October 2016).

[1062] See, StrEG 1998, section 4. These ceilings were set as a fixed percentage of the total electricity output of the supply undertaking concerned.

[1063] See, Opinion of Advocate General Jacobs delivered on 26 October 2000 in Case C-379/98, *PreussenElektra*, *cit.*, paras 109, 134-149, 160, 163, 168.

[1064] See, Case C-379/98, *PreussenElektra*, *cit.*, paras 62-66 and Opinion of Advocate General Jacobs delivered on 26 October 2000 in Case C-379/98, *PreussenElektra*, *cit.*, paras. 106-186. We will not deal with the claim unsuccessfully made by the Commission that the scheme at hand constituted a measure having an equivalent effect to State aid, which was thus adopted in breach of the Member State's duty of cooperation under Article 4(3) TEU (See, para. 63 of the *PreussenElektra* ruling and paras 180-186 of AG Jacobs' Opinion). The Commission had already provided this argument in the *Poor Farmers* case in order to discontinue the formal investigation procedure under Article 108(2) TFEU and to open an infringement procedure (See, Case 290/83, *Poor Farmers*, *cit.*, paras 4 and 6-9). However, first of all, we do not support the extension under the State aid regime of methods of analysis applied in very different fields of EU law. Secondly, a similar argument might run the risk of excessively

To reach this conclusion the Court followed three successive steps of analysis. First of all, it selectively recalled some previous rulings where it had allegedly stated its favour towards the previously addressed cumulative approach.[1065] However, first of all, as has been noted, most of this case law covered different situations because they did not involve a transfer of resources from one company to another.[1066] Secondly, the Court did not expressly overrule or even mention the earlier contrasting case law.[1067] Nor it has tried to provide any kind of legal reasoning for opting for a restrictive interpretation of the State origin criterion. Nonetheless, as a result of this judgment the State resources requirement has 'definitively' become a constituent element of the State aid test. As to the second step of analysis, the Court held that the purchase obligations at fixed minimum prices and the rules on compensation laid down in the contested legislative provisions did not constitute a *direct* or *indirect* transfer of State resources. More precisely, it found that the method of financing the support measure under scrutiny allocated the financial burden amongst "*private electricity supply undertakings*" and "*upstream private electricity network operators*" (emphasis added), as PreussenElektra and Schleswag were. Hence, in its view, the costs entailed were not met from the public budget but were borne by private undertakings active in the energy sector.[1068] In this regard, however, we should highlight that the Court has evidently confined the answer to the question of the referring court to the relationship between the parties to the main proceeding, *i.e.* PreussenElektra and Schleswag. This was notwithstanding the fact that the order for reference invested the FIT scheme in question in its entirety. Indeed, as mentioned, the CJ referred only to private undertakings, without considering that at the time of the facts the German market was operated by TSOs and

expanding the effect-based approach under the EU State aid test, which in any case is – or at least should be – already a pillar of such test.

[1065] See, Case C-379/98, *PreussenElektra*, *cit.*, para. 58, where the CJ simply replicated the wording of these previous judgments and quoted, to that effect, the following cases: Case 82/77, *Van Tiggele*, *cit.*, paras 24-25; Joined Cases C-72/91 and 73/91, *Sloman Neptun*, *cit.*, para. 19; Case C-189/91, *Kirsammer-Hack*, *cit.*, para. 16; Joined Cases C-52/97, C-53/97 and C-54/97, *Viscido*, *cit.*, para. 13; Case C-200/97, *Ecotrade*, *cit.*, para. 35; and Case C-295/97, *Piaggio*, *cit.*, para. 35. In reality, in the *Ecotrade* and the *Piaggio* judgments the Court found that the measures under scrutiny constituted State aid. Indeed, the reasoning provided thereunder is rather inconsistent with the final outcome of the cases, which, in the author's view, can be justified only by embracing the alternative approach. See, Case C-200/97, *Ecotrade*, *cit.*, para. 45, and Case C-295/97, *Piaggio*, *cit.*, para. 43, and the respective operative parts.

[1066] In that respect see, *inter alia*, Cruz B. J., de la Torre F. C. (2001) A Note on PreussenElektra, *cit.*

[1067] See, for instance, Case 290/83, *Poor Farmers*, *cit.*, paras 13-14; Joined Cases 67/85, 68/85 and 70/85, *Van der Kooy*, *cit.*, paras 28 and 32-38 ; and Case 57/86, *Greece v. Commission*, *cit.*, para. 12.

[1068] See, Case C-379/98, *PreussenElektra*, *cit.*, paras. 59-60.

DSOs in both private and public ownership.[1069] As will become apparent from the following paragraphs, this is an important characteristic of the *PreussenElektra* judgment that could have had a positive impact on the assessment of every kind of energy regulatory measure implemented in the last fifteen years. Indeed, the ownership structure of the economic operators of most EU energy markets is diversified. In any event, a problematic principle has been clearly established by the CJ in *PreussenElektra*: Article 107(1) TFEU does not cover national legislations that impose financial redistributions of resources between private entities – including competitors! – if the money does not pass through statutory-designated private or public bodies.[1070] As a result, when the support measure is devised so that the financial redistribution takes place by way of taxes imposed on consumers and private undertakings or parafiscal charges and compulsory contributions managed by an entity mandated by the State, the relevant private funds fall within the definition of State resources.[1071] By contrast, when the State obliges private undertakings to directly purchase certain products and/or pay given amounts to selected beneficiaries, the relevant resources are not considered to be under the control of the public authorities.[1072] In *PreussenElektra* the Court provided no explanation to justify this somewhat formalistic legal distinction based on the organisation of the relevant money transfers. Actually, the degrees of intervention of the public authority in the definition of both kind of measures and their methods of financing are substantially alike. Neither there are policy reasons for distinguishing deceptively different arrangements having not only the same economic effects but also the very same objectives. The Court's approach was, in fact, immediately criticised for not being justifiable on the ground of the State aid rules' goal – the

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1069. Cf. paragraphs 27 and 55 with paragraphs 59, 60 and 66 of the judgment rendered by the Court in Case C-379/98, *PreussenElektra*, *cit.*

1070. In that regard see also, Notice on the Notion of Aid, *cit.*, section 3.2.3.

1071. The relevant Commission decisional practice and CJEU case law on energy support measures of the last fifteen years will be analysed in the following paragraphs. Examples of judgments and orders on energy support measures include, Case C-206/06, *Essent*, *cit.*; Case T-25/07, *Iride*, *cit.*, against which an appeal was presented and then dismissed by Order of the Court of 21 January 2010, which, however, did not touch on the paragraphs pertaining to the State origin question (Case C-150/09 P, *Iride SpA and Iride Energia SpA v. Commission*, *cit.*); Case C-262/12, *Vent De Colère*, *cit.*; Case C-275/13, *Elcogás*, *cit.*; Case T-251/11, *Austrian Green Electricity Act 2008*, *cit.*; Case T-172/14 R, *Stahlwerk Bous*, *cit.*; and Case T-47/15, *Germany v. Commission* (*German EEG 2012*), ECLI:EU:T:2016:281. As per a recent judgment rendered with respect to a sector other than the energy sector see, Case T-139/09, *Oniflhor*, *cit.*,

1072. The relevant Commission decisional practice on energy support measures of the last fifteen years will be analysed in the following paragraphs.

protection of competition – and for moving away from the traditional effect-based and economic-oriented method of analysis of State support measures.[1073]

We should now turn to the third abovementioned element of analysis entered into by the CJ in the *PreussenElektra* judgment to conclude that the measure under scrutiny did not involve State resources. The Court, in fact, rejected the referring court's argument that the first condition for the applicability of Article 107(1) TFEU was met because of the consequences in terms of losses of tax revenues that would have arisen from the contested legislative act.[1074] More precisely, it held that any diminution in tax receipts for the State that might have arisen following the implementation of the provisions under exam could not be treated in the same way as a 'foregone revenue' ascribable to a public support measure, which would instead imply the fulfilment of the State resources condition.[1075] However, it ruled so by simply stating that the resultant potential burden on the public budget was an "*inherent feature*" of statutory systems laying down such frameworks under scrutiny (hereinafter, the inherent feature approach) and by recalling the *SlomanNeptum* and *Ecotrade* rulings, where it had explicitly applied this approach. [1076] Actually, the Court seems to have implicitly adopted the very same method of analysis in other cases.[1077] However, in none of these cases has it provided an

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[1073.] See, *ex plurimis*, Cruz B. J., de la Torre F. C. (2001) A Note on PreussenElektra, *cit.*; Bronckers M., Van der Vlies R. (2001) The European Court's PreussenElektra Judgment: Tensions Between E.U. Principles and National Renewable Energy Initiatives. *European Competition Law Review* **22**(10) 58-468; Rubini L. (2001) Brevi note a margine del caso PreussenElektra, ovvero come "prendere seriamente" le norme sugli aiuti di Stato e la tutela dell'ambiente nel diritto comunitario. *Diritto Comunitario e degli Scambi Internazionali* ….. 473-501; Kreiner S. (2001) Il peccato originale lussemburghese: è ammissibile a livello comunitario l'obbligo statale di sovvenzionare i concorrenti. *The European Legal Forum* 312-319; Goossens A., Emmerrechts S. (2001) Case C- 379/98, PreussenElektra AG v. Schleswag AG, Judgment of the Full Court of 13 March 2001. *Common Market Law Review* **38**(4) 991-1010; Koenig C., Kühling J. (2002) EC Control of aid granted through State resources. *European State Aid Law Quarterly* **1**(1) 7-18. *Contra, inter alia* Winter J. A. *(*2004*),* Redefining the Notion of State Aid in Article 87(1) of the EC Treaty. *Common Market Law Review* **41**(2) 475-504; Bjørnebye H. (2010) The Boundaries of Article 107(1) TFEU, in Bjørnebye H. (ed.) *Investing in EU Energy Security*: *Exploring the Regulatory Approach to Tomorrow's Electricity Production*, *cit.* pp. 347-368; Ehricke U. (2003) Staatliche Maßnahmen zur Förderung umweltfreundlicher Energien und europäisches Wettbewerbsrecht. *Recht der Energiewirtschaft* **12** 57–65. Also, some environmentally friendly scholars welcomed the findings of the ruling. However, they maintained that the reasoning should had been that electricity prices do not reflect the environmental costs incurred by other forms of power generation.

[1074] The Commission had already brought this argument in previous similar cases.

[1075] Case C-379/98, *PreussenElektra*, *cit.*, para. 62.

[1076] *Ibidem.* See, Joined Cases C-72/91 and 73/91, *Sloman Neptun*, *cit.*, para. 21 and Case C-200/97, *Ecotrade*, *cit.*, para. 36. With that regard, Slotboom has argued that, as a result of the approach under scrutiny, the 'additional charge for the State' criterion was not decisive anymore. See, Slotboom M. M. (2002) Subsidies in WTO Law and in EC Law: Broad and Narrow Definitions. *Journal of World Trade* **36**(3) 517–542. Cf., however, paragraph 45 and the operative part of the *Ecotrade* judgment: the Court has since found that the measure under scrutiny constituted State aid. This does not fit well with the inherent feature approach it provided in its reasoning.

[1077] See, Case C-189/91, *Kirsammer-Hack*, *cit.*, para. 17; Joined Cases C-52/97, C-53/97 and C-54/97, *Viscido*, *cit.*, para. 14; and Case C-295/97, *Piaggio*, *cit*. See also, Case C-480/98, *Spain v. Commission*, [2000] I-8717,

explanation of how the inherent feature approach should be applied, what the analysis steps are thereunder, and what it entails. Moreover, it has not explained how this approach can be reconciled with the settled case law on the State aid nature of measures entailing only a *potential* use of State resources, which we have addressed at the beginning of this paragraph.[1078] Neither it is clear how the non-application of employment legislations and the ensuing reduction in social contributions in cases such as *Sloman Neptum* can be distinguished in terms of loss of State revenues from the direct reduction in these contributions which was, for instance, found to constitute State aid in the above-analysed *Italian textiles* case. Hence, several theories have been put forward by experts over time. In the author's opinion, the Court purposely provided no explanation for this additional ambiguous approach in order to enhance the acceptability of what it had actually done. It has, in fact, tried to narrow down the State resources criterion with respect to domestic legislations accomplishing social, employment and energy-related objectives, without, however, directly clashing with the long-standing EU jurisprudence on the objective notion of aid.[1079] Indeed, these types of legislations were at the time considered the epitome of the margin of autonomy that the Treaty of Rome granted to the Member States for pursuing their legitimate policies. It is noteworthy, in fact, that all the cases where the inherent feature approach has been directly or indirectly applied pertain to regulatory measures implemented in the labour/social, insolvency and energy/environment fields of law. However, by ruling that incidental reductions in the resources accruing to the State do not represent a valid reason for a public support measure to pass the State origin test,[1080] it is indubitable that the CJEU has again distanced itself from the 'classic' effect-based and economic-oriented doctrine.[1081] Hence, for the sake of legal certainty, the Court should have at least provided an explanation of the test to be undertaken under this approach. According to our reading of the

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paras 17-21, where the Court applied the same approach to rule that, in the particular circumstances of the case, the loss of tax revenue for the State was not an inherent feature of the statutory system laying down a framework for relations between an insolvent undertaking and the general body of its creditors.

[1078] In that respect see, for instance, Ross M. (2000) State Aids and National Courts*:* Definitions and Other Problems – A Case of Premature Emancipation? Common Market Law Review **37**(2) 401 – 423, at p. 414.

[1079] In that regard see, extensively, Chapter 2.

[1080] For a proper explanation in that respect see, Quigley C. (2009) *European State Aid Law and Policy*. Oxford: Hart Publishing, at pp. 23-24, and Hancher L. (2012) 'EU State Aid Law: Now a Truly Ugly Sister?', in Hancher L., Ottervanger T., Slot P.J. (eds) *EU State Aids*, *cit.*, at p. 14.

[1081] See, in that respect, *ex plurimis*, Hancher L., Salerno F. (2011) 'State aid in TFEU', in Jones C. (ed) *EU Energy Law: EU Competition Law and Energy Markets*, *cit.*, at p. 636 and the previous pages; Slotboom M. M. (2002) Subsidies in WTO Law and in EC Law: Broad and Narrow Definitions, *cit.*; Cruz B. J., de la Torre F. C. (2001) A Note on PreussenElektra, *cit.*

relevant judgments, if necessary, a properly structured inherent feature test can be articulated only as follows. First of all, a reference system should be taken into account for evaluating the nature of the effects of the domestic measure in question. This should be an abstract regulatory system laying down a framework for the organisation and proper conduct of the very same national economic policies such domestic measures deal with. This abstract regulatory system should, of course, resemble the statutory system established under the contested measure in all its relevant aspects. The following analytical step that should be undertaken under the inherent feature approach is an evaluation of whether the identified abstract regulatory system would in any event and under any circumstance generate the potential burden on the public budget that might be ascribable to the contested statutory system. If this is the case, this potential burden should be considered an intrinsic characteristic of statutory systems laying down frameworks like the one under scrutiny and, thus, should not be ascribed to the specific measure in question. However, this analysis would require a very difficult exercise which is not worth the effort when considering the purpose for which the inherent feature approach has been framed and the damaging effects that we shall see the relevant rulings have generated in terms of legal certainty, distortions of competition and the effectiveness of the State aid control system.

As a result of all the above-analysed jurisprudence where the Court has narrowed down the concept of State control over the funds used to finance a support measure, State resources arguments have become the main safe haven for Member States to circumvent State aid rules. As we will evidence by analysing the Commission's decisional practice and the CJEU's case law on energy support measures of the last fifteen years in paragraph 3, this is particularly true with respect to this sector. Moreover, the situation has been further exacerbated by the confusing, inconsistent and agnostic stance the Commission has adopted towards energy aid measures, and not only in the immediate aftermath of the *PreussenElektra* judgment. With regard to sectors that fall outside the purpose of our research, suffice it here to mention three very problematic judgments, that is to say, the *UTECA*, the *Aiscat* and the *Cigliola* judgments.[1082] As per the *UTECA* case, the measure in question was a statutory obligation imposed on both publicly-owned and privately-owned television broadcasters to earmark a percentage of their operating revenues for the pre-funding of certain specific films. We will

[1082] Case T-182/10, *Aiscat, cit.*; Case C-222/07, *Unión de Televisiones Comerciales Asociadas v. Administración General del Estado* (*UTECA*), [2009] ECR I-1407; and Case C-59/03, *Cigliola v. Ferrovie dello Stato*, OJ 2003 C83/12.

further explain in subparagraph 3.2 why this judgment has a very problematic impact on the assessment of energy support regimes. Indeed, the CJ seems to have extended the *PreussenElekra* rationale to aid schemes where the majority of the undertakings concerned are in public ownership.[1083] Turning to the more recent *Aiscat* case, in Chapter 5 we have already criticised the assessment under the State resources requirement provided by the General Court, which simply recalled the *PreussenElektra* judgment to rule that this requirement was not fulfilled because the measure in question involved a direct transfer of monies between private companies.[1084] We have also extensively explained why we believe that the Italian public authority was actually exercising control over the relevant resources through the private entity it had appointed by concession to administer them.[1085] The order of the CJ in the *Cigliola* case, though, provides a clear example of how damaging the above-analysed inherent feature approach might be. The Court, in fact, made reference to the relevant case law to rule that an Italian law allowing an important undertaking to terminate the contracts of employment of its oldest workers did not meet the State resources condition. This, notwithstanding in its own words, in the legislation under scrutiny caused not only an "*immediate resulting burden on the State in the form of reduced contribution revenue*" but also "*the payment of pensions to dismissed workers*".[1086] Hence, the 'inherent feature approach' loophole has apparently been widened to a greater extent.

6.2. Why were FIT Schemes Deemed to be Fit to Set the Framework of Assessment?

As with every critical tale able to have systemic impacts on the effectiveness of EU Law, we should start from the outset in order to properly understand the main drivers of the pivotal changes it prompted. In the previous paragraph we have maintained that the State resources criterion and the methodology embraced for its interpretation have a decisive impact on the qualification of energy support measures as State aid for two main reasons. One, the way energy financial mechanisms are frequently framed by the granting authorities, and two, the approach usually adopted by the competent European Institutions regarding the assessment of domestic

[1083] See, Case C-222/07, *UTECA, cit.,* paras 44-47, where the Court has emphasised that the measure under scrutiny was a "*general legislation*" addressing "*television operators, whether public or private*".

[1084] See, Case T-182/10, *Aiscat,* paras 102-107.

[1085] *Ibidem,* paras 1-5 and 91-101.

[1086] See, the operative part of the Order of the Court in Case C-59/03, *Cigliola v. Ferrovie dello Stato, cit.*

measures under the other conditions for the applicability of Article 107(1) TFEU. In this paragraph we will develop on these statements. In our view, in fact, the results of the relevant analysis will explain why the Court has considered the State resources criterion the best and easiest 'way out' for energy support measures. This, in turn, will help us to put the *PressuenElektra* judgment and the following decisional practice back in their right perspective.

Starting with the first abovementioned reason, we have already explained that it is rather common for the Member States to foster energy-related goals through regulatory measures which place the financial burden on energy consumers, supply undertakings, network operators and/or other undertakings active in the energy sector. Hence, under such measures the costs entailed are, in principle, not met from the public budget but are borne by individual undertakings. In this respect we should also add that any properly structured legislative act can establish a system of compulsory purchase, sale or payment obligations having the same economic effects of parafiscal levy systems[1087] but directly directing money flows to make sure they end up in the right place. As we shall see, this might be the case not only for RES-e and CHP support regimes[1088] but also for different kinds of energy support measures where the very same financial mechanism can be used. Examples certainly include preferential tariff measures, whereby Member States might require private electricity companies to grant reduced tariff rates to certain undertakings or with respect to certain goods. Moreover, for instance, stranded costs compensation mechanisms, capacity remuneration mechanisms, energy infrastructure support measures, compensation mechanism for public service obligations related to the use of indigenous fuels,[1089] *etc*., can also be and have been framed in the same way. As a result, under

[1087] The term parafiscal levy system has never been defined in either Union law or EU jurisprudence. However, it has always been adopted for describing statutory systems imposing compulsory taxes or charges which are levied by a predetermined public or private entity on the production, marketing or consumption of products in order to finance activities benefiting the whole or a part of the sector concerned. Hence, this kind of system always requires the intervention of an intermediary and differs from general taxes because their proceeds are earmarked for specific purposes.

[1088] See, for instance, the measures at issue in Commission Decision of 22 May 2002, State aid NN 27/2000, *Law on promotion of electricity generation from renewable energies* (*EEG 2000*), OJ 2002 C164/5, and Commission Decision of 22 May 2002, State aid NN 68/2000, *Law for the protection of electricity generation on the basis of combined heat and power* (*KWKG 2000*), OJ 2002 C164/5. Similarly, the imposition of an obligation to purchase green certificates at fixed minimum prices were, for example, deemed to merely allocate the financial burden amongst private electricity supply undertakings and electricity consumers in Commission Decision of 25 July 2001, State aid N 550/2000, *Green Electricity Certificates* (*Belgium Green Certificates*), OJ 2001 C330/3, and Commission Decision of 03 May 2005, State aid N 608/2004, *Flemish CHP Certificates*, OJ 2005 C240/22.

[1089] For a proper analysis of these kind of compensation mechanisms see, Rusche M.T. (2006) The Production of Electricity from Renewable Energy Sources as a Public Service Obligation. *Journal for European Environmental & Planning Law* **3**(6) 486-499.

a narrow interpretation of the State resources criterion several domestic energy support provisions and regimes might outright escape the classification as State aid.

We should now turn to the second statement we have made regarding the relevance of the State resources criterion with respect to energy-related measures as a consequence of the approach adopted by the competent European Institutions under the other conditions for State aid. To make things simpler we might illustrate our point by taking as an example a hypothetical FIT scheme implemented to promote investments in the generation of RES-e. As previously explained, under a similar scheme the use of RES-e is fostered by means of statutory provisions that oblige DSOs – less frequently, TSOs – to buy all the green electricity that operators of RES plants feed into the grid at a fixed price set by the government at a level which is above market rates. The cost of the scheme might then be passed on to consumers or the producers of electricity from conventional sources – less frequently, on to TSOs.[1090] Therefore, this kind of regulatory system is certainly imputable to the State.[1091] Moreover, it is generally found to meet the economic advantage and selectivity requirements under Article 107(1) TFEU.[1092] Indeed, it guarantees solely to producers of green electricity certain and higher profits than they would otherwise make under normal market conditions, and it shelters them from normal risks of overcapacity and price fluctuations. Actually, the above features might be considered inherent characteristics of each and every FIT scheme because they reflect the very goals such support instruments purport to achieve. In reality, should sustainable energy support regimes be purged of the purchase obligation they would not meet the economic advantage and distortion of competition criteria. Indeed, in such a case, electricity supply undertakings and energy users would not be locked in and green energy producers would lose market shares.[1093] Moreover they would not fall foul of Article 107(1)'s prohibition because, as already explained, the Court

[1090] See, in that regard, Chapter 2 of this doctoral dissertation.

[1091] Actually, in *PreussenElektra* the Court clearly highlighted that the contested purchase obligation was imposed by statute and implicitly recognised that this was enough for the relevant measure to meet the imputability requirement. See. Case C-379/98, *PreussenElektra*, *cit.*, para. 61.

[1092] Indeed, regarding the *PreussenElektra* case there has been no dispute among the parties to the proceedings about the fact that the German FIT scheme in question met the economic advantage and selectivity requirements under Article 107(1) (see, Opinion of Advocate General Jacobs delivered on 26 October 2000 in Case C-379/98, *PreussenElektra*, *cit.*, para. 112). This was, in fact, also immediately recognised by the Court (See, Case C-379/98, *PreussenElektra*, *cit.*, paras 54 and 61).

[1093] See, in that respect, also, Jaeger T. (2012) Goodbye Old Friend: Article 107's Double Control Criterion. *European State Aid Law Quarterly* **11**(3) 535-538.

has always refused to consider price regulations under the State aid regime.[1094] Nonetheless, for the very effect we have mentioned that minimum pricing logic might have in terms of market shares, simple price-control regulatory measures would probably not foster the investments in generation of green energy required to ensure that climate change targets and environmental goals are reached in the medium-short run. Hence, they have never been considered an option. Turning to the distortion of competition and the effect on intra-EU trade criteria, since the fulfilment of these conditions for the applicability of Article 107(1) TFEU is usually taken for granted with respect to every measure conferring an economic advantage to specific undertakings or productions,[1095] this is the case also with regard to FIT schemes.[1096] Indeed, as we shall see, these schemes certainly strengthen the position of renewable energy sources and CHP electricity producers compared to competing conventional sources, which are also sometimes bound to finance the relevant support measures. Moreover, since FIT schemes are usually domestic regimes, they affect the possibilities of undertakings from other Member States seeking establishment in the concerned national market in a cost-efficient way. Nonetheless, we do believe that a more thoughtful assessment of the support measures under these two conditions for State aid should be provided by the competent European Institutions.[1097] Indeed, properly framed energy support measures might not meet at least the effect on trade criterion in the near future. Member States will, in fact, have to increasingly make use of cooperation mechanisms to introduce cross-border support.

[1094] This conventional approach towards State-set minimum prices traces its origin back to the very early ruling rendered in Case 82/77, *Van Tiggele*, *cit.*, where, however, the Court relied on the State resources criterion to exclude the qualification of these State measures as aid.

[1095] In that respect see, *ex plurimis*, Ross M. (2000) State Aids and National Courts*:* Definitions and Other Problems – A Case of Premature Emancipation?, *cit*., at pp. 415-416; Opinion of Advocate General Poiares Maduro of 12 January 2006 in Case C-237/04, *Enirisorse SpA v. Sotacarbo SpA* (*Enirisorse*), [2006] ECR I-02843, para. 36; and Hancher L. (2012) 'The General Framework', in Hancher L., Ottervanger T., Slot P.J. (eds) *EU State Aids*, *cit.*, at p. 73, who however notes that a number of recent cases have emphasised the growing importance of these conditions. Similarly, Biondi A., Righini E. (2015) 'An Evolutionary Theory of EU State Aid Control', in Arnull A., Chalmers D. (eds) *The Oxford Handbook of European Law*. Oxford: Oxford University Press, pp. 670-690.

[1096] The fulfilment of these conditions of the notion of aid has been, in fact, taken for granted by all the parties to the *PreussenElektra* proceeding, AG Jacobs (see, Opinion of Advocate General Jacobs delivered on 26 October 2000 in Case C-379/98, *PreussenElektra*, *cit.*, para. 112) and the CJ. Indeed, although this has not been made explicit in the ruling, we can ascribe the Court's silence in that respect precisely to the usual attitude of the competent European Institutions with regard to these conditions.

[1097] In that regard see, for instance, Biondi A., Righini E. (2015) An Evolutionary Theory of EU State Aid Control, in Arnull A., Chalmers D. (eds) *The Oxford Handbook of European Law*, *cit.*; Hancher L. (2003) Towards a New Definition of a State Aid under European Law: Is There a New Concept of State Aid Emerging?. *European State Aid Law Quarterly* **2**(3) 365-373; and Bishop S. (1997) The European Commission's Policy Towards State Aids: a Role for Rigorous Competitive Analysis, *cit.*

As we shall see in the following chapters, all the considerations just provided concerning the assessment of FIT schemes under the conditions of the State aid test other than the State origin requirement apply, *mutatis mutandis*, to the alternative sustainable energy schemes most frequently implemented by the Member States, *i.e.*, TGC and FIP schemes. Importantly enough, these considerations also hold true with respect to different kinds of energy support measures. Let us just think about all the financial mechanisms listed at the beginning of this paragraph. As we shall see, it is true that, for instance, certain schemes providing for reductions/exemptions from or compensation for energy/environmental taxes have been found not to meet the selectivity requirement on the ground that they were justified by the logic and nature of the tax systems concerned.[1098] However, this kind of scheme represents an exception. The same holds true regarding, for example, the few financial mechanisms that have been deemed not to meet the economic advantage criterion on the basis of the *Altmark* conditions.[1099] Indeed, while security of supply obligations imposed by Member States have been included in prospective candidates for public service obligation status, the Commission's decision-making practice in that respect has always rightly been quite strict.[1100] Also, other energy support measures have been found to not fulfil the economic advantage criterion. This has been the case, for instance, for certain preferential tariffs granted by public undertakings.[1101] Examples also include the conduct of State-owned TSOs having signed contracts with energy companies for the supply of electricity at short notice,[1102] or having financed the construction costs of pipelines to connect certain power plants with the national transmission grid with the required approval of the public

[1098] Examples include, Commission decision on 28 March 2001, State aid N 123/2000 (then, for a different aspect of the scheme, C 18/2001), *UK Climate Change Levy*, OJ 2001 C 185/22; Commission Decision of 9 November 2005, State aid N 602/2004, *Reorganisation Danish Electricity Sector*, *cit.*

[1099] See, for instance, Commission Decision on 16 December 2003, State aid N 475/2003, *Public Service Obligation in respect of new electricity generation capacity for security of supply* (*Irish CADA*), OJ 2003 C34/7, which concerned a CRM implemented by Ireland. See, in that respect, Case C-280/00, *Altmark*, *cit.*, paras 88-94.

[1100] See, for instance, Commission Decision of 14 July 2004, State aid N 143/2004, *Public Service Obligation – Electricity Supply Board*, OJ 2005 C242/5, on a temporary CRM adopted by Ireland; Commission Decision of 4 June 2008, State aid C 41/2005 (ex NN 49/2005), *Hungarian PPAs*, *cit.*; Commission Decision of 14 June 2010, State aid N 675/2009, *Latvian CRM*, *cit.*; and Commission Decision of 29 Sep. 2010, State aid N 178/2010, *Public service compensation linked to a preferential dispatch mechanism for indigenous coal power plants* (*Spanish indigenous coal power plants*), OJ 2010 C312/6.

[1101] See, for example, Commission Decision, State Aid C 38/1992 (ex NN 128/1992), *Alumix*, *cit.*, and Commission Decision of 11 April 2000, State aid C 39/1998, *2000 EDF decision*, *cit.*

[1102] See, for a recent example, Commission Decision of 23 May 2016, SA.32184, *Alleged State aid to an electricity supplier*, n.y.p., where the Commission assessed the contract entered into by the Danish State-owned TSO, Energinet.dk, and DONG Energy for the supply of electricity at short notice to the network, although it finally found that it did not confer a selective advantage.

authorities.[1103] However, the relevant findings were due to the peculiar circumstances of the cases and the markets concerned and, in any case, the measures in question were not regulatory measures. In any event, the assessment to be undertaken under the selectivity and economic advantage criteria to exclude energy support measures from their scope is rather complicated.

As a result of the above considerations on the traditional attitude towards the financial instruments most frequently employed by the Member States to support the energy sector, it is clear that the only possibility left for such instruments to not easily pass the State aid test was a finding that they did not meet the State resources criterion. Actually, as we have seen, to the extent that the European Courts' jurisprudence on this condition has not always been clear and consistent, a wide margin of discussion in that respect has been available since the first sustainable energy support schemes were implemented by the Member States. Also, interestingly enough, the CJ in some ways delivered the 'needed result' in its very first judgment on one of these schemes, *i.e.*, the *PreussenElektra* judgment.[1104]

A question, however, still remains unanswered. Indeed, the great part of the above addressed typologies of energy regulatory measures did not exist or had not yet been analysed at the time this judgment was rendered. This was, for instance, the case for capacity remuneration mechanisms and stranded costs compensation mechanisms.[1105] As to the others, we have already evidenced in Chapter 2 that, although their State character was not disputed when they were instituted and disciplined by law, the approach adopted by the Commission in the 1990s did not generate great difficulties for their implementation. They were, in fact, always cleared

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[1103] See, for instance, Commission Decision of 13 July 2011, State aid SA.26117 (C 2/2010) (ex NN 62/2009), *Aluminium of Greece*, *cit.*, where the Commission, *inter alia*, analysed the partial financing by the publicly-owned National Gas System Operator of the construction costs of a pipeline to connect a co-generation power plant with the national gas transmission grid. Although the measure did not meet the economic advantage criterion, what is relevant for our purposes is that a favourable opinion by the Greek energy regulator was required and provided before the measure was implemented.

[1104] Case C-379/98, *PreussenElektra*, *cit.*

[1105] Some stranded costs compensation mechanisms and capacity mechanisms were actually notified before the *PreussenElektra* judgment. This was the case, for instance, for the Italian, Austrian, Spanish, UK, Dutch and Belgian stranded costs compensation mechanisms. However, as we shall see, they were decided after the *PreussenElektra* judgment was rendered and, unfortunately, some of them in the immediate aftermath of this judgment. As per the few capacity mechanisms at the time adopted in the form of capacity payments and notified to the Commission, they were linked to the compensation of stranded costs and, hence, they were also addressed in the decisions on the related stranded costs measures after *PreussenElektra*. As we shall see, this was, for example, the case for the capacity payments introduced by the Spanish authorities with Royal Decree 2019/1997, these being granted as considerations for the guaranteed capacity electricity that generators actually delivered to the system. The measure also had the purpose of helping such generators to recover stranded costs during the liberalisation of the national electricity market. Similar mechanisms were also established by Austria and Denmark in the context of their stranded costs compensation mechanisms.

without any great problem,[1106] at first directly on the basis of Article 107(3)(c) TFEU and then according to the relevant provisions of the 1994 Environmental Guidelines.[1107] The same approach was actually applied with respect to measures financed directly out of the public budget.[1108] Hence, at least regarding energy support measures, there was no actual need to narrow down the concept of control over *direct* and *indirect* State resources, unless the real purpose was to let them escape the notification obligation and the ensuing Commission assessment.

We should now turn briefly to the technical characteristics of the *PreussenElektra* judgment and the factual circumstances in which it was rendered. Indeed, we do strongly believe that these elements should limit its relevance as a leading ruling with respect to the interpretation of the State resources criterion; this, in turn, should provide grounds for our postulation concerning the need to further discuss the topic. In the author's view, in fact, it is possible to assume that the controversy over the State resources criterion has never been and/or was never meant to be

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[1106] Examples include, Commission Decisions of 28 March 1990, State aid N 34/90, *UK non-fossil fuel obligation I*, notified with letter SG(90)541, of 28 July 1993, State aid N 410/93, *UK non-fossil fuel obligation II*, notified with letter SG(93)1211, and of 17 August 1998, State aid N 153/98, *UK non-fossil fuel obligation III*, OJ 1998 C300/1, on public tender schemes (PTSs); Commission Decision of 19 December 1990, State aid N 442/90, *StrEG 1990*, *cit.*; Commission decision of 30 September 1992, State aid N 310/92, *Danish Wind Energy Scheme*, OJ 1993 C 29/04, which was meant to stimulate investment in wind power through guaranteed prices for wind energy supplied to the grid and relief from connection costs; Commission Decision of 15 May 1996, State aid N 1037/95, *Danish FIT scheme*, OJ 1996 C188/03, on the percentage-based Danish FIT scheme adopted to foster CHP power stations, RES-e generators and new sources of energy; Commission Decision of 15 May 1996, State aid N 305/96, *Measures in favour of centralised electricity generating plants*, OJ 1998 C58/7, on an obligation imposed by Denmark on public distribution companies to buy electricity produced through cogeneration technologies at a price based on the cost of producing it, for ensuring that district heating supplies from centralised electricity generating plants could be maintained; Commission Decision of 2 December 1999, State aid NN 143/96, *Swedish FIT scheme*, notified with letter SG (99) D/9743; Commission Decision of 12 April 2000, State aid N 653/1999**,** *Danish CO2 Quotas*, OJ 2000 C322/9, on a national emission trading system; and Commission Decision of 20 September 2000, State aid N 416/1999, *Danish GC scheme*, OJ 2000 C354/17.

[1107] See, European Commission, *Community Guidelines on State aid for Environmental Protection*, OJ 1994 C72/3, para. 3.4.

[1108] Examples include, Commission Decision of 7 April 1992, State aid N 4/92, *Danish CO_2 Tax Scheme*, OJ 1992 C160/5, on exemptions from and compensations for the Danish CO_2 tax on electricity, which were granted to certain CHP plants, RES-e generators, district heating (DH) networks and biofuel power plants. The measure was later modified and addressed again in Commission Decision of 12 April 1995, State aid N 698/94, OJ 1995 C267/13, and Commission Decision of 16 September 1997, State aid N 11/97, OJ 1998 C47/3; Commission Decision of 28 September 1994, State aid N 306/94, *Danish CO_2 Tax Exemption for EIUs*, IP/94/881, on CO_2 tax reliefs granted to energy-intensive businesses carrying out certain energy conservation measures; Commission Decision of 20 December 1995, State aid N 760/95, *Dutch Energy Tax Exemption for EIUs*, OJ 1996 C70/6, where the reliefs from electricity and gas taxes were authorised under the 1994 Environmental Guidelines on the ground that it was necessary to offset European companies' losses in competitiveness at the international level; Commission Decision of 6 May 1998, State aid N 752/97, *Netherlands - Nihil-tariff regulating energy tax for supply to the users of green electricity*, OJ 1998, C244/8; Commission Decisions, State aid N 884/96, N 66/98, and N 515/98, *Finland – Compensation for Energy Tax for Power Plants Using RES-e*, respectively, OJ 1997 C288/3, OJ 1998 C264/9, OJ 1999 C225/4.

definitively set. Actually, some distinguished academics and advocates general are still explicitly or implicitly calling for the Court to openly overrule the judgment at hand.[1109]

With regard to the technical characteristics of the *PreussenElektra* judgment, in the previous paragraph we have already evidenced how the interpretative approach embraced by the Court in the State aid part of the ruling raises relevant doubts and concerns. Moreover, we have explained that, in order to substantiate its findings, the CJ has simply selectively recalled some previous rulings where it had already allegedly stated its favour towards a restrictive interpretation of the State origin criterion. Turning to the factual circumstances in which the *PreussenElektra* judgment was rendered, we have already highlighted that it was the outcome of the first judicial challenge to a RES-e support mechanism dealt with by the Court. In order to properly understand the paramount relevance of this circumstance we have to make reference to the internal market part of the judgment. Indeed, in this part of the judgment the CJ was at least more explicit about its ultimate goals. After ruling that the purchase obligation in question was "*capable, at least potentially, of hindering intra-Community trade*", it in fact made several policy considerations and indicated a number of factors that, in its view, were preventing the integration and development of the green electricity market.[1110] More precisely, the Court talked about increasing the share of RES-e in Member States' energy mix as one of the priority objectives of the European Union. Moreover, it highlighted the link between this objective and the protection of the environment in terms of contributing to reversing the climate change trend and stressed the prominence of the abovementioned increase in enabling the Member States and the EU to comply with their international commitments in terms of reductions in greenhouse gas (GHG) emissions.[1111] As a result, the Court has recognised the 'new' widely perceived need to grant more flexibility than is provided under the Treaty to Member State policies aimed at supporting the generation of green electricity. All these arguments were purported to support its conclusion that, given "*the current state of Community law concerning the electricity market*", and since the measure at issue was aimed at both protecting the environment and complying with international and EU eco-friendly initiatives, it was justifiable

[1109] See, *inter alia*, Biondi A. (2013) State Aid is Falling Down, Falling Down: an Analysis of the Case Law on the Notion of Aid, *cit.*; Jaeger T. (2012) Goodbye Old Friend: Article 107's Double Control Criterion, *cit.*; Rubini L. (2009) The 'Elusive Frontier': Regulation under EC State Aid Law. *European State Aid Law Quarterly* **8**(3) 277-298; and Opinion of Advocate General Poiares Maduro of 12 January 2006 in Case C-237/04, *Enirisorse SpA v. Sotacarbo SpA* (*Enirisorse*), [2006] ECR I-02843, paras 41-51.

[1110] See, Case C-379/98, *PreussenElektra*, *cit.*, paras 71-80.

[1111] *Ibidem*, paras 73-74.

from an internal market law perspective.[1112] It seems, therefore, that the effects of the judgment were meant to be confined in terms of sectors, objectives and time. This is apparently confirmed by a very recent judgment on a TGC scheme, *Ålands Vindkraft* , where the Court finally acknowledged that its decision in the *PreussenElektra* case was informed by an understanding of the EU internal energy market that is no longer current.[1113] As a result, it is clear that the *PreussenElektra* judgment was rendered in a period characterised by a growing awareness within the European Institutions of the uttermost importance of increasing the share of green electricity in Member States' energy mix for reversing the climate change trend. In addition, it is indisputable that, at that time, renewable sources could not outcompete carbon-based sources under normal market conditions. Hence, given the above-provided considerations regarding the various conditions for State aid, it might be, in a way, understandable that the Court believed at the time that the easiest way to achieve the mentioned environmental objectives and comply with international commitments in terms of GHG emissions was to leverage on the inconsistencies of the prior case law on the State resources criterion.[1114]

The following relevant questions are, therefore, raised: how has a similar cut-and-paste exercise based on a transitional situation turned out to be one of the leading cases in the State aid field? Why has the *PreussenElektra* judgment not solely influenced the competent European Institutions' approach towards the financial mechanisms so far developed for promoting investments in the generation of sustainable energy? Why it has influenced the assessment of all the public support measures adopted by the Member States in connection to each and every sector governed by the Treaty, irrespective of the EU objectives to which they are related? As will become evident from the analysis we will provide of the following EU decisional practice on energy support measures in the next paragraph, three main elements have since contributed to the 'successful' application of the *PreussenElektra* doctrine. First of all, there is the Member States' attempts to bring their support schemes outside the perimeters of the State aid control-zone the ruling established by taking advantage of the huge loophole it left. Secondly, there is the implicit acknowledgment by the following decisions of the Commission and jurisprudence

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[1112] *Ibidem*, para. 81.

[1113] See, Case C-573/12, *Ålands Vindkraft AB v Energimyndigheten* (*Ålands Vindkraft*), ECLI:EU:C:2014:2037, para 85.

[1114] See, Bronckers M., Van der Vlies R. (2001) The European Court's PreussenElektra Judgment: Tensions Between E.U. Principles and National Renewable Energy Initiatives, *cit.*, where the authors actually stated that, although the narrow interpretation of the notion of State aid provided in *PreussenElektra* could be welcomed from an environmentalist perspective, from a broader systemic view it was troublesome.

of the CJEU that the *PreussenElektra* ruling provided the final reading of the State resource criterion. Notably, in fact, neither the CJEU nor the Commission have ever tried to overrule this jurisprudence, notwithstanding that the economic, political and social environment has changed to a great extent over time. Last but not least is the confusing, inconsistent and agnostic stance the Commission has adopted towards energy support measures. It is fair to note that, as we shall see, the Commission has struggled in managing to set some boundaries between *PreussenElektra*-type measures and some other energy measures falling under the State resources criterion. However, although its effort are appreciable, we will later evidence that these attempts to patch up the *PreussenElektra* loophole have led to more confusion and sometimes to rather arbitrary and divergent results with respect to very similar measures.

As mentioned, in the next paragraph we will deal with the EU jurisprudence and decisional practice on energy support measures of the last fifteen years. More precisely, we will evidence how the narrow reading of the concept of State control over the funds used to finance national support measures has generated a great notification deficit and a flawed approach with respect to each and every type of energy regulatory measure. To help the reader to detect the inconsistencies in the assessment of similar – even identical – legislative frameworks, we have grouped the relevant support measures on the basis of their similarity in terms of structure and obligations imposed on third parties rather than on the basis of the different types of financial mechanisms and energy-related objectives.

6.3. Damaging Effects of the Narrow Notion of 'State Control' on EU Energy Markets

6.3.1. *The Scale of the Notification Deficit*

A first practical impact of the *PreussenElektra* judgment has been that, by deliberately overstating its reach, a great number of Member States have stopped giving notification of most of their energy support measures and regimes, some of which are still in place or have lasted for several years. One might legitimately argue that this effect cannot be ascribed to the principles established by the Court in the mentioned judgment. Hence, before addressing the scale of the notification deficit in the last fifteen years, we will provide evidence that before the *PreussenElektra* ruling was rendered Member States usually duly gave notification of their

energy support regulatory measures for prior approval, the watershed between the first and the second part of this paragraph being precisely the date on which this ruling was adopted.

Prior to *PreussenElektra* the notification obligation was obviously complied with by the Member States with respect to those support measures representing the typical tools of fiscal policy – that is to say, financial transfers and tax measures. As previously explained, in fact, these support provisions diverge from energy regulatory measures in that they are always financed directly out of the public budget, and, thus, the restrictive reading of the concept of *indirect* control have no great implications in that regard. Leaving aside individual aid measures, a clear-cut example of direct financial assistance in the form of aid regimes is represented by those price-based instruments usually granted to deal with international competitiveness and environmental concerns; that is to say, reductions and exemptions from or compensation for energy taxes. In that respect, examples of Member States' due diligence in terms of notification before *PresussenElekra* include several measures adopted by Denmark,[1115] the Netherlands[1116] and Finland.[1117]

Importantly, as we shall evidence, the very same Member States' due diligence was also applied with regard to those regulatory measures whereby the financial burden of the support was put on energy consumers, supply undertakings, network operators and/or other undertakings active in the energy sector. If the legislative acts under consideration provided for parafiscal levy systems to finance the schemes, which were implemented and managed by intermediaries established or appointed by the State, notification of the measures at issue was certainly given and found to meet the State resources criterion on the basis of settled case law.[1118] The same was true regarding schemes involving the resources of public undertakings, such as preferential tariffs schemes, although, frequently, they took the form of individual aid and notification was sometimes not given due to the characteristics of European energy markets

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[1115] See, Commission Decision of 7 April 1992, State aid N 4/92, *Danish CO_2 Tax Scheme*, *cit.*, Commission Decision of 12 April 1995, State aid N 698/94, OJ 1995 C267/13, and Commission Decision of 16 September 1997, State aid N 11/97, *cit.* See, also, Commission Decision of 28 September 1994, State aid N 306/94, *Danish CO_2 Tax Exemption for EIUs*, *cit*.

[1116] See, for instance, Commission Decision of 20 December 1995, State aid N 760/95, *Dutch Energy Tax Exemption for EIUs*, *cit.*, and Commission Decision of 6 May 1998, State aid N 752/97, *Netherlands - Nihil-tariff regulating energy tax for supply to the users of green electricity*, *cit.*

[1117] See, Commission Decisions, State aid N 884/96, N 66/98, and N 515/98, *Finland – Compensation for Energy Tax for Power Plants Using RES-e*, *cit.*

[1118] *E.g.*, Case 173/73, *Italian textiles*, *cit.*; Case 78/76, *Steinike & Weinlig*, *cit.*

at the time.[1119] Even more important was the fact that it was not considered relevant, as a distinguishing feature in terms of notification and assessment, that certain national provisions simply provided for compulsory purchase, sale or payment obligations where private monies flowed directly between market participants – with or without a compensatory component. On the basis of the principles established by the EU jurisprudence up to then there was, in fact, no doubt that State-set prices for certain goods did not involve State aid only when not coupled with other distortive elements,[1120] such as statutory purchase and payment obligations, parafiscal levy systems or the participation of public undertakings in the financing of price regulation.

All the above considerations were true, for instance, with respect to the few stranded costs compensation schemes and capacity mechanisms in the form of capacity payments adopted before the *PreussenElektra* judgment and duly notified to the Commission.[1121] As we shall see, however, the relevant cases were all decided after this judgment was rendered and, unfortunately, some of them in the immediate aftermath of this judgment. Turning to early nuclear energy, RES-e and CHP support regimes, independently from the regulatory technique adopted notification was generally given and found to involve a transfer of State resources simply because they were instituted by law and this was considered to determine a sort of indirect State control over the relevant resources.[1122] This was the case not only for price-based instruments, such as FIT schemes,[1123] but also for quantity-based instruments such as public tender schemes (PTS)[1124] and TGC regimes. Interestingly enough, the two German feed-in laws

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[1119] See, *inter alia*, Commission Decision, State Aid C 38/1992, *Alumix*, *cit.*; Commission Decision of 11 April 2000, State aid C 39/1998, *2000 EDF decision*, *cit.*; Case C-169/84, *Cofaz*, *cit.*; Joined Cases 67/85, 68/85 and 70/85, *Van der Kooy*, *cit.*; Case C-56/93, *Belgium v. Commission*, *cit.*

[1120] See, Case 82/77, *Van Tiggele*, *cit.*

[1121] Examples of stranded costs compensation schemes include the Italian, Austrian, Spanish, UK, Dutch and Belgian ones. As per the few capacity mechanisms adopted at the time, this was the case for the capacity payments introduced by the Spanish authorities with Royal Decree 2019/1997 and for the similar mechanisms established by Austria and Denmark, all with due notification in the context of the notifications of their stranded costs compensation mechanisms. These capacity mechanisms were, in fact, all linked to the compensation of stranded costs and, hence, they were addressed in the relevant decisions.

[1122] In that respect, see also European Commission - DG COMP (1998) *XXVIIth Report on Competition Policy – 1997*. Luxembourg: Office for Official Publications of the European Communities, sections 285-286.

[1123] See, Commission Decision of 19 December 1990, State aid N 442/90, *StrEG 1990*, *cit.*; Commission decision of 30 September 1992, State aid N 310/92, *Danish Wind Energy Scheme*, *cit.*; Commission Decision of 15 May 1996, State aid N 1037/95, *Danish FIT scheme*, *cit.*; Commission Decision of 15 May 1996, State aid N 305/96, *Measures in favour of centralised electricity generating plants*, *cit.*; and Commission Decision of 2 December 1999, State aid NN 143/96, *Swedish FIT scheme*, *cit.*

[1124] See, Commission Decisions of 28 March 1990, State aid N 34/90, of 28 July 1993, State aid N 410/93, and of 17 August 1998, State aid N 153/98, *UK non-fossil fuel obligation*, *cit.* Under the public tender scheme in question

that replaced the FIT scheme under exam in *PreussenElektra* during the relevant proceeding represented the only exception to the notification pattern.[1125] It is worth also noting that, in contrast to the following path taken by the Commission, even TGC systems were considered to meet the State resources criterion in the 1990s, and this independently from the existence of a penalty mechanism. In its *Danish GC scheme* decision, in fact, the Commission assimilated the scheme under scrutiny with its ancestor, the *Danish FIT scheme.*[1126] It thus concluded that although the object of the purchase obligation was different – *i.e.*, green electricity *vs.* green certificates – the scheme still consisted of a purchase obligation established by law and, therefore, constituted State aid.[1127] We should finally stress that a similar attitude was also adopted at the time with respect to national emission trading systems. Actually, as we shall see, so far notifications have been given for them all. This is due to the circumstance that, in contrast to the analogous TGC schemes, the Commission has never cast doubt on the fact that these kinds of systems involve State resources. Indeed, in its first decision on an emission trading system, the *Danish CO_2 Quotas* decision, the Commission clearly stated that, by allocating free of charge emissions rights, the Danish State was foregoing revenues, and this approach was then applied in the following decision.[1128]

As mentioned, since *PreussenElektra* several Member States have stopped giving notification of their energy support regulatory measures, some of which are still in place or have lasted for several years. This has happened especially with regard to sustainable energy

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nuclear power plants and RES-e generators bid on the obligation to provide a fixed quantity of non-fossil fuel power, with the lowest-price bidders winning long-term contracts with distribution companies. The ensuing additional costs for distribution companies were financed through the proceeds of a fossil fuel levy imposed on energy consumers. For a critical analysis of this scheme and its outcomes see Fouquet D., Johansson Thomas B. (2008) European renewable energy policy at crossroads – Focus on electricity support mechanisms. *Energy Policy* **36**(11) 4079– 4092.

[1125] See, Commission Decisions of 22 May 2002, State aid NN 27/2000 and State aid NN 68/2000, respectively, *EEG 2000* and *KWKG 2000*, *cit.*

[1126] Commission Decision of 20 September 2000, State aid N 416/1999, *Danish GC scheme*, *cit.*

[1127] Indeed, the *Danish GC scheme* obliged consumers to buy a number of RES-e certificates from green electricity generators, which was set as a fixed share of their electricity consumption. This was found to certainly contain an element of State intervention to the benefit of these generators. Hence, it is clear from the analysis provided by the Commission that the circumstance that a penalty mechanism was established under the scheme it did not add anything to its finding under the State resources criterion. This, notwithstanding that under such mechanism a public fund was entrusted with collection and redistribution tasks with respect to revenues from fines imposed under the GC scheme, a characteristic that was later considered decisive for a finding of State aid with respect to TGC schemes.

[1128] See, Commission Decision of 12 April 2000, State aid N 653/1999, *Danish CO2 Quotas*, *cit.*, para. 4.1. Indeed, the Commission explained that these emissions rights constituted intangible assets embodying a market value and, therefore, could have been sold by the State, for instance through an auction. Actually, the existence of a market for these pollution documents further demonstrated their monetary worth.

financial schemes and capacity remuneration mechanisms, notwithstanding that most of them constitute State aid according to both the traditional and the current jurisprudence of the CJEU. As will become apparent from the analysis provided in the next subparagraphs, this still ongoing trend has been further exacerbated by the confusing and agnostic stance adopted by the Commission towards almost every kind of energy support regulatory measure, especially in the immediate aftermath of the *PreussenElektra* ruling.

We might start our dissertation in this respect by providing a few examples from among the great number of sustainable energy support schemes that have not seen notification in the last fifteen years.[1129] For instance, the Spanish and Italian RES-e support schemes have been financed in the same way as other domestic regimes implemented by these two countries for many years, and these other regimes have been found to meet the State resources criterion in some Commission and CJEU decisions. This is the case for certain decisions that rendered on support measures for conventional power stations, [1130] stranded costs compensation mechanisms and preferential tariffs granted to energy-intensive industries.[1131] The same holds true for the Slovenian priority dispatching FIT and FIP scheme, adopted to the advantage of RES-e generators, producers using CHP technologies and a coal-fired power plant. This scheme was later discovered by the Commission in the context of assessing the Slovenian stranded costs compensation system and was found to constitute State aid.[1132] Another example is provided by the Luxembourgian and Austrian feed-in laws, which were found to constitute State aid just eight and three years after their implementation, respectively.[1133] We should also quote the

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[1129] Examples of countries that have not given notification of some of the sustainable energy support schemes they have adopted over time include Italy, France, Spain, Poland, Greece, Portugal, Hungary, Bulgaria, Slovakia, Latvia, Lithuania, Malta, Luxemburg and Slovenia.

[1130] See, for instance, Case C-275/13, *Elcogás*, *cit.*, on the Spanish scheme adopted to support conventional power stations.

[1131] Several Italian support measures have, actually, been financed through parafiscal levy systems managed by the Equalisation Fund for the Electricity Sector and have been considered to meet the State resources criterion. See, for example, Commission Decision of 1 December 2004, State aid N 490/2000, *Italian Stranded Costs*, *cit.*, Commission Decision 8 November 2006, State aid C 11/2006 (ex N 127/2005), *Stranded costs for the municipalizzate, cit.*, and the related CJEU judgments rendered in Joined Cases C-128/03 and C-129/03, *AEM*, *cit.*, and Case T-25/07, *Iride*, *cit.* See, also, Commission Decisions on State aid C 36/A/2006 (ex NN 38/2006), *Terni*, *cit.*, State aid C 38/A/2004 (ex NN 58/2004) and C 36/B/2006 (ex NN 38/2006), *Alcoa*, *cit.*, and State aid C 38/B/2004 (ex NN 58/2004) and C 13/2006 (ex N 587/2005), *Portovesme, ILA & Euroallumina*, *cit.*

[1132] See, Commission Decision of 24 April 2007, State aid C 7/2005 (ex NN 80/2004), *Slovenian FIT & FIP scheme*, *cit.*

[1133] See, Commission Decision of 28 January 2009, State aid C 43/2002 (ex NN 75/2001), Commission Decision of 28 January 2009, State aid C 43/2002 (ex NN 75/2001), *Luxembourgian compensation fund for the organisation of the electricity market* (*Luxembourg Feed-in Tariff I*), OJ 2009 L159/11, and Commission Decision of 4 July 2006, State Aid NN 162/A/2003 and State Aid N 317/A/2006, *Austrian Green Electricity Act 2003*, *cit.*

long-lasting Italian TGC regime[1134] and numerous sustainable energy schemes the French government has adopted over the years, which have never seen notification.[1135] Regarding the successive French FIT schemes established by law to the advantage of wind-power installations, one of these came to the attention of the competent European Institutions only in May 2012, as a result of the reference for a preliminary ruling lodged by the French supreme administrative court. This case referral then led to the landmark *Vent De Colère* judgment,[1136] where, as we shall see, the Court found that the support mechanism under scrutiny certainly constituted an intervention through State resources.[1137] By contrast, when addressing the non-notified previous version of the FIT scheme in 2003 – which was almost identical to that at issue in *Vent De Colère* –[1138] the Conseil d'État ruled that it did not meet the State resources requirement. Importantly enough, it found that the *PreussenElektra* 'precept' was applicable to the case and thus refrained from requesting a preliminary ruling on the basis of the *acte claire* doctrine.[1139] Apart from these examples, a blatant proof of the scale of the notification deficit and of its impact is provided by the data on energy support measures. The most recent available figures on aid granted for environmental protection and energy-related objectives show a great increase in expenditure from 2013 to 2014, amounting to approximately 28.5 billion EUR.[1140]

[1134] Overall, non-notified green certificates schemes were in place in Italy from about 2001 to 2012.

[1135] See, in that respect, http://www.iea.org/policiesandmeasures/renewableenergy/?country=France (accessed 30 October 2016).

[1136] See, Case C-262/12, *Vent De Colère*, *cit.*, which is properly addressed in subparagraph 3.3. During the preliminary reference proceeding, the Commission received a complaint from the Association Vent de Colère – which was a party to the main national proceeding – regarding the non-notified French on-shore wind power scheme. Hence, it started its own investigation. While the FIT scheme was cleared under the 2008 EAG, the Commission opened a still ongoing in-depth inquiry into the second pillar of the scheme, *i.e.* three types of exceptions from/reductions of renewable energy surcharges granted to EIUs. See, Commission Decision of 27 March 2014, State aid SA.36511, *Mécanisme de soutien aux énergies renouvelables et plafonnement de la CSPE*, OJ 2014 C348/78.

[1137] Case C-262/12, *Vent De Colère*, *cit.*, para. 37.

[1138] The only differences lay in the circumstances that in the first case the statutory-designated entity was a public service fund managed by a public body and not the public body directly, and the relevant parafiscal levy was not imposed on consumers but on certain producers – hence, competitors of the beneficiaries, suppliers and distributors, which is even worse in terms of distortions of competition. Moreover, the purchase obligation was imposed on publicly-owned TSOs and DSOs. Interestingly enough, the French FIT scheme in question was almost identical to the FIT scheme the Commission found to constitute State aid in Commission Decision of 14 April 2010, State Aid N 94/2010, *Feed In Tariffs to support the generation of renewable electricity from low carbon sources* **(***UK feed-in tariffs*), OJ 2010 C166/1. In that regard see subparagraph 3.3.

[1139] Conseil d'Etat, Judgment of of 21 May 2003, *Union des industries utilisatrices d'énergie*, Case 237466, n.p. in the Lebon report of cases. For a critical analysis of the judgment see, Bouquet G. (2006) Les Mécanismes de Soutien de la Production D'électricité à Partir de Sources d'Énergie Renouvelables à l'Épreuve des Articles 87 et 88 du Traité Relatifs Aux Aides d'Etat. *Actualité Juridique Droit Administratif* **13**(April) 697-701.

[1140] State aid statistics are available in the European Commission's State Aid Scoreboard, which can be accessed at http://ec.europa.eu/competition/state_aid/scoreboard/index_en.html. The relevant figures have been provided

85 per cent of this increased amount is due to the circumstance that from 2014 Member States' annual reports include information on more – but still not all – RES-e schemes.[1141] Most support measures filling the information gap are, therefore, certainly non-notified aid; otherwise they would have been taken into consideration in previous State aid Scoreboards.

An even more worrisome trend can be evidenced regarding other kinds of energy support schemes, such as capacity remuneration mechanisms. Indeed, apart from a very few recent exceptions, only two successive Irish CRMs and the Latvian CRM were notified during the first decade of the new millennium.[1142] This is notwithstanding that these mechanisms more than others need to be properly assessed on a case-by-case basis. Indeed, the design types so far devised for generation adequacy measures are usually partially reshaped by the Member States through the inclusion of peculiar features.[1143] Moreover, with regard to these kinds of measures the result of the State aid evaluation also depends on the distinguishing characteristics and different structures of the energy markets where they are implemented. As we have seen and we shall see, this is especially true when assessing them under the economic advantage test and the compatibility provisions. Furthermore, in the author's view, it is quite problematic that some of the capacity remuneration mechanisms so far conceived can escape Article 107(1)'s prohibition in general and the State resources test in particular.[1144]

This is almost certainly true with regard to price-based capacity payment schemes, which normally take the form of direct payments financed from the State budget. Indeed, the remuneration for capacity availability provided under such schemes is usually directly paid by national energy regulators or State-owned and controlled TSOs. In a very few cases the financial burden is put on market operators; however, in such cases the relevant resources aimed

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by the Eurostat and are available at http://ec.europa.eu/eurostat/tgm_comp/refreshTableAction.do?tab=table&plugin=1&pcode=comp_sa_01&language=en (accessed 30 October 2016).

[1141] *Ibidem.*

[1142] See, Commission Decision of 16 December 2003, State aid N 475/2003, *Irish CADA*, *cit.*; Commission Decision of 14 July 2004, State aid N 143/2004, *Public Service Obligation – Electricity Supply Board*, *cit.*; and Commission Decision of 14 June 2010, State Aid N 675/2009, *Latvian CRM*, *cit.*

[1143] For a brief overview of some of the capacity remuneration mechanisms so far implemented by the Member States see, European Commission, *Staff Working Document Accompanying the Interim Report of the Sector Inquiry on Capacity Mechanisms*, of 13 April 2016, SWD(2016) 119 final, section 3.2., available at http://ec.europa.eu/competition/sectors/energy/state_aid_to_secure_electricity_supply_en.html (accessed 30 October 2016).

[1144] See, in that respect, also Hancher L. (2015) 'Funding Capacity Mechanisms: When Do the State Aid Rules Apply?', in Hancher L., de Hauteclocque A., Sadowska M. (eds) Capacity Mechanisms in the EU Energy Market – Law, Policy, and Economics. Oxford: Oxford University Press, pp. 162-171.

at recompensing electricity producers are also administered by the very same TSOs, which are entrusted by the States with collection and redistribution duties. Thus, according to well-established case law, the private resources financing capacity payment schemes certainly come under the control of the States.[1145] Moreover, the price paid for availability and activation capacity is usually set administratively, with the ensuing risks of over-compensating capacity providers. Nonetheless, these kinds of capacity remuneration mechanisms have been implemented over the years without prior notification by several Member States. Examples include the targeted capacity payment regimes still in force in Italy,[1146] Greece,[1147] Spain,[1148] Portugal and Poland,[1149] and the market-wide capacity payment mechanism still in place in Ireland.[1150]

The same notification deficit can be evidenced regarding other types of capacity mechanisms where, in our opinion, the State resources element might also be deemed readily identifiable. This is the case, *inter alia*, for the strategic reserve mechanisms and the interruptibility schemes, which are two sides of the same coin, the first having as beneficiaries big plant operators while the second has energy-intensive users.[1151] Non-notified strategic reserve mechanisms have been

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[1145] For instance, under the Transitional Capacity Assurance Mechanism implemented by Greece, electricity suppliers have to buy capacity availability tickets from certain electricity producers at a regulated price. The transactions are managed through an account run by the State-controlled TSO, which has calculation, collection and redistribution duties.

[1146] The Italian authorities have introduced capacity payments for dispatchable generators with Legislative Decree No 379/2003, as a temporary system managed and regulated by the Italian energy regulator. Under the system an administered fee – determined by the regulator according to certain criteria – is paid to plants selected according to their reliability as remuneration for the fact that they make their capacity available to the TSO in the day-ahead market.

[1147] The Transitional Capacity Assurance Mechanism was introduced by amending the Grid Code in 2005.

[1148] Spain currently operates three capacity payments schemes, two of which were adopted in 1997 and notified about in their original version as part of the Spanish stranded cost compensation mechanism. However, these schemes were later amended and incremented both by the Electricity Sector Act 2007 (also, Ministerial Order 2794/2007) and by Royal Decree 9/2013. Notification was not given of these amendments, although some new elements, such as the capacity payments for the availability services, almost certainly constituted State aid.

[1149] In Portugal two targeted capacity payments schemes have been in place since 2010, *i.e.* the 'availability' and the 'investment' incentive schemes. In Poland, instead, a sort of targeted capacity payment has been in place since 2014. Indeed, at the end of 2013 the state-owned TSO in charge of managing the operating capacity reserve system modified the rules of this system: currently, the generators concerned not only receive not only a given amount of monies for MWh effectively dispatched from the TSO but also a fixed remuneration for the availability of capacity.

[1150] This mechanism was introduced in 2007 to remunerate all capacity providers for the fixed costs they incur during the trading periods in which they are available. Foreign capacity providers are granted a capacity payment on top of the Irish electricity price. The value of capacity payments is set administratively by the Irish and Northern Irish regulators.

[1151] Generally speaking, under strategic reserve mechanisms eligible generators have to keep their plants in stand-by until capacity shortfalls arise, and they have to reactivate them when instructed to do so by the TSO. In exchange for their reserve services they usually receive both availability payments and an activation payment. Interruptibility schemes, instead, deal with demand response capacity. Under such schemes energy intensive users must agree to

in place, for instance, in Sweden and Finland for a long time, and have been more recently introduced in Germany, Belgium and Poland. Non-notified interruptibility schemes are being operated in Spain, Italy, Portugal, Poland, Germany and Ireland. However, with some exceptions,[1152] they should in principle be run through competitive processes that should also set the relevant availability price and capacity activation or demand reduction prices. However, since there is frequently insufficient capacity on offer to allow for competitive tenders, in practice prices are normally set administratively. With specific reference to the State resources criterion, it is also worth noting that both the availability and capacity activation payments to the selected generators and the availability and demand reduction payments to the selected energy-intensive consumers are usually made by State-owned and controlled TSOs. Higher transmission tariffs are then established by the TSOs in certain cases in order to pass on to consumers the costs of the regime concerned. This circumstance should, however, have no impact on a positive finding as to the control exercised by the State over the relevant resources.[1153] The same holds true when a parafiscal levy is established as part of the transmission tariffs consumers have to pay in order for the latter to bear the costs of strategic reserve mechanisms.[1154] Moreover, it is worth stressing that in all these cases the relevant payments to plant operators are still made in the first place by the State-owned and controlled TSOs, who also manage the parafiscal levy and tariff systems and the private resources in question. However, for instance, the Belgian Council of State[1155] has erroneously held that, on the grounds of *PreussenElektra*, the Belgian Strategic Reserve Law does not constitute State aid simply because the costs of the system are ultimately borne by consumers. Indeed, the so-called public service obligation levy established thereunder allows the TSO to pass the costs it bears under the system on to consumers.[1156] In this respect it is finally interesting to highlight

be automatically disconnected when needed by the TSO, and they are usually paid a fixed amount of monies for each MW made available for demand response and a fixed price for demand reductions made.

[1152] *E.g.*, Portuguese and Irish interruptibility schemes.

[1153] For instance, under the Polish Cold Contingency Reserve mechanism and the Demand Side Response contracts, the generators and energy-intensive consumers concerned receive payments directly from the 100% state-owned and ownership unbundled TSO. These payments are fixed uniform payments in the first case, while they vary according to the contractual arrangements in the second case. With respect to the Cold Contingency Reserve payments, the ensuing costs are then passed on by the TSO to consumers.

[1154] A similar public service obligation levy, aimed at covering the expenditures to be incurred by the TSO under the strategic reserve mechanism, has been, for example, established under the Belgian Strategic Reserve Law.

[1155] The Council of State is a constitutionally established advisory and jurisdictional body that has to be consulted on draft legislation.

[1156] See, Draft bill, Parl. St. 2013–2014, 53-3357/001, p. 30.

that, had Germany given notification of the network reserve and interruptibility mechanisms it has implemented, great problems in terms of State aid assessment would have arisen. Several TSOs, in fact, manage such systems and provide for the relevant payments, *i.e.* the TSOs responsible for the regions concerned. Moreover, as we have explained, with regard to most German TSOs the majority of the shares are privately owned. As we shall see in the next subparagraph, the legal assessment in such cases is still uncertain. This is, in fact, one of the problematic legacies left by *PreussenElekra* and the following jurisprudence, which might lead to discriminatory outcomes based on the ownership structures of the undertakings concerned, as well as with respect to capacity remuneration mechanisms.

Other examples of deliberate violations by the Member States of their notification's obligation have, for instance, arisen with respect to several preferential energy tariffs. Most of them have then been found to constitute State aid, either because they were granted by public undertakings whose resources were under the direct control of the State or because private and public bodies were appointed by the State to administer the aid.[1157]

Of course, many other energy support measures have not been notified before their implementation in the last fifteen years. In this paragraph we have, however, focused on those un-notified regimes that, as clearly evidenced in Part 2 of this doctoral thesis, represent the broadest and most problematic categories of energy aid. On a final note we should recall that, as explained in the very same part of the thesis, this notification deficit has certainly not at all diminished the case-overload and investigation onus that the European Commission's DG COMP is confronting; neither it has alleviated the burdensome quasi-legislative role it is increasingly forced to play with respect to compatibility assessment.[1158]

6.3.2. *A Flawed Approach towards Statutory Purchase or Payment Obligations*

[1157] Examples include, Commission Decision of 20 November 2007, State aid C 36/A/2006 (ex NN 38/2006), *Terni*, *cit.*; Commission Decision of 19 November 2009, State aid C 38/A/2004 (ex NN 58/2004) and C 36/B/2006 (ex NN 38/2006), *Alcoa*, *cit.*; Commission Decision of 23 February 2011, State aid C 38/B/2004 (ex NN 58/2004) and C 13/2006 (ex N 587/2005), *Portovesme, ILA & Euroallumina*, *cit.*; Commission Decision of 12 June 2012, State aid SA.21918 (C 17/07) (ex NN 17/2007), *Tarifs réglementés de l'électricité en France*, OJ 2012 C398/10; Commission Decision of 20 April 2015, State aid SA.33475, *Preferential tariffs in contracts between Hidroelectrica S.A. and thermoelectricity sellers*, *cit.*

[1158] For an exhaustive analysis with that respect see, Ştefan O. (2013) *Soft Law in Court: Competition Law, State Aid, and the Court of Justice of the European Union*. The Hague: Kluwer Law International.

We have already explained how the Court proved to be ingenious but also faint-hearted in *PreussenElektra,* and not at all forward-looking in confining the answer to the referring court's question to the relationship between the parties to the main proceeding, notwithstanding that the order for reference invested the German FIT scheme in its entirety.[1159] This was the easiest way out because the TSO and DSO concerned were both undertakings where the majority of the shares were privately owned. However, precisely as in the German market at the time,[1160] the ownership structures of the economic operators of any EU energy market are diversified, differ from national market to national market and vary over time. This is a great problem that should not be underestimated when dealing with long-lasting and large-scale support regimes like those frequently adopted by the Member States for dealing with energy-related concerns. Further, this is one of the greatest problems the Commission has to confront when addressing energy support measures, as a result of the problematic legacy left by *PreussenElekra*. A problem that, in the author's view, neither the Commission nor the CJEU have properly addressed.

Three possible scenarios which do not provide for compensation mechanisms administered by bodies specifically appointed by the State for that purpose can occur and have occurred when dealing with energy-related support schemes in the form of purchase and/or payment obligations. Actually, the same applies with respect to mandatory quota and tariff obligations. The first scenario is that the energy market operators on which the statutory obligation is imposed are all in private ownership. The second one is that they are all in public hands. The third, even more problematic and increasingly frequent one, is that the abovementioned forms of compulsory schemes established by law address undertakings characterised by different ownership structures. These three scenarios will be addressed in turn, by making reference to the relevant jurisprudence.

The Commission has not frequently confronted the first above provided scenario since the *PreussenElektra* ruling. In the author's view this does not mean that the legal test set out under this judgment is difficult to apply and the scholars have, therefore, overestimated its impact.[1161]

[1159.] Cf. paragraphs 27 and 55 with paragraphs 59, 60 and 66 of the judgment rendered by the Court in Case C-379/98, *PreussenElektra, cit.*

[1160.] *Ibidem*, para. 55, were, however, the Court did not analyse the ownership structure of the grat number of DSOs involved.

[1161] This is, instead, the opinion of some distinguished scholars. See, *inter alia*, Rusche M.T. (2015) 'Union Law on State Aid: Down for the Count, but not Knocked Out by *PreussenElektra*', in Rusche M.T. (ed.) EU Renewable

This circumstance might instead be attributable to three main reasons. The first one is that, as we have seen in the previous subparagraph, one of the practical effects of the *PreussenElektra* ruling is that several Member States have stopped giving notification of many of their energy support measures, especially – but, unfortunately, not only – those where the economic advantage conferred by statutory provisions is directly granted by privately-owned market participants from their own resources. Secondly, the full restructuring and privatisation of the energy sector is still an on-going path in most EU countries.[1162] Thirdly, most Member States are still not ready to pretend to lose some managing powers with respect to energy support systems. The very same private law entities that are addressed by mandatory obligations are left with the task of administering them according to the public authorities' directives, without compensation. In this regard it is worth noting that, on the one side, things are slowly changing and, at some point in time, all energy support measures will not be notified or, in any event, they will escape the State aid control system according to the *PreussenElektra* doctrine. On the other side, it is important to stress that, in order to properly achieve the EU Energy Union's goals in an efficient and cost-effective way, Member States should retain some control over the functioning of the support measures, and the costs of the relevant schemes should be redistributed among the various market operators and the consumers. Hence, incentivising the Member States to devise their support regimes like the *PreussenElektra* one in order to escape their obligations under Article 108(3) TFEU is certainly not a very intelligent and forward-looking idea.

A couple of examples are already available provided in this respect. In the *UK Competitive Transition Charge* the Commission addressed, *inter alia*, the decision of the UK government to maintain a PPAs mechanism in force.[1163] Suffice it here to mention that under this mechanism a private undertaking – which was a fully vertically integrated State-owned company when the contracts were concluded – was obliged to purchase electricity from four generators at prices higher than the real economic value of the type of electricity concerned.

Electricity Law and Policy: From National Targets to a Common Market. Cambridge: Cambridge University Press, pp. 79-137, at p. 115.

[1162] An exception is, for instance, represented by the UK energy market.

[1163] See, Commission Decision of 27 February 2002, State aid N 661/1999, *UK Competitive Transition Charge* OJ 2002 C113/3, paras 5-15. A stranded costs compensation mechanism was also introduced by the UK government as a complementary measure in order to offset the additional costs incurred by the company having the purchase obligation under the relevant PPAs. In the next subparagraph we will deal also with this mechanism. Indeed, it is even more problematic in terms of State aid assessment and the Commission has addressed it separately (see, paras 25-28).

Hence, the Commission cannot be blamed for having decided that it was a *PreussenElektra*-type measure and, thus, the State resources criterion was not met.[1164] This was notwithstanding that these kind of contracts create serious potential obstacles to the liberalisation of the energy sector and leave little room for new market entrants, especially when covering high percentages of the generation market.[1165] The Commission might also not be blamed for not having investigated the second-to-last Luxembourgian FIT scheme for RES-e and CHP electricity, as reformed in order to replace the former scheme as of 1 January 2009. In fact, the State had abolished the compensation pillar of the measure and, thus, the levelisation mechanism that was aimed at channelling the compulsory contributions under the previous system.[1166] However, the Commission has not even investigated the ownership structure of the DSOs and TSOs involved in the scheme other than the biggest TSO, which was in majority privately owned.[1167] Hence, it might well be that the case would have fallen into the third abovementioned scenario had the European Institution properly addressed it.

We should now turn to the second abovementioned scenario; that is to say, the case in which statutory purchase or payment obligations are imposed on energy companies that are all in public hands. This scenario encompasses both cases where the Member States establish the relevant obligation by legislative means and those where they use their control over the public undertakings concerned and their funds to reach the very same result. According to the above-addressed well-established jurisprudence on support measures involving the resources of public undertakings, such measures certainly constitute State aid and there should be no doubt in that respect.[1168] However, as a result of the *PreussenElektra* judgment, the Commission has wrongly started to think that the Court might have in a way superseded its previous case law. Hence, for some years it has adopted a confusing and agnostic stance even towards these clear cases. It is, therefore, not surprising to see the scale of Article 108(3) obligation violations

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[1164] *Ibidem*, paras 21-23.

[1165] *Contra*, Glachant J-M., Finon D., de Hauteclocque A. (2011) *Competition, Contracts and Electricity Markets: A New Perspective*, *cit.*

[1166] See, in that respect, paragraph 23 of the Commission Decision on the former Luxembourgian scheme, which was rendered after the mentioned second-to-last Luxembourgian FIT scheme entered into force, *i.e.*, the Commission Decision of 28 January 2009, State aid C 43/2002 (ex NN 75/2001), *Luxembourg Feed-in Tariff I*, *cit.*, where the Commission addressed only the provisions applicable as of 2009.

[1167] *Ibidem*, para. 24.

[1168] *E.g.*, Joined Cases 67/85, 68/85 and 70/85, *Van der Kooy*, *cit.*; Case C-56/93, *Belgium v. Commission*, *cit.*; Case C-200/97, *Ecotrade*, *cit.*; Case C-295/97, *Piaggio*, *cit.*; as definitively confirmed soon after *PreussenElektra* in Case C-482/99, *Stardust Marine*, *cit.*

evidenced in the previous subparagraph. Examples include the really convoluted and puzzling decision adopted by the Commission in the *Alternative energy requirements* case.[1169] The support scheme under scrutiny was based on an obligation imposed by the Irish Government on a State-owned and monopolist DSO to conclude long-term PPAs with certain power plants, at guaranteed prices to be set through tenders but still at higher rates than market prices. The DSO concerned could then pass on part of the financial burden to final electricity consumers through statutory fixed electricity tariffs.[1170] The Commission at first held that the monies transferred by the DSO under the State-imposed PPAs could potentially be regarded as constituting State resources by virtue of the fact that they belonged to a public undertaking. However, it concluded that it was unable to come to a final determination as to whether the provisions at issue qualified as State aid because the purchase obligations provided by the relevant contracts could instead be assimilated to those under scrutiny in *PreussenElektra.*[1171] Hence, it turned directly to the compatibility assessment. Unfortunately, the very same irresolute path has been later reiterated in other decisions, also since the Court delivered the *Stardust Marine* judgment.[1172] This has certainly represented not only the broadest possible interpretation of the *PreussenElektra* doctrine but also its most dangerous application because it could have dismantled the entire State aid control system. Indeed, under this reading, several types of energy support measures can be devised in such a way that they would not pass the State aid test. The measures at risk include, in fact, PPAs, preferential energy tariffs, capacity remuneration mechanisms, stranded costs compensation mechanisms, FIT and FIP schemes, compensation mechanisms for energy and environmental taxes, infrastructural aid schemes, *etc*. One might only wonder how many national support provisions have not had notification given on these grounds. An example has been already provided in the previous subparagraph: the French Conseil d'État ruledin 2003 that an early non-notified FIT scheme did not meet the State resources requirement notwithstanding that the TSO and DSO concerned with the purchase obligation were fully State-owned.[1173]

[1169] Commission Decision of 15 January 2002, State aid N 826/2001, *Alternative energy requirements*, OJ 2002 C59/25.

[1170] *Ibidem*, paras 6-18. In the same context the Irish government had also given notification of a projected revision of the compensation mechanism, which will be dealt with in the next subparagraph because it involved a parafiscal levy system and has been addressed separately by the Commission (see, paras 20-28 of the decision)

[1171] *Ibidem*, paras 31-43, 58, 61 and 63.

[1172] See, for instance, Commission Decision of 9 November 2005, State aid N 602/2004, *Reorganisation Danish Electricity Sector*, *cit.*, where the relevant compulsory payments were made by Energinet, a publicly-owned TSO.

[1173] Conseil d'Etat, Judgment of 21 May 2003, *Union des industries utilisatrices d'énergie*, *cit.*

Fortunately, however, the Commission has since regained confidence, at least in the well-established jurisprudence on support measures exclusively involving the resources of public undertakings, and has started to make distinctions between these measures and *PreussenElektra*-type measures. Examples include, first of all, a system of direct grants established by the Hungarian authorities to ensure security of energy supply through coal production, which was financed by means of the resources of a 99.9 per cent State-owned network operator, MVM.[1174] The Commission in fact distinguished this kind of support to the coal industry from the financial mechanism under scrutiny in *PreussenElektra*. Importantly enough, it has also been forced to differentiate it from other critical cases falling within the third abovementioned scenario, which we will address later.[1175] As we shall see, this in a way justifies its regard for the circumstance that the legislator purported to specifically use the resources of a public undertaking, which, however, should have no relevance at this stage of analysis. A more straightforward was then adopted by the Commission for establishing the involvement of State resources in the *Hungarian PPAs* decision.[1176] Indeed, it simply noted the difference in the ownership structure of the companies under purchase obligation in the StrEG 1998 and in the long term PPAs in question, which actually also included capacity remuneration obligations.[1177] Under the Hungarian PPAs, in fact, it was again that the MVM was bound to pay State-imposed electricity and capacity fees for, respectively, fixed minimum quantities of generated power and fixed reserved capacities, which overall covered the capital, fixed and variable costs of the power plants concerned.[1178] The Commission has, since, rightly applied the same rationale to any kind of energy support measure. Hence, for instance, certain FIT mechanisms and FIP schemes financed exclusively via publicly-owned undertakings have been easily found to meet the State resources criterion.[1179]

[1174] Commission Decision of 25 January 2006, State aid NN 53/2005, *State aid to Hungarian coal industry 2004 and 2005*, OJ 2007 C90/10.

[1175] *Ibidem*, paras 42 ff.

[1176] Commission Decision of 4 June 2008, State aid C 41/2005 (ex NN 49/2005), *Hungarian PPAs*, *cit*. NOT COMPATIBLE

[1177] *Ibidem*, paras 287-290.

[1178] *Ibidem*, paras 36-37, 55-64, 66-73.

[1179] Examples of FIP schemes include those implemented by Denmark to foster the generation of electricity from wind turbines, biomass and biogas, where the price supplements on top of market prices are provided by the State-owned transmission system operator Energinet.dk (see, Commission Decision of 10 March 2009, State aid N 354/2008, *Danish FIP for New Wind Turbines*, OJ 2009 C143/6; Commission Decision of 1 April 2009, State aid N 356/2008, *Danish FIP for Biogas*, OJ 2009 C151/16; Commission Decision of 1 April 2009, State aid N 359/2008, *Danish FIP for Biomass*, OJ 2009 C179/1). As per FIT schemes, see, for instance, paragraphs 48 to 53 of the Commission Decision of 4 July 2006, State aid NN 162/A/2003 and N 317/A/2006, *Austrian Green*

Interestingly enough, the Commission's findings in the *Hungarian PPAs* decision on the State resources requirement were later confirmed under appeal by the General Court.[1180] However, in the relevant judgment the Court focused its assessment under the first condition for the applicability of Article 107(1) TFEU on the imputability element, and the analysis on the State resources criterion is almost inexistent.[1181] This judgment, in fact, clearly shows the great overlaps in the assessments of the two legs of the State origin criterion, which frequently result in confusing and unnecessary duplications.

We should finally address the third scenario advanced above; that is to say, the case in which statutory purchase or payment obligations are imposed on energy market operators characterised by different ownership structures. As usually happens, the problems lie in the middle and, in fact, this is the most problematic scenario and one that the Court avoided addressing in *PreussenElektra*. As it is, however, the most frequent one, the Commission has been forced to confront it on a number of occasions, with quite weird outcomes.

In the very first two decisions adopted after *PreussenElektra* the Commission dealt with statutory payments obligations in the form of price premiums which were imposed on privately-owned and publicly-owned system-responsible organisations to the advantage of new power plants using RES-e sources.[1182] In addressing the measures in question under the State resources criterion the Commission, at first stated that payments made by the publicly-owned organisation met the first condition for State aid while those made by the privately-owned one did not. Fortunately, however, it then adopted the irresolute attitude previously evidenced with regard to other types of support measures addressed in the immediate aftermath of the *PreussenElektra* judgment: indeed, the provisions under scrutiny could easily have been authorized under the compatibility assessment.[1183] In the author's view, in fact, on the one side, the above provided distinction would have been the only way to reconcile *PreussenElektra* with the well-established jurisprudence on the resources of public undertakings, especially after

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Electricity Act 2003, *cit.*, which concern the first pillar of the Austrian support mechanism, *i.e.* the eco-balance group representatives' purchase obligation in favour of green generators at prices fixed by law at a level higher than the market value of the electricity concerned, and their obligation to resell it to electricity traders at a lower price, also fixed by law. Indeed, the eco-balance group representatives were three high-voltage grid operators, in the majority publicly owned (para. 14).

[1180] See, Case T-468/08, *Tisza Erőmű kft v. Commission*, *cit*.

[1181] *Ibidem*, paras 166-179. The same actually also holds true regarding the relevant Commission Decision, as we have seen Chapter 5.

[1182] Commission Decision of 20 June 2001, State aid N 278/2001, *Electricity reform*, OJ 2001 C263/6, and Commission Decision of 9 April 2002, State aid N 505/2001, *Electricity reform – Agriculture*, OJ 2002 C113/4.

[1183] *Ibidem*, respectively, sections 3.1. and 3.

Stardust Marine. Moreover, it would have avoided at least some completely unjustified discriminations between Member States based on their systems of property ownership. On the other side, however, it would have generated distortions of competition between different types of companies on the financing side of the support schemes because only public undertakings would have been able to escape their statutory obligations by way of the State aid regime.[1184] This would, in turn, have increased the number of paradoxes caused by the *PreussenElektra* doctrine. Moreover, given the specific characteristics of an increasing number of domestic energy markets and the EU Energy Union's goals, only a continuously decreasing portion of the payments made under such support schemes would have fallen within the purview of the European Institutions.[1185]

Notwithstanding the above considerations, it should be noted that the consequences of the divergent approach later adopted by the competent European Institutions are even more worrisome. The Commission has, in fact, embraced and elaborated on the line of action advanced by AG Jacobs in the opinion he delivered on the *PreussenElektra* case.[1186] More precisely, after having tried to dismiss the authority of the precedents on aid measures financed through public undertakings' resources,[1187] AG Jacobs has held that, in any event, a "*general measure*" conferring an advantage to one group of undertakings at the expense of another cannot qualify as State aid when only one or a small number of undertakings financing it are owned by the public authorities.[1188] Hence, since in the following decisions on energy-related schemes involving the funds of DSOs and/or TSOs in both private and public ownership the privately-owned ones were in the lead, the Commission has found that the relevant schemes did

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[1184] In the opinion he has delivered on the *PreussenElektra* case, AG Jacobs has gone even further. He has, in fact, stated that the above-addressed distinction would have led the Member States to directly exempt publicly-owned undertakings from statutory obligations affecting private enterprises in order to comply with State aid rules. See, Opinion of Advocate General Jacobs delivered on 26 October 2000 in Case C-379/98, *PreussenElektra*, *cit.*, para. 175.

[1185] For instance, in the above-described cases, the payments obligations of the privately-owned system-responsible organisations covered almost 80 per cent of the relevant market, while those of the publicly-owned organisations only the remaining portion. See, Commission Decision of 20 June 2001, State aid N 278/2001, *Electricity reform*, *cit.* p.3.

[1186] Opinion of Advocate General Jacobs delivered on 26 October 2000 in Case C-379/98, *PreussenElektra*, *cit.*

[1187] *Ibidem*, paras 167-174. In our view, this attempt is actually difficult to reconcile with the opinion AG Jacobs delivered one year later on the *Stardust Marine* case (see, Opinion of Advocate General Jacobs of 13 December 2001 in Case C-482/99, *Stardust Marine*, *cit.*, paras 43 ff.) and has been, in any case, outclassed by the ruling that the Court rendered in this case.

[1188] Opinion of Advocate General Jacobs delivered on 26 October 2000 in Case C-379/98, *PreussenElektra*, *cit.*, para. 175.

not meet the State resources criterion.[1189] In our opinion, in this way it has extended the reading of *PreussenElektra* and the scope of the *PreussenElektra*-category of measures. The Commission has explicitly justified this extension by stating that, since the undertakings financing the support systems at issue were both public and private energy market operators, the measures were of a "*general nature*". This, in turn, indicated, in its view, that the objective of such systems was not to exploit the resources of public companies.[1190] In the author's opinion, the line of action undertaken by the Commission in these cases raises a number of problems which have great implications for the assessment not only of sustainable support schemes but of every type of energy aid measure we have so far run into. Indeed, these measures can all be devised in such a way as to be directly financed by both private and public market participants.[1191] As per the above-provided Commission's reasoning, it is first of all at variance with the well-established case law on the principle of irrelevance of the aim in the context of the State aid test, the objective nature of this test and the required effect-based approach under Article 107(1) TFEU.[1192] Secondly, it is based on a not at all exhaustive – or even erroneous – analysis of circumstances such as the potential general nature of the measure, the organisational structure of the market concerned and the objectives of the State, which should be properly

[1189] Examples include one of the three sections composing the Belgian stranded costs compensation system addressed in Commission Decision of 24 April 2002, State aid N 149/2000, *Belgian transitional regime for the electricity market* (*Belgian Regime for RES-e*), OJ 2002 C 222/2, section 3.2. The measure was, in fact, financed by a State-owned undertaking, SPE, and a privately-owned undertaking, Electrabel, the latter being the largest operator in the market. Other important examples are provided by the Commission Decisions of 22 May 2002, State aid NN 27/2000 and State aid NN 68/2000, respectively, *EEG 2000* and *KWKG 2000*, *cit.*, sections 4, which concerned the two German feed-in laws that replaced the FIT scheme under exam in the *PreussenElektra* ruling by establishing a new framework for fostering the electricity from, respectively, RES and CHP installations. In these cases the majority of the TSOs involved were certainly privately-owned while there was no clear information on the ownership structures of the great number of DSOs concerned with the system, and, indeed, the Commission has provided no assessment in that regard. With that regard, see further Könings M., Jozepa I. (2012) 'Environmental Aid', in Hancher L., Ottervanger T., Slot P.J. (eds) *EU State Aids*, *cit.*, at pp. 815-816. We should finally quote some Commission decisions on modifications of and amendments to the previously analysed Danish schemes, where, as mentioned, the great part of the financial burden was allocated to the privately-owned system-responsible organisation: see, Commission Decision of 18 February 2004, State aid N 448/2003, *Market-orientation of CHPs*, OJ 2005 C307/4, section 3.1., Commission Decision of 16 March 2004, State aid N 342/2003, *Support for windpower plants*, OJ 2005 C250/10, section 2.1., and Commission Decision of 19 May 2004, State aid N 618/2003, *Prolongation of N 1037/95 for certain CHPs*, OJ 2005 C250/11, section 2.1.

[1190] *Ibidem*, respectively, sections 3.2., 4, 4, 3.1., 2.1., and 2.1. By way of speculation, some scholars have stated that the Commission's shift in approach might be attributable to the difficulties it had in confronting the German FIT schemes that succeeded the one at issue in *PreussenElektra*. See, for instance, Rusche M.T. (2015) 'Union Law on State Aid: Down for the Count, but not Knocked Out by *PreussenElektra*', in Rusche M.T. (ed.) EU Renewable Electricity Law and Policy: From National Targets to a Common Market, *cit.*, at p. 94.

[1191] Examples of non-notified capacity remuneration mechanisms have already been provided in the previous subparagraph. These include, for instance, the German network reserves and interruptibility mechanisms addressed thereunder.

[1192] See, in that respect, Chapter 2 of this doctoral thesis.

addressed under the compatibility assessment.[1193] Thirdly, the approach adopted by the Commission generates discriminating between Member States based on their systems of property ownership, which is also difficult to reconcile with the interpretation of Article 345 TFEU provided by the Court.[1194] Fourthly, it causes legal uncertainty and requires a challenging – if not impossible – analysis of the ownership structure of every undertaking of concern to a given support regime, with the ensuing consequences in terms of efficiency of the State aid control regime.

Given the above-provided approach, it is not surprising that the Member States no longer give notification of national support measures involving energy market operators characterised by different ownership structures. The resulting legal uncertainty and notification deficit has also determined that neither of the two competent European Institutions has yet been confronted with energy support systems financed predominantly by market participants in public ownership. Actually, in its decisions the Commission has not established a percentage threshold in terms of public undertakings' involvement that would trigger Article 108(3)'s obligations.[1195] Such a threshold has not even been defined by the European Institutions when dealing with similar measures adopted with respect to sectors others than the energy sector. Moreover, the approach later applied by the Court with regard to these measures sheds some 'black' light on what the outcome would be should notification of an energy support scheme financed mainly by public undertakings be given in the future. Indeed, as already explained in the first paragraph of this chapter, in the *UTECA* judgment CJ has dealt with a statutory financing obligation imposed on both publicly-owned and privately-owned television broadcasters.[1196] Surprisingly, thanks also to the inputs provided by AG Kokott in the opinion she has delivered on the case,[1197]

[1193] See, in that respect, Part II of this doctoral thesis.

[1194] More precisely, Article 345 TFEU reads as follows: "[t]*he Treaties shall in no way prejudice the rules in Member States governing the system of property ownership*". The Court long ago clearly established that this article cannot be considered to restrict the scope of the concept of State aid within the meaning of Article 107(1) TFEU. See, *inter alia*, Joined Cases T-228/99 and T-233/99, *Westdeutsche Landesbank Girozentrale and Land Nordrhein-Westfalen v. Commission*, [2003] ECR II-435, para. 194, and Joined Cases T-116/01 and T-118/01, *P&O European Ferries (Vizcaya) SA and Diputación Foral de Vizcaya v. Commission*, [2003] ECR II-2957, para. 152.

[1195] Some scholars have, actually, looked with favour this omission because defining a similar threshold could be rather arbitrary. See, for instance, Maqueda E.C., Conte G. (2016) 'State Resources and Imputability', in Pesaresi N., Van de Casteele K., Flynn L., Siaterli C. (eds) *EU Competition Law: State Aid – Book One*, *cit.*, at p. 220.

[1196] Case C-222/07, *UTECA*, *cit.*

[1197] See, Opinion of Advocate General Kokott delivered on 4 September 2008 in Case C-222/07, *UTECA*, *cit.*, paras 134-135, where the Advocate General has highlighted that the measure at issue was a "*general statutory system the scope of which* [was] *not confined to just broadcasting institutions governed by public law but also encompasse*[d] *a not inconsiderable number of private television broadcasters*" and that "[did] *not draw any*

in this ruling the Court seems to have extended the above-provided Commission approach to cases where the majority of the undertakings concerned are in public ownership.[1198] These cases should, therefore, also not fall within the remit of Article 107(1) TFEU when involving energy market operators. Hence, the *PreussenElektra* loophole has apparently been widened to a greater extent.

6.3.3. *A Flawed Approach towards Parafiscal Levy Systems*

In this subparagraph we will analyse the EU jurisprudence on energy aid granted through parafiscal levy systems and other compulsory contributions administered by statutory-designated intermediaries. Unfortunately, in this regard we also have to evidence that some decisions adopted in the immediate aftermaths of the *PreussenElektra* judgment have lacked consistency with settled case law on aid schemes implemented and managed by public or private entities established or appointed by the State, which we have addressed in the first paragraph of this chapter.[1199] Indeed, the Commission has wrongly started to think that with *PreussenElektra* the Court might in a way have superseded the mentioned case law in this respect.

This is clearly evident, first of all, when analysing some decisions on stranded costs compensation systems rendered after the mentioned judgment. As an example we might, for instance, quote the Commission decision on the *Ireland Peat Electricity* scheme.[1200] The contested measure was established to offset the costs incurred by an Irish company due to an obligation imposed by the Irish authorities with respect to the generation of electricity from peat.[1201] In its decision the Commission first stated that, since a public body was entrusted with collection and redistribution duties with respect to the compulsory contributions provided by the scheme, the amounts transferred by the consumers thereunder could, in principle, be

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distinction between private and public law television broadcasters" (emphasis added). Which is the numerical equivalent of "*a not inconsiderable number*" remains, however, unclear.

[1198] See, Case C-222/07, *UTECA*, *cit*., paras 44-47, where the Court emphasised that the measure under scrutiny was a "*general legislation*" addressing "*television operators, whether public or private*".

[1199] *E.g.*, Case 173/73, *Italian textiles*, *cit.*; Case 78/76, *Steinike & Weinlig*, *cit*.

[1200] Commission Decision of 30 October 2001, State aid N 6/A/2001, *Public service obligations imposed on the Electricity Supply Board concerning electricity generated out of peat* (*Ireland Peat Electricity*), OJ 2002 C77/26.

[1201] *Ibidem*, paras 5-19.

regarded as constituting State resources.[1202] However, it concluded that it was unable to come to a final determination as to whether the compensations at issue qualified as State aid because the Court's findings in the *PreussenElektra* ruling had cast doubt on the effective mobilisation of State resources in the case under consideration. Thus, since in its opinion the contested potential aid was compatible with the internal market, it decided to turn directly to the compatibility assessment under Article 106(2) TFEU.[1203] The very same agnostic attitude and path has been undertaken by the Commission with respect to other similar stranded costs compensation systems, such as those notified by Austria and Spain.[1204] The same holds true regarding the capacity mechanisms adopted at the time in the form of capacity payments by the Austrian and Spanish States and addressed as part of the relevant stranded costs compensation schemes.

Even more problematic have been the *UK Competitive Transition Charge* decision and the decisions rendered on the *Belgian offshore wind energy* and the *Belgian Regime for RES-e* schemes.[1205] Indeed, in these decisions the Commission did not adopt the above-provided dubitative formula and took the Court's findings in *PreussenElektra* to the extreme. For instance, in the *UK Competitive Transition Charge* case, the Commission found that the State resources requirement was not met by a measure implemented to offset the additional costs incurred by a private undertaking as a result of the previously analysed PPAs mechanism.[1206] The outcome of the case was justified by the circumstance that the proceeds of the levy imposed on energy consumers to finance the measure did not transit through a public fund but were administered by privately-owned DSOs and TSO. The latter had, in fact, to collect the relevant charges through their electricity bills and to transfer them to the beneficiary private

[1202] *Ibidem*, paras 23-24.

[1203] *Ibidem*, paras 25-28.

[1204] See, Commission Decision of 25 July 2001, State aid N 34/1999, *Austrian Stranded Costs & CRM*, OJ 2002 C5/2; Commission Decision of 25 July 2001, State aid NN 49/1999, *Spanish Stranded Costs & CRM*, OJ 2001 C268/7. More precisely in these two cases the parafiscal levy system was also administered by a public body. However, the grounds on which the compatibility question was answered in these cases differed. See, in that respect, Chapter 2.

[1205] Commission Decision of 27 February 2002, State aid N 661/1999, *UK Competitive Transition* Charge, *cit.*; Commission Decision of 2 August 2002, State Aid N 14/2002, *Régime fédéral belge de soutien aux énergies renouvelables* (*Belgian offshore wind energy*), OJ 2002 C309/14; and Commission Decision of 24 April 2002, State aid N 149/2000, *Belgian Regime for RES-e*, *cit.*

[1206] For the analysis of the part of the Commission's decision dealing with PPAs mechanism see the previous paragraph.

undertaking.[1207] The same rationale was applied by the Commission with respect to the TGC scheme under scrutiny in the *Belgian offshore wind energy* case, where the financial mechanism was also managed by a privately-owned TSO.[1208] Importantly enough, the same findings were also reiterated with respect to the *Belgian Regime for RES-e*, where the relevant amounts were levied by both a State-owned undertaking and a privately-owned company.[1209] Hence, in the author's opinion, these decisions are, first of all, inconsistent with settled case law: rather than considering the existence of parafiscal levy systems managed by statutory-designated bodies as a decisive factor, the Commission in fact focused on the nature of such bodies. Secondly, they represent a problematic precedent. Indeed, they entail that the State aid nature of a public support measure depends on the ownership structure of the energy market. This could have, in turn, led to both discriminatory outcomes and increasingly dangerous effects on the effectiveness of the State aid control system, which would have gone hand to hand with the reorganisation of EU gas and electricity markets in the path towards the EU Energy Union.

As we shall see, we had to wait until 2009 for an explicit revision of the approach undertaken towards financial mechanisms administered by privately-owned intermediate entities.[1210] Fortunately, however, the Commission immediately abandoned its irresolute attitude towards support measures financed through private or public undertaking funds administered by public bodies or transferred to accounts managed by public authorities. Indeed, the Commission has since straggled to resist Member States' attempts to devise schemes potentially eluding the application of State aid rules by taking advantage of the *PreussenElektra* ruling loophole. It has, in fact, tried to set boundaries between *PreussenElektra*-type measures and other measures involving a transfer of State resources. However, as we shall see, this has led to unclear reasoning and arbitrary and discriminatory findings.

[1207] See, Commission Decision of 27 February 2002, State aid N 661/1999, *UK Competitive Transition* Charge, *cit*., paras 25-28. For a critical analysis of the distortive and dangerous effects of this Commission's decision see, *inter alia*, Opinion of Advocate General Mengozzi delivered on 24 January 2008 in Case C-206/06, *Essent*, *cit.*, para. 97.

[1208] See, Commission Decision of 2 August 2002, State Aid N 14/2002, *Belgian offshore wind energy*, *cit.*, section 2.2. More precisely, under this scheme the TSO was bound to buy all the green certificates from the concerned electricity generators at fixed prices and to resell them on the certificates market. It was then allowed to cover the potential losses via a surcharge imposed on electricity consumers.

[1209] See the section of the Commission Decision of 24 April 2002, State aid N 149/2000, *Belgian Regime for RES-e*, *cit.*, concerning the RES-e scheme, which has been notified as part of the Belgian stranded costs compensation system.

[1210] *I.e.*, until the Commission Decision of 22 July 2009, State Aid N 446/2008, *Austrian Green Electricity Act 2008 – FIT scheme*, *cit.*

A first example in this respect is provided by a Commission decision on a PPA mechanism. Indeed, the Irish government notified a projected revision of the compensation mechanism established under the *Alternative energy requirements* scheme.[1211] More precisely, the mentioned revision consisted of the institution of a parafiscal levy system financed by electricity network users: the relevant proceeds had to be collected by the publicly-owned TSO and had to be poured into an account controlled by it and the Irish electricity system regulator. These, finally, had to be transferred to the State-owned DSO, which was in charge of redistributing them to the beneficiaries on the basis of yearly calculations made by the mentioned regulator.[1212] As a result, by recalling the *Italian textiles* and the *Steinike & Weinlig* doctrines,[1213] the Commission found that the reformed scheme constituted State aid.[1214] The same approach has since been applied with respect to every kind of energy support measure financed through monies administered by public entities or transferred to funds managed by public authorities, either for redistribution or for levelisation purposes.[1215] Generally speaking, the key distinction between *PreussenElektra*-type measures and measures involving a transfer of State resources has been identified in the establishment of mechanisms allowing public authorities to exercise some control over market participants' resources. The latter should, therefore, flow directly between market operators for a measure to be considered a *PreussenElektra*-type measure. Examples of energy support measures that qualify as State aid on the basis of these grounds include stranded costs compensation mechanisms,[1216] preferential

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[1211] We have already analysed this scheme in the previous subparagraph. See, Commission Decision of 15 January 2002, State aid N 826/2001, *Alternative energy requirements*, *cit.*

[1212] *Ibidem*, paras 20-28 and paras 59 and 62.

[1213] Case 173/73, *Italian textiles*, *cit.*; Case 78/76, *Steinike & Weinlig*, *cit.*

[1214] See, Commission Decision of 15 January 2002, State aid N 826/2001, *Alternative energy requirements*, *cit.*, paras 63-64. The Commission then cleared the scheme under the 2001 EAG (see, paras 66 ff.).

[1215] Levelisation mechanisms are sometimes implemented for the purpose of ensuring that the obligated operators make a fair contribution to the relevant support scheme based on their share of the energy market. More precisely, under this mechanism the intermediaries request and collect additional payments from those obliged undertakings that, due to the peculiar characteristics of the relevant market, have contributed less to the scheme, and redistribute them to the obliged undertakings that have paid more than their fair share. Usually, the required contributions are calculated on the basis of the operators' market shares. *E.g.*, Commission Decision of 14 April 2010, State Aid N 94/2010, *UK feed-in tariffs*, *cit.*, and Commission Decision of 28 January 2009, State aid C 43/2002 (ex NN 75/2001), *Luxembourg Feed-in Tariff I*, *cit.*

[1216] See, for instance, Commission Decision of 1 December 2004, State aid N 490/2000, *Italian Stranded Costs*, *cit.*; Commission Decision of 22 September 2004, State aid N 161/2004, *Portugal Stranded Costs*, *cit.*; Commission Decision 8 November 2006, State aid C 11/2006 (ex N 127/2005), *Stranded costs for the municipalizzate*, *cit.*; Commission Decision of 25 September 2007, State Aid C 43/2005 (ex N 99/2005), *Polish PPAs & Stranded Costs Compensations*, *cit.*; and Commission Decision of 27 April 2010, State Aid N 691/2009, *Hungarian Stranded Cost Compensation Scheme*, *cit.* For an exhaustive analysis of these cases see Hancher L., Salerno F. (2011) 'The Application of EU State Aid Law to the Energy Sector', in Jones C. (ed) *EU Energy Law:*

tariffs systems,[1217] capacity remuneration mechanisms and aid to energy infrastructures.[1218] Additional examples are, of course, provided by several Commission decisions on sustainable energy support regimes other than TGC schemes,[1219] in which respect the European Institution has long applied a different line of reasoning.[1220] The Commission has also since ruled that there is no distinction in terms of assessment under the State origin criterion between cases where the compulsory contribution is imposed on final consumers and cases where it is imposed at the level of electricity suppliers. Neither it is relevant that there is no obligation for electricity suppliers to pass on the additional costs they incur through a levy on end consumers.[1221]

EU Competition Law and Energy Markets, *cit*., Part 5, ch. 4, at pp. 718-739.

[1217] See, *inter alia*, Commission Decision of 20 November 2007, State aid C 36/A/2006 (ex NN 38/2006), *Terni*, *cit.*; Commission Decision of 19 November 2009, State aid C 38/A/2004 (ex NN 58/2004) and C 36/B/2006 (ex NN 38/2006), *Alcoa*, *cit.*; and Commission Decision of 23 February 2011, State aid C 38/B/2004 (ex NN 58/2004) and C 13/2006 (ex N 587/2005), *Portovesme, ILA & Euroallumina*, *cit*. For an exhaustive analysis of these and other preferential tariffs cases see Talus K. (2013) 'State Aid in the Energy Industry', in Talus K. (ed) *EU Energy Law and Policy: A Critical Account*. Oxford: Oxford University Press, at pp. 146 ss.

[1218] See, *inter alia*, Commission Decision of 14 July 2004, State aid N 143/2004, *Public Service Obligation – Electricity Supply Board*, *cit.*, on a temporary CRM adopted by Ireland; Commission Decision of 14 June 2010, State Aid N 675/2009, *Latvian CRM*, *cit*.; Commission Decision of 20 November 2013, State aid SA.36740, *Lithuania LNG terminal*, *cit.*; Commission Decision of 23 July 2014, State aid SA.35980, *United Kingdom Electricity market reform – Capacity market* (*UK Capacity Mechanism*), OJ 2014 348/5; Commission Decision of 08 October 2014, State aid SA.34947, *Support to Hinkley Point C Nuclear Power Station* (*CfD for Hinkley Point*), OJ 2015 L109/44; Commission Decision to initiate the formal investigation procedure of 13 November 2015, State aid SA.40454 *Tender for additional capacity in Brittany* (*CRM in Brittany*), OJ 2016 C 46/69.

[1219] See, *ex plurimis*, Commission Decision of 19 March 2003, State aids N 707/2002 and N 708/2002, *Dutch MEP Schemes for RES-e and CHP*, OJ 2003 C148/11, and the following decisions on modifications and prolongations to the schemes (Commission Decisions on State aid N 543/2005, N 478/2007, SA.34411 and SA.39399); Commission Decision of 19 August 2004, State aid N 540/2003, *Amendments to Alternative Energy Requirement Scheme*, OJ 2005 C162/5; Commission Decision of 4 July 2006, State Aid NN 162/A/2003 and State Aid N 317/A/2006, *Austrian Green Electricity Act 2003*, *cit.*; Commission Decision of 22 December 2006, State aid N 432/2006, *Cyprus Feed-in Tariff I*, OJ 2007 C33/1; Commission Decision of 24 April 2007, State aid C 7/2005 (ex NN 80/2004), *Slovenian FIT & FIP scheme*, *cit*; Commission Decision of 25 September 2007, State aid N 571/2006, *Irish Feed-in Tariff I*, OJ 2007 C311/2; Commission Decision of 28 January 2009, State aid C 43/2002 (ex NN 75/2001), *Luxembourg Feed-in Tariff I*, *cit.*; Commission Decision of 2 July 2009, State aid N 143/2009, *Cyprus Feed-in Tariff II*, OJ 2009 C247/2; Commission Decision of 12 January 2012, State aid SA.31236, *Irish Feed-in Tariff II*, OJ 2012 C312/5; Commission Decision of 27 March 2014, State aid SA.36511 (ex 2013/NN) *French Feed-in Tariff*, OJ 2014 C348/05; Commission Decision of 16 September 2014, State aid SA.37232, *Luxembourg Feed-in Tariff II*, OJ 2015 C44/3; Commission Decision of 28 October 2014, State aid SA.37122, *Danish FIP – Wind Turbines*, OJ 2015 C277/1; Commission Decision of 24 October 2014, State aid SA.36204, *Danish FIP – PV and RES-e*, OJ 2015 C94/1.

[1220] With that regard see the next subparagraph and paragraph 4.

[1221] That is to say, it is not relevant that the levy is not mandatory. In that regard see, Commission Decision of 14 April 2010, State Aid N 94/2010, *UK feed-in tariffs*, *cit*., and the decisions on following amendments to the scheme (Commission Decisions on State aid SA.33210 and SA.35576). See also, Commission Decision of 25 November 2014, State Aid SA.33995, *EEG 2012*, *cit.*, and Commission Decision of 23 July 2014, State aid SA.38632, *Germany EEG 2014 – Reform of the Renewable Energy Law* (*EEG 2014*), OJ 2015 C325/4. The Commission has also confirmed these findings with respect to CfD schemes. See, Commission Decision of 23 July 2014, State aid SA.36196, *United Kingdom Electricity market reform – Contract for Difference for Renewables* (*UK CfD for RES-e*), OJ 2014 C393/2, and Commission Decision of 23 July 2014, State aid SA.38758, SA. 38759, SA.38761,

The EU Courts ultimately embraced the Commission's approach in two judgments on stranded costs compensation systems, *Essent* and *Iride*, which were rendered in 2008 and 2009, respectively.[1222] The support regime in question in the *Essent* case encompassed a price surcharge imposed by national law upon electricity consumers for the defrayal of stranded costs. The surcharge was levied by the TSOs. *Essent Network*, the claimant in the main proceeding, was a publicly-owned TSO. The TSOs were delegated to pay a fixed amount to a statutory-designated company, the SEP, and to transfer the remaining proceeds to the Minister. The SEP was, in turn, required to transfer the relevant sums to its own parent companies, which were under both public and private control. In this regard, it is worth underlining that it is, first of all, unclear why the CJ considered the SEP to be the body appointed to manage the resources instead of the concerned TSOs. This forced the Court to maintain that "*it* [was] *of little account that that designated company was at one and the same time the centralising body for the tax received, the manager of the monies collected and the recipient of part of those monies. The mechanisms provided for by the Law and, more specifically, the detailed accounts certified by an auditor,* [made] *it possible to distinguish those different roles and to monitor the use of the monies*".[1223] The Court then distinguished the national provisions under consideration from those in question in the *Pearle* and the *PreussenElektra* cases. The dissimilarities with the *Pearle* case were self-evident. Nonetheless, the CJ explicitly relied on the objective of the stranded costs compensation system under scrutiny to 'clarify' the distinction.[1224] In this way it brought into the relevant analysis an element that, in our view, should instead have been addressed in the context of the balancing exercise to be entered into under the compatibility assessment. The other explanation put forward for distinguishing the case at hand from the *Pearle* case pertained to the institution of the measure by law, which is a circumstance that should be taken into account under the imputability analysis.[1225] Hence, in the author's opinion, the Court clearly overstepped into areas within the precinct of other constituents of the State

SA.38763 and SA.38812, *United Kingdom Support for five Offshore Wind Farms: Walney, Dudgeon, Hornsea, Burbo Bank and Beatrice* (*UK CfD for Wind Farms*), OJ 2014 C393/7.

[1222] Case C-206/06, *Essent, cit.*, and Case T-25/07, *Iride, cit.*, which has upheld the Commission Decision of 8 November 2006, State aid C 11/2006 (ex N 127/2005), *Stranded costs for the municipalizzate, cit.*, and has been, in turn, appealed. The appeal has been then dismissed by Order of the Court of 21 January 2010, which, however, did not touch on the paragraphs pertaining the State origin question (Case C-150/09 P, *Iride SpA and Iride Energia SpA v. Commission, cit.*).

[1223] See, Case C-206/06, *Essent, cit.*, para. 70.

[1224] *Ibidem*, paras 71-72.

[1225] *Ibidem*, para. 73.

aid control assessment to justify its findings on the State resources requirement. Turning to the differences evidenced by the Court between the stranded costs compensation mechanism in question and the StrEG 1998, they are not at all clear.[1226] Indeed, to differentiate these domestic measures that looked identical from an effect-based perspective the CJ only provided a rather formalistic legal explanation:[1227] the distinction was, in fact, based on the circumstance that the SEP was appointed by the State to administer the relevant financial transfers.[1228] One might argue that, as a result, the divergent outcomes of the State aid test with respect to *PreussenElektra*-type and *Essent*-type arrangements are simply based on two elements that have nothing to do with the control exercised by public authorities over the private resources involved. The first element consists of the complexity of the mechanism established for transferring these resources. The second one is represented by the number of persons upon whom the State 'directly' – and not 'indirectly' – imposes the financial burden, *i.e.* a handful of market operators in *PreussenElektra*-type measures and countless electricity consumers in *Essent*-type measures.[1229] In terms of control and economic effects, in fact, these two types of measures can be considered substantially alike: sooner or later energy users bear the costs of the support systems. Indeed, while under *Essent*-type arrangements the final electricity price is immediately raised by the amount of a statutory-imposed levy, under *PreussenElektra*-type

[1226] This has been acknowledged also by some authors who have backed the Court's finding in *PreussenElektra.* See, for instance, Bjørnebye H. (2010) The Boundaries of Article 107(1) TFEU, in Bjørnebye H. (ed.) *Investing in EU Energy Security*: *Exploring the Regulatory Approach to Tomorrow's Electricity Production*, *cit.* p. 356; *Contra*, Ole Gram Mortensen B. (2008) The European Court of Justice Decision in Case C-206/06, Essent Netwerk Noord BV. *European Energy and Environmental Law Review* **17**(6) 389-393: the author actually maintains that the *Essent* judgment has shed light on the above distinction.

[1227] See, with that regard, *inter alia*, Könings M., Jozepa I. (2012) 'Environmental Aid', in Hancher L., Ottervanger T., Slot P.J. (eds) *EU State Aids*, *cit.*, at p. 815; Maqueda E.C., Conte G. (2016) 'State Resources and Imputability', in Pesaresi N., Van de Casteele K., Flynn L., Siaterli C. (eds) *EU Competition Law: State Aid – Book One*, *cit.*, at p. 224; and Talus K. (2013) 'State Aid in the Energy Industry', in Talus K. (ed) *EU Energy Law and Policy: A Critical Account*, *cit.*, at pp. 142-144.

[1228] See, Case C-206/06, *Essent*, *cit.*, para. 74.

[1229] *Contra*, Opinion of Advocate General Mengozzi delivered on 24 January 2008 in Case C-206/06, *Essent*, *cit.* The Advocate General has, in fact, maintained that there are good reasons for distinguishing these types of measures on the ground of the intervention of a statutory-designated intermediary. Indeed, in his view, such intervention interrupts the direct flow of monies between market participants, and this, in turn, allows the identification of a point at which those funds are under public control. Actually, the Advocate General has gone further to state that this interpretation is possible especially when the concerned intermediary is a public body or a fund, even if it is merely responsible for exercising accounting checks and regardless of the degree of autonomy it enjoys in administering the measure (para. 109). However, in the author's view, AG Mengozzi was just striving – like he has done in many opinions he has delivered – to avoid a further extension of the *PreussenElektra* loophole. Indeed, in preceding paragraphs of the relevant Opinion, he explicitly held that a similar extension would have run the risk of allowing support measures capable of having a significant effect on the outcome of the liberalisation processes under way in the Member States to *de facto* escape any form of control under the EU State aid system (see, paras 97 and 98).

arrangements the additional costs incurred by the obligated market operators are eventually passed on to end consumers through a mark-up on the market price.[1230] It seems, in fact, unrealistic to assume that these operators would not recover their losses from their customers.[1231] A similar criticism of the distinction the CJEU has made between the two kind of support schemes in question might also be made by analysing the distortions of the level playing field that they generate. It seems, in fact, that this distinction is not justifiable even on the ground of the State aid regime's stated goal, the protection of competition. Indeed, under both types of schemes green electricity generators are ultimately allowed to sell electricity at prices higher than those applied by conventional sources, which might also be obliged to finance this competitive advantage under *PreussenElektra*-type arrangements. Therefore, one might also wonder whether the CJ's rationale allows for preserving the effectiveness of the State aid control system.[1232] Turning to the other arguments the Court provided in the *Essent* judgment in support of the finding that State resources were involved, they did not pertain to the control exercised by public authorities over the funds used to finance the stranded costs compensation system. They were, in fact, related to the establishment of the measure by law and to the control exercised by the public authorities over SEP and its administration of the implementing procedure.[1233] All these elements concerned the imputability criterion, whose fulfilment was actually impossible to deny. Indeed, in its reasoning on the first condition for State aid, the Court again conflated the assessments under the two legs of this condition.

The same rationale was then been applied by the General Court to distinguish the similar stranded costs compensation mechanism under scrutiny in the *Iride* case from the StrEG 1998.[1234] Actually, the mechanism in question in *Iride* was even simpler in terms of structure.

[1230] In that regard, see Nicolaides P. (2015) 'Support of Green Electricity with and without Transfer of State Resources', in Nicolaides P. (ed.) State Aid Uncovered: Critical Analysis of Developments in State Aid 2014, *cit*. See also, Opinion of Advocate General Mengozzi delivered on 24 January 2008 in Case C-206/06, *Essent, cit.*, para. 108, who has explicitly acknowledged the validity of these arguments, although he has since tried to overcome future economically sound objections on the grounds and for the reason addressed in the previous footnote.

[1231] In that regard see, also, Giraud A. (2014) Vents De Colère! – Testing the Limits of PreussenElektra. *European State Aid Law Quarterly* **13**(2) 345-348, and Sandberg L., Davies L., Cockroft C. (2014) 'The Creeping Scope of State Aid in Relation to Energy Taxes and Charges', in von Sydow H. S. (ed.) *EU Energy Law & Policy: Yearbook 2014*. Leuven: Claeys & Casteels Publishing, pp. 337-352.

[1232] For a positive answer to this question see, Buendia Sierra J. L. Panero J. M. (8 January 2015) Energy and State aid: An Overview of EU and National Case Law. *e-Competitions Bulletin Energy & State Aids*, Art. N° 70678.

[1233] See, Case C-206/06, *Essent, cit.*, para. 66-70.

[1234] See, Case T-25/07, *Iride, cit*., paras 26-27. For a proper analysis of other important aspects of this judgment that fall outside the scope of our research question see Cheynel B. (2009) Aide Nouvelle sur Aide Illégale et

Therefore, the assessment of the control exercised by the State over the monies used to finance it could have been straightforward. An Equalisation Fund was, in fact, established by decree for handling, *inter alia*, the related financial flows through a special account opened for that purpose by decision of the Electricity and Gas Authority.[1235] Moreover, clear evidence was provided about the fact that the Italian authorities could freely dispose of the sums deposited in that account: indeed, they had actually reallocated the relevant monies to satisfy purposes other than the defrayal of stranded costs.[1236] Nevertheless, in order to corroborate its finding regarding the differences between the measure under scrutiny in the *Iride* case and *PreussenElektra*-type measures, the General Court apparently considered it necessary to prove that the sums in question were not only under constant State control but also State property.[1237] To make its point in terms of State ownership, the General Court curiously relied on the findings of a judgment of the Italian Supreme Court of Cassation and stated that it had no jurisdiction to bring into question the interpretation provided by this Court.[1238] As a result, the General Court was forced to go through an extensive analysis of the mentioned national judgment and the context in which it was rendered.[1239]

One might argue that all these efforts also prove the discomfort that EU Institutions feel in distinguishing *PreussenElektra*-type arrangements from *Essent*-type arrangements on the basis of the above-addressed formalistic grounds.[1240] As we shall see, the recent ruling of the General Court on the *Austrian Green Electricity Act 2008* case proves that this sense of awkwardness has not been eradicated by the famous reasoning provided by the CJ in support of the mentioned distinction in the *Vent De Colère* case.[1241] In our opinion, this does not come as a surprise. It is true that in *Vent De Colère* the Court tried to shed some light on the alleged economic differences between *PreussenElektra*-type measures and the measure under the case at hand,

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Incompatible Non Remboursée Ne Vaut – Actualité de la Doctrine Deggendorf. *Revue Lamy de la Concurrence: droit, économie, régulation* **20** 43-52.

[1235] *Ibidem*, para 24.

[1236] *Ibidem*, para 29.

[1237] *Ibidem*, para 28.

[1238] *Ibidem*, paras 31 and 38.

[1239] *Ibidem*, paras 32-37.

[1240] See, Rubini L. (2009) 'The Forms of Governmental Action Covered by EC State Aid Rules', in Rubini L. (ed.) *The Definition of Subsidy and State Aid: WTO and EC Law in Comparative Perspective*, *cit.*, where the author has indicated *Essent* and *Iride* as blatant examples of judgments where the CJEU has proved to lack self-confidence in dealing with the definition of State resources and in the utility of the instruments at disposal for the related assessment.

[1241] Case T-251/11, *Austrian Green Electricity Act 2008*, *cit.*, and Case C-262/12, *Vent De Colère*, *cit.*

which it has qualified as aid. However, in the author's view, this judgment also provides an emblematic illustration of the complicated and unclear subtle distinctions the CJEU has to enter into in its struggle to guarantee the effectiveness of Article 107(1) TFEU without overruling *PreussenElektra*. Actually, several elements of the legal and economic reasoning provided by the Court in *Vent De Colère* are not at all coherent with the *PreussenElektra* legacy. To make our point we shall start with an assessment of the legal arguments that have been put forward and later move to the economic ones.

We have already explained how the French FIT scheme under review was structured.[1242] What we have not shed light on is that, in reality, only part of the proceeds of the surcharges imposed on final consumers ultimately transited through the public body entrusted by the State with administrative tasks, the CDC.[1243] Most of the private funds financing the offsetting mechanism were, in fact, directly transferred to those market operators that were subjected to purchase obligations.[1244] The foregoing has actually also been acknowledged by the Court. Nonetheless, it has bypassed the issue by stating that the fact that part of the funds were not channelled through CDC was not sufficient to exclude there being an intervention through State resources and, "*in any event*", CDC acted as an intermediary with respect to the remainder.[1245] To the extent that the CJ decided to not overrule the *PreussenElektra* judgment, for consistency reasons it should have distinguished the different financial flows provided under the measure, although in our opinion this would not have been desirable. That said, after providing the usual overview of the traditional case law in the field[1246] the Court listed a number of factors to corroborate its finding that the French FIT scheme differed from the German StrEG 1998.[1247]

[1242] See Chapter 5, paragraph 3, of this part of the thesis.

[1243] As already put forward in Chapter 5, paragraph 2, of this part of the thesis, CDC has already been considered in several judgments as the public body *par excellence*. See, for instance, Case T-358/94, *Air France*, *cit.*

[1244] More precisely, the customers paid the parafiscal charge, together with their electricity bills, directly to the market operators subjected to the purchase obligations. The latter then debited the amounts necessary for offsetting in full the additional costs arising from that obligation and transferred the surplus cash to CDC, which, if necessary, had to redistribute the funds to obliged undertakings with negative balances. Otherwise, it had to invest them and the remuneration from such investments had to be deducted from the amount of the charges payable for the following year. See, with that respect, C-262/12, *Vent De Colère*, *cit.*, paras 3-5.

[1245] *Ibidem*, paras 27-28.

[1246] For a criticism of the Court's attitude and to quote what the author has considered to be different lines of cases, whose application to the *Vent De Colère* case should have led, in his view, to two divergent answers to the State resources question, see Giraud A. (2014) Vents De Colère! – Testing the Limits of PreussenElektra, *cit.*

[1247] For a criticism of this finding see also, Clayton M., Segura Catalan M. (2015) The Notion of State Resources: So Near and yet so Far, *cit.*; Maqueda E.C., Conte G. (2016) 'State Resources and Imputability', in Pesaresi N., Van de Casteele K., Flynn L., Siaterli C. (eds) *EU Competition Law: State Aid – Book One*, *cit.*, at p. 222-224; and Nicolaides P. (19 December 2013) The EU Court of Justice interprets the concept of intervention through state

In the author's opinion, however, all the factors it relied on were relevant only for addressing the imputability and the economic advantage questions.[1248] Hence, in order to justify its finding under the State resources criterion, the Court had again overstepped into areas within the precinct of other elements of the notion of aid. This 'intrusion' cannot be attributed to the usual attitude of the competent European Institutions to conflating the assessments under the two elements of the State origin condition. Indeed, in the judgment at hand the CJ separately and straightforwardly found that the imputability requirement was met.[1249] In this regard, one might even argue that the emphasis the Court put on this case not only on the statutory-designated intermediary but also on other elements of the French support measure was rather short-sighted. This is, for instance, the case for the administrative penalty established for non-compliant end consumers and for the role attributed to the energy regulator and the Minister for Energy in the determination of the amount of the parafiscal charge.[1250] The emphasis on the relevance of these elements for the State resources requirement to be fulfilled might, in fact, backfire on the goals of the State aid control regime: in order to escape the control of the Commission, Member States might be tempted to adopt support measures that are not superintended in their functioning and implementation. Importantly enough, similar measures might in practice not facilitate the pursuit of the underlying objectives in an efficient and cost-effective way.

As has been noticed, in *Vent De Colère* the Court again felt the need to further differentiate the measure at hand from *PreussenElektra*-type arrangements,[1251] this time both on legal and economic grounds. Regarding the legal grounds, in addition to the above-provided reasoning, the CJ explicitly applied the *Essent* doctrine.[1252] Hence, the critical arguments we have put forward with respect to the *Essent* ruling apply, *mutatis mutandis*, to the judgment under scrutiny. As per the new 'economically sound' explanation provided in support of the relevant

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resources and finds that the offset of additional costs arising from the obligation to purchase green electricity constituted state intervention (Vent de Colère). *e-Competitions Bulletin Energy & State Aids*, Art. N° 70763.

[1248] With regard to the imputability elements, see Case C-262/12, *Vent De Colère*, *cit.*, paras 23, 24, and 29-30. As per factors relevant only under the economic advantage criterion, see paragraph 32 of the judgment.

[1249] *Ibidem*, paras. 17-18. For a proper analysis of this aspect of the case see Chapter 5, paragraph 3, of this part of the work.

[1250] *Ibidem*, paras 23-24.

[1251] See, in that respect, Giraud A. (2014) Vents De Colère! – Testing the Limits of PreussenElektra, *cit.*, who seems to actually consider this Court's feeling to also be an indication of the need to definitively overrule *PreussenElekta*.

[1252] See, Case C-262/12, *Vent De Colère*, *cit.*, paras 34-35. AG Jääskinen has, instead, applied a different line of reasoning for reaching the conclusion that State resources were involved in the case. See, Opinion of Advocate General Jääskinen delivered on 11 July 2013 in Case C-262/12, *Vent De Colère*, *cit.*, paras 46 ff.

distinction, two interconnected arguments have been set forth. The CJ in fact stated that "*the funds at issue [in PreussenElektra] could not be considered a State resource since*": **(i)** "*there was no mechanism, such as the one* […] *in the present case* […] *for offsetting the additional costs arising from that obligation to purchase*"; **(ii)** "*and through which the State offered those private operators the certain prospect that the additional costs would be covered in full*".[1253] With regard to argument sub **(i)** we might make two interrelated comments. First of all, we should recall that, in contrast with the Court's allegation, a compensation mechanism was also established under the StrEG 1998 to the benefit of the DSOs affected by the purchase obligation.[1254] As already explained, this mechanism entitled them to reimbursement from the TSOs of the costs incurred in purchasing the amount of green electricity that exceeded certain ceilings established by law.[1255] Therefore, in our opinion, the first argument provided is not based on valid grounds. Indeed, in that respect there was only one characteristic that differentiated the StrEG 1998 from *Essent*-type arrangements: the compensation mechanism did not take the form of a levy on consumer prices but of an equivalent increase in the costs of TSOs. The second comment we might make is that whether a mechanism is established for offsetting the costs incurred by the obliged undertakings or not has no impact on the economic effects a support measure generates. This is, in our view, true for two main reasons. The first one is that, as already explained, both the DSOs' losses and the TSOs' costs under the StrEG 1998 were certainly passed on to final consumers. The State, therefore, 'indirectly' – rather than 'directly'– imposed the financial burden on energy consumers.[1256] The second one is that it is, in any case, irrelevant in terms of economic effects at what level of the energy market chain the financial burden is allocated, *i.e.*, at the level of energy end-users or at the level of electricity providers. Turning to the argument provided above sub **(ii)**, the Court essentially maintained that, from an economic effect-based perspective, the distinction between *PreussenElektra*-type arrangements and the measure under scrutiny in *Vent De Colère* rested on the degree of risk borne by electricity suppliers, which was allegedly very low in the first case and high in the second. Interestingly enough, this statement appears to simply elaborate on a reasoning put forward by AG Jacobs in his opinion on the *PreussenElektra* case by adding

[1253] *Ibidem*, para. 36.

[1254] See, StrEG 1998, section 3(2).

[1255] *Ibidem*, section 4. See, in that regard, paragraph 1 of this chapter.

[1256] In that regard see, also, Giraud A. (2014) Vents De Colère! – Testing the Limits of PreussenElektra, *cit*., and Sandberg L., Davies L., Cockroft C. (2014) 'The Creeping Scope of State Aid in Relation to Energy Taxes and Charges', in von Sydow H. S. (ed.) *EU Energy Law & Policy: Yearbook 2014*, *cit.*

a comparative perspective. Indeed, among the arguments he provided to corroborate its finding that State resources were not involved under the StrEG 1998, AG Jacobs maintained that "[n]*o public authority enjoy*[ed] *at any moment any rights with regard to* [the relevant] *sums* [because] [i]*f one of the undertakings refuse*[d] *to comply with its obligations under the StrEG 1998 the other ha*[d] *to go to court*.[1257] In this regard we might, first of all, make five comments. First, the explanation put forward above as to the irrelevance of the existence of statutory-imposed offsetting mechanisms for distinguishing support measures on the grounds of their economic effects also applies with respect to the argument sub **(ii)**. Secondly, although the DSOs' losses were not offset in full under the compensation mechanism provided in the StrEG 1998, the option for the DSOs to recover what was left from their costumers was still available.[1258] Thirdly, the circumstance that, under the measure in question in *Vent De Colère*, the French State was required to cover in full the additional costs imposed on the obliged undertakings, had the parafiscal levy system been insufficient to cover these costs, should have no relevance in the distinction between *PreussenElektra*-type and *Essent*-type measures.[1259] This is, in fact, a peculiar characteristic of the *Vent De Colère* case which is not present in other *Essent*-type arrangements. Indeed, it represents a distinct additional element to be addressed separately. That is to say, it is an element other than the parafiscal levy system, to which only the 'economic' argument sub **(ii)** seems rightly to refer. Actually, if anything, the peculiar French provision in question proves that under *Essent*-type arrangements there is no guarantee that additional costs imposed on obliged undertakings will be covered in full. Fourthly, in our view, the 'economic' explanation provided by the Court has nothing to do with either the origin of the resources financing a support measure or with the control exercised over them by the public authorities. Whether the certain prospect of recouping the costs is guaranteed or not has no impact on the circumstance that under both types of measures the relevant private resources are under public control because the State establishes how, when and for whose benefit they should be used. Fifthly, the lack of this "*certain prospect*" and the potential need "*to go to court*" to enforce the rights established under the measure simply mean that the support measure in question is not properly superintended in its functioning: this should actually be considered

[1257] Opinion of Advocate General Jacobs delivered on 26 October 2000 in Case C-379/98, *PreussenElektra*, *cit.*, para. 166.

[1258] In that regard see, also, Giraud A. (2014) Vents De Colère! – Testing the Limits of PreussenElektra, *cit*., and Sandberg L., Davies L., Cockroft C. (2014) 'The Creeping Scope of State Aid in Relation to Energy Taxes and Charges', in von Sydow H. S. (ed.) *EU Energy Law & Policy: Yearbook 2014, cit.*

[1259] Case C-262/12, *Vent De Colère*, *cit.*, para 26.

a negative element to be taken into account under the compatibility assessment. That said, in a remarkable effort to render the argument sub **(ii)** economically sound, a distinguished scholar has somehow reformulated it by providing a more economic-oriented interpretation of the Court's words.[1260] He has stated that what the Court maintained is that the distinction between *PreussenElektra*-type and *Essent*-type measures in terms of economic effects is based on the circumstance that it is only under the first kind of measures that the number of extra costs each DSO is able to pass on its costumers depends on its relative efficiency.[1261] Admittedly, had this argument been confirmed by economic analysis, this would have been an economically sound explanation for distinguishing the two types of measures. However, first of all, the relevant analysis and distinction should take place under the economic advantage criterion rather than under the State resources requirement. Secondly, the argument under exam is not confirmed by economic analysis. Indeed, by applying simple but rigorous models the mentioned scholar has clearly demonstrated that, independently from the market structure considered, a levy on energy consumers and an increase in energy distributors' costs are equivalent in terms of economic effects.[1262]

The reading of the State resources requirement provided in *Vent De Colère* has since been extensively recalled and confirmed in the Order rendered by the CJ in reference to a preliminary ruling submitted by the Spanish Supreme Tribunal with respect to the aid scheme in question in the *Elcogás* case.[1263] More precisely, the scheme under scrutiny was structured similarly to the above-addressed French FIT scheme but also provided for extraordinary viability plans for companies owning conventional power stations that demonstrated specific financial difficulties.[1264] The CJ held that, since the support measure was financed by final electricity consumers and the relevant sums were distributed by a public body to certain specific undertakings, it qualified as aid.[1265] In ruling so the Court also specified that it was irrelevant that the measure was not financed via a supplement to the electricity tariff, a fiscal levy or a parafiscal charge but through tolls paid by end users in order to gain access to the electricity

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[1260] Nicolaides P. (2014) The legal differences and economic similarities of the various methods of supporting green electricity under state aid rules. European Competition Law Review **35**(5) 227-231.

[1261] *Ibidem*.

[1262] *Ibidem*.

[1263] See, Case C-275/13, *Elcogás, cit.*, paras 24-33. For a further assessment of the case see, Idot L. (2014) Aides d'État: Application de la Jurisprudence Vent de Colère à un Cas Espagnol. *Europe* **12** 36 ff.

[1264] See, Case C-275/13, *Elcogás, cit.*, paras 3-8.

[1265] *Ibidem*, para. 33.

transmission network. Indeed, in its view, the way the sums were raised was immaterial, as long as the relevant amounts fed a financial mechanism structured as explained above.[1266]

As mentioned, in its 2009 decision on the *Austrian Green Electricity Act 2008* the Commission finally explicitly extended the above-provided approach to energy aid measures granted through private entities specifically appointed by law to administer the support system.[1267] The General Court then upheld the Commission's findings in that respect at the end of 2014.[1268] We have already extensively addressed the FIT scheme under scrutiny in this case.[1269] Suffice it here to recall that the measure in question had already been found to constitute State aid in the *Austrian Green Electricity Act 2003* decision.[1270] In the meantime, however, the entity appointed by concession to act as a settlement centre, the ÖMAG, had been privatised. Hence, Austria made a parallel with the *PrussenElektra* case to claim that the monies channelled through this body could no longer be attributed to the State.[1271] Both the Commission and the General Court dismissed this argument by contrasting the structure of the support scheme in question with *PreussenElektra*-type measures and by assimilating it to the case that gave rise to the judgment in *Essent*.[1272] To that effect, the Commission also stressed that in the *Austrian Green Electricity Act 2003* decision it had explicitly clarified that it had not relied on the ownership structure of the ÖMAG to find that the FIT scheme in question qualified as aid.[1273] In the author's opinion, it is in this case that the sense of awkwardness felt by the Commission and the General Court in distinguishing *PreussenElektra*-type arrangements from *Essent*-type arrangements on the basis of the above-addressed formalistic grounds is proven to reach the highest levels. This is clearly evidenced by the fact that, during the proceedings before the Court, the Commission sought to ascribe greater value to *Steinike & Weinlig* as a leading judgment by stating that *PreussenElektra* and *Essent* were purely 'ad hoc' rulings from which

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[1266] *Ibidem*, paras 31-32.

[1267] Commission Decision of 22 July 2009, State Aid N 446/2008, *Austrian Green Electricity Act 2008 – FIT scheme*, *cit.*

[1268] Case T-251/11, *Austrian Green Electricity Act 2008*, *cit.*

[1269] See Chapter 5 of this part of the thesis.

[1270] Commission Decision of 4 July 2006, State Aid NN 162/A/2003 and State Aid N 317/A/2006, *Austrian Green Electricity Act 2003*, *cit.* See, with that regard, Renner-Loquenz B. (2006) State aid in feed-in tariffs for green electricity. *Competition Policy Newsletter* **3** 61-65.

[1271] Commission Decision of 22 July 2009, State Aid N 446/2008, *Austrian Green Electricity Act 2008 – FIT scheme*, *cit.*, para. 37.

[1272] See, *ibidem*, paras 38-48, and Case T-251/11, *Austrian Green Electricity Act 2008*, *cit.*, paras 47 ff.

[1273] See, Commission Decision of 22 July 2009, State Aid N 446/2008, *Austrian Green Electricity Act 2008 – FIT scheme*, *cit.*, para. 49.

it was not possible to infer the generally applicable conditions to be followed for a positive finding under the State resources criterion.[1274] Moreover, it is also proved by the circumstance that the General Court dedicated an incredible number of paragraphs to confuting the British and Austrian governments' submissions on the State resources issue.[1275] Interestingly enough, all these efforts were dedicated to qualifying as aid a FIT scheme that was not even the subject-matter of the action that led to the General Court's judgment.[1276] Furthermore, to support its finding on the State resources criterion, the General Court provided an extensive overview of the judgment rendered by the CJ in the *Essent* case and again overstepped into areas within the precinct of the imputability and economic advantage criteria.[1277] Meanwhile, the same approach was adopted by the Commission to deal with the amended Austrian FIT scheme in

[1274] See, Case T-251/11, *Austrian Green Electricity Act 2008*, *cit*., para. 57. This has been – to a certain extent – recognised also by the General Court (para. 58).

[1275] *Ibidem*, paras 47-75.

[1276] As already explained, in fact, only the compensation mechanism used to the advantage of energy-intensive users, addressed by the Commission in the decision that concluded its formal investigation procedure, formed the subject-matter of the action that led to the General Court's judgment (Commission Decision of 8 March 2011, State Aid C 24/2009 (ex N 446/2008), *Austrian Green Electricity Act 2008 – EIUs*, *cit*.). Indeed, the Austrian FIT scheme had already been cleared by the Commission under the 2008 EAG in its decision to open the formal investigation procedure with respect to the exemption mechanism for EUIs (Commission Decision of 22 July 2009, State Aid N 446/2008, *Austrian Green Electricity Act 2008 – FIT scheme*, *cit.*). However, the Court considered that this mechanism had to be analysed against the background of the overall structure of the energy support regime provided for under the *Austrian Green Electricity Act 2008* (See, Case T-251/11, *Austrian Green Electricity Act 2008*, *cit*., para 32). Thus, in its assessment it also covered the elements of the Austrian measure that the Commission had already authorised.

[1277] With regard to the elements of imputability, see Case T-251/11, *Austrian Green Electricity Act 2008*, *cit*., paras 68 and 71-75. As per factors relevant only under the economic advantage criterion, see paragraph 70 of the judgment. See, with that respect, also, Heise S. (2015) When Private Funds Mutate into State Resources – An Ambivalence Coherence. *European State Aid Law Quarterly* **14**(3) 424 – 429. The author overtly criticises the General Court for having relied on those elements that we have maintained should be addressed under the imputability criterion to establish that the State had control over the use of the resources. However, it seems he goes even further by putting forward an argument we do not subscribe to. Indeed, he seems to state that the Court has softened the preconditions for a positive finding under the State resources criterion established by the CJ in *Doux Élevage*. More precisely, the author seems to maintain that, by applying the *Doux Élevage* doctrine, the General Court should have found that the Austrian authorities had no power to direct or influence the administration of the funds.

the *Austrian Green Electricity Act 2012* decision,[1278] although the analysis provided thereunder was much more concise.[1279]

The very same rationale was finally applied by the Commission to rule that State resources were involved under both the *EEG 2012* and the *EEG 2014*,[1280] which are the latest descendants of the StrEG 1998. The two successive German support regimes under scrutiny in these cases are rather complicated. Under the EEG 2012 and EEG 2014 both a FIT scheme and a FIP system are established and extensively regulated. Green electricity generators have the option of taking advantage of either system, on the basis of certain conditions.[1281] Both a purchase obligation under the FIT scheme and an obligation to pay the market premium are imposed on network operators – mainly DSOs. Moreover, the feed-in tariff and the amount of the market premium are fixed by law.[1282] The four German privately-owned TSOs are then obliged to purchase the so-called EEG electricity from network operators and to compensate the latter for the costs they have incurred under the FIT and the FIP mechanisms.[1283] They also have to sell the relevant electricity on the spot market. If the price thereby obtained is not enough to cover

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[1278] Under the reformed scheme, first of all, the more problematic and incompatible element of the scheme, *i.e.* the exemption for energy-intensive undertakings, has been eliminated. The support now takes the form only of operating aid in the form of feed-in tariffs and investment grants for the construction of new green electricity power plants. For certain types of green electricity, bonuses are now also granted on top of the standard feed-in tariff. The scheme is now financed through two types of parafiscal charges. As per the first one, it consists of fixed lump sum payments based on the grid level to which the consumers are connected, which were already provided under the previous scheme and have remained unchanged. Regarding the second one, the funding of the support mechanism by means of a fixed transfer price to be paid by the electricity traders to ÖMAG has been deleted and replaced by a surcharge imposed on all electricity consumers connected to the grid. Both types of charges are collected by network operators and transferred to the ÖMAG, which then invests the proceeds in the above-addressed two kind of supports provided for RES under the scheme. See, Commission Decision of 8 February 2012, State aid SA.33384, *Austrian Green Electricity Act 2012*, *cit.*, paras 10-14, 22-27 and 45-53.

[1279] *Ibidem*, paras 68-70.

[1280] Commission Decision of 25 November 2014, State Aid SA.33995, *EEG 2012*, *cit.*, and Commission Decision of 23 July 2014, State aid SA.38632, *EEG 2014*, *cit*. The EEG 2014 has already been amended and the Commission has yet decided not to raise objections on the relevant modifications in Commission Decision of 19 April 2016, State aid SA.40912 *Modification of the modalities of the support under the EEG 2014 – Reform of the Renewable Energy Law, cumulation* (*EEG 2014 – Amendments*), OJ 2006 C390/2. With regard to the analysis on the qualification as aid, the Commission simply referred to the conclusions provided in the *EEG 2014* decision because the amendments under scrutiny had no impact on the relevant assessment.

[1281] We shall, however, mention that the EEG 2014 provides for a gradual replacement of feed-in tariffs with more competition-oriented feed-in premiums, the introduction of flexibility premiums for certain technologies and a system of guarantees of origin. See, Commission Decision of 23 July 2014, State aid SA.38632, *EEG 2014*, *cit.*, paras 12-21 and 74-141.

[1282] See, Commission Decision of 25 November 2014, State Aid SA.33995, *EEG 2012*, *cit.*, para. 7, and Commission Decision of 23 July 2014, State aid SA.38632, *EEG 2014*, *cit.* para 18. We do, however, recall that the EEG 2014 provides for a transition from statutory feed-in tariffs and fixed market premiums towards auctions.

[1283] An equalisation mechanism is also established in order to spread the financial burden between the four TSOs in such a way that, ultimately, each TSO covers the costs of the systems on the basis of the electricity delivered to final consumers in the areas they serve. See, *ibidem*, respectively, paras 8-9 and 22-24.

the financial burden they have suffered as a result of the payment obligations towards network operators, they are entitled by law to impose the so-called EEG-surcharge on electricity suppliers.[1284] In this regard it is worth noting that, although it is for the TSOs to determine the amount of the surcharge, they have no discretion at all in that respect because they in their calculation they are bound to follow the strict prescriptions established under the EEG 2012 and EEG 2014.[1285] Moreover, the Federal Network Agency can, *inter alia*, take enforceable decisions to correct the level of the surcharge and impose fines.[1286] The electricity suppliers can then pass the EEG-surcharge on to end consumers in its entirety through their electricity bills and according to detailed rules established under the relevant German laws; the available data actually confirm that they all do so.[1287] However, the two German laws under scrutiny also provide for reductions in the EEG-surcharge in favour of those EIUs that apply for the privilege and satisfy certain statutory-established eligibility conditions and thresholds. The relevant requests are dealt with directly by the BAFA, a public authority that issues self-executing administrative decisions which are also binding upon the TSOs.[1288] Finally, it is worth mentioning that all the financial mechanisms described above are strictly regulated, monitored and managed in their functioning and implementation, not only by the BAFA but also by other public authorities and bodies.[1289] In its assessment of the *EEG 2012* and *EEG 2014* under the State resources criterion the Commission went through all the numerous elements of the support systems provided thereunder. As a result, it concluded that, although the EEG-surcharge is administered by four private undertakings, the latter are not free to decide upon the terms for its calculation, levy and management, and neither do they have power and/or discretion over

[1284] In that regard it is worth recalling that in previous decisions the Commission had already clearly ruled that, for a positive finding under the State origin criterion, it is immaterial whether the compulsory contribution is imposed at the level of electricity suppliers or final consumers and whether the obliged undertakings are compelled or simply entitled to pass on the additional costs they incur to the latter. See, for instance, Commission Decision of 14 April 2010, State Aid N 94/2010, *UK feed-in tariffs*, *cit.*

[1285] See, Commission Decision of 25 November 2014, State Aid SA.33995, *EEG 2012*, *cit.*, paras 10-13, and Commission Decision of 23 July 2014, State aid SA.38632, *EEG 2014*, *cit*. paras 25-28. We can recall that, under the so-called green electricity privilege provided by the EEG 2012, electricity suppliers could benefit from a reduction of the EEG-surcharge when specific eligibility conditions and thresholds set by the German law were met (see, paras 14 ff.). However, under the EEG 2014 the problematic green electricity privilege has been completely abolished. Instead, two so-called auto-supply systems have been established in favour of, respectively, TSOs and certain final consumers (see, paras 29-30 and 46-56).

[1286] *Ibidem*, respectively, para. 43 and paras 67 ff.

[1287] *Ibidem*, respectively, para. 20 and para. 31.

[1288] That is to say, the electricity supplier's obligation to pay the EEG-surcharge to the TSOs was reduced accordingly. See, *ibidem*, respectively, paras 20-26 and paras 32-45.

[1289] See, *ibidem*, respectively, paras 30-45 and paras 57-73.

the financial and electricity flows that occur under the systems.[1290] According to the Commission, in fact, the TSOs are the central point in the functioning of the relevant systems. However, they are simply private bodies entrusted by the State with a series of obligations and monitoring tasks in relation to the EEG systems and surcharges that they have to discharge under the control of public authorities and in accordance with the detailed rules established by the relevant EEG acts.[1291] In concluding so and rebutting all the arguments put forward by Germany, the Commission went through all the conventional case law we have addressed in paragraph 1 on the *indirect* control exercised by the State over the resources used to finance national measures and the entrustment or appointment of intermediaries for the administration of support systems.[1292] In that respect, it also extensively assimilated the characteristics of the systems established under the EEG 2012 and EEG 2014 to those of the energy support measures under scrutiny in the CJ judgments we have analysed in this subparagraph.[1293] Moreover, it widely contrasted them with the financial mechanisms in question in *PreussenElektra* and *Doux Élevage* on the basis of the arguments already put forward in the abovementioned CJ judgments.[1294] The very same pattern has been followed by the General Court, which has backed the Commission evaluation as to the involvement of State resources under the EEG

[1290] See, *contra*, Haak A., Brüggemann M. (2016) Compatibility of Germany's Renewable Energy Support Scheme with European State Aid Law – Recent Developments and Political Background. *European State Aid Law Quarterly* **15**(1) 91-102, and the writings of the German scholars cited in this article. The authors have, actually, contrasted the EEG 2012 against the support measures under scrutiny in the *Essent* and the *Austrian Green Electricity Act 2008* judgments to conclude that, like the previous StreEG 1998, the new German system simply imposes obligations on private entities. Hence, in their view, the EEG 2012 should have been excluded from the purview of State aid law. Moreover, they maintain that the scope of application of *PreussenElektra* is rather limited because its findings cannot be directly transferred to other cases – but for German cases, apparently. See, similarly, Sandberg L., Davies L., Cockroft C. (2014) 'The Creeping Scope of State Aid in Relation to Energy Taxes and Charges', in von Sydow H. S. (ed.) *EU Energy Law & Policy: Yearbook 2014*, *cit.*

[1291] See, *ibidem*, respectively, paras 98-138 and paras 175-226. A similar approach was adopted by the Commission in the *§19 StromNEV* opening decision. Indeed, this decision concerns an exemption from network charges granted to EIUs which, since 2012, has been financed through the imposition on end consumers of a special levy, the §19- surcharge. Hence, the Commission relied on the *Essent* case to preliminarily conclude that the measure under scrutiny might satisfy the State resources requirement. It is also worth noting that this is the first case dealing with an exemption from network charges. See, Commission Decision of 6 March 2013, State aid SA.34045, *Exemption from network charges for large electricity consumers (§19 StromNEV*), OJ 2013 C128/43. For an exhaustive analysis of the case under the State resources criterion see, Ernst L, Koenig C. (2013) Grid Fee Exemption under German Energy Law for Large-Scale Energy Consumers – A State Aid Déjà Vu?. *European State Aid Law Quarterly* **12**(1) 37-39.

[1292] See, Commission Decision of 25 November 2014, State Aid SA.33995, *EEG 2012*, *cit.*, paras 100-102, 114, 116, 124, and Commission Decision of 23 July 2014, State aid SA.38632, *EEG 2014*, *cit*. paras 175, 179-182.

[1293] See, *ibidem*, respectively, paras 100-101, 114, 121, 125-127, 131-136, and paras 175-176, 183-187, 216.

[1294] See, *ibidem*, respectively, paras 99, 103-105, 128-130, and paras 188-190, 198, 218-219.

2012, both during the formal investigation procedure[1295] and in the very recent *German EEG 2012* ruling.[1296] The last-mentioned judgment was delivered in the context of one of the action brought against the *EEG 2012* decision.[1297] Even the General Court seems to have sometimes got lost while trying to reiterate all the formalistic legal distinctions and equivalences among energy support measures put forward by the CJ in the judgments addressed in this subparagraph.[1298] At first glance, the miscellaneous arguments provided and repeated several times in the almost sixty paragraphs dedicated to the State resources question[1299] might seem to corroborate the distinction between the EEG 2012 and the measures in question in *PreussenElektra* and *Doux Élevage.* However, in the author's opinion, this is not the case. First of all, one might argue that the need to restate the very same arguments several times may evidence an attempt by the General Court to convince itself – rather than the claimant – of the mentioned distinction. Hence, the sense of awkwardness felt by the European Institutions in that regard seems not to have disappeared. Confirmation of this might be also inferred from the weird parallel between the role of the TSOs in the EEG 2012 system and a "*State concession*", which was advanced by the Court several times in order to validate its conclusion that the

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[1295] By rejecting several applications for interim measures, the President of the General Court has, in fact, endorsed the Commission's assessment in the decision to initiate the formal investigation procedure (Commission Decision of 18 December 2013, State aid SA.33995, *Germany – Support of renewable electricity and reduced EEG-surcharge for energy-intensive users*, OJ 2014 C37/7): see, *inter alia*, Case T-172/14 R, *Stahlwerk Bous, cit.*; Case T-183/14 R, *Schmiedag v. Commission*, ECLI:EU:T:2014:562; Case T-173/14 R, *WeserWind v. Commission*, ECLI:EU:T:2014:559; Case T-174/14, *Dieckerhoff Guss v. Commission*, ECLI:EU:T:2014:560; Case T-176/14 R *Georgsmarienhütte v. Commission*, ECLI:EU:T:2014:556; Case T-178/14 R *Friedrich Wilhelms-Hütte Eisenguss v. Commission*, ECLI:EU:T:2014:557; Case T-179/14 R, *Schmiedewerke Gröditz v. Commission*, ECLI:EU:T:2014:561. There have also been more than fifty challenges against the decision to initiate the formal investigation procedure. These have, however, been withdrawn because in the meantime the Commission has rendered the final decision.

[1296] Case T-47/15, *German EEG 2012*, *cit.* This judgment is currently under appeal in Case C-405/16 P, *Germany v. Commission*, n.y.p. However, it might well be the case that the CJ will first render the preliminary ruling requested by a German court regarding a potential breach of 107(1) TFEU by the Commission in qualifying the reductions of the EEG-surcharges for EUIs as aid (Case C-135/16, *Georgsmarienhütte GmbH and Others v. Bundesrepublik Deutschland*, n.y.p.). This ruling would certainly provide an anticipation of what the findings would be in the judgment that will be rendered in the above appeal.

[1297] Other actions have been brought against the *EEG 2012* decision and are still pending. However, we might certainly assume that the outcomes of these cases will be identical to the *German EEG 2012* judgment in terms of findings. See, for instance, Case T-294/15, *ArcelorMittal Ruhrort v. Commission*, n.y.p., Case T-109/15, *Saint-Gobain Isover G+H and Others v. Commission*, n.y.p., Case T-108/15, *Bundesverband Glasindustrie and Others v. Commission*, n.y.p., and Case T-103/15, *Flabeg Deutschland v. Commission*, n.y.p.

[1298] *Contra*, Alija N. (2016) State Aid For Green Electricity – Annotation of the Judgment of the General Court (Third Chamber) of 10 May 2016 in Case T-47/15, *Federal Republic of Germany v. European Commission*. *European State Aid Law Quarterly* **15**(3) 452-457. The author seems to state that the Court's conclusions in the case are interesting because they clearly provide the list of criteria to be satisfied for the State resources criterion to be met.

[1299] See, Case T-47/15, *German EEG 2012*, *cit.*, paras 71-129.

private nature of these undertakings had no impact on the role they played as intermediaries under the support scheme.[1300] Secondly, the General Court clearly stated that all the arguments it provided, taken together, corroborated its findings under the State resources requirement. However, some of these arguments again evidence the great overlaps in the assessments of the two legs of the State origin criterion.[1301] Other elements it has addressed should be relevant only for evaluating the EEG 2012 under the economic advantage criterion.[1302] Other grounds it has relied on, though, are explicitly based on the objectives pursued by the German support measure, which should be taken into account only in the last stage of analysis under the State aid regime, the compatibility assessment.[1303] Finally, some features of the EEG 2012 that the Court has described as characteristics that differentiate the support scheme at issue from the StrEG 1998 are those that in practice assimilate – rather than distinguish –the two German systems.[1304] Actually, at some point of the ruling the General Court went so far as to state that one of the differences between these systems lay in the circumstance that "*the mechanism laid down by the previous German law* [did not] provide[…] *for the additional costs to be expressly passed on to final consumers*" (emphasis added).[1305]

As a result of all the foregoing considerations, in our view, the critical considerations we have put forward in this subparagraph with respect to other judgments apply, *mutatis mutandis*, to the *German EEG 2012* ruling. Actually, the President of the General Court seems to have recently inadvertently corroborated our allegation that the distinction among very similar arrangements the CJEU has provided in these judgments is simply grounded on the way the Member States have decided to organise their action and the complexity of the mechanism established for the transferring of private resources. Indeed, in the order rendered in *Stahlwerk Bous* case, which concerned an application for interim measures made with respect to the *EEG 2012* decision, he expressly highlighted that, while the StrEG consisted only of few paragraphs, the EEG 2012 was composed of more than 80 paragraphs.[1306]

[1300] See, Case T-47/15, *German EEG 2012*, *cit.*, paras 93, 94 and 127. With that regard see also, Alija N. (2016) State Aid For Green Electricity – Annotation of the Judgment of the General Court (Third Chamber) of 10 May 2016 in Case T-47/15, *Federal Republic of Germany v. European Commission*, *cit.*

[1301] See, for instance, *ibidem*, paras 93, 95, 111, 118, 122 and 125.

[1302] See, for instance, *ibidem*, paras 106, 107 and 110.

[1303] See, for instance, *ibidem*, paras 93, 95, 106, 107, 111, 117, 122, and 123.

[1304] See, *inter alia*, *ibidem*, paras 98, 102, and 122.

[1305] *Ibidem*, para. 99.

[1306] See, Case T-172/14 R, *Stahlwerk Bous*, *cit*., paras 51-51.

Needless to say, in the author's opinion, the distinctions made in the case law analysed in this subparagraph evidence that the European Institutions have lost the required effect-based perspective and that, as a result, market organisational models now set the boundaries of supranational jurisdiction over energy-related support measures. The legal uncertainty and incoherency that derives from this case law can be solved only by overruling judgments such as *PreussenElektra*, *Doux Élevage* and *Aiscat.*

6.3.4. *A Flawed Approach towards Green and Capacity Certificates' Systems*

We should now turn to addressing the EU's decisional practice on domestic support measures providing for statutory quota obligations coupled with tradable certificates regimes. These measures have so far been implemented in the form of capacity obligations and certificate schemes, TGC schemes and national emission trading schemes.[1307] Although not frequently addressed by scholars, as we shall see in the next paragraph the jurisprudence in that respect has recently gathered further momentum for three main reasons. First of all, the Commission seems to have abandoned the questionable line of reasoning adopted with respect to TGC schemes after *PreussenElektra.*[1308] Secondly, and importantly, in doing so it has adopted an approach to assessment under the State origin criterion that might have a 'revolutionary' impact not only on each and every type of energy support measure so far implemented by the Member States but also on most national provisions fostering other sectors. Indeed, it has apparently re-broadened the scope of this criterion.[1309] Thirdly, the Commission has applied a new stance in the decision it delivered in November 2016 on the capacity mechanism adopted by France in the form of statutory capacity obligations and exchange of capacity certificates.[1310] However,

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[1307] We will deal only with national emission trading schemes falling outside the scope of the EU ETS system. Hence, we will not deal with the emission allowances granted free of charge under the EU ETS system. As explained in Chapter 5, in fact, the underlying gratuitous advantage was usually considered not imputable to the State because the NAPs were adopted and implemented by the Member States in order to comply with their obligations under Directive 2003/87/EC, which proscribed distributing most of the allowances for free during the first two trading periods.

[1308] See, Commission Decision of 4 May 2015, State aid SA.37177, *Amended Romanian Green Certificates System*, OJ 2015 C343/1, and Commission Decision of 2 August 2016, State aid SA.37345, *Polish Green Certificates for RES-e and Reductions for EIUs*, *cit.* See also, Commission Decision of 28 September 2016, State aid SA.36518, *Polish Green Certificates for CHP*, n.y.p., which is almost identical to the decision rendered by the Commission on the very similar Polish Green Certificates scheme for RES-e.

[1309] *Ibidem*.

[1310] Commission Decision of 8 November 2016, State aid SA.39621, *French Country-wide Capacity Mechanism II*, n.y.p.

in order to properly understand the wide-ranging effects of this very recent jurisprudence, we should first explain the approach adopted towards tradable certificates schemes and national emission trading systems in the first fifteen years of the new millennium.

As explained in subparagraph 3.1., before the *PreussenElektra* judgment was rendered the Commission had never cast doubts on the fact that both of the abovementioned kinds of support schemes and systems met the State resources requirement, independently from the fact that a penalty mechanism was established under the relevant regimes.[1311] Since *PreussenElektra*, however, everything has changed. First of all, in its first decision on a national emission trading scheme implemented as part of the *UK climate change levy* system, the Commission started to hesitate regarding the fact that the establishment of these kind of schemes involved State resources.[1312] Indeed, it stated that it "*cannot exclude that* [similar] *arrangements constitute aid granted by a Member State or through State resources*" (emphasis added).[1313] This is notwithstanding that in the very same decision the Commission provided strong arguments evidencing the involvement of State resources in any emission trading system. Actually, it overtly recognised that emission rights are intangible assets embodying a market value and that the existence of a market for this kind of pollution document demonstrates their monetary worth. Moreover, it has highlighted that, under these types of arrangements, where the State sets emissions standards and allows trading among entities, overperforming companies can sell their permits to underperforming companies and use the ensuing cash-flow to improve their competitive position.[1314] Hence, the natural outcome of the above-provided reasoning would have certainly been a finding that, since the UK public authorities had chosen to allocate tradable emission allowances free of charge instead of selling them or putting them up for auction, the State was waiving revenues in the sense of Article 107(1) TFEU. Fortunately, in following decisions on national emission trading schemes the Commission has adopted a more

[1311] See, for instance, Commission Decision of 12 April 2000, State aid N 653/1999, *Danish CO2 Quotas*, *cit.*, and Commission Decision of 20 September 2000, State aid N 416/1999, *Danish GC scheme*, *cit.*

[1312] Commission decision on 28.03.2001 State aid N 123/2000 (later, for a different aspect of the scheme, C 18/2001), *UK Climate Change Levy*, *cit.* More precisely, the notified scheme provided for a series of exemptions from a climate change levy and certain reductions for energy-intensive users entering into climate change agreements with the British government. The Commission thus addressed both the tax reductions and the climate change agreements, under which, in turn, CO_2 targets were established and CO_2 emission trading was allowed.

[1313] *Ibidem*, at pp. 39-40. Nonetheless, it has then addressed the trading system under paras 69 to 71 of the 2001 EAG.

[1314] *Ibidem*.

assertive attitude and has explicitly held that they clearly constitute State aid.[1315] This was, for instance, the case for the decisions it rendered on the *British emission trading scheme* and the *Dutch NOx scheme.*[1316]

However, in the same period the Commission has taken a diverging view with respect to very similar arrangements implemented as part of tradable certificates regimes. Actually, in the first decision it delivered on a TGC regime after *PreussenElektra*, the *Belgium Green Certificates* decision, the Commission broke down the relevant scheme into its alleged three constituent elements and analysed them separately.[1317] More precisely, the three identified elements were the quota obligation usually imposed on energy suppliers or DSOs,[1318] the free allocation of the concerned certificates and their tradability, and the penalty mechanism. As we shall see, during the following fourteen years this approach has been applied with respect to almost every tradable certificate system.[1319] In the author's opinion, the noteworthy results of

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[1315] Although in a less affirmative and effective way, the Commission has taken the same view when addressing certain NAPs providing for the over-allocation of emission credits or the allocation below their market value of tradable emission allowances falling within the percentages for which Member States retained discretion in choosing the allocation methodology. See, in that respect, Weishaar S. (2007) The European Emissions Trading System and State Aid: An Assessment of the Grandfathering Allocation Method and the Performance Standard Rate System, *cit.*; de Sépibus J. (2009) The European Emission Trading Scheme Put to the Test of State Aid Rules, *cit.;* Catti De Gasperi G. (2010) Making State Aid Control "Greener": The EU Emissions Trading System and its Compatibility with Article 107 TFEU, *cit.*

[1316] See, Commission Decision of 28 November 2001, State aid N 416/2001, *British emission trading scheme*, OJ 2001 C 88/16, where the Commission addressed a notified extension of the previous scheme to all national undertakings on a voluntary basis; and Commission Decision of 24 June 2003, State aid N 35/2003, *NOx emission trading scheme (Dutch NOx scheme)*, OJ 2003 C227/19, section 3.2. As we shall see, the latter decision was later upheld on this point by both the General Court and the CJ. See, in that respect, Case T-233/04, *Netherlands v. Commission*, *cit.,* and Case C-279/08P, *Dutch NOx, cit.* For an exhaustive analysis of the Commission decisions on pre-EU ETS emission trading schemes, see Rydelski M. S. (2006) *The EC State Aid Regime: Distortive Effects of State Aid on Competition and Trade*, *cit.*, pp. 352-362,

[1317] Commission Decision of 25 July 2001, State aid N 550/2000, *Belgium Green Certificates*, *cit.*, section 3. In this decision, the Commission found that the measure did not constitute State aid. However, it has adopted a more cautious attitude than in the following cases and has also addressed the scheme under the 2001 EAG (see, pp. 7-10 of the decision). The same holds true regarding the decision on a similar regime that was rendered few months later: see, Commission Decision of 28 November 2001, State aid N 415/A/2001, *Wallonian Green Certificates*, OJ 2002 C30/14, pp. 5-8. As we shall see, this more cautious attitude was to be readopted by the Commission only ten years later: see, Commission Decision of 13 July 2011, State aid SA.33134, *Romanian Green Certificates*, OJ 2011 C 244/2, para. 55.

[1318] In few cases the quota obligation was also imposed on TSOs. The only exception in that respect was the Swedish TGC scheme, where the relevant obligation was imposed directly on end consumers. However, in practice, end consumers mandated their energy suppliers to discharge their duties in that respect. Indeed, this possibility was envisaged and partly disciplined by the Swedish legislator. See, Commission Decision of 5 February 2003, State aid N 789/2002, *Swedish Green Certificates*, OJ 2003 C120/8, section 2.2.

[1319] Examples include, Commission Decision of 28 November 2001, State aid N 504/2000, *UK Renewables Obligation and Capital Grants*, *cit.*, p. 11-12, and all the numerous following decisions on modifications to the UK TGC scheme and on its extension to regions previously not covered, until and including Commission Decision of 1 February 2011, State aid N 557/2010, *UK Renewables Obligation and Capital Grants V*, OJ 2011 C/189/1 (see, with that regard, Rusche M.T. (2015) EU Renewable Electricity Law and Policy: From National Targets to

this fragmentation have been that the assessments provided lack the consistency that could have been granted only by taking into account the relevant measures in their entirety, and that the outcomes of the analysis of almost identical schemes under the State resources criterion have diverged.

As per the abovementioned first element of tradable certificates regimes, the addressees have to comply with their quota obligation by purchasing a predetermined number of certificates from renewable energy sources, CHP electricity producers or capacity providers at fixed minimum prices. [1320] In contrast to previous decisions, [1321] since *PreussenElektra* the Commission has always found that the reasoning provided in that judgment was applicable with respect to this element and, thus, the relevant purchase obligations did not met the State resources condition.[1322] It is certainly not the case that this European Institution is to be blamed for this outcome. However, it should be noted that, contrary to the approach adopted under the case law analysed in subparagraph 3.2, in its decisions on certificate systems the Commission has never even tried to analyse the ownership structure of the main addressees of the quota obligations.[1323]

We should now turn to the second element of tradable certificates regimes. As mentioned, it is composed of both the free allocation of the concerned certificates to capacity providers or

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a Common Market, *cit.* at p. 101); Commission Decision of 28 November 2001, State aid N 415/A/2001, *Wallonian Green Certificates*, *cit.*, section 2; Commission Decision of 2 August 2002, State aid N 14/2002, *Belgian offshore wind energy*, *cit.*, section 2.1.; Commission Decision of 5 February 2003, State aid N 789/2002, *Swedish Green Certificates*, *cit.*, sections 2.1., 2.2. and 2.3; Commission Decision of 3 May 2005, State aid N 608/2004, *Flemish CHP Certificates*, *cit.*, section 3.

[1320] Actually, in few cases the price is not fixed. However, it is still to be calculated on the basis of pre-determined detailed criteria established by the public authorities. Moreover, under some schemes the obliged entities are left with other options, such as the production of their own capacity or RES-e: examples include the schemes under scrutiny in the above quoted numerous decisions on the UK TGC system and those under exam in the *Belgium Green Certificates*, the *French country-wide capacity mechanism* and the *Polish Green Certificates for RES-e and Reductions for EIUs* decisions.

[1321] E.g., Commission Decision of 20 September 2000, State aid N 416/1999, *Danish GC scheme*, *cit.*

[1322] Examples include, Commission Decision of 25 July 2001, State aid N 550/2000, *Belgium Green Certificates*, *cit.*, section 3; Commission Decision of 28 November 2001, State aid N 504/2000, *UK Renewables Obligation and Capital Grants*, *cit.*, pp. 10-13; Commission Decision of 28 November 2001, State aid N 415/A/2001, *Wallonian Green Certificates*, *cit.*, section 2; Commission Decision of 2 August 2002, State aid N 14/2002, *Belgian offshore wind energy*, *cit.*, section 2.1.; Commission Decision of 5 February 2003, State aid N 789/2002, *Swedish Green Certificates*, *cit.*, section 3.1.; Commission Decision of 3 May 2005, State aid N 608/2004, *Flemish CHP Certificates*, *cit.*, section 3; Commission Decision of 24 October 2006, State aid N 254/2006, *Prix minimum pour les certificats d'énergie verte de l'installation de panneaux photovoltaïques* **(***Panneaux photovoltaïques*), OJ 2006 C314/80, paras 10-11.

[1323] The only exception being the *Panneaux photovoltaïques* decision, where the Commission addressed the ownership structure of the Flemish region's DSOs and concluded that, since the majority of the DSOs were privately-owned, the State resources condition was not satisfied. See Commission Decision of 24 October 2006, State aid N 254/2006, *Panneaux photovoltaïques*, *cit.*, para. 12.

RES-e and CHP electricity generators, and the possibility of these recipients selling them on an *ad hoc* created trading market. Surprisingly, for about fourteen years the Commission has consistently held that the issuance of these types of intangible assets free of charge cannot be considered a waiver of revenue by the State.[1324] This has been justified with the remark that the relevant certificates merely provide official proof that a certain kind of electricity has been produced – or made available, in the case of CRMs – by the recipients of the documents.[1325] Therefore, according to this reading, these documents have no market value and cannot be sold or auctioned by the State. In this respect we should highlight that, in our view, this approach would have been legally and economically sound had the States not included in the certificate regimes in question a quota obligation and tradability component, as was the case in the *Zero tariff for green electricity* Dutch scheme.[1326] Indeed, under certificate support systems, the intangible assets offered for free by the State evidently gain considerable value as soon as they are granted a tradable character and a quota obligation is imposed by law on energy market operators, the latter generating the needed demand in the certificates market. One would, therefore, have expected that the rationale adopted under the above addressed jurisprudence on national emission trading schemes would also have been applied to the component of tradable certificates regimes under exam. Instead, it was precisely in the abovementioned *Dutch NOx scheme* decision that the Commission provided an in-depth comparative analysis of emission trading systems and tradable certificates systems, and concluded that they diverged.[1327] In this regard we might speculate that the European Institution had difficulties in qualifying the *Dutch*

[1324] Actually, at some point the Commission even stopped addressing the free allocation and tradability constituents. See, for instance, Commission Decision of 24 October 2006, State aid N 254/2006, *Panneaux photovoltaïques*, *cit.*, paras 10-14.

[1325] See, for instance, Commission Decision of 25 July 2001, State aid N 550/2000, *Belgium Green Certificates*, *cit.*, section 3; Commission Decision of 28 November 2001, State aid N 504/2000, *UK Renewables Obligation and Capital Grants*, *cit.*, pp. 10-13, and all the numerous above cited decisions rendered by the Commission from 2003 to 2011 on modifications to and extensions of the UK TGC scheme; Commission Decision of 28 November 2001, State aid N 415/A/2001, *Wallonian Green Certificates*, *cit.*, section 2; Commission Decision of 2 August 2002, State aid N 14/2002, *Belgian offshore wind energy*, *cit.*, section 2.1.; Commission Decision of 5 February 2003, State aid N 789/2002, *Swedish Green Certificates*, *cit.*, section 3.1.; Commission Decision of 3 May 2005, State aid N 608/2004, *Flemish CHP Certificates*, *cit.*, section 3.

[1326] See, Commission Decision of 28 November 2001, State aid NN 30/B/2000 and 678/2001, *Zero tariff for green electricity*, OJ 2002 C30/16, p. 6. Under this scheme green certificates were mere guarantees of origin. Indeed, they served the sole purpose of allowing RES-e generators to demonstrate to public authorities that the electricity they sold was actually green electricity, in order to be able to benefit from the tax exemption for green electricity established under the scheme.

[1327] See, Commission Decision of 24 June 2003, State aid N 35/2003, *Dutch NOx scheme*, *cit.*, section 3.1. The very same distinction has since been restated and articulated in some decisions on tradable certificates schemes. See, for instance, Commission Decision of 3 May 2005, State aid N 608/2004, *Flemish CHP Certificates*, *cit.*, p. 3.

NOx scheme as aid, given the approach already adopted regarding TGC schemes. However, in the author's view, the differences it has evidenced between these two types of systems find no basis in either their theoretical or practical functioning.[1328] Moreover, the analysis provided is not at all inspired by the required effect-based approach.

The following judgments on the *Dutch NOx scheme* rendered under appeal by the General Court and the CJ have not been at all helpful in that respect.[1329] Indeed, on the one side, both Union Courts upheld the Commission's finding that emission trading systems involve a transfer of State resources in, respectively, the *Netherlands v. Commission* and the *Dutch NOx* rulings.[1330] On the other side, however, while the General Court has explicitly distinguished emission trading systems from tradable certificates schemes,[1331] the CJ has not even addressed the arguments put forward by the Netherlands regarding the similarities between these two types of regimes. Hence, another chance to clarify the scope of the State resources criterion has been missed and the Member States still continue to rely on the abovementioned Commission comparative analysis to maintain that their capacity and green certificate support systems do not constitute State aid.[1332] Moreover, contrary to the Commission's and the General Court's assessments of the case, in the *Dutch NOx* judgment the CJ did not even give decisive relevance to the free allocation of NOx emission allowances under the measure in question for differentiating it from the German StrEG 1998. It in fact focused its reasoning on the circumstance that, by permitting the tradability of the pollution documents, the State was foregoing revenues because it was allowing the undertakings bound by the purchase obligation

[1328] *Ibidem.* For instance, regarding emission trading systems, the Commission has underlined that there is a trading market, the value of tradable emission allowances is predicted to be considerable, and the fact that the undertakings have to bear expenses in order to realise the value of the emission allowances does not change the existence of an advantage. These elements are also all present in tradable certificate systems.

[1329] See, Case T-233/04, *Netherlands v. Commission*, [2008] ECR II-591, paras 75-78, upheld, on this point, on appeal in Case C-279/08P, *Dutch NOx, cit.*, paras 106-112.

[1330] *Ibidem*, respectively, para. 78 and para. 112.

[1331] See, Case T-233/04, *Netherlands v. Commission*, *cit.*, para. 76. The General Court in fact ruled that the Dutch authorities were wrong in maintaining that the emission trading system in question was similar to the measure under scrutiny in the *Belgium Green Certificates* case. In doing so, the Court simply recalled the Commission findings in the last-mentioned case without providing any further explanation in that respect.

[1332] A very recent example is provided by the arguments submitted by the French State regarding the capacity remuneration mechanism it has just implemented. See, Commission Decision of 8 November 2016, State aid SA.39621, *French Country-wide Capacity Mechanism II*, *cit.*, para 85, to be read in conjunction with paragraphs 108 to 110 of the Commission's decision to initiate the formal investigation procedure in the case, *i.e.*, Commission Decision of 13 November 2015, State aid SA.39621, *French Country-wide Capacity Mechanism I*, OJ 2016 C46/35.

to escape the penalty mechanism.[1333] One might argue that, in this way, the Court has also found a way to catch most tradable certificates schemes without taking a clear position in that respect. Indeed, as we shall see, the *Dutch NOx* judgment has at least led the Commission to rethink its approach towards these types of schemes as well. However, first of all, had the concerned Member State avoided introducing the system under scrutiny there would have been no penalty mechanism. Secondly, also with respect to these kind of penalty mechanisms, the State at the very most renounces resources in favour of the recipients of pollution documents or certificates of origin. Indeed, the entities bound by standards or quota obligations are not granted an exemption from the fining system: they are simply required to redirect the funds that they would have used for paying the fines to the mentioned recipients by purchasing the relevant intangible assets. Thirdly, any tradable certificates regime can be devised in such a way that it does not include a fining system. Under such regimes, in fact, the sanctions are simply ancillary elements aimed at incentivising obliged entities to comply with the purchase obligation and, thus, to ensure that there is a demand for the relevant certificates in the market.[1334]

This brings us to the third abovementioned element of tradable certificates schemes identified by the Commission, *i.e.* the penalty mechanism. The Commission has, actually, relied on it for distinguishing cases where the State resources condition is satisfied from cases where it is not. Indeed, it has long differentiated certificate support schemes on the basis of the destination of the funds raised through the fining system established thereunder.[1335] In cases where the regimes under scrutiny have provided for the proceeds of the fines faced by non-compliant energy market operators to be reinvested in the scheme,[1336] the Commission has found that the measure constitutes State aid.[1337] In cases where the national authorities have stated that the relevant monies are earmarked for financing other projects, it has instead

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[1333] See, Case C-279/08P, *Dutch NOx*, *cit.*, para. 106, where the granting of allowances free of charge by the State seems simply to represent an additional element, which confirms the finding on State resources based on the penalty mechanism.

[1334] In a similar vein see, recently, Commission Decision of 2 August 2016, State aid SA.37345, *Polish Green Certificates for RES-e and Reductions for EIUs*, *cit.*, para. 145.

[1335] The proceeds of the fines are usually collected either directly by the regulator or by publicly-owned funds and market operators.

[1336] For instance, by redistributing the monies among the generators concerned by the scheme or by using them for guaranteeing the minimum price in the following years of scheme application.

[1337] See, for instance, *UK Renewables Obligation and Capital Grants*, *cit.*, pp. 12-13, and all the numerous above-cited decisions rendered by the Commission from 2003 to 2011 on modifications to and extensions of the UK TGC scheme. See also, Commission Decision of 5 February 2003, State aid N 789/2002, *Swedish Green Certificates*, *cit.*, section 3.1.

concluded that State resources are not involved.[1338] This is notwithstanding that in certain cases these projects favoured the very same portion of the energy sector covered by the relevant scheme and, in any event, there was no way to verify how the monies would later have been used.[1339]

As a result, also, of the considerations we made when analysing the *Dutch NOx* judgment, in the author's view in the first fifteen years of the new millennium the penalty mechanism has been given an excessive role in the assessment of certificate support schemes. This has also been a very risky path because, as mentioned, tradable certificate systems can certainly be designed without this ancillary element. In this respect, we might speculate that, given that the approach the Commission has adopted regarding the other two elements of these schemes would have let all tradable certificate regimes fall outside the scope of the State aid control system, it has since tried to find a solution without revising its previous case practice.

6.4. Four Recent Revolutionary Decisions: a Step towards the Erosion of the State Resources Requirement?

In the last year and a half the Commission seems to have completely reshaped the framework for assessing energy support measures under the first condition for State aid. At the beginning of the previous subparagraph we, in fact, mentioned the potential 'revolutionary' effects certain very recent decisions on tradable certificates regimes might have on the structure of the State origin criterion. This is the case for the decisions the Commission has rendered on the *Amended Romanian Green Certificates System*, the *Polish Green Certificates for RES-e* scheme, the *Polish Green Certificates for CHP* scheme and the *French Country-wide Capacity Mechanism*.[1340] Indeed, in these decisions the Commission has – in our view, on purpose –

[1338] Examples include, Commission Decision of 25 July 2001, State aid N 550/2000, *Belgium Green Certificates*, *cit.*, section 3; Commission Decision of 28 November 2001, State aid N 415/A/2001, *Wallonian Green Certificates*, *cit.*, section 2; Commission Decision of 2 August 2002, State aid N 14/2002, *Belgian offshore wind energy*, *cit.*, section 2.1.; Commission Decision of 3 May 2005, State aid N 608/2004, *Flemish CHP Certificates*, *cit.*, section 3. In the *Panneaux photovoltaïques* decision, the Commission even erroneously held that the measure did not provide for a fining mechanism: cf. paras 2 and 13 of Commission Decision of 24 October 2006, State aid N 254/2006, *Panneaux photovoltaïques*, *cit.*

[1339] Given the notification deficit and the State aid regime loopholes evidenced above, the Commission could not be sure that the financial mechanism adopted to finance the relevant projects would have been notified later.

[1340] Commission Decision of 4 May 2015, State aid SA.37177, *Amended Romanian Green Certificates System*, *cit.*, Commission Decision of 2 August 2016, State aid SA.37345, *Polish Green Certificates for RES-e and Reductions for EIUs*, *cit.*; Commission Decision of 28 September 2016, State aid SA.36518, *Polish Green*

taken two different and alternative paths to address the relevant support measures under the State origin condition. More precisely, it has developed two lines of reasoning that have led, independently from each other, to the conclusion that State resources were involved in the cases under scrutiny.[1341] The first one concerns the granting of certificates for free and might have an impact on all future financial mechanisms that, like certificate support systems, provide for the allocation of intangible assets free of charge by public authorities or bodies. The second line of reasoning, instead, pertains to the financing of the support systems in question and might bring about a major change in the framework for assessing all support measures under the first condition for the applicability of Article 107(1) TFEU. As we shall explain, this change might eventually lead to a tacit 'amputation' of the second leg of this condition, the State resources requirement, an evolution strongly recommended by some distinguished scholars, especially in recent years.[1342]

The core element of both these lines of reasoning is the *reductio ad unum* of the three constituents of tradable certificates systems addressed in the previous subparagraph. Under the first path this means that the quota/purchase obligations, the tradability character of the certificates and the penalty mechanisms all become instrumental for qualifying the free allocation of intangible assets as aid.[1343] In this way there is no more room for the *PreussenElekra* doctrine with respect to these schemes. According to the Commission, in fact, the legal frameworks under scrutiny in the *Amended Romanian Green Certificates System*, the *Polish Green Certificates for RES-e* scheme and the *French Country-wide Capacity Mechanism*

Certificates for CHP, *cit.*; and Commission Decision of 8 November 2016, State aid SA.39621, *French Country-wide Capacity Mechanism II*, *cit.* To the extent that the Polish Green Certificates system for RES-e and the Polish Green Certificates system for CHP are identical and, thus, the relevant Commission's decisions are substantially alike (cf., respectively, paras 138-165 and paras 43-77), the references we will make and the arguments we will put forward in this paragraph with regard to the decision on the first Polish system apply, *mutatis mutandis*, to the decision on the second one.

[1341] See, Commission Decision of 4 May 2015, State aid SA.37177, *Amended Romanian Green Certificates System*, *cit.*, para 46; Commission Decision of 2 August 2016, State aid SA.37345, *Polish Green Certificates for RES-e and Reductions for EIUs*, *cit.*, para. 138; and Commission Decision of 8 November 2016, State aid SA.39621, *French Country-wide Capacity Mechanism II*, *cit.*, para. 53.

[1342] See, for instance, Rubini, L. (2009) The 'Elusive Frontier': Regulation under EC State Aid Law, *cit.*, and Jaeger T. (2012) Goodbye Old Friend: Article 107's Double Control Criterion, *cit.*

[1343] Actually, the Commission had already started to cast doubt on its previous case practice on tradable certificates systems in its prior decision on the Romanian TGC scheme, which was delivered three month before the *Dutch Nox* judgment. Indeed, after restating its previous case law and confirming the alleged differences between emission trading systems and tradable certificates schemes, it briefly delineated what has then become the first line of reasoning in the cases under exam. However, in the relevant decision it decided not to take a definitive position on this point because the measure was, in any event, compatible with the internal market. See, Commission Decision of 13 July 2011, State aid SA.33134, *Romanian Green Certificates System*, OJ 2011 C244/2, paras 47-55.

determine,[1344] when considered in their entirety, that the concerned Member States forego revenues by distributing capacity or RES-e certificates without real consideration.[1345] Indeed, the States confer a market value on the relevant commodities by creating an artificial demand for them. This demand stems from the legally binding provisions disciplining the support systems in question and the principles underlying such schemes. More precisely, the simple fact that the States set up a quota for obligated entities, to be satisfied either by purchasing the certificates or by paying a compensation fee, generates a demand for the relevant assets. In this way, in fact, the States confer a tradable character on the latter which, in turn, determines the creation of a market where they can be traded for consideration, thanks to the demand generated by the quota obligation.[1346] Under this reading, the administrative fining mechanism established for sanctioning non-compliant entities simply becomes a further mean used by the Member States for ensuring that there is a certain level of demand for the certificates. It is, therefore, solely aimed at incentivising market operators to fulfil their quota obligations by purchasing the certificates.[1347] With regard to this first line of reasoning it is finally worth highlighting that, although the Commission has explicitly relied on the *Dutch NOx* judgment for reconsidering its previous case practice,[1348] it has – in our view, rightly – limited the weight attributed to the

[1344] Regarding the decision on the *French Country-wide Capacity Mechanism* we should note that, in the part of its final decision where it assessed the measure under the State origin criterion, the Commission mainly addressed the arguments put forward by the interested parties during the formal investigation procedure. As per the proper assessment of the measure under this criterion it instead explicitly made reference to its decision to initiate the formal investigation procedure in the case, which is actually clearly summarised at the beginning of its final decision. Hence, for the sake of exhaustiveness, in the following pages we will make reference also to the relevant paragraphs of the Commission's decision to initiate the formal investigation procedure, *i.e.*, Commission Decision of 13 November 2015, State aid SA.39621, *French Country-wide Capacity Mechanism I*, *cit.*

[1345] See, Commission Decision of 4 May 2015, State aid SA.37177, *Amended Romanian Green Certificates System*, *cit.*, para. 52; Commission Decision of 2 August 2016, State aid SA.37345, *Polish Green Certificates for RES-e and Reductions for EIUs*, *cit.*, para. 144; and Commission Decision of 8 November 2016, State aid SA.39621, *French Country-wide Capacity Mechanism II*, *cit.*, paras 54 and 200.

[1346] *Ibidem*, respectively, paras 48, 50 and 52; paras 139-140, 142, 144 and 146; and paras 200-202, to be read in conjunction with paragraphs 114 to 117 of the Commission's decision to initiate the formal investigation procedure of 13 November 2015, State aid SA.39621, *French Country-wide Capacity Mechanism I*, *cit.*

[1347] With that respect, see Commission Decision of 2 August 2016, State aid SA.37345, *Polish Green Certificates for RES-e and Reductions for EIUs*, *cit.*, para. 145.

[1348] *Ibidem*, paras 141 to 143. See also, Commission Decision of 4 May 2015, State aid SA.37177, *Amended Romanian Green Certificates System*, *cit.*, paras 44 and 49-51, and Commission Decision of 8 November 2016, State aid SA.39621, *French Country-wide Capacity Mechanism II*, *cit.*, para. 54, to be read in conjunction with paragraphs 114 to 117 of the above cited Commission's decision to initiate the formal investigation procedure in the case.

penalty mechanism in that judgment. Actually, in two out of three decisions the fining systems were not even considered.[1349]

Importantly, in its decisions on the *Amended Romanian Green Certificates System*, the *Polish Green Certificates for RES-e* scheme and the *French Country-wide Capacity Mechanism*, the Commission explicitly held that the first dimension of the assessment of certificate support systems that we have just addressed was enough to conclude that the schemes under scrutiny involved a transfer of State resources.[1350] Nonetheless, it also decided to develop the abovementioned second line of reasoning in support of its findings on the State resources criterion. More precisely, this second path is based on an assessment of the control exercised by the State over the financial flows resulting from the schemes in question. One may, therefore, speculate that the Commission tried to provide criteria that could also have an impact on other types of energy support measures and, in this way, it has attempted to reshape, in general, the methodology of assessment under the first condition of State aid.

More precisely, in the three decisions under scrutiny the Commission first went through the CJEU's jurisprudence on the concept of State intervention through public and private bodies appointed or established by the State to administer the aid.[1351] In particular, it focused on the *Italian textiles*, *Steinike & Weinlig*, *Essent*, *Vent De Colère* and *French contingency plans* judgments.[1352] Importantly however, the Commission seems to have broadened the reading these rulings provided so far in two different but mutually reinforcing ways. On the one ground, in fact, it seems to have extended the concept of a body entrusted with administrative duties regarding the private funds financing a given measure. On the other ground, it seems to have

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[1349] Indeed, while in the decision on the *Amended Romanian Green Certificates System* the penalty mechanism established thereunder was not even mentioned by the Commission when assessing it under the State resources criterion, in the decision on the *French Country-wide Capacity Mechanism II* it was mentioned only with respect to the second line of reasoning. See, Commission Decision of 8 November 2016, State aid SA.39621, *French Country-wide Capacity Mechanism II*, *cit.*, para. 119.

[1350] See, Commission Decision of 4 May 2015, State aid SA.37177, *Amended Romanian Green Certificates System*, *cit.*, para. 53, and Commission Decision of 2 August 2016, State aid SA.37345, *Polish Green Certificates for RES-e and Reductions for EIUs*, *cit.*, para. 147. As per the *French Country-wide Capacity Mechanism* decision, this can be inferred from the circumstance that the analytical steps provided thereunder are identical to those provided in the two above-cited decisions and have been mainly developed by making continuous references to these decisions, especially with respect to the first line of reasoning.

[1351] *Ibidem*, respectively, paras 55, 57-58 and paras 148,150-152. See also, Commission Decision of 8 November 2016, State aid SA.39621, *French Country-wide Capacity Mechanism II*, *cit.*, para. 55, to be read in conjunction with paragraphs 112, 113 and 121 of the Commission's decision to initiate the formal investigation procedure of 13 November 2015, State aid SA.39621, *French Country-wide Capacity Mechanism I*, *cit.*

[1352] Case 173/73, *Italian textiles*, *cit.*, Case 78/76, *Steinike & Weinlig*, *cit.*, Case C-206/06, *Essent*, *cit.*, Case C-262/12, *Vent De Colère*, *cit.*, and Case T-139/09, *Oniflhor*, *cit.* With that respect see paragraph 1 and subparagraph 3.3 of this chapter.

narrowed down the degree of State control over such funds necessary for a positive finding under the State resources criterion. As per the first ground, we shall explain that, in our view, under the Romanian, Polish and French certificate systems no intermediate bodies are appointed to collect the relevant funds from the obligated private entities and to pass them on as aid to other undertakings on behalf of the States. Indeed, as explicitly recognised by the Commission, in the cases in question the financial flows take place directly between private parties.[1353] However, in three out of four decisions the Commission maintained that the very undertakings having purchase obligations under the systems were the entities appointed to administer the financial flows thereunder, *i.e.* their own monies.[1354] In the third decision, though, it seemed to attribute this role to the public undertaking assigned with managing tasks only regarding the certificates and a very peculiar sanctioning mechanism.[1355] Turning to the mentioned second ground, the Commission has maintained that in the above cited judgments the Court found that State resources were involved because of the degree of intervention of the State in defining the measure and its financing methodology.[1356] More precisely, the Commission has held that the Court's findings in these judgments were based on the circumstance that the support schemes were financed through compulsory contributions imposed by State legislation, the funds were managed and apportioned in accordance to the provisions of that legislation, and the mechanism established for offsetting the resulting additional costs was disciplined by law.[1357] In this regard, it might well be argued that the characteristics and elements of the relevant CJEU jurisprudence evidenced by the Commission are those that assimilate – rather than distinguish – the judgments under exam to the *PrussenElektra* ruling. Indeed, while they are usually considered relevant for

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[1353] See, Commission Decision of 4 May 2015, State aid SA.37177, *Amended Romanian Green Certificates System*, *cit.*, para. 54; Commission Decision of 2 August 2016, State aid SA.37345, *Polish Green Certificates for RES-e and Reductions for EIUs*, *cit.*, para. 154; and Commission Decision of 13 November 2015, State aid SA.39621, *French Country-wide Capacity Mechanism I*, *cit.* para. 120.

[1354] Commission Decision of 4 May 2015, State aid SA.37177, *Amended Romanian Green Certificates System*, *cit.*, para. 64, and Commission Decision of 2 August 2016, State aid SA.37345, *Polish Green Certificates for RES-e and Reductions for EIUs*, *cit.*, para. 160. As mentioned, the Polish Green Certificates system for RES-e and the Polish Green Certificates system for CHP are identical and, thus, the relevant Commission decisions are substantially alike.

[1355] Commission Decision of 8 November 2016, State aid SA.39621, *French Country-wide Capacity Mechanism II*, *cit.*, para. 55, to be read in conjunction with paragraphs 120-125 of the above cited Commission decision to initiate the formal investigation procedure in the case.

[1356] See, Commission Decision of 4 May 2015, State aid SA.37177, *Amended Romanian Green Certificates System*, *cit.*, paras 57-58; Commission Decision of 2 August 2016, State aid SA.37345, *Polish Green Certificates for RES-e and Reductions for EIUs*, *cit.*, paras 151-152; and Commission Decision of 8 November 2016, State aid SA.39621, *French Country-wide Capacity Mechanism II*, *cit.*, para. 55, to be read in conjunction with paragraphs 113 and 118 of the above cited Commission's decision to initiate the formal investigation procedure in the case.

[1357] *Ibidem.*

establishing the imputability to the State of support measures, they have so far been considered not enough for a positive finding about the control exercised by the State over the resources used to finance regulatory measures. However, as we shall see, the Commission seems to have relied precisely on these characteristics and elements to find that the State resources requirement was fulfilled by the Romanian, Polish and French certificate systems.[1358]

To properly understand the reach of these four Commission decisions and their potential impact on the assessment framework applicable to any kind of support measure under the State origin criterion,[1359] we shall briefly address them in turn by focusing on the relevant structural aspects of each national certificate scheme.

Regarding the *Amended Romanian Green Certificates System* and the *Polish Green Certificates for RES-e* scheme, we should first highlight that the financial flows on the certificates markets take place directly between private parties;[1360] that is to say, electricity suppliers and RES-e generators.[1361] The same holds true regarding the amounts of the compensation fees, which were provided under the Polish scheme only as alternative means of fulfilling the quota obligation.[1362] As per the financial flows generated by the compensation mechanisms established to finance the schemes, they also take place directly between end consumers and electricity suppliers.[1363] Indeed, the latter have to pass the costs of the schemes on to their customers through electricity prices and,[1364] in order to do so, they simply have to

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[1358] *Ibidem*, respectively, paras 59, 153 and 55.

[1359] As mentioned, the Polish Green Certificates system for RES-e and the Polish Green Certificates system for CHP are identical and, thus, the relevant Commission's decisions are substantially alike (cf., respectively, Commission Decision of 2 August 2016, State aid SA.37345, *Polish Green Certificates for RES-e and Reductions for EIUs*, *cit.*, paras 138-165, and Commission Decision of 28 September 2016, State aid SA.36518, *Polish Green Certificates for CHP*, *cit.*, paras 43-77). Hence, the references we will make and the arguments we will put forward with regard to the decision on the first Polish system apply, *mutatis mutandis*, to the decision on the second one.

[1360] To be fair, we do not know whether the market operators involved in the schemes are all private undertakings or not because the Commission has not entered into an analysis of their ownership structure. However, we might assume that currently a great number of national electricity suppliers are privately-owned and, thus, the principles established in the jurisprudence analysed in subparagraph 3.2. of this chapter would, in any event, apply to these cases.

[1361] See, Commission Decision of 4 May 2015, State aid SA.37177, *Amended Romanian Green Certificates System*, *cit.*, para. 54, and Commission Decision of 2 August 2016, State aid SA.37345, *Polish Green Certificates for RES-e and Reductions for EIUs*, *cit.*, para. 154. Under the Polish scheme certain generators that sell energy directly to end customers are also obligated entities.

[1362] See, Commission Decision of 2 August 2016, State aid SA.37345, *Polish Green Certificates for RES-e and Reductions for EIUs*, *cit.*, para. 158.

[1363] *Ibidem*, para. 154.

[1364] While under the *Amended Romanian Green Certificates System* it is compulsory to pass on the costs of certificates to end-customers, under the *Polish Green Certificates for RES-e* scheme electricity suppliers are allowed to choose whether to proceed in that sense or not. However, in its decision on the *French Country-wide*

elaborate a special bill component.[1365] Nonetheless, the Commission found that public authorities and/or energy regulators are able to exercise control over either the above delineated money transfers and, thus, the State resources requirement is fulfilled in these cases.[1366] More precisely, it held that electricity suppliers are entrusted by the Romanian and Polish States with administrative tasks regarding both the funds generated by the sale of the certificates – actually, their own funds! – and those raised through the compensation mechanisms established to their advantage – *i.e.*, their own electricity bills![1367] In this regard, the Commission further stressed that electricity suppliers have to fulfil their alleged administrative tasks under the control of national authorities and/or energy regulators, and, as a result, the relevant resources are constantly under State control. To support its finding in this respect, it highlighted that, under the schemes, such authorities and/or regulators issue and redeem the certificates, have monitoring powers over the whole system, and can control, direct and influence the 'administration' of the certificates. Moreover, it was noted that they had – obviously – indicated in the relevant legislations the beneficiaries of the support schemes, the eligibility criteria, the obliged entities, the rules for determining their quota obligation and the level of support. Finally, as additional elements in support of its findings, the Commission provided that the financial resources aimed at covering the costs of the support, the methodology for calculating the relevant electricity bill component and the structure of this component are defined by law.[1368] Regarding the penalty mechanisms established under both schemes, it should be noted that, while the Commission did not even mention the Romanian one when assessing the relevant measure under the State aid test, it briefly referred to the Polish one simply as an additional element evidencing the control exercised by the State over the certificates system.[1369]

Capacity Mechanism the Commission explicitly ruled that this is not a distinctive feature capable of having an impact on the result of the State aid test. See, Commission Decision of 8 November 2016, State aid SA.39621, *French Country-wide Capacity Mechanism II*, *cit.*, para 203.

[1365] See, Commission Decision of 4 May 2015, State aid SA.37177, *Amended Romanian Green Certificates System*, *cit.*, paras 60-61, and Commission Decision of 2 August 2016, State aid SA.37345, *Polish Green Certificates for RES-e and Reductions for EIUs*, *cit.*, para. 156.

[1366] *Ibidem*, respectively, para. 65 and paras 154 and 161.

[1367] *Ibidem*, respectively, paras 64 and 160.

[1368] *Ibidem*, respectively, paras 61 to 65 and paras 155-157 and 160-161. Some of these elements of the schemes are actually established by the implementing ministerial regulations and by the acts of the energy regulators.

[1369] Commission Decision of 2 August 2016, State aid SA.37345, *Polish Green Certificates for RES-e and Reductions for EIUs*, *cit.*, para. 159. Actually, these fining mechanisms do not even provide for a redistribution of the funds ensuing from the application of administrative penalties.

One might argue that it is quite impossible to distinguish the above-addressed Romanian and Polish legislative frameworks from that established under the StrEG 1998. It is also difficult to understand how the role attributed to electricity suppliers under the Romanian and Polish certificates schemes can be assimilated to that played by those third entities which were entrusted with collection and redistribution duties under the support regimes assessed by the CJEU in cases such as *Essent*, *Iride* and *Vent De Colère*.[1370]Moreover, all the abovementioned arguments provided by the Commission in support of an alleged control exercised by the States over the resources used to finance the Polish and Romanian regulatory measures have so far been considered relevant only for establishing State imputability.

The very same considerations might be deemed applicable to the Commission's assessment of the *French Country-wide Capacity Mechanism* under the second line of reasoning it recently developed.[1371] As we shall see, in fact, but for some details and the far more complicated structure of the system, the French CRM does not differ from the green certificates schemes analysed above in its main aspects – *i.e.* capacity obligations, capacity certificates market, compensation and sanctioning mechanisms. However, it is precisely due to the complexity of this capacity mechanism that, for the purpose of our analysis, it is worth separately addressing some of the elements of which it is composed.[1372] We shall, therefore, start with the financial flows stemming from the capacity obligations, the capacity market and the related compensation mechanism. Under the French CRM the obligations of both capacity providers and electricity suppliers are established by the publicly-owned TSO[1373] according to the parameters provided by the relevant legislation.[1374] Capacity certificates can be then traded,

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[1370] Case C-206/06, *Essent, cit.*, Case T-25/07, *Iride*, *cit.*, and Case C-262/12, *Vent De Colère*, *cit.*

[1371] As already mentioned, in its final decision the Commission mainly addressed the arguments put forward by the interested parties during the formal investigation procedure. While the first line of reasoning was briefly recalled thereunder to explain why the related arguments of the parties could have no impact on the Commission assessment of the case in the decision to initiate a formal investigation procedure, the second one was only summarised at the beginning of the final decision. However, this might be due, first of all, to the nature of the arguments put forward by the interested parties. Moreover, it might be attributed to the circumstance that, as already stated by the Commission, the first line of reasoning was enough to conclude that the scheme under scrutiny involved a transfer of State resources. We might, therefore, assume that also for the proper assessment of the measure under this second line of reasoning we should refer to the Commission decision to initiate the formal investigation procedure in the case.

[1372] At this stage of the analysis, we will not address the system established to deal with the capacity obligations the French legislation has imposed on the operators of generation and demand response capacities, which is based on contracts certifying their capacity and on a bonus-malus sanctioning system.

[1373] The TSO is a 100 per cent subsidiary of EDF, which is also controlled by the State.

[1374] More precisely, electricity capacity providers – which include both power plants and demand side operators – have their certificates assigned by the TSO. The obligated entities – which include not only electricity suppliers but also big power consumers – are informed of the number of certificates they have to hold to fulfil their

either through private bilateral transactions or through public auctions in the certificates market, where both suppliers and capacity operators hold capacity accounts administered by the TSO.[1375] Importantly, under both of the abovementioned kind of transactions, the resulting financial payments are directly and privately settled between the parties to the transactions, as also acknowledged by the Commission.[1376] Moreover, the TSO has no administrative powers over the financial flows taking place under the compensation mechanism provided by law to finance the scheme: indeed, electricity suppliers are simply granted the option of passing the costs of the scheme on to their customers and they can do so only through their electricity prices. Hence, in the author's view, with regard to the above-addressed elements of the French capacity mechanism the TSO has only managing, accounting and control powers over the capacity accounts and market,; *i.e.*, over the certificates.

Turning to the sanctioning mechanism established under the relevant French legislation, it is far more complicated than usual. First of all, it is a two-fold mechanism: on the one side, the TSO administers the separate account set up for managing the so-called bonus-malus sanctioning system; on the other side, suppliers not complying with this system can be sanctioned through fines imposed by the energy regulator, whose proceeds are, however, not redistributed.[1377] More precisely, under the bonus-malus system suppliers exceeding their obligation are granted a bonus payment which is financed by the malus payments that suppliers not matching their obligations in a given period have to make. The TSO actually manages the relevant monies and financial flows.[1378] However, it is evident that these flows do not occur between capacity providers and obliged suppliers but only between overperforming and underperforming suppliers.[1379] In our view, it is also evident that the transfers of the relevant funds do not provide financial support to the beneficiaries but simply restore the balance of duties among suppliers. It should also be noted that, according to the relevant law, if the balance

obligation. Electricity suppliers can – alternatively – satisfy their obligations by investing in generation capacity or demand response measures themselves. See, Commission Decision of 8 November 2016, State aid SA.39621, *French Country-wide Capacity Mechanism II*, *cit.*, sections 2.1. and 2.2.

[1375] *Ibidem*, paras 8 and 27. As per the certificates' transactions in the relevant market, transfer of property occurs as a result of the inscription of the concerned certificates in the account of the beneficiary.

[1376] *Ibidem*, section 2.3. See also, Commission Decision of 13 November 2015, State aid SA.39621, *French Country-wide Capacity Mechanism I*, *cit.*, para. 120.

[1377] *Ibidem*, section 2.4.

[1378] *Ibidem*. An identical bonus-malus system has also been established to deal with non-compliant capacity providers.

[1379] *Ibidem*, para. 36.

of payments is positive, the remaining amounts are not directly redistributed among end consumers: they are, in fact, kept in the accounts and later used to finance a decrease in the final electricity price. Hence, in the author's view, under the sanctioning mechanism the TSO cannot be deemed to have been appointed to administer the collection and redistribution of funds having an aid character.

Notwithstanding all the above considerations, the Commission found that the State resources requirement was met by the French CRM with respect to its financing methodology as well. To reach this conclusion it again recalled its above-provided unconventional reading of judgments such as *Italian textiles*, *Steinike & Weinlig*, *Essent* and *Vent De Colère*.[1380] It therefore held that, although under the capacity mechanism in question the financial flows among capacity providers, obligated suppliers and end consumers take place directly between private parties, they still remain under the control of the State, as in the cases listed above.[1381] The Commission then justified its finding in the case through a number of arguments that were not properly systematised because, by addressing the French CRM in its entirety, it mixed its various components. However, in our view the arguments it put forward might be reduced to two main mutually reinforcing arguments. The first one consists of the allegation that the publicly-owned TSO was entrusted by the State with managing the financial flows of the bonus-malus sanctioning system – which, in our view, have no aid character – according to the national legislation disciplining it, and, thus, under the control of the State.[1382] The second one seems to include several arguments that are normally used to establish State imputability.[1383] These arguments allegedly support the finding that, since the State – either on its own or through the TSO – disciplines and controls the certificates market, it controls also the ensuing private financial flows.[1384]

[1380] *Ibidem*, para. 55, to be read in conjunction with paragraphs 112, 113, 118 and 121 of the above-cited Commission decision to initiate the formal investigation procedure of 13 November 2015, State aid SA.39621, *French Country-wide Capacity Mechanism I*, *cit.*

[1381] *Ibidem*, para. 55, to be read in conjunction with paragraphs 120, 124 and 125 of the above-cited Commission decision to initiate the formal investigation procedure in the case.

[1382] *Ibidem*, para. 55, to be read in conjunction with paragraphs 122-124 of the above cited Commission decision to initiate the formal investigation procedure in the case. The Commission also seems to substantiate this first reasoning through some of the elements provided under the second argument and listed in the next two footnotes.

[1383] Actually, this also seems to be indirectly acknowledged by the Commission. See, paragraph 119 of the above cited Commission's decision to initiate the formal investigation procedure in the case.

[1384] The arguments provided include the following: the funds financing the system are raised thanks to compulsory contributions imposed by law; the State has established the methodology to be used for determining the reference price/penalty under the bonus-malus system; this reference price/penalty has an impact on the price and number of capacity certificates; the relevant legislation has provided for the fining mechanism managed by the energy

In conclusion, in the author's opinion, the in-depth analysis of the two-fold assessment recently developed by the Commission with respect to the Romanian, Polish and French certificate support systems provided in this paragraph confirms the diagnosis that the relevant decisions might have a 'revolutionary' impact on the evaluation of national support measures under the State origin criterion. The impact of the first line of reasoning provided thereunder is undoubtedly far more limited and is also partially grounded on the Court's case law on emission trading schemes. This is not the case, however, for the second line of reasoning. Indeed, first of all, it finds no support from the conventional understanding of the State origin criterion as developed by the CJEU jurisprudence from *PreussenElektra* onwards. Our opinion in this respect is confirmed, for instance, by the analysis certain esteemed scholars have provided of the *French Country-wide Capacity Mechanism* prior to the adoption of the relevant decisions: by applying the conventional reading of the State resources requirement, in fact, they have rightly found that the support scheme in question could not meet it.[1385] Secondly, the second line of reasoning might lead to an implicit 'amputation' of the second leg of the State origin condition, the State resources criterion, which would have an impact on each and every domestic support measure. In the author's view, in fact, the decisions addressed in this subparagraph actually disguise a first real attempt by the European Institution to definitively clear *PreussenElektra* out of the way in all its aspects and effects. Indeed, on the one ground, the Commission has extended the scope of the concept of a body entrusted with administrative duties to such an extent that it would cover any private undertaking obliged to finance a support measure, and hence any kind of measure. On the other ground, it has to a great extent narrowed down the degree of State control over the funds financing a measure that is necessary for a positive finding under the State resources criterion.

As reshaped, the State origin assessment would, however, include an undesirable more structured imputability analysis which would cover not only an evaluation of the control exercised by the public authorities over the adoption of the support measure but also an

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regulator; both the fining mechanism and the abovementioned reference price/penalty established by the State have a strong influence on the efficiency of the CRM because they encourage suppliers and capacity providers to comply with their obligations; the State has established how the amounts remaining in accounts after the bonus-malus system has been implemented should be used, etc. See, Commission Decision of 8 November 2016, State aid SA.39621, *French Country-wide Capacity Mechanism II*, *cit.*, para. 55, to be read in conjunction with paragraphs 120 to 125 of the above cited Commission's decision to initiate the formal investigation procedure in the case.

[1385] See, for instance, Crevel-Sander D., Beaugonin C. (2015) 'Case Studies – France', in Hancher L., de Hauteclocque A., Sadowska M. (eds) Capacity Mechanisms in the EU Energy Market – Law, Policy, and Economics, *cit.*, pp. 256-270.

appraisal of the control exercised in some way by the State over its implementation. Nonetheless, at least all regulatory support schemes properly disciplined by law and superintended in their practical functioning – which are rather common in European energy markets – would pass the first condition for the applicability of Article 107(1) TFEU.

The breadth of the impact of the new approach seems to be provided by the Commission in its *Polish Green Certificates for RES-e* decision, where it seems to hold that the types of schemes that are addressed in its guidelines can easily pass the State aid test as this is the reason why they are dealt with thereunder.[1386] What remains to be seen is whether this is a warning or a notice.

[1386] See, Commission Decision of 2 August 2016, State aid SA.37345, *Polish Green Certificates for RES-e and Reductions for EIUs*, *cit.*, para. 136.

PART IV

In Search of Other Viable Tools to Narrow Down the Notion of Energy Aid

A Brief Overview

With respect to the foregoing, and with a view to giving the research question a forward-looking perspective, this part of the thesis encompasses an evaluation of certain theories and interpretations of the case law that, if embraced by EU courts, may further restrict the perimeter of the State aid review and intrude on the precinct of compatibility analysis of aid measures. To the extent that some of the analytical methods advanced by scholars are allegedly already being applied in the antitrust and internal market fields of EU law, a comparative assessment of the impact the relevant approaches would have in the three fields of law is provided where relevant.

Chapter 7

'Rule of Reason'-Type Arguments in the Case Law: a Reality or Pure Mystification?

7.1. Contextualising the Issue and Its Impact on Energy Support Measures

In Chapter 2 of this doctoral thesis we clearly evidenced that, according to settled case law, the objectives pursued by public support provisions are not in themselves sufficient to put them outside the scope of the State aid prohibition.[1387] We even clarified that this holds true also with regard to environmental and energy-related goals,[1388] which might be relevant only as grounds for justification under Article 107(3)'s exemptions.[1389] Finally, we explained that the principle of irrelevance of the aim of Member States' intervention is a general axiom that applies when addressing a domestic measure under each of the cumulative conditions provided for in Article 107(1) TFEU.

[1387] See, *ex plurimis*, Case 173/73, *Italy v. Commission* (*Italian textiles*), [1974] ECR 709, para. 13; Case 310/85, *Deufil GmbH & Co. KG v. Commission* (*Deufil*), [1987] ECR 901, para. 8; Case C-56/93, *Belgium v. Commission*, [1996] ECR I-723, para. 79; Case T-46/97, *Sociedade Independente de Comunicação SA v. Commission* (*SIC v. Commission*), [2000] ECR II-02125, para. 83; Case C-83/98 P, *French Republic v. Ladbroke Racing Ltd and Commission* (*Ladbroke*), [2000] ECR I-3271, para. 25; Case T-613/97, *Union française de l'express and Others v. Commission (Ufex)*, [2000] ECR I-4055, para. 67; Case C-172/03, *Wolfgang Heiser v. Finanzamt Innsbruck* (*Heiser*), [2005] I-1627, para. 46; and, more recently, Case C-81/10P, *France Télécom SA v. Commission* (*France Télécom*), [2011] ECR I-12899, para. 17; Joined Cases C-71/09 P, C-73/09 P and C-76/09 P, *Comitato "Venezia vuole vivere" and Others v. Commission*, [2011] ECR I-4727, para. 132; Case C-452/10 P, *BNP Paribas and BNL v. Commission*, ECLI:EU:C:2012:366, para. 100; Joined Cases T-268/08 and T-281/08, *Land Burgenland and Austria v. Commission*, ECLI:EU:T:2012:90, para. 76; Case C-272/12 P, *Commission v. Ireland*, ECLI:EU:C:2013:812, para. 53.

[1388] For explicit pronouncements by the CJEU to that effect we might recall, *inter alia*, Case C-409/00, *Spain v. Commission*, [2003] ECR I-1487, paras 46 and 53-54; Case T-109/01, *Fleuren Compost BV v. Commission* (*Fleuren Compost*), [2004] ECR II-127, para. 54; Case C-487/06 P *British Aggregates Association v. Commission* (*British Aggregates*), [2008] ECR I-10515, paras 84-85, 90-92 and 111-112; Case C-279/08 P, *Commission v. Netherlands* (*Dutch NOx*), [2011] ECR I-7671, para. 75; Case T-251/11, *Austria v. Commission* (*Austrian Green Electricity Act 2008*), ECLI:EU:T:2014:1060, para. 118.

[1389] As explained in Part II of this work, the main grounds for justifying environmental and energy aid measures are Articles 107(3)(b) and (c) TFEU. Indeed, on the basis of these provisions the Commission may declare compatible with the internal market "*(b) aid to promote the execution of an important project of common European interest or to remedy a serious disturbance in the economy of a Member State;* [and] *(c) aid to facilitate the development of certain economic activities or of certain economic areas, where such aid does not adversely affect trading conditions to an extent contrary to the common interest*" (emphasis added).

Some distinguished scholars have recognised the significance of the considerations provided and the jurisprudence quoted in Chapter 2 and have rightly welcomed the consequences thereon.[1390] More precisely, they have acknowledged that there is certainly no room for 'rule of reason' type arguments or the concept of 'objective justification' in the interpretation and application of the State aid test.[1391]

Nevertheless, we cannot ignore the fact that some unclear jurisprudence, if misinterpreted and unduly overstretched, might provide grounds for allowing the adoption of an objectives-based approach, in combination with or in lieu of the effect-based approach. This approach, we have explained, should also apply when defining a measure as aid.[1392] Actually, some experts have quoted this case law as providing evidence of a sort of implicit afterthought by the European Court of Justice ("CJ" or "Court") with regard to the role that regulatory intent should have in determining whether the domestic measure in question amounts to aid. More precisely, they have interpreted the relevant jurisprudence as supporting the application of a 'rule of reason' approach to the definition of aid with respect to each and every essential EU objective, indiscriminately.[1393] Others, instead, have construed it as a tacit acknowledgment of the peculiar 'status' that sustainable energy and other environmental goals deserve under Article 107(1) assessment, on account of the environmental integration principle now enshrined in Article 11 TFEU (previously, Article 6 EC).[1394] Their heart is indubitably in the right place. Indeed, they yearn for the preservation of a sensible degree of regulatory power for those

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[1390] See, *inter alia*, Bacon K. (2013) *European Union Law of State Aid*. Oxford: Oxford University Press, at 21; de Cecco F. (2012) 'State Aid and Self-Government: Regional Taxation and the Shifting Space of Constitutional Autonomy', in Shuibhne N. N., Gormley L. W. (eds) *From Single Market to Economic Union: Essays in Memory of John A. Usher*. Oxford: Oxford University Press, at 223; Hancher L. (2003) Towards a New Definition of a State Aid under European Law: Is There a New Concept of State Aid Emerging?. *European State Aid Law Quarterly* **2**(3) 365-373; Bacon K. (2003) The Concept of State Aid: The Developing Jurisprudence in the European and UK Courts. *European Competition Law Review* **24**(2) 54-61.

[1391] *Ibidem.*

[1392] With that regard see, further, Chapter 2 of this doctoral dissertation.

[1393] See, *inter alia*, Bartosh A. (2010) Is There a Need for a Rule of Reason in European State aid Law? Or How to Arrive at a Coherent Concept of Material Selectivity?. *Common Market Law Review* **47**(3) 729–752; Biondi A. (2006) Some Reflections on the Notion of "State Resources" in European Community State Aid Law. *Fordham International Law Journal* **30**(5)1426-1448. Actually, Professor Biondi seems to have changed his mind on this point at least with respect to the case law on the selectivity criterion: see Biondi A. (2013) State Aid is Falling Down, Falling Down: an Analysis of the Case Law on the Notion of Aid. *Common Market Law Review* **50**(6) 1719-1744, at 1732. METTI ALTRI MESSI IN PARAS DOPO SU RULE OF REASON

[1394] See, *inter alia*, Wiesbrock A. (2015) 'Sustainable State Aid: a Full Environmental Integration into the EU's State Aid Rules?', in Sjåfjell B., Wiesbrock A. (eds) *The Greening of European Business under EU Law: Taking Article 11 TFEU Seriously*. Abingdon/New York: Routledge, pp. 75-96. METTI ALTRI MESSI IN PARAS DOPO SU art 11. BIJORNEBYE? ANCHE GORMLEY X INT MKT? KINGSTON 2011, ALTRI?

Member States who wish to pursue legitimate and important policy goals, such as sustainable development and energy security objectives, without being required to justify the relevant measures. Nevertheless, in the author's opinion, their good intentions should not be enough to stand on its head the traditional jurisprudence on the objective notion of aid.

That said, while in this chapter we will deal with the rule of reason doctrine, in Chapter 18 we will discuss some of the alternative tools put forward by some experts that might result in certain environmental and energy-related measures escaping the compatibility assessment. Particular attention will be paid to the arguments that have been advanced by those scholars stating that the codification of the environmental integration clause under the Treaty should have relevant consequences when addressing a national support measure at the classification stage.

To properly appreciate the impact – if any – of the relevant rulings of the Court of Justice of the European Union ('CJEU' or 'Court') on Article 107(1)'s effect-based test, however, we should first understand what a rule of reason method of analysis consists of. When talking about a rule of reason approach, we basically refer to a sort of proportionality test carried out to ascertain whether the effects of the Member State legislation under scrutiny are justified in the light of its stated goals.[1395] Actually, in our view, the very existence of a European-style rule of reason approach is rather questionable but we will address this issue in paragraph 3. In any event, the problem in the State aid field arises because some scholars have tried to raise the rule of reason to the rank of a legal or constitutional principle or a rule of law.[1396] As such, it might be deemed capable of defining the substantive nature of any prohibition provided under the Treaty by narrowing down its compass, including Article 107(1)'s proscription of domestic aid measures.[1397] We though do, instead and at the very most,[1398] subscribe to the view expressed by other distinguished experts who have stated that the reach of the rule of reason is much more

[1395] For a far-reaching examination of the rule of reason approach, as it might be said to emerge in various areas of EU Law, see Schrauwen A. (2005) *Rule of Reason*: *Rethinking another Classic of EC Legal Doctrine*. Groningen: Europa Law Publishing; and Adinolfi, A. (2009) 'The Principle of Reasonableness in European Union Law', in Sartor G., Bongiovanni G., Valentini C. (eds.) *Reasonableness and Law*. Dordrecht: Springer, 2009, pp. 383-403.

[1396] This is actually the view expressed by some of the authors of the book Schrauwen A. (2005) *Rule of Reason*: *Rethinking another Classic of EC Legal Doctrine*, *cit.*

[1397] For an explicit statement to that effect see, for instance, Hoffmann L. (2005) 'The Rule of Reason in English Law' in Schrauwen A. (ed.) *Rule of Reason*: *Rethinking another Classic of EC Legal Doctrine*, *cit*., at p. 185.

[1398] See the arguments provided with that respect in subparagraph 3.3.

limited.[1399] Indeed, these experts have maintained that it might simply allow for "*exceptions from a hard rule, most often a rule of prohibition, in order to attain legitimate public policy objectives, provided measures taken are necessary and proportionate*".[1400] Moreover, they have highlighted that there does not exist "*a generally accepted method of interpretation allowing the* [Union] *Courts to interpret hard rules and regulatory prohibitions as implying a rule of reason*".[1401] Sharing this reading of the rule of reason does, therefore, mean that environmental and energy goals might be relevant only as grounds for justification under Article 107(3)'s exemptions. Actually, as we have explained in Part II of this thesis, the necessity and the proportionality of the State aid measure regarding its stated objective are among the relevant requirements that have to be appraised under the compatibility assessment.

What remains to be ascertained, however, is whether and to what extent the Community judicature has ever taken into account, at the classification stage, the intentions of the national legislature and the objectives pursued by the domestic support measure. What makes the subject even more important for the purposes of our analysis is that applying a rule of reason analytical method to the definition of aid would evidently have great consequences with respect to the assessment of environmental and energy-related measures under Article 107(1) TFEU. Moreover, as we shall see, the relevant faulty, incoherent or simply misinterpreted Court findings pertain mainly to the evaluation of social and energy-related measures under the State origin and selectivity criteria.

Given the foregoing considerations, in the next paragraph we will properly address the legal and practical implications of a rule of reason approach and the impact, if any, of the relevant EU jurisprudence on the definition of aid. Suffice it here to note that applying the rule of reason when determining if a certain State action qualifies as aid would certainly run counter to the principles of the objective nature of the concept of aid and the irrelevance of the aim of the State measure, which we spelled out in Chapter 2 of this doctoral thesis. Hence, the main question to be answered in the next paragraph is whether, in certain judgments, the CJEU has really tried to move away from the abovementioned principles and, thus, from the effect-based approach, by applying an objectives-based approach to the definition of aid. With no aspiration

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[1399] C.W.A. Timmermans, 'Rule of Reason, Rethinking another Classic of EC Legal Doctrine', in Schrauwen A. (ed.) *Rule of Reason*: *Rethinking another Classic of EC Legal Doctrine*, *cit*., at pp. vii-viii. Importantly, Professor Timmermans was serving as a judge of the European Court of Justice at the time the book was published.

[1400] *Ibidem.*

[1401] *Ibidem.*

to exhaustiveness, we will analyse only the pertinent passages of the most frequently quoted cases in an attempt to reach a general conclusion in that respect. The very same cases and passages have been, in fact, scrutinised in more depth in other parts of this doctoral thesis dealing with strictly related but different topics. Indeed, as mentioned, the relevant passages pertain to the assessment of social and energy-related measures under the first and third conditions for the applicability of Article 107(1) TFEU.[1402]

In paragraph 3 we will finally address the question of whether a European-style rule of reason approach does actually exist. For that purpose we will also make reference to other neighbouring fields of EU law, such as internal market and antitrust law, and we will enter into a comparison between such fields of EU law and the EU State aid regime.

7.2. A Clear Bias in Favour of a 'Rule of Reason' Approach in the Interpretation of the EU Case Law on Energy Support Measures

As mentioned in the previous paragraph, some unclear Court rulings, if misinterpreted, might provide grounds for supporting the application of a rule of reason approach to the definition of aid. This holds especially true with respect to the case law on the assessment of social and energy-related measures under the State origin criterion. Indeed, the controversial pronouncements most frequently quoted in this regard are those that were made in some famous judgments delivered by the CJ on measures implemented with respect to these areas of domestic law. We might, for instance, recall the *Sloman Neptun* and *Kirshamer-Hack* rulings, which concerned national legislations adopted for social and employment purposes, and the *Ecotrade* and *PreussenElektra* judgments, which, as we have seen, dealt with support measures in favour of undertakings engaged in, respectively, the steel and the renewable energy industries.[1403] Actually, as we shall explain, the wording of certain paragraphs of these judgments is rather

[1402] The State origin criterion and the relevant case law have been analysed more in depth in Part III of this doctoral thesis.

[1403] Joined Cases C-72/91 and 73/91, *Firma Sloman Neptun Schiffahrts AG v. Seebetriebsrat Bodo Ziesemer* (*Sloman Neptun*), [1993] ECR I-887; Case C-189/91, *Petra Kirsammer-Hack v. Nurhan Sidal* (*Kirsammer-Hack*), [1993] ECR I-6185; Case C-200/97, *Ecotrade Srl v. Altiforni e Ferriere di Servola SpA* (*Ecotrade*), [1998] ECR I-7907; Case C-379/98, *PreussenElektra AG v. Schleswag AG* (*PreussenElektra*), [2001] ECR I-2099.

unfortunate and may be misleading, and it might be deemed to have been reinforced by following decisions of the Commission on energy-related measures.[1404]

For instance, in the *Sloman Neptun* and the *Kirshamer-Hack* rulings the CJ stated that the legislative provisions at issue in the cases could not be considered to constitute State aid. To that effect, it mentioned the legislature's intention, which it regarded as being the improvement of the general economic and legal playing field with respect to the sectors covered by the relevant measures, and not the creation of an advantage for the business concerned, which would instead have been considered as constituting a burden for the State.[1405] This has led some scholars to maintain that the aim of the State action may be material when assessing its effects under Article 107(1) TFEU.[1406] More precisely, they have quoted these rulings as examples of cases where the Court has taken into account the objectives of the contested provisions for tempering the required effect-based analysis.[1407] Others, instead, have placed even greater emphasis on these judgments, stating that the CJ relieved the relevant measures of their quality as aid on the basis of the aims they pursued. However, these interpretations of the *Sloman Neptun* and the *Kirshamer-Hack* rulings seem to have been contradicted by the attitude adopted by the very same Court in its following judgments, including those it delivered with respect to

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[1404] See, for instance, Commission Decision of 22 May 2002, State aid NN 27/2000, *Law on promotion of electricity generation from renewable energies* (*EEG 2000*), OJ 2002 C164/5; Commission Decision of 22 May 2002, State aid NN 68/2000, *Law for the protection of electricity generation on the basis of combined heat and power* (*KWKG 2000*), OJ 2002 C164/5; Commission Decision of 25 July 2001, State aid N 550/2000, *Green Electricity Certificates* (*Belgium Green Certificates*); Commission Decision of 2 August 2002, State aid N 14/2002, *Régime fédéral belge de soutien aux énergies renouvelables* (*Belgian offshore wind energy*), OJ 2002 C309/14.

[1405] See, Joined Cases C-72/91 and 73/91, *Sloman Neptun*, *cit.*, para. 21, where the CJCJ alleged that "[t]*he system at issue does not seek, through its object and general structure, to create an advantage which would constitute an additional burden for the State or the abovementioned bodies, but only to alter in favour of shipping undertakings the framework within which contractual relations are formed between those undertakings and their employees*" (emphasis added), and Case C-189/91, *Kirsammer-Hack*, *cit*., para. 17, where the Court stated that the exclusion of a category of businesses from the protection system in question "*derives solely from the legislature's intention to provide a specific legislative framework for working relationships between employers and employees in small businesses and to avoid imposing on those businesses financial constraints which might hinder their development*" (emphasis added).

[1406] See, for instance, Plender R. (2004) 'Definition of Aid', in Biondi A., Eeckhout P., Flynn J. (eds) *The Law of State Aid in the European Union*. Oxford: Oxford University Press, pp. 7, 8 and 39, quoting, to that effect, precisely the selected passages of the CJCJ's rulings delivered in the *Sloman Neptun* and the *Kirsammer-Hack* cases that we have quoted in the previous footnote.

[1407] *Ibidem.* See also, Rubini L. (2009) The 'Elusive Frontier': Regulation under EC State Aid Law. *European State Aid Law Quarterly* **8**(3) 277-298. Indeed, although disapproving of the Court's approach in the relevant rulings, Professor Rubini has stated that the Court has tried to set down limits to what he has named the "*inherent expansiveness of a purely effect-based analysis*". Moreover, he has maintained that the Court has tried to disguise its attempts to give relevance to the objectives of certain support measures and/or to their regulatory nature by wrongly reframing the State origin criterion, in general, and the State resources condition, in particular.

the above quoted *Ecotrade* and *PreussenElektra* cases. Indeed, since, the CJ has never mentioned, directly or indirectly, the purpose for which the domestic legislative acts has been adopted when determining whether the State origin condition is satisfied.[1408] Therefore, also assuming that the Court has at some point thought of distancing itself from the well-established principles of the objective nature of the concept of aid and of the irrelevance of the State measure's aim, in our view it rightly gave up this idea soon after.

Nonetheless, additional attempts to support applying the rule of reason approach to assessing the State origin criterion have been made by other experts, who justly wished to ensure that the State aid regime was not excessively overstretched at the expense of Member States' regulatory sovereignty. For instance, some scholars have done so by providing an interesting understanding of some relevant paragraphs of the abovementioned rulings. Indeed, there is something that the *Sloman Neptun*, *Kirshamer-Hack*, *Ecotrade* and *PreussenElektra* judgments have in common. As we have already explained, in fact, in its reasoning the CJ applied – either directly or indirectly – what we have named the 'inherent feature' approach.[1409] Hence, it ruled that the potential losses of tax revenues that would have arisen from the contested legislative acts did not amount to forgone revenues but were to be considered as inherent characteristics of statutory systems laying down frameworks like those under scrutiny.[1410] This approach has

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[1408] See Case C-200/97, *Ecotrade*, *cit.*, paras 35 ff., and Case C-379/98, *PreussenElektra*, *cit.*, paras 58 ff. See also, for instance, Joined Cases C-52/97, C-53/97 and C-54/97, *Epifanio Viscido and Others v. Ente Poste Italiane* (*Viscido*), [1998] ECR I-2629, para. 15.

[1409] With that regard see, further, Chapter 6, paragraph 1.

[1410] More precisely, in paragraphs 62 and 63 of the above cited *PreussenElektra* judgment the CJCJ ruled that the contested renewable energy support scheme was not aid within the meaning of Article 107(1) TFEU and stated that "*that conclusion* [could] *not be undermined by the fact, pointed out by the referring court, that the financial burden arising from the obligation to purchase at minimum prices* [was] *likely to have negative repercussions on the economic results of the undertakings subject to that obligation and therefore entail*[ed] *a diminution in tax receipts for the State*" (emphasis added). Indeed, according to the Court, "[t]*hat consequence* [was] *an inherent feature of such a legislative provision and cannot be regarded as constituting a means of granting to producers of electricity from renewable energy sources a particular advantage at the expense of the State*" (emphasis added). To that effect, in this paragraph of the *PreussenElektra* judgment the Court quoted paragraphs 21 and 36 of, respectively, the *Sloman Neptun* and the *Ecotrade* rulings. Indeed, the second part of paragraph 21 of the *Sloman Neptun* reads as follows: "[t]*he consequences arising from this, in so far as they relate to the difference in the basis for the calculation of social security contributions, mentioned by the national court, and to the potential loss of tax revenue because of the low rates of pay, referred to by the Commission, are inherent in the system and are not a means of granting a particular advantage to the undertakings concerned*" (emphasis added). The Court restated the very same principle in paragraph 36 of the *Ecotrade* by maintaining that "[c]*ontrary to the view taken by the Commission, the possible loss of tax revenue for the State as a result of the application of the system* […] *does not in itself justify treating that system as aid. That consequence is an inherent feature of any statutory system laying down a framework for relations between an insolvent undertaking and the general body of creditors, and the existence of an additional financial burden borne directly or indirectly by the public authorities as a means of granting a particular advantage to the undertakings concerned may not automatically be inferred therefrom*" (emphasis added). See also, Case C-189/91, *Kirsammer-Hack*, *cit.*, para. 17.

been, therefore, assimilated into the so-called 'inherent restriction' approach and 'ancillary restraints' doctrine, which the CJEU has allegedly applied in judgments delivered with respect to other fields of EU law, such as internal market and antitrust law. Importantly, with regard to these fields of EU law some distinguished scholars have actually identified the inherent restriction and ancillary restraints approaches with the rule of reason method of analysis. Hence, it has been maintained that a European-style rule of reason approach does actually exist in general and has also emerged with respect to the State aid test as a result of the above quoted State aid cases.

In this regard we should first of all highlight that, in the author's opinion, the inherent feature approach cannot be identified with the inherent restriction and ancillary restraints doctrines.[1411] Hence, the premises on which the allegations about the application by the CJEU of a rule of reason method of analysis under the State aid regime are based are, in our view, flawed. Indeed, according to our reading of the State aid judgments where the Court has applied the inherent feature approach,[1412] under this approach the Court identifies an abstract regulatory system which lays down a framework for the organisation of the very same national economic policies that the contested measures deal with. Then it simply evaluates whether the reference regulatory system would, in any event and under any circumstance, generate the potential burden on the public budget that might be ascribable to the statutory system under scrutiny. In cases of positive answers the State resources requirement is not met.[1413] The inherent restriction and ancillary restraints doctrines, though, entail a slightly different and more difficult exercise under the above-provided second step of analysis. The elements to be compared in this context are, in fact, the potential negative effects on inter-State trade and competition that both the reference framework and the contested measure or action might cause. This assessment should require an analysis of the relevant market and an identification, economic evaluation and quantification of the restrictive effects the contested measure or action might generate in this market. These restrictive effects should, in turn, be compared to the potential side-effects of the abstract

[1411] See, in that respect, subparagraph 3.1 and 3.2.

[1412] For a proper explanation and further details of our interpretation of this approach see Chapter 6, paragraph 1. In that chapter we have also explained that in none of the relevant cases has the Court provided an explanation of how the inherent feature approach should be applied, what the steps of analysis are thereunder and what it entails.

[1413] For an example where the Court has, instead, ruled that, in the particular circumstances of the case, the loss of tax revenue for the State was not an inherent feature of the statutory system laying down a framework for relations between an insolvent undertaking and the general body of its creditors, see Case C-480/98, *Spain v. Commission*, [2000] I-8717, paras 17-21.

regulatory framework previously identified. Hence, the above-described analysis would be better assimilated to the appraisal of public support measures under the fourth and fifth conditions for the applicability of Article 107(1) TFEU – *i.e.*, the distortion of competition and the effect on intra-EU trade conditions.

Let us nonetheless assume that the inherent feature approach adopted in the State aid field can be identified with the inherent restriction and ancillary restraints doctrines. Even in this case, a second point should be made which pertains to the relationship between these doctrines and the rule of reason method of analysis. Indeed, it is hard to see how the rule of reason methodology can be identified with or even gathered from the inherent restriction or similar approaches.[1414] In the author's view, in fact, these two methods of analysis are unlike and, importantly, have very different implications regarding the principle of the objective nature of the concept of aid and the applicability of the effect-based approach under Article 107(1) TFEU. Indeed, as previously explained, a rule of reason approach is a sort of proportionality test carried out to determine if the negative effects that the contested legislative provision brings about are justified in the light of its stated objectives. The inherent restriction and similar approaches, instead, merely consist of assessing whether the abovementioned effects fall within the category of incidental effects that allegedly occur as a result of any statutory system laying down frameworks for the organisation and proper conduct of national economic policies.[1415] However, to bear out their claim that the above two approaches are equal, the scholars inferring a move towards a rule of reason test in the State aid field from cases such as *Sloman Neptun*, *Kirshamer-Hack*, *Ecotrade* and *PreussenElektra* do, actually, provide an interesting but creative understanding of the CJ's reasoning in the relevant rulings. Indeed, they seem to interpret the Court's words as a recognition that the objectives which the contested measures are aimed at assume relevance for determining whether their effects on the public budget can be considered as inherent in the pursuit of those objectives, proportionate to them, and, thus, the State policies under scrutiny can outright escape the classification as State aid.[1416] We instead believe, though, that a more literal reading of the relevant paragraphs of these judgments strongly supports a different construction of the CJ's reasoning. Indeed, the Court has simply

[1414] As we will properly explain in paragraph 3, in fact, we do not believe that the inherent restriction and the ancillary restraints doctrines represent an application of the rule of reason approach in the fields of EU internal market law and EU antitrust law.

[1415] See, Quigley C. (2009) *European State Aid Law and Policy*. Oxford: Hart Publishing, at pp. 23-24.

[1416] The same holds true with respect to their allegations regarding applying the inherent restriction approach and the ancillary restraints doctrine in free movement and competition cases.

ruled that any diminution in tax receipts for the State that might have arisen following the implementation of the provisions under scrutiny cannot be treated in the same way as a 'foregone revenue' ascribable to a public support measure.[1417] This has nothing to do with the objectives pursued by the contested measures, whose assessment under the State aid test was not required nor even implicitly legitimised or endorsed by the Court in the pertinent paragraphs of these cases.[1418] Actually, as already said, in more recent judgments the CJ has not even briefly alluded to the aims of the measures at issue when addressing them under the State origin criterion.[1419]

Based on the forgoing considerations it seems blatantly clear that statements like those provided in these rulings do not endorse applying a rule of reason test under the State origin criterion. Hence, they do not call into question the objective nature of the concept of aid and the relevance of the effect-based method of analysis under Article 107(1) TFEU. Quite the contrary is, in fact, true: by providing 'exceptions' for some purportedly peculiar effects when certain kinds of legislative systems are under scrutiny, the Court has indirectly confirmed that an effect-based approach shall be generally adopted when addressing a domestic measure under the first condition for the applicability of Article 107(1) TFEU. Therefore, in the rulings under discussion it has corroborated, in a way, the well-established case law addressed in Chapter 2, paragraph 1, of this doctoral thesis.[1420] To be fair, it is indubitable that in the above-analysed cases and in other judgments delivered in the very same period the CJEU distanced itself from the 'classic' effect-based and economic-oriented test.[1421] However, this happened for reasons and with effects other than those put forward by scholars supporting the rule of reason

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[1417] See paragraphs 62, 21 and 36 of, respectively, Case C-379/98, *PreussenElektra*, *cit.*, Joined Cases C-72/91 and 73/91, *Sloman Neptun*, *cit.*, and Case C-200/97, *Ecotrade*, *cit.*

[1418] *Ibidem.* In that regard see, further, Chapter 6, paragraph 1.

[1419] See, Case C-200/97, *Ecotrade*, *cit.*, paras 35 ff., and Case C-379/98, *PreussenElektra*, *cit.*, paras 58 ff. See also, Joined Cases C-52/97, C-53/97 and C-54/97, *Viscido*, [1998] ECR I-2629, para. 15, *cit.*

[1420] *Contra*, Rubini L. (2009) The 'Elusive Frontier': Regulation under EC State Aid Law, *cit.*, and Plender R. (2004) 'Definition of Aid', in Biondi A., Eeckhout P., Flynn J. (eds) *The Law of State Aid in the European Union*, *cit.*

[1421] For instance, the Court also seems to have distanced itself, at least in practice, from the 'classic' effect-based test in, *inter alia*, Case C-482/99, *France v. Commission* (*Stardust Marine*), [2002] ECR I-4397, paras 50-59, and Case C-345/02, *Pearle BV, Hans Prijs Optiek Franchise BV and Rinck Opticiëns BV v. Hoofdbedrijfschap Ambachten* (*Pearle*), [2004] I-07139, paras 33-39. However, and rightly, the Court's reasoning in these cases has not been interpreted as an application of the rule of reason approach. Indeed, it is well acknowledged that the CJEU has 'simply' narrowed down the second element of the State origin criterion, *i.e.* the imputability of the support measure to the State. See, with that respect, Chapter 5, paragraph 2.

approach.[1422] The Court has not, in fact, gone so far as to state that the objectives of the State action are relevant for determining whether a measure constitutes State aid. It has 'simply' narrowed down the interpretation of the State resources criterion by ruling that incidental reductions in the resources accruing to the State do not represent a valid reason for a public support measure passing the State origin test.[1423] Indeed, as we have already explained, they are precisely the Court's findings in these cases that have opened Pandora's box on whether the State resources criterion is a constitutive element of the notion of aid.[1424] Accordingly, the effect-based approach is still an essential requirement of the State aid test, although it is not determinative, on its own, in the identification of State aid measures.[1425]

Further support for our arguments is provided by the following decisions of the Commission on sustainable energy schemes, where the competent European Institutions have explicitly relied on the Court's findings in the *PreussenElektra* ruling for relieving the contested measures of their quality as aid. This is, for instance, the case of the *EEG 2000* and *KWKG 2000* decisions that we have already addressed in Chapter 6.[1426] In these decisions the Commission explicitly assimilated the feed-in tariff (FIT) schemes under scrutiny with that in question in the *PreussenElektra* judgment and stated that they did not meet the State resources criterion because the economic advantage conferred thereunder to renewable energy sources and combined heat and power (CHP) electricity producers was directly granted by market

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[1422] See, with that regard, *ex plurimis*, Hancher L., Salerno F. (2011) 'State aid in TFEU', in Jones C. (ed) *EU Energy Law: EU Competition Law and Energy Markets*. Leuven: Claeys & Casteels Publishing, pp. 636 and preceding; Hancher L. (2012) 'EU State Aid Law: Now a Truly Ugly Sister?', in Hancher L., Ottervanger T., Slot P.J. (eds) *EU State Aids*. London: Sweet and Maxwell, p. 14; Slotboom M. M. (2002) Subsidies in WTO Law and in EC Law: Broad and Narrow Definitions. *Journal of World Trade* **36**(3) 517–542; Cruz B. J., de la Torre F. C. (2001) A Note on PreussenElektra. *European Law Review* **26**(5) 489-501

[1423] For a proper explanation to that effect see, Quigley C. (2009) *European State Aid Law and Policy*, *cit*, pp. 23-24, and Hancher L. (2012) 'EU State Aid Law: Now a Truly Ugly Sister?', in Hancher L., Ottervanger T., Slot P.J. (eds) *EU State Aids*, *cit*. p. 14. Actually, in the *Sloman Neptun*, *Kirshamer-Hack*, *Ecotrade* and *Preussen Elektra* cases, the entire Court's reasoning on the State origin criterion revolved around the very existence of a State resources criterion and its scope. When reading the relevant paragraphs in their entirety and in conjunction with the preceding and following paragraphs, in fact, it appears blatantly clear that the measures at issue in these cases did not pass the State aid test 'merely' because, in the Court's view, the economic advantage that the beneficiaries of the measures enjoyed was not granted, directly or indirectly, through State resources. See Joined Cases C-72/91 and 73/91, *Sloman Neptun*, *cit.*, paras 19-22; Case C-189/91, *Kirsammer-Hack*, *cit.*, paras 16-19; Case C-200/97, *Ecotrade*, *cit.*, paras 34-36; Case C-379/98, *PreussenElektra*, *cit.*, paras 58-66.

[1424] We have already dealt with the long-lasting debate over the proper interpretation of the State origin criterion in Part III of this doctoral thesis.

[1425] Likewise, Schütte M. (2006) 'The Notion of State Aid*'*, in Rydelski M. S. (ed.) *The EC State Aid Regime: Distortive Effects of State Aid on Competition and Trade*. London: Cameron May, at p. 28.

[1426] Commission Decision of 22 May 2002, State aid NN 27/2000, *EEG 2000*, *cit.*, and Commission Decision of 22 May 2002, State aid NN 68/2000, *KWKG 2000*, *cit.* These cases concerned the two German feed-in laws that replaced the FIT scheme under exam in the *PreussenElektra* ruling.

participants from their own resources.[1427] Hence, the Commission made no mention of the inherent features of the systems or the environmental protection objective that the contested measures pursued in relation to relieving them of their quality as aid. Actually, the irrelevance of the goal of the national support measures when addressing the State origin criterion is confirmed by the fact that very similar energy-related mitigation measures have been found to involve a transfer of State resources, notwithstanding the objective they pursued was actually identical to that characterising the German FIT schemes addressed above.[1428] The only difference lay on the fact that under these measures public authorities were, in some ways, allowed to exercise control over market participants' resources.[1429] It is worth also noting that the Commission has adopted the very same approach with respect to other forms of energy support schemes. This is the case, for instance, for green certificates (GC) schemes, which are also aimed at pursuing environmental protection objectives. Indeed, a comparative analysis of its decisions on such schemes further supports our reading of the CJEU jurisprudence analysed in this paragraph. Suffice it here to recall the diverging findings of the Commission on, for instance, the *Belgium Green Certificates* and the *Sweden Green Certificates* cases.[1430] In the relevant decisions the competent European Institution did not even mention the sustainable energy goals that both of the measures concerned purported to achieve.[1431] The divergent

[1427] *Ibidem*, paras 4, of both the above-cited Commission decisions.

[1428] Examples include, Commission Decision of 4 July 2006, State aid NN 162/A/2003 and State Aid N 317/A/2006, *Support of electricity production from renewable sources under the Austrian Green Electricity Act (feed-in tariffs)* (*Austrian Green Electricity Act 2003*), OJ 2006 C221/8; Commission Decision of 22 July 2009, State aid N 446/2008, *The Austrian Green Electricity Act – Aid to the Producers of Green Electricity and Aid to Large Electricity Consumers* (*Austrian Green Electricity Act 2008 – FIT* scheme), OJ 2009 C217/12, on certain amendments to the *Austrian Green Electricity Act 2003*, in some ways confirmed with that respect under appeal by the General Court in Case T-251/11, *Austrian Green Electricity Act 2008*, *cit.*; Commission Decision of 14 April 2010, State aid N 94/2010, *Feed In Tariffs to support the generation of renewable electricity from low carbon sources* (*UK feed-in tariffs*), OJ 2010 C166/1; Commission Decision (EU) 2015/1585 of 25 November 2014, State aid SA.33995, *Support of renewable electricity and reduced EEG surcharge for energy-intensive users* (*EEG 2012*), OJ 2015 L250/122. For further, countless, examples see Chapter 6, paragraphs 3.2. and 3.3.

[1429] For an exhaustive analysis in that respect see, Chapter 6, paragraphs 3.2. and 3.3.

[1430] See, Commission Decision of 25 July 2001, State aid N 550/2000, *Belgium Green Certificates*, *cit.*, para. 3, pp. 6-7, and Commission Decision of 5 February 2003, State aid N 789/2002, *Green certificates* (*Sweden Green Certificates*), OJ 2003 C120/8, para. 3.1.2. For additional examples and an exhaustive analysis of these cases see, Chapter 6, paragraph 3.4.

[1431] More precisely, in the decision on the *Belgium Green Certificates* case, the issuance free of charge of green certificates was not judged to be a waiver of revenue by the State because these certificates were considered intangible assets with no market value. Moreover, the imposition of an obligation to purchase green certificates at fixed minimum prices was been deemed to merely allocate the financial burden amongst private electricity supply undertakings and electricity consumers. Hence, by explicitly applying the *PreussenElektra* doctrine, the Commission simply ruled that the scheme did not entail a loss of State resources, without even mentioning the sustainable energy goals it purported to achieve (para. 3, pp. 6-7). Similarly, *inter alia*, Commission Decision of 2 August 2002, State aid N 14/2002, *Belgian offshore wind energy*, *cit.*; Commission Decision of 03 May 2005,

outcome of the Commission's evaluation in these cases was, in fact, caused by the circumstance that under the Swedish GC scheme only entities controlled by the State were entrusted with collection and redistribution tasks with respect to revenues from fines imposed according to the scheme.[1432]

Actually, a comparative analysis of all the decisions adopted with respect to every kind of sustainable energy scheme we have analysed in Parts II and III of this doctoral thesis would clearly prove that the objectives of national support measures have no bearing whatsoever on the classification matter to be dealt with under Article 107(1) TFEU. Indeed, had these objectives been of any relevance, none of the energy mitigation measures implemented by the Member States in the last fifteen years would ever have passed the State aid test, whatever the specific organisation of the support system. Moreover, with regard to the reasoning provided by the Commission in the above-quoted decisions where GC and FIT schemes were found to qualify as aid, it is finally worth highlighting that it cannot be alleged that such reasoning amounts to an error of law or a misconstruction of the concept of aid. Indeed, the CJEU has never questioned this decisional practice of the Commission, and it has been further restated with respect to other kinds of energy support schemes, such as stranded costs compensation mechanisms,[1433] preferential tariffs systems,[1434] capacity remuneration mechanisms and aid to

State aid N 608/2004, *Flemish CHP Certificates*, OJ 2005 C240/22; and Commission Decision of 24 October 2006, State aid N 254/2006, *Prix minimum pour les certificats d'énergie verte de l'installation de panneaux photovoltaïques* **(***Belgium Panneaux photovoltaïques*), OJ 2006 C314/80. By contrast, in *Sweden Green Certificates*, the Commission found that the Swedish GC scheme under scrutiny met the first condition for the applicability of Article 107(1) TFEU. This was, again, despite the general structure of this scheme and the objective it pursued being identical to those characterising the Belgian GC support mechanism.

[1432] Commission Decision of 5 February 2003, State aid N 789/2002, *Sweden Green Certificates*, *cit.*, para. 3.1.2. Similarly, Commission Decision of 28 November 2001, State Aid N 504/2000, *UK Renewables Obligation and Capital Grants*, OJ 2002 C30/12; Commission Decision of 4 May 2015, State aid SA.37177, *Amended Romanian Green Certificates System*, OJ 2015 C343/1; and Commission Decision of 2 August 2016, State aid SA.37345, *Polish Green Certificates for RES-e and Reductions for EIUs*, n.y.p.

[1433] See, for instance, Commission Decision of 22 September 2004, State aid N 161/2004, *Portugal Stranded Costs*, OJ 2005 C 250/9; Commission Decision of 8 November 2006, State aid C 11/2006 (ex N 127/2005), *Stranded costs for the municipalizzate*, OJ 2006 L366/62; Commission Decision of 25 September 2007, State aid C 43/2005 (ex N 99/2005), *Polish PPAs & Stranded Costs Compensations*, OJ 2009 L83/1; and Commission Decision of 27 April 2010, State aid N 691/2009, *Hungarian Stranded Cost Compensation Scheme*, OJ 2010 C213/2. For an exhaustive analysis of these cases see Hancher L., Salerno F. (2011) 'The Application of EU State Aid Law to the Energy Sector', in Jones C. (ed) *EU Energy Law: EU Competition Law and Energy Markets*, *cit*., Part 5, ch. 4, at pp. 718-739.

[1434] See, *inter alia*, Commission Decision of 20 November 2007, State aid C 36/A/2006 (ex NN 38/2006), *State aid in favour of ThyssenKrupp, Cementir and Nuova Terni Industrie Chimiche* (*Terni*) OJ 2008 L144/37; Commission Decision of 19 November 2009, State aid C 38/A/2004 (ex NN 58/2004) and C 36/B/2006 (ex NN 38/2006), *Preferential electricity tariff in favour of Alcoa* (*Alcoa*), OJ 2010 L227/62; Commission Decision of 23 February 2011, State aid C 38/B/2004 (ex NN 58/2004) and C 13/2006 (ex N 587/2005), *Preferential electricity tariff in favour of Portovesme, ILA & Euroallumina* (*Portovesme, ILA & Euroallumina*), OJ 2011 L309/1. For an

energy infrastructures.[1435] Actually, as we have seen in Chapter 6, the Court has instead explicitly endorsed the above outlined Commission's approach in some recent important rulings concerning energy-related measures.[1436]

7.3. Is There Any Room for a European-Style Rule of Reason Approach?

7.3.1. *Some Reflections on EU Competition Case Law*

In the previous paragraph and prior parts of this doctoral thesis we have provided reasons and evidence in support of our allegation that there is no such a thing as a rule of reason approach to address the question of whether environmental and energy-related measures qualify as State aid. Indeed, we have explained that, in our opinion, the application of a similar approach under Article 107(1) TFEU clearly represents a groundless and unjustifiable departure from the very wording of this article, the structure of the State aid control system as neatly framed under the Treaty, and a well-established body of case law.[1437] In our view, the conclusion we have reached regarding the State aid regime cannot be controverted by making reference to other neighbouring fields of EU law, such as EU internal market and antitrust law.[1438] Indeed, first of all, also with respect to these fields of EU law, the adoption of and the need for a rule of

exhaustive analysis of these and other preferential tariffs cases see Talus K. (2013) 'State Aid in the Energy Industry', in Talus K. (ed) *EU Energy Law and Policy: A Critical Account*. Oxford: Oxford University Press, at pp. 146 ss.

[1435] See, *inter alia*, Commission Decision of 20 November 2013, State aid SA.36740, *Aid to Klaipėdos nafta – LNG terminal* (*Lithuania LNG terminal*), OJ 2016 C161/2; Commission Decision of 23 July 2014, State aid SA.35980, *United Kingdom Electricity market reform – Capacity market* (*UK Capacity Mechanism*), OJ 2014 39621 348/5; Commission Decision of 08 October 2014, State aid SA.34947, *Support to Hinkley Point C Nuclear Power Station* (*CfD for Hinkley Point*), OJ 2015 L109/44; Commission Decision to initiate the formal investigation procedure of 13 November 2015, State aid SA.40454 *Tender for additional capacity in Brittany* (*CRM in Brittany*), OJ 2016 C 46/69.

[1436] See, Case T-332/06, *Alcoa Trasformazioni Srl v. Commission*, 2009 II-00029; Case C-206/06, *Essent Netwerk Noord and Others v. Aluminium Delfzijl BV* (*Essent*) [2008] ECR I-5497; Case T-25/07, *Iride and Iride Energia v. Commission* (*Iride*) [2009] ECR II-245; Case T-308/11, *Eurallumina SpA v. Commission*, ECLI:EU:T:2014:894; Case T-291/11, *Portovesme Srl v. Commission*, ECLI:EU:T:2014:896; Case C-262/12, *Association Vent De Colère! And Others v. Ministre de l'Économie, des Finances et de l'Industrie* (*Association Vent De Colère*), ECLI:EU:C:2013:851; Case C-275/13, *Elcogás SA v Administración del Estado and Iberdrola SA* (*Elcogás*), ECLI:EU:C:2014:2314; Case T-251/11, *Austrian Green Electricity Act 2008*, *cit.*; Case T-172/14 R, *Stahlwerk Bous GmbH v. European Commission* (*Stahlwerk Bous*), ECLI:EU:T:2014:558; and Case T-47/15, *Germany v. Commission* (*German EEG 2012*), ECLI:EU:T:2016:281.

[1437] See also, in that respect, Chapter 2 and Part III of this doctoral thesis.

[1438] Bacon K. (2003) The Concept of State Aid: The Developing Jurisprudence in the European and UK Courts, *cit*. *Contra*, Biondi A. (2006) Some Reflections on the Notion of "State Resources" in European Community State Aid Law, *cit.*

reason approach is highly disputable and disputed. This is a relevant point given that the rule of reason approach is a creature of antitrust lawyers and judgments. Actually, the very existence of a European-style rule of reason approach might be deemed rather questionable. Moreover, although the ultimate purposes of EU State aid, internal market and antitrust policies might be similar, this does not imply that the instruments which the competent European Institutions can and should deploy for reaching such purposes are the very same in these areas of EU law. Actually, they might and should diverge to take into account various relevant factors. These factors include the different kinds of actions the mentioned policies target, the distinctions that can be easily detected among the Treaties' rules disciplining them, the dissimilarities in terms of the short-term goals they aim at achieving, and the different interests that their implementation might clash with.

For the sake of completeness we will not, however, miss the chance to briefly address these issues. Our analysis in this respect shall start with an assessment of the pertinent case law on agreements, practices and domestic provisions potentially falling within the scope of EU rules prohibiting restrictions on competition and free movement rights. This assessment – which we will carry out in this and the next subparagraph – is aimed at verifying whether the rule of reason doctrine has ever been applied in the EU antitrust and internal market fields.

In order to understand the above statement on the fact that the rule of reason is a creature of antitrust lawyers and judgments we should first explain that it is a judicial doctrine that traces its origins back to US antitrust policy. It was, in fact, elaborated by the US Supreme Court in some famous judgments it delivered on the interpretation of Section 1 of the Sherman Act of 1890, as later amended (Sherman Act).[1439] Indeed, the Sherman Act simply proscribes certain anti-competitive practices and provides no 'legal exception' to such prohibition: that is to say, under US antitrust law there is no equivalent of Article 101(3) TFEU. Hence, the rule of reason approach has been developed by the US jurisprudence to fill a legislative gap that does not exist under EU competition law. More precisely, the US Supreme Court has divided the violations of the Sherman Act into *per se* infringements of the Act and violations of the rule of reason. In this way it has distinguished certain anti-competitive conducts that are *per se* illegal, such as price fixing, from restrictive trade practices that, although they can give rise to competition

[1439] Sherman Act, July 2, 1890, ch. 647, 26 Stat. 209, 15 U.S.C. 1–7, as amended (last amended by Public Law 94-435, Title 3, Sec. 305(a), 90 Stat. 1383 at p. 1397).

concerns, might also have pro-competitive effects.[1440] The latter are, therefore, to be evaluated on a case-by-case basis under the rule of reason standard in order to establish whether or not they unreasonably restrain trade and, thus, whether or not they violate the Sherman Act.[1441]

Actually, this approach is analogous to that provided under EU competition law but for two elements: the bifurcated structure of Article 101 TFEU and the absence of a *per se* rule thereunder; these are, in our opinion, extremely appropriate.[1442] In this regard we should first of all recall that Article 101(1) TFEU differentiates between 'restrictions by object' and 'restrictions by effects'. The agreements covered by the first category have, by their very nature, the potential to restrict competition and, thus, they are mostly regarded as hardcore restrictions. The second category, however, covers all the other trade practices that competition authorities have to prove might produce anti-competitive effects for them to fall within the scope of Article 101(1)'s proscription.[1443] Article 101(3) TFEU, then, provides a 'legal exception' to the general prohibition of anti-competitive conducts in Article 101(1) TFEU by establishing that this prohibition may be declared inapplicable where a restrictive practice satisfies certain cumulative conditions.[1444] Indeed, fulfilling the conditions listed thereunder indicates that the valid efficiency-enhancing benefits that the relevant practice generates outweigh the anti-competitive effects it produces. Therefore, Article 101(3) TFEU contains all the elements of the US-style rule of reason analysis because it provides for the very same weighing up of pro-

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[1440] For a clear and critical analysis of the rule of reason doctrine elaborated by the US Supreme Court see, Werden G. J. (2014) Antitrust's Rule Of Reason: Only Competition Matters. *Antitrust Law Journal* **79**(2) 713-759; Cavanagh E. D. (2012) The Rule of Reason Re-Examined. *BusinessLawyer* **67**(2) 435-469; Markham J. W. (2012) Sailing A Sea Of Doubt: A Critique Of The Rule Of Reason In U.S. Antitrust Law. *Fordham Journal of Corporate & Financial Law* **17**(3) 591-664.

[1441] See, for instance, *Continental TV, Inc. v. GTE Sylvania, Inc.*, 433 US 36, 49 (1977). For an in-depth examination of the topic see, Black O. (1997) Per Se Rules and Rules of Reason: What Are They?. *European Competition Law Review* **18**(3) 145-161, and Areeda P. E., Hovenkamp H. J. (2010) *Antitrust Law*: *An Analysis of Antitrust Principles and Their Application*. New York: Aspen Publishers, Vol. VII (3rd ed.), ch. 15.

[1442] See, in that respect, Jones A. (2006) Analysis of Agreements under US and EC Antitrust Law - Convergence or Divergence?. *Antitrust Bulletin*, **51**(4) 691 – 813, where the author provides a thorough comparative analysis of the assessment tools adopted under the Sherman Act and Article 101 TFEU and evidences the significant differences that still characterise the two systems, including the absence of a rule of reason analysis under Article 101 TFEU.

[1443] More precisely, the assessment in that respect has to be undertaken on a case-by-case basis and through a wide-ranging analysis of the market.

[1444] More precisely, the Commission might declare Article 101(1)'s prohibition inapplicable to agreements between undertakings, decisions by associations of undertakings and concerted practice that "*contribute to improving the production or distribution of goods or to promoting technical or economic progress, while allowing consumers a fair share of the resulting benefit, and which does not: (a) impose on the undertakings concerned restrictions which are not indispensable to the attainment of these objectives; (b) afford such undertakings the possibility of eliminating competition in respect of a substantial part of the products in question*".

competitive and anti-competitive effects of restrictive trade practices. As a result, anticipating this balancing exercise under Article 101(1) TFEU is not necessary since, contrary to the Sherman Act, under the TFEU there is already a legal provision that sets out the framework for such an assessment. Moreover, as previously mentioned, in contrast to US antitrust law, Article 101 TFEU does not contain a *per se* rule:[1445] hence, 'restrictions by object' can also qualify for satisfying the terms of Article 101(3) TFEU, although this might be unlikely in practice.[1446] In this regard it is also worth noting that in certain cases the US Supreme Court has had to blur the *per se* and rule of reason divide to enable analysis under the rule of reason standard anti-competitive conducts that have traditionally fallen under the *per se* category but could still generate efficiency-enhancing benefits in the relevant case.[1447] This jurisprudence brings the US antitrust system into greater alignment with the EU competition system[1448] but for two aspects: it generates legal uncertainty issues and it further increases the great discretion that the US Supreme Court already enjoys in that respect.[1449]

In the author's opinion, all the above considerations clearly evidence that, as compared to the US antitrust regime, the EU law system generates less legal uncertainty precisely because it is based on the bifurcated structure of Article 101 TFEU and on a proper balance between the assessments under Article 101(1) and (3) TFEU. This also holds true regarding the very same bifurcated structure of Article 107 TFEU. Moreover, for the purpose of ensuring that pro-competitive trade practices are left untouched it is more flexible than the distinction between

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[1445] See, in that respect, Case T-17/93, *Matra Hachette SA v. Commission*, [1994] II-595, para. 85, and Communication from the Commission, *Guidelines on the application of Article 81(3) of the Treaty*, OJ 2004 C 101/97, para. 46.

[1446] Examples include, for instance, Case 258/78, *L.C. Nungesser KG and Kurt Eisele v. Commission* (*Nungesser*), [1982] ECR 2015, and Case T-29/92, *Vereniging van Samenwerkende Prijsregelende Organisaties in de Bouwnijverheid and Others v. Commission*, [1995] ECR II-289. In that regard, see also Bailey D. (2012) Restrictions of Competition by Object under Article 101 TFEU. *Common Market Law Review* **49**(2) 559-600, and Faull J., Nikpay A. (2007) *The EC Law of Competition*. Oxford: Oxford University Press, p. 294, evidencing the difficulties for hardcore restrictions in passing Article 101(3) TFEU test but explaining why the absence of a *per se* rule is nonetheless of paramount importance.

[1447] See, *inter alia*, *Leegin Creative Leather Products, Inc. v. PSKS, Inc.*, 551 US 877 (2007), where the US Supreme Court decided that an agreement on minimum resale price maintenance had to be analysed under the rule of reason standard, and *Broadcast Music, Inc. v. Columbia Broadcasting System, Inc.*, 441 US 1 (1979), where the same approach was adopted with respect to a price fixing agreement.

[1448] See, Jones A. (2006) Analysis of Agreements under US and EC Antitrust Law - Convergence or Divergence?, *cit.*, where the author shows a recent greater convergence between the US and EU objectives-based approaches but also explains that there is certainly no rule of reason analysis under Article 101 TFEU.

[1449] For an exhaustive analysis of all the shortcomings and deficiencies the rule of reason standard has so far generated in the context of the US legal system see, Stucke M. E. (2009) *Does the Rule of Reason Violate the Rule of Law?*. *UC Davis Law Review* **42**(5) 1375-1490.

the US *per se* and rule of reason approaches. This is truer still now that Council Regulation (EC) No 1/2003 has abolished the system of notification for individual exemption and, thus, Article 101(3) is directly applicable.[1450]

Apart from the general but relevant points we have made, we should briefly analyse whether the competent European Institutions have ever provided grounds for supporting the application of a rule of reason kind of assessment under Article 101(1) TFEU. In this respect we should preliminarily note that both the Commission and the General Court have explicitly rejected any recent attempt to incorporate the US jurisprudence on the rule of reason doctrine into EU competition law.[1451] This was the case, for instance, ib the judgments delivered by the General Court in the *Métropole*, *Van den Bergh Foods*, *O2* and *MasterCard* cases,[1452] and in the Commission's White Paper on Modernisation and Guidelines on the Application of Article 101(3) TFEU.[1453] In these judgments and notices the mentioned European Institutions also clearly explained that Article 101(3) TFEU already contains all the elements of a rule of reason approach and that the implementation of such an approach under Article 101(1) TFEU would paradoxically render Article 101(3) TFEU an empty and ineffective provision.[1454] Again, as we will better explain in subparagraph 3.3., this is still truer with respect to Article 107(3) TFEU.

As per the CJ, it has never explicitly endorsed the application of the US-style rule of reason approach. Nonetheless, we cannot ignore the fact that some of its rulings have been interpreted by certain experts as an implicit recognition and tacit application of this method of analysis

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[1450] Inthat regard see, Council Regulation (EC) No. 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty, OJ 2003 L1/1, Articles 1(1) and (2), 5 and 6.

[1451] See, in that regard, Tesauro G. (2013) 'Reasonableness in the European Court of Justice Case-Law', in Rosas A., Levits E., Bot Y. (eds) *The Court of Justice and the Construction of Europe: Analyses and Perspectives on Sixty Years of Case-law*. The Hague: Asser Press. pp. 307-327, explaining that the use of the rule of reason has been expressly excluded by European judges in competition cases.

[1452] Case T-112/99, *Métropole télévision (M6), Suez-Lyonnaise des eaux, France Télécom and Télévision française 1 SA (TF1) v. Commission* (*Métropole*), [2001] ECR II-2459; Case T-65/98 *Van den Bergh Foods Ltd v. Commission* (*Van den Bergh Foods*), [2003] ECR II-4653; Case T-328/03, *O2 (Germany) GmbH & Co. OHG v. Commission* (*O2*), [2006] ECR II-1231; Case T-111/08, *MasterCard, Inc. and Others v. Commission* (*MasterCard*), ECLI:EU:T:2012:260, para.11.

[1453] European Commission, *White Paper on modernisation of the rules implementing Articles 85 and 86 of the EC Treaty* (*White Paper on Modernisation*), OJ 1999 C132/1; and Communication from the Commission, *Guidelines on the application of Article 81(3) of the Treaty* (*Guidelines on the Application of Article 101(3) TFEU*), OJ 2004 C101/97.

[1454] See, Case T-112/99, *Métropole*, *cit.*, paras 72-76; Case T-65/98 *Van den Bergh Foods*, *cit.*, para. 106; Case T-328/03, *O2*, *cit.*, para. 69; Case T-111/08, *MasterCard*, *cit.*, paras 80, 87-89, 101; White Paper on modernization, *cit.*, para. 57; and Guidelines on the Application of Article 101(3) TFEU, *cit.*, para. 11.

under Article 101(1) TFEU, which is in their view unavoidable, at least in certain situations.[1455] Some of these distinguished scholars, however, recognise that introducing a rule of reason approach would profoundly distort Article 101's text, render Article 101(3) TFEU useless and generate legal uncertainty.[1456] Examples in the CJ's jurisprudence include, first of all, certain very old cases, which are frequently quoted in support of the above allegation simply because in the relevant judgments the CJ considered either the nature and effects of the restraints or the specific characteristics of the market to exclude the application of Article 101(1) TFEU. This is the case, for instance, in the *Metro*, *Nungesser*, *Coditel*, *Pronuptia* and *Gøttrup-Klim* rulings.[1457] More precisely, the CJ found that the restrictions of competition under scrutiny in these rulings fell outside the scope of Article 101(1) TFEU because they were indispensable in order for the parties to the agreements to achieve certain legitimate commercial goals.[1458] Hence, we shall subscribe to the views of those experts who have adopted the expression 'commercial ancillarity'[1459] to describe the contested restrictions and have distinguished them in 'objectively necessary agreements' and 'objectively necessary restraints'.[1460] Actually, these

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[1455] *Ex plurimis*, Nazzini R. (2011), *The Foundations of European Union Competition Law: The Objective and Principles of Article 102*. Oxford: Oxford University Press, footnote 147; Kaczorowska A. (2008), *European Union Law*. London: Routledge, pp. 775 and 786; Nicolaides P. (2005) The Balancing Myth: The Economics of Article 81(1) & (3). *Legal Issues of Economic Integration* **32**(2) 123-145; Verouden V. (2003) Vertical Agreements and Article 81(1) EC: The Evolving Role of Economic Analysis. *Antitrust Law Journal* **71**(2) 525-575; Steindorff E. (1984) Article 85 and the Rule of Reason, Common Market Law Review, **21**(4) 639-646.

[1456] See, for instance, Jones A., Sufrin B. (2014) *EU Competition Law: Text, Cases and Materials*. Oxford: Oxford University Press, pp. 242-248, criticising the relevant case law and stating that it profoundly distorts Article 101(1)'s text and generates legal uncertainty, and that a revision of the Treaty's articles is therefore necessary; and Monti G. (2007) 'The Rule of Reason Distraction' and 'The Contribution of the European Courts', in Monti G. (ed.) *EC Competition Law*. Cambridge: Cambridge University Press, pp. 29-39, stating that Article 101(3) TFEU "*provides the functional equivalent of a rule of reason*" approach and, thus, the adoption of such an approach would render this article useless and, in general, would not be "*compatible with the legal text*" of Article 101 TFEU.

[1457] Case 26/76, *Metro SB-Großmärkte GmbH & Co. KG v. Commission* (*Metro I*), [1977] ECR 1875; Case 75/84, *Metro SB-Großmärkte GmbH & Co. KG v. Commission* (*Metro II*), [1986] ECR 3021; Case 258/78, *Nungesser*, *cit.*; Case 262/81, *Coditel SA, Compagnie générale pour la diffusion de la télévision, and others v Ciné-Vog Films SA and others* (*Coditel*), [1982] ECR 3381; Case 161/84, *Pronuptia de Paris GmbH contro Pronuptia de Paris Irmgard Schillgallis* (*Pronuptia*), [1986] ECR 353; and Case C-250/92, *Gøttrup-Klim e.a. Grovvareforeninger v Dansk Landbrugs Grovvareselskab AmbA* (*Gøttrup-Klim*), [1994] ECR I-5641.

[1458] *Ibidem.*

[1459] At the time when some of the mentioned judgments were delivered, the concept of 'ancillary restrictions' was already being applied in the EU mergers' control field. See, in that respect, European Commission, *Notice Regarding Restrictions Ancillary to Concentrations*, OJ 1990 C203/5. Now, European Commission, *Notice on restrictions directly related and necessary to concentrations*, OJ 2005 C56/24. Actually, this concept is now also explicitly applied with respect to agreements potentially falling within the scope of Article 101(1) TFEU: see, Case T-112/99, *Métropole*, *cit.*, para. 104, and *Guidelines on the Application of Article 101(3) TFEU*, *cit.*, paras 28-31.

[1460] See, in that regard, Whish R., Bailey D. (2015) 'Commercial ancillarity', in Whish R., Bailey D. (eds) *Competition Law*. Oxford: Oxford University Press, pp. 136-138; Faull J., Kjøbye L., Leupold H., Nikpay A.

experts have strongly supported the Court's approach in that regard, alleging that it has simply proved to be 'reasonable' in refraining from judging as void agreements and practices necessary to achieve a legitimate commercial outcome.[1461] Turning to more recent cases, two frequently quoted judgments where the CJ has applied an approach that might resemble the US-style rule of reason analysis are the famous *Wouters* and *Meca-Medina* judgments.[1462] Again, we agree with those distinguished scholars who have maintained that in these cases the Court has also simply 'reasonably' applied the so-called 'ancillary restraints' doctrine without carrying out any balancing exercise between pro- and anti-competitive effects.[1463] The only difference lies in the fact that the restrictions addressed in the previously mentioned judgments were ancillary to a regulatory function. The relevant concept of ancillarity has, in fact, been labelled 'regulatory ancillarity'.[1464] Indeed, in the *Wouters* case the CJ found that the restrictive effects on competition that the provisions in question could have caused "*could* […] *reasonably be considered to be necessary in order to ensure the proper practice of the legal profession*".[1465] As per the *Meca-Medina* judgment, it held that anti-doping provisions might restrict competition.[1466] However, as in *Wouters*, the Court explicitly stated that the potential restrictive effects on competition of the rules under scrutiny had to be considered "*inherent*" effects of the regulatory frameworks concerned.[1467]

As a result of the above considerations, in the author's opinion the approach undertaken by the CJ in the cases addressed above has nothing to do with the rule of reason method of analysis.

(2014) 'No Rule of Reason under Article 101(1)', 'Gøttrup-Klim', 'Metro I and II', 'O2', and 'Explicit Rejection of the Rule of Reason under Article 101(1) by the General Court', in Faull J., Nikpay A. (eds) *The EU Law of Competition*. Oxford: Oxford University Press, pp. 269-278. See also Manzini P. (2002) The European Rule of Reason: Crossing the Sea of Doubt. *European Competition Law Review* **23**(8) 392-399.

[1461] *Ibidem.*

[1462] Case C-309/99, *J. C. J. Wouters, J. W. Savelbergh and Price Waterhouse Belastingadviseurs BV v. Algemene Raad van de Nederlandse Orde van Advocaten* (*Wouters*), [2002] ECR I-1577; Case C-519/04 P, *David Meca-Medina and Igor Majcen v. Commission* (*Meca-Medina*), [2006] ECR I-6991.

[1463] See, in that respect, Whish R., Bailey D. (2015) 'Regulatory ancillarity: the judgment of the Court of Justice in Wouters' and 'The application of Article 101(1) to sporting rules', in Whish R., Bailey D. (eds) *Competition Law, cit.*, pp. 138-142; Faull J., Kjøbye L., Leupold H., Nikpay A. (2014) 'No Rule of Reason under Article 101(1)'and 'Wouters', in Faull J., Nikpay A. (eds) *The EU Law of Competition, cit.*, pp. 269-273. For different readings of the *Wouters* ruling, still dismissing any rule of reason approach under Article 101(1) TFEU, see Goyder J., Albors-Llorens A. (2009) *Goyder's EC Competition Law*. Oxford: Oxford University Press, pp. 112-116 and 156, and Odudu O. (2006) *The Boundaries of EC Competition Law: The Scope of Article 81*. Oxford: Oxford University Press, p. 53.

[1464] *Ibidem.*.

[1465] See, Case C-309/99, *Wouters, cit.*, para. 107.

[1466] See, Case C-519/04 P, *Meca-Medina, cit.*, paras 42-45.

[1467] See, Case C-309/99, *Wouters, cit.*, para. 97, and Case C-519/04 P, *Meca-Medina, cit.*, para. 45.

Indeed, the ancillary restraints doctrine cannot be identified with this method of analysis and interpreted as a means of blurring the boundaries between Article 101(1) and Article 101(3) assessments.[1468] This statement was unmistakeably subscribed to by the CJ in its recent ruling on the *MasterCard* case, where it strongly endorsed the approach adopted in that respect by the General Court in the judgment under appeal.[1469] Indeed, the CJ first of all clarified the distinction between the classification of a restriction as ancillary, which is relevant for the purpose of applying Article 101(1) TFEU, and the criterion of indispensability, which is required under Article 101(3) TFEU.[1470] Actually, it explained that the previous case law where it had established that certain agreements fell outside Article 101(1) TFEU – either because they were objectively necessary for carrying out legitimate regulatory prerogatives or because the restrictions in question were found to be ancillary – should not be interpreted as providing an amalgamation of the conditions to be fulfilled in order for an agreement to escape Article 101(1)'s prohibition and to be exempted under Article 101(3) TFEU.[1471] Then it went on to elucidate that the 'objective necessity' test under Article 101(1) TFEU has nothing to do with the assessment provided under Article 101(3) TFEU and is, instead, related to the ancillary restrictions theory.[1472] Finally, the CJ made the abovementioned distinction even clearer since it narrowed down the scope of the ancillary restraints doctrine by providing a strict application of the condition of necessity to be fulfilled under the 'objective necessity' test.[1473]

[1468] See, *inter alia*, Whish R., Bailey D. (2015) 'Have the EU Courts embraced the 'rule of reason'?', in Whish R., Bailey D. (eds) *Competition Law*, *cit.*, pp. 142-145; Korah V. (2006) *Cases and Materials on EC Competition Law*. Oxford: Hart Publishing, pp. 62 and 82. *Contra*, Kaczorowska A. (2008), *European Union Law*, *cit.*, p. 780; Jones A. (2010) Left Behind by Modernisation? Restrictions by Object under Article 101(1). *European Competition Journal* **6**(3) 649 – 676.

[1469] See, Case C-382/12 P, *MasterCard Inc. and Others v. Commission* (*MasterCard*), ECLI:EU:C:2014:2201, paras 89-94.

[1470] *Ibidem*, para. 91. More precisely, the Court held that the fact that the contested agreement "*is simply more difficult to implement or even less profitable without the restriction concerned cannot be deemed to give that restriction the 'objective necessity' required in order for it to be classified as ancillary*". Indeed – it added – "[s]*uch an interpretation would effectively extend that concept to restrictions which are not strictly indispensable to the implementation of the main operation"*. Hence, the final "*outcome would undermine the effectiveness of the prohibition laid down in Article 81(1) EC*". According to the CJCJ, in such cases the restriction should instead be tested under the 'indispensability' criterion within Article 101(3) TFEU.

[1471] *Ibidem*, para. 92.

[1472] *Ibidem*, para. 93. Indeed, in the Court's words, it simply concerns the question of whether certain restrictions are 'necessary' in order to fulfil a particular legitimate commercial or non-commercial prerogative and, thus, they are not caught by Article 101(1)'s prohibition.

[1473] *Ibidem*, paras 105 ff.

Given that the Court has chosen the term "*inherent*" to describe the restrictive effects contested in some of the most important cases analysed above,[1474] we might also conclude that the 'objective necessity' test and the ancillary restraints doctrine applied by the CJEU in the antitrust field might be – at the very most –[1475] assimilated into the inherent feature and inherent restriction approaches adopted by the Court in the State aid and free movement fields of EU law. Therefore, the very same arguments we have put forward in the previous paragraph in support of our allegation that the rule of reason methodology cannot be identified with or even gathered from these approaches do actually also apply with respect to EU antitrust law.

7.3.2. *Some Reflections on EU Internal Market Case Law*

The considerations we have made at the end of the previous subparagraph regarding antitrust cases are also relevant for addressing the question of whether the CJEU has ever applied a rule of reason approach when dealing with domestic measures under EU internal market provisions. Two arguments are generally put forward in support of also applying such an approach in this field of EU law. The first one, once again, stems from an interpretation of certain judgments adopted by the Court with respect to domestic restrictions of free movement rights that we do not subscribe to. More precisely, the judgments concerned are those where, in our view, the Community judicature simply applied the inherent restriction approach.[1476] In that respect we might, therefore, simply recall what we have stated regarding both the ancillary restraints

[1474] See, *inter alia*, Case C-309/99, *Wouters, cit.*, para. 97, and Case C-519/04 P, *Meca-Medina, cit.*, para. 45.

[1475] See, however, the arguments we have put forward in paragraph 2 of this chapter regarding the divergences between, on the one side, the inherent feature approach and, on the other side, the inherent restriction and the ancillary restraints doctrines.

[1476] See, *inter alia*, Joined Cases C-51/96 and C-191/97, *Christelle Deliège v. Ligue francophone de judo et disciplines associées ASBL, Ligue belge de judo ASBL, Union européenne de judo and François Pacquée* (*Deliège*), [2000] ECR I-2549, para. 64, where the Court addressed certain selection rules for sporting events under the lens of free movement of services provisions and ruled that "*although selection rules like those at issue in the main proceedings inevitably have the effect of limiting the number of participants in a tournament, such a limitation is inherent in the conduct of an international high-level sports event, which necessarily involves certain selection rules or criteria being adopted. Such rules may not therefore in themselves be regarded as constituting a restriction on the freedom to provide services prohibited by Article* [56] *of the Treaty*" (emphasis added). See also Case C-309/99, *Wouters, cit.*, para. 122, where the CJ stated that the prohibition of the multi-disciplinary partnerships at issue in the proceeding could also constitute a restriction on the right of establishment and the freedom to provide services. However, the Court maintained that "*that restriction would in any event appear to be justified for the reasons set out in paragraphs 97 to 109*" of the ruling. And these are precisely the paragraphs where it explained why the restrictive effects the rules in question could have generated were to be considered "*inherent*" features of statutory systems laying down frameworks like those disputed in the case.

doctrine and the inherent feature approach adopted by the CJEU in the antitrust and State aid fields, respectively. Indeed, this issue has been already extensively analysed, and the arguments provided with respect to the previously mentioned areas of EU law apply, *mutatis mutandis*, to EU internal market rules and judgments.[1477]

Turning to the second line of reasoning frequently provided by those scholars supporting the application of a rule of reason standard in the EU internal market field, in the author's opinion it derives from a flawed construal of the 'mandatory requirements' doctrine conceived by the CJ in the famous *Cassis de Dijon* judgment and developed by the subsequent case law.[1478] As we shall explain in the next chapter, in fact, with regard to non-discriminatory restrictions prohibited under the Treaty's free movement rules, the Court's case law has elaborated the so-called mandatory requirements of public interest, which are potentially unlimited.[1479] In this respect it is important to highlight that, in cases such as *Danish bottles*, *Walloon Waste*, *Dusseldorp*, *Aher-Waggon*, *Danish bees*, *Toolex Alpha*, *PreussenElektra*, *Air quality* and *Essent Belgium*, the overriding requirements were explicitly extended to include the protection of the environmental and energy-related objectives as well.[1480] The subject matter assumes relevance for answering our research question because some scholars have assimilated the mandatory requirements doctrine to the rule of reason approach.[1481] In this way, they have

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[1477] In that regard, see the previous subparagraph and paragraph 2 of this chapter.

[1478] See Case 120/78, *Rewe-Zentral AG v. Bundesmonopolverwaltung für Branntwein* (*Cassis de Dijon*), [1979] ECR 649, para. 8, where the CJ first drew a distinction between those measures adopted in breach of Article 34 TFEU that are indistinctly applicable and those that are distinctly applicable. Then it ruled that obstacles to the free movement of goods resulting from indistinctly applicable measures "*relating to the marketing of the products in question must be accepted in so far as those provisions may be recognized as being necessary in order to satisfy mandatory requirements relating in particular to the effectiveness of fiscal supervision, the protection of public health, the fairness of commercial transactions and the defence of the consumer*".

[1479] For instance, the maintenance of press diversity as a means of safeguarding freedom of expression was considered an overriding requirement justifying a restriction of free movement rights in Case C-368/95, *Vereinigte Familiapress Zeitungsverlags- und vertriebs GmbH v. Heinrich Bauer Verlag* (*Familiapress*), [1997] ECR I-3689.

[1480] Case 302/86, *Commission v. Denmark* (*Danish bottles*), [1988] ECR 4607; Case C-2/90, *Commission v. Belgium (Walloon Waste)*, [1992] ECR I-4431; Case C-203/96, *Chemische Afvalstoffen Dusseldorp BV and Others v. Minister van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer* (*Dusseldorp*), [1998] ECR I-4075; Case C-389/96, *Aher-Waggon GmbH v. Bundesrepublik Deutschland* (*Aher-Waggon*), [1998] ECR I-4473; Case C-67/97 *Criminal proceedings against Bluhme* (*Danish bees*), [1998] ECR I-8033; Case C-473/98, *Toolex Alpha*, [2000] ECR I-5681; Case C-379/98, *PreussenElektra*, *cit.*; and, more recently, Case C-28/09, *Commission v. Austria* (*Air quality*), ECLI:EU:C:2011:854, and Joined Cases C-204/12 and C-208/12, *Essent Belgium NV v. Vlaamse Reguleringsinstantie voor de Elektriciteits- en Gasmarkt* (*Essent Belgium*), ECLI:EU:C:2014:2192.

[1481] See, *inter alia*, Monti G. (2002) Article 81 and Public Policy. *Common Market Law Review* **39**(5) 1057-1099, who, however, later explained – not without generating a certain degree of confusion – that in the quoted journal article he did not mean to state that the mandatory requirements case law is an application of the US-style rule of reason approach but rather that it is an application of a so-called European-style rule of reason approach, which is instead aimed at balancing national policy and EU law (Monti G. (2007) 'National Interests' in Monti G. (ed.) *EC Competition Law*, *cit.*, pp. 110-113; Federico Ortino (2004) 'The Dassonville-Cassis De Dijon "Rule of Reason"

distinguished, in terms of stages of analysis, assessing these requirements from appraising statutory justifications of domestic restrictions on free movement rights provided under the Treaty. More precisely, to reach the above-provided interpretative outcome it is necessary to maintain that the imperative requirements elaborated by the jurisprudence are not simply additional justification grounds for non-discriminatory national measures, other than those established under the TFEU that are also applicable to domestic discriminatory provisions. They should, in fact, be considered as objective justifications or intrinsic limits that narrow down the scope of the Treaty rules prohibiting restrictions of free movement rights.[1482] This is tantamount to stating that the Court has given priority to certain types of Member State public policies, has introduced new mandatory requirements which correspond to the public interests these policies are aimed at, and, through this process, has redefined and narrowed down the scope of the above-cited Treaty articles.[1483] As an 'incidental' consequence of this alleged decision on the scope of EU internal market law, the relevant Treaty prohibitions would not catch the abovementioned public policies at all and the national measures implementing them would not even reach the justification stage of analysis, thus escaping supranational control.[1484]

The above-provided understanding of the imperative requirements of public interest finds grounds in some rather confusing judgments, where we assume that the CJ opted for an unclear reasoning in order to enhance the acceptability of what it was actually doing. This was adding

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Doctrine: Uncovering the Court's Formalist Sophistry', in Federico Ortino (ed.) *Basic Legal Instruments for the Liberalisation of Trade: A Comparative Analysis of EC and WTO Law*. Portland: Hart Publishing, pp. 392-399; Biondi A., Eeckhout P. (2004) 'State Aid and Obstacles to Trade', in Biondi A., Eeckhout P., Flynn J. (eds) *The Law of State Aid in the European Union*, *cit.*, pp. 103-116, at p. 112; Schrauwen A. (2005) 'Defence of Public Interest: the Rule of Reason', in Schrauwen A. (ed.) *Rule of Reason*: *Rethinking another Classic of EC Legal Doctrine*, *cit.*, pp. 3-17; Cseres K. J. (2005) *Competition Law and Consumer Protection*. The Hague: Kluwer Law International; Rossi L.S., Curzon S.J. (2008) *What "Rule of Reason" for the EU Internal Market?*. Studi Sull'Integrazione Europea **3**(2) 295-309; Rosas A. (2010) 'Life after "Dassonville" and "Cassis": Evolution but No Revolution', in Maduro M. P., Azoulai L. (eds) *The Past and Future of EU Law: The Classics of EU Law Revisited on the 50th Anniversary of the Rome Treaty*. Oxford: Hart Publishing, pp. 433-446, interpreting the Court case law after *Cassis de Dijon* as treating the mandatory requirements as a rule of reason but not subscribing to this approach.

[1482] *Ibidem.* See, in that respect, also Tesauro G. (2012) *La Ragionevolezza nella Giurisprudenza Comunitaria*. Napoli: Editoriale Scientifica; Tesauro G. (2012) *Diritto dell'Unione Europea*. Padova: Cedam, pp. 408-411. Judge Tesauro, however, maintains that also under this reading the *Cassis de Dijon* formula is something different from the rule of reason and that there is no EU-style rule of reason: see Tesauro G. (2013) 'Reasonableness in the European Court of Justice Case-Law', *cit.*, in Rosas A., Levits E., Bot Y. (eds) *The Court of Justice and the Construction of Europe: Analyses and Perspectives on Sixty Years of Case-law*, *cit.*

[1483] Actually, this is the reading of some rulings of the CJEU on labour cases provided by Paul Davies, who has extended such interpretation to similar State aid cases on employment measures analysed above. However, instead of justifying the relevant Court's judgments as an application of the 'rule of reason' doctrine, he both criticises them and explains them as examples of the so-called 'hidden balancing' hypothesis. See, Davies P. (1995) Market Integration and Social Policy in the Court of Justice. *Industrial Law Journal* **24**(1) 49-77.

[1484] *Ibidem*.

further justifications to the express derogations provided under the TFEU notwithstanding the fact that it has always stated that they are fixed and have to be interpreted narrowly.[1485] Therefore, the Court's equivocal attitude and the previously explained construal of the mandatory requirements has been criticised and rejected by distinguished scholars, who have rightly considered such requirements as a jurisprudential broadening of the derogation grounds provided for in the Treaty.[1486] Moreover, it also seems to have been more recently and implicitly rebutted by the CJEU. Indeed, first of all, after judging that a measure breaches one of the Treaty articles prohibiting restrictions of free movement rights, the Court now increasingly and overtly poses itself the question of whether the "*prohibition* [at issue] *may be justified on one of the public interest grounds set out in Article* [36 TFEU] *or in order to meet imperative requirements*".[1487] It then usually states that "[i]*n either case, the national provision must be appropriate for securing the attainment of the objective pursued and not go beyond what is necessary in order to attain it*".[1488] Secondly, and as a consequence of the just mentioned approach towards the mandatory requirements doctrine, the Court actually applies the very same proportionality test with respect to the express derogations provided for in the TFEU and the overriding requirements elaborated by the jurisprudence.

The interpretation of the case law we have just provided seems to be all the more well-grounded when analysing the CJEU rulings on environmental protection and energy-related measures.[1489] The fact that, as we shall see in the next chapter, in some of these rulings the CJ has incorrectly classified certain eco-friendly legislations as non-discriminatory hindrances to

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[1485] See, in that respect, Weatherill S. (2012) Free Movement of Goods. *International and Comparative Law Quarterly* **61**(2) 541 – 550, and Oliver P. (2010) Oliver on Free Movement of Goods in the European Union, *cit.*

[1486] See, *ex plurimis*, Barnard C. (2013) 'Derogations and Justifications', in Barnard C. (ed.) *The Substantive Law of the EU: The Four Freedoms*. Oxford: Oxford University Press, pp. 154-197; Oliver P., Enchelmaier S. (2007) Free Movement of Goods*:* Recent Developments in the Case Law, *cit.*; Oliver P., Jarvis M. A. (2003) *Free Movement of Goods in the European Community: under Articles 28 to 30 of the EC Treaty*. London: Sweet & Maxwell, at p. 217. Scott J. (2002) 'Mandatory or Imperative Requirements', in Barnard C., Scott J. (eds.) *The European Single Market: Unpacking the Premises.* Portland: Hart Publishing, pp. 269-294. Oliver P. (1999) Some Further Reflections on the Scope of Articles 28–30 (ex 30–36) EC, *cit.*; Weiler J. H. H. (2000) 'Epilogue: Towards a Common Law of International Trade', in Weiler J. H. H. (ed.) *The EU, the WTO, and the NAFTA: Towards a Common Law of International Trade*. Oxford: Oxford University Press, pp. 201-232.

[1487] Case C-110/05, *Commission v. Italy*, [2009] ECR I-519, para. 59. Similarly, Case C-54/05, *Commission v. Finland*, [2007] ECR I-2473, para 38; Case C-297/05, *Commission v. Netherlands*, [2007] ECR I-7467, para. 75; Case C-270/02, *Commission v. Italy*, [2004] ECR I-1559, para 21; Case C-420/01, *Commission v. Italy* [2003] ECR I-6445, para. 29; Case C-14/02, *ATRAL SA v. Belgium*, [2003] ECR I-4431, para. 64; Joined Cases C-388/00 and C-429/00, *Radiosistemi Srl v. Prefetto di Genova*, [2002] ECR I-5845, para. 42.

[1488] *Ibidem.*

[1489] See, *inter alia*, Case C-2/90, *Walloon Waste, cit.*, Case C-203/96, *Dusseldorp, cit.*, Case C-389/96, *Aher-Waggon, cit.*, Case C-28/09, *Air quality, cit.*, and Joined Cases C-204/12 to C-208/12, *Essent Belgium, cit.*

inter-States trade or has sidestepped the classification question actually supports our allegation that the mandatory requirements are simply additional grounds for justification.[1490] Indeed, in this way the Court has implicitly extended the application of certain imperative requirements to directly discriminatory restrictions and has unequivocally gone through a proportionality appraisal of such restrictions. In this regard we shall further add that, if we exclude those early rulings where the CJ simply tried to define the scope of EU free movement provisions[1491] and those where it applied the inherent restriction approach,[1492] the remoteness test[1493] or the 'purely internal situations' doctrine[1494], it is hard to think of a case where it did not go through the proportionality test – and, thus, the second stage of analysis – with respect to both distinctly and indistinctly applicable measures.[1495]

As a result of all the considerations provided in this subparagraph, in the author's opinion the CJEU has never applied a rule of reason approach when dealing with domestic measures under EU internal market law.

7.3.3. *EU State Aid vs EU Competition and Internal Market Law*

In the author's opinion, the jurisprudence analysed and the arguments put forward in the previous subparagraphs demonstrate that there is no such a thing as a European-style rule of reason approach that can be deemed to have been applied by the CJEU to narrow down the scope of the general proscriptions of free movement restrictions and anti-competitive conducts provided under the Treaty. Hence, there should be no reason to extend to the EU State aid regime an approach that probably does not exist at all under the EU law system and is actually

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[1490] *Ibidem.*

[1491] *E.g.*, Joined Cases C-267/91 and C-268/91, *Criminal proceedings against Bernard Keck and Daniel Mithouard* (*Keck and Mithouard*), [1993] ECR I-6097.

[1492] In that respect, see also paragraph 2 of this chapter.

[1493] The remoteness test is addressed in Chapter 8, paragraph 1.

[1494] See, in that regard, Tryfonidou A. (2009) *Reverse Discrimination in EC Law*. The Netherlands: Kluwer Law International, and Davies G. (2003) 'The Wholly Internal Situation', in Davies G. (ed.) *European Union Internal Market*. Abingdon/New York: Routledge-Cavendish, pp. 163-174.

[1495] While distinctly applicable measures are those measures which apply exclusively to imports or exports and, hence, *prima facie* favour either domestic producers over importers or vice versa, indistinctly applicable measures are those domestic provisions which apply to imports, exports and domestic goods alike, thus having effects that are *prima facie* equal for both domestic producers and importers.

unnecessary. Indeed, compared to the legal systems where the rule of reason was first adopted, the EU State aid regime already provides a comprehensive, exhaustive and well-balanced framework of assessment, with no gaps that need to be plugged in that respect. However, since the issue will continue to be controversial until the CJ explicitly rejects the application of a European-style rule of reason doctrine and properly explains certain unclear rulings, we cannot avoid providing at least a brief comparative analysis between, on the one side, EU antitrust and internal market law and, on the other side, the EU State aid regime. This comparison, in turn, purports to ascertain whether the very same logic provided by those supporting the application of the rule of reason doctrine in the former areas of EU law is also applicable with to respect public support measures. That said, for such an extension of rationale to be conceivable, the EU State aid regime should be at least comparable to EU antitrust and internal market laws in terms of shortcomings. A relevant point is worth being preliminarily remarked on in this regard. In our view, while all the previously summarised academic debate over the application of a rule of reason approach might be reasonable with respect to the internal market and antitrust provisions of the Treaty in some ways, it is not so with regard to EU State aid rules. A distinction should, in fact, be made between these fields of EU law, especially with respect to the justification grounds they provide.

As per Article 101(3) TFEU, we should highlight that its purely economic formulation includes only competition factors and provides no grounds for considering non-competition concerns, such as social, environmental and energy-related issues.[1496] Hence, whilst several scholars advocate a more prominent role for environmental and energy-related justifications under EU antitrust law,[1497] the related objectives are not covered by Article 101(3) TFEU. Although this finds its rationale in the fact that antitrust law does not deal with national legislative measures but with private agreements and actions, which are not the proper means to deal with objectives of common interest, cases like *Wouters* and *Meca-Medina* might prove that in exceptional circumstances those agreements and actions might take over public

[1496] In that regard it is worth recalling that the main condition for the inapplicability of Article 101(1)'s prohibition is that the agreement, decision or concerted practice under scrutiny contribute at the least to either improving the production or distribution of goods or promoting technical or economic progress while allowing consumers a fair share of the resulting benefit.

[1497] *Inter alia*, Kingston S. (2010) Integrating Environmental Protection and EU Competition Law: Why Competition Isn't Special. *European Law Journal* **16**(6) 780–805; Casey D. K. (2009) Disintegration: Environmental Protection and Article 81 EC. *European Law Journal* **15**(3) 362-381; Gehring M. W. (2006) Competition for Sustainability: Sustainable Development Concerns in National and EC Competition Law. *Review of European Community & International Environmental Law* **15**(2) 172–184.

functions.[1498] Hence, despite the fact that, in the author's view, the ancillary restraints doctrine is fit to fill this narrow gap in EU antitrust law by rightly confining the solution to limited situations, there is still some room to argue that Article 101(3) TFEU does not perform the same functions and satisfy the same needs of a rule of reason approach. A similar but far more limited criticism might be moved with respect to the express derogations provided for in the free movement rules of the Treaty. Indeed, although Articles 36, 45, 52 and 62 TFEU contemplate certain public policy goals as justification grounds, the public interest reasons listed thereunder are rather outdated and deficient.[1499] For instance, they do not expressly encompass environmental and energy related objectives. Nonetheless, as explained in the previous subparagraph, with respect to non-discriminatory restrictions falling within the scope of the Treaty's prohibitions the CJEU's jurisprudence has elaborated the mandatory requirements of public interests. These overriding requirements are potentially unlimited, include environmental protection and energy-related goals, and have been, in practice, also applied to discriminatory measures. Moreover, as we will explain in Chapter 8, the Court might simply reverse the narrow reading so far applied to the very broad derogation grounds spelled out in the Treaty for giving relevance to certain pre-eminent EU goals, such as environmental protection and energy-related objectives.[1500] Finally, if properly employed, the inherent restriction approach, the remoteness test and the purely internal situation doctrine would allow several domestic measures to fall directly outside the scope of the abovementioned Treaty prohibitions.[1501] Notwithstanding all the above considerations, however, it is fair to note that

[1498] Case C-309/99, *Wouters*, *cit.*, and Case C-519/04 P, *Meca-Medina*, *cit.* See, with that respect, Schmid C. U. (2000) Diagonal Competence Conflicts between European Competition Law and National Regulation: A Conflict of Laws Reconstruction of the Dispute on Book Price Fixing. *European Review of Private Law* **8**(1) 155-172.

[1499] More precisely, non-fiscal barriers to trade might be justified under the Treaty on the following grounds: public morality, public policy, public security, the protection of health and life of humans, animals or plants, the protection of national treasures possessing artistic, historic or archaeological value, and the protection of industrial and commercial property (Article 36 TFEU). By contrast, the express derogations to the prohibitions of restrictions of the freedom of movement for workers, the freedom of establishment and the freedom to provide services encompass only public policy, public security and public health considerations (Articles 36, 45, 52 and 62 TFEU).

[1500] Several distinguished scholars have recommended this interpretative approach: see, *inter alia*, Johnston A., Block G. (2012) *EU Energy Law*. Oxford: Oxford University Press, pp. 347-348, and Jacobs F. (2006) The Role of the European Court of Justice in the Protection of the Environment. *Journal of Environmental Law* **18**(2) 185–205. Suffice it here to recall that, although the protection of "*health and life of human, animals and plants*" is included only among the express derogations to the prohibition of quantitative restrictions to trade in goods provided under Article 36 TFEU, "*public health*" is applicable as a justification ground for restrictions to all the free movement rights (see, Articles 45(3), 52(1) and 62 TFEU).

[1501] In those regards see, paragraph 2 of this chapter, Tryfonidou A. (2009) *Reverse Discrimination in EC Law*, *cit.*, and Davies G. (2003) 'The Wholly Internal Situation', in Davies G. (ed.) *European Union Internal Market*, *cit.*

applying the rule of reason doctrine might still be deemed capable of satisfying needs that are not expressly addressed by Articles 36, 45, 52 and 62 TFEU.

Turning to the EU State aid regime, it is first of all important to highlight that, in contrast to EU antitrust law, it aims at achieving not only economic goals but also environmental, social and other public policy objectives. Indeed, as we have evidenced in Part II of this work, these objectives are properly identified under Article 107(2) and (3) TFEU and safeguarded under the compatibility framework. Actually, the EU State aid regime has been introduced not only to avoid potential competition-distorting and trade-distorting effects of national support policies but also to correct, in an efficient way, those market failures that prevent market forces meeting important objectives of common interest on their own. Also, as already explained, it is precisely the double function that this regime performs which requires structuring it as a control system and giving relevance to pre-eminent public policy objectives just under this system.[1502] In fact, only rigorous supervision of State aid provisions can help in distinguishing the so-called "*good aid*"[1503] from highly distortive forms of public support, through a fair balance between the positive effects of aid measures and their potential negative impact on competition and trade.[1504] Hence, there are great policy differences between State aid provisions and antitrust rules which are perfectly consistent with and justified by the different roles played by these two fields of EU and the different actions they deal with.

[1502] In that regard see Chapter 2 of this doctoral thesis.

[1503] We shall recall that the concept of "*good aid*" has been defined under the State Aid Modernisation (SAM) Communication so as to encompass only aid measures that are *"well-designed, targeted at identified market failures and objectives of common interest, and least distortive*". See, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 8 May 2012, *EU State Aid Modernisation* (SAM Communication), COM(2012) 209 final, section 2.1., in general, and para. 12, in particular. In that respect see, further, Part II of this doctoral thesis

[1504] See, in that respect, Ross M. (2004) 'Decentralisation, Effectiveness and Modernisation: Contradictions in Term', in Biondi A., Eeckhout P., Flynn J. (eds) *The Law of State Aid in the European Union*, *cit.*, pp. 86-87; and Lowe P. (2006) Some Reflections on the European Commission's State Aid Policy. *Competition Policy International* **2**(2) 57 ff. In that regard we shall, in fact, recall that, under the recently reformed regime, notified aid measures shall satisfy the following cumulative compatibility conditions: contribution to a well-defined objective of common interest (*i.e.*, the aid must ensure an increased level of environmental protection or a competitive, sustainable and secure EU internal energy market), need for State intervention (*i.e.*, the aid must correct market failures), appropriateness of the aid measure (*i.e.*, there are no equally effective less distortive instruments), incentive effect of the aid (*i.e.*, the aid induce a change in the recipient behaviour), proportionality of the aid (*i.e.*, the aid amount must be limited to the minimum necessary), avoidance of undue negative effects on competition and trade between Member States (*i.e.*, the overall balance of the measure must be positive) and transparency of aid (*i.e.*, Member States must publish exhaustive information on the aid granted).

With regard to the comparison between the above-addressed EU internal market rules and the compatibility framework established under Article 107(2) and (3) TFEU,[1505] it is worth recalling that, as the analysis provided in Part II of this work clearly evidences, this framework gives pre-eminence to all the most important EU and domestic goals, including environmental and energy-related ones. This is thanks also to the relevant soft law instruments that have further explicated, detailed and integrated the relevant provisions of Treaty.[1506] Actually, since the Commission's regulations, guidelines and notices in the field are periodically reformed, there is no risk of the compatibility criteria and conditions and the list of public interests that might serve as grounds for justifying aid measures not being kept updated. Further, a very recent proof of this is provided by the State Aid Modernisation (SAM) initiative, which has already been extensively addressed.[1507] Indeed, as we have seen, more inclusive, far-reaching and clear guidelines and notices have been adopted in this context to replace the existing soft law instruments.[1508] Moreover, the scope of the new general block exemption regulation (New GBER) has been broadened to such a degree that its reach now extends to most of the compatibility grounds provided under Article 107 TFEU and the related guidelines.[1509] This holds all the more true regarding energy support measures, which, as we have seen, are now widely covered by the new guidelines on State aid for environmental protection and energy (EEAG) and the New GBER.[1510]

As a result of the foregoing consideration, in the author's opinion all the potential problems Article 101(3) TFEU and the justification grounds for free movement restrictions might pose with respect to important public policy interests cannot also be ascribed to the State aid regime. Hence, a rule of reason standard would have no role to play thereunder.

[1505] For further reasons why the 'objective justification' principle allegedly employed in the free movement field should not be imported into the notion of aid see, Bacon K. (1999) Differential Taxes, State Aids and the Lunn Poly Case. *European Competition Law Review* **20**(7) 384-391, and Bacon K. (2003) The Concept of State Aid: The Developing Jurisprudence in the European and UK Courts, *cit.*

[1506] Regarding the preeminent role soft law instruments now play when dealing with antitrust and State aid cases see, Ştefan O. (2013) *Soft Law in Court: Competition Law, State Aid, and the Court of Justice of the European Union*. The Netherlands: Kluwer Law International.

[1507] See, SAM Communication, *cit.*

[1508] For an extensive analysis of the reform see Chapter 3 of this doctoral thesis.

[1509] Commission Regulation (EU) No. 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty (New GBER), OJ 2014 L187/1.

[1510] Communication from the Commission of 9 April 2014, *Guidelines on State aid for environmental protection and energy 2014-2020* (EEAG), OJ 2014 C200/1

Chapter 8

Alternative Tools for Escaping the Compatibility Assessment

8.1. A Remoteness Test: How Remote is the Alternative?

In an attempt to put aside definitively any claim in favour of the application of a rule of reason doctrine under the EU State aid regime, another theory has been put forward. Some esteemed scholars and Advocates General have, in fact, suggested that, instead of relying on regulatory intent, some of the case law and Commission decisions we have analysed in Chapter 7, paragraph 2 and Chapter 6 can be assimilated to and rationalised under what academics call the 'remoteness' test.[1511]

More precisely, this test has allegedly been applied by the CJEU in the internal market field of EU law. According to academics' understanding of the reasoning provided by the Court in certain rulings delivered with respect to free movement rights, this test should consist of determining whether it is possible to establish a direct causal link between the national provision under scrutiny and certain effects on intra-EU trade that might result from the implementation of this provision.[1512] If this is not the case because the impact of the domestic measure in question on the pattern of trade is 'too uncertain and indirect', the Treaty articles prohibiting restrictions of free movement rights are not breached owing to the fact there is no cross-border element.[1513] That is to say, the contested measure falls outside the scope of these

[1511] See, de Cecco F. (2013) 'The State as Regulator: The Use of Public Resources', in de Cecco F. (2013) *State aid and the European Economic Constitution*. Oxford: Hart Publishing, pp. 110-115; and Biondi A. (2013) State Aid is Falling Down, Falling Down: an Analysis of the Case Law on the Notion of Aid, *cit.*, at pp. 1727-1729. See also, Opinion of Advocate General Fennelly of 16 July 1988 in Case C-200/97, *Ecotrade*, *cit*., para. 24.

[1512] For in-depth analyses of the remoteness test see Tryfonidou A. (2016) 'A *De Minimis* Test?' and 'A Remoteness Test?', in Tryfonidou A. (ed.) *Impact of Union Citizenship on the EU's Market Freedoms*. Oxford: Hart Publishing, pp. 177-182; Shuibhne N. N. (2013) 'Between Negative and Positive Scope: The Principles of *De Minimis* and Remoteness', in Shuibhne N. N. (ed.) *The Coherence* of *EU Free Movement Law*: *Constitutional Responsibility and the Court of Justice*. Oxford: Oxford University Press, pp. 157-188; Barnard C. (2016) *The Substantive Law of the EU: The Four Freedoms*. Oxford: Oxford Univerisity Press, pp. 240 ff.; Oliver P. (2010) 'The Meaning of "Measures"' and 'Measures of Equivalent Effect on Imports', in Oliver P. (ed.) *Oliver on Free Movement of Goods in the European Union*. Oxford: Hart Publishing, pp. 86-92 and 93 ff.

[1513] *Ibidem.* Various formulations have been used by the CJEU when allegedly applying the remoteness test across the four freedoms, *e.g.* "uncertain", "insignificant", "tenuous", "indirect", etc. See, in that respect, Arnull A. (2006) *The European Union and its Court of Justice.* Oxford: Oxford University Press, pp. 491 ff.

articles and is, thus, excluded from the purview of EU law. Interestingly enough, according to the analysis of the relevant case law provided by academics who have elaborated the notion of remoteness, the most important early internal market judgments where the Court implicitly employed the remoteness test dealt with environmental issues or energy resources.[1514] This test has since allegedly been extended to almost every kind of measure and sector.[1515]

As previously mentioned, some distinguished scholars have recently suggested also applying the rule of remoteness in the State aid field and, more precisely, when assessing public support measures under the State resources criterion. *Mutatis mutandis*, this would mean that if no direct causal connection can be established between the economic advantage conferred to specific undertakings or productions by the national measure under scrutiny and a State's disposal of its resources, the State origin condition is not met and, thus, the measure does not qualify as aid.[1516] In support of their proposition, and in an effort to be positive, these scholars actually allege that the Court has in reality already applied a sort of remoteness test in certain State aid rulings.[1517] In our view, unfortunately, this has not been the case. Indeed, in some of the judgments quoted by these scholars – such as the *Doux Élevage*, the *Bouygues* and the *Germany v. Commission* judgments – the CJ simply carried out conventional assessment of the contested support

[1514] Joined Cases 3, 4 and 6-76, *Kramer*, [1976] ECR 1279; Case C-379/92, *Peralta*, [1994] ECR I-3453; Joined cases C-140/94, C-141/94 and C-142/94, *DIP v. Bassano di Grappa*, [1995] ECR I-3257; Case C-134/94, *Esso Española*, [1995] ECR I-4223. Case C-67/97, *Bluhme*, [1998] ECR I-8033. With that respect, see also de Sadeleer N. (2014) 'Prohibition of Quantitative Restrictions and of Measures Having Equivalent Effect to Quantitative Restrictions to Trade: Limits to the Material Scope of Article 34 TFEU' in de Sadeleer N. (ed.) *EU Environmental Law and the Internal Market*. Oxford: Oxford University Press.

[1515] Examples include, *inter alia*, Case 75/81, *Blesgen*, [1982] ECR 1211; Case C-69/88, *Krantz*, [1990] ECR I-583; Case C-159/90, *The SPUC Ireland Ltd v. Stephen Grogan and Others*, [1991] ECR I-4685; Case C-96/94, *Centro Servizi Spediporto v. Spedizioni Marittima del Golfo*, [1995] ECR I-2883; Case C-418/93, *Semeraro Casa*, [1996] ECR I-2975; Case C-266/96, *Corsica Ferries*, [1998] ECR I-3949; Case C-44/98, *BASF*, [1999] ECR I-6269; Case C- 412/97, *ED Srl v. Italo Fenocchio*, [1999] ECR I- 3845; Case C-190/98, *Graf*, [2000] ECR I-493; Case C-20/03, *Burmanjer*, [2005] ECR I-4133; Joined Cases C-282/04 and C-283/04, *Commission v. Netherlands (Golden Shares)*, [2006] ECR I-9141; Case C-256/06, *Jäger*, [2008] ECR I-123; Case C-211/08, *Commission v. Spain*, [2010] I-5267; Case C-291/09, *Guarnieri & Cie*, [2011] ECR I-2685; Case C-602/10, *SC Volksbank România*, ECLI:EU:C:2012:443. Please note that some of the cases hereby quoted might be and have been ascribed also to other free movement law categories.

[1516] See, de Cecco F. (2013) 'The State as Regulator: The Use of Public Resources', in de Cecco F. (2013) *State aid and the European Economic Constitution*, *cit*.; and Biondi A. (2013) State Aid is Falling Down, Falling Down: an Analysis of the Case Law on the Notion of Aid, *cit*.

[1517] *Ibidem*.

measures under the State origin criterion,[1518] although sometimes in a flawed way.[1519] Moreover, the examples provided also include the *Sloman Neptun* and *Dutch NOx* judgments.[1520] However, as with other similar rulings on energy-related measures also reviewed in Chapter 7, paragraph 2,[1521] with regard to the *Sloman Neptun* judgment the CJ simply applied what we have named the inherent feature approach and never stated that the impact of a contested provision on the public budget was too remote, uncertain, insignificant, tenuous, indirect *et similia* for this provision to satisfy the State resources requirement.[1522] We have already clarified why, in our view, this approach differs from the inherent restriction and ancillary restraints doctrines adopted by the CJEU in certain free movement and competition law cases. The very same reasons provided thereunder in support of this distinction apply also, *mutatis mutandis*, to the relationship between the inherent feature and remoteness tests. Actually, a further element of divergence can be detected between these two tests, which, in our view, makes the adoption of the inherent feature approach in the State aid field preferable. Indeed, while the inherent feature approach simply requires an evaluation of whether the

[1518] Suffice it here to recall that in Case C-677/11, *Doux Élevage SNC and Coopérative agricole UKL-ARREE v. Ministère de l'Agriculture and Others* (*Doux Élevage*), ECLI:EU:C:2013:348, the CJ simply ruled that: a) the private funds used by the inter-trade organization could not be considered State resources simply because they were used alongside sums which originated from that budget; and that b) the measure did not meet the imputability requirement because there was nothing in the case-file submitted permitting it to consider that the initiative for imposing the compulsory contribution at issue in the case originated with the public authorities rather than the inter-trade organization (paras 33-44). As per the judgment delivered in Joined Cases C-399/10 P and C-401/10 P, *Bouygues SA and Bouygues Télécom SA v. Commission and Others* (*Bouygues*), ECLI:EU:C:2013:175, the Court simply quashed the General Court ruling because this Court had wrongly stated that, for the State resources condition to be fulfilled, it was necessary to demonstrate that the reduction in the State budget or the risk of burdens on that budget corresponded or was equivalent to the economic advantage allegedly conferred to the recipient. To that effect, the CJ simply ruled that, when addressing a domestic measure under the State resources condition, there is no need to enter into a mathematical quantitative comparison between the advantage given to the beneficiary and a reduction or a potential future reduction in the State budget. For the State resources condition to be met it is, in fact, enough to establish that there is a "*sufficiently direct link*" between these two elements (paras 108-111). Finally, in Case C-156/98, *Germany v. Commission*, [2000] I-6857, the Court simply restated that the concept of aid encompasses any kind of intervention that mitigates the charges normally included in the budget of the beneficiary, including renunciation by the Member State of tax revenues. Then it simply went on to recall that when the measure involves forgone revenues to which the State would be entitled and a "*connection*" between the measure and the renunciation of incomes by the Member State is established, the domestic measure meets the State resources requirement (paras. 25 to 28). In the author's opinion, these cases provide nothing more than the conventional analysis applied under the State resources criterion. Moreover, while this analysis entails a 'positive' appraisal, the remoteness test requires a 'negative' assessment.

[1519] This is the case, for instance, in the *Doux Élevage* case. For a dissenting analysis of the Court's findings in this case see, Chapter 5, paragraph 3, and Chapter 6, paragraph 1.

[1520] Joined Cases C-72/91 and 73/91, *Sloman Neptun*, *cit.*, and Case C-279/08 P, *Commission v. Netherlands (Dutch NOx)*, [2011] ECR I-7671.

[1521] *E.g.*, Case C-200/97, *Ecotrade*, *cit.*, and Case C-379/98, *PreussenElektra*, *cit.*

[1522] See Joined Cases C-72/91 and 73/91, *Sloman Neptun*, *cit.*, para. 21.

reference regulatory system would in any event and under any circumstance generate a potential burden on the public budget that might be ascribable to the statutory system under scrutiny,[1523] the remoteness test would entail a much more difficult exercise. It would, first of all, be necessary to anticipate evaluation of the national measure under the economic advantage criterion. Secondly, although not in quantitative terms, both the economic advantage the relevant measure might confer on its potential beneficiaries and its potential effects on the public budget would have to be appraised in concrete terms. Indeed, these examinations should allow the analyst to properly compare the two elements in order to establish whether there is a direct casual connection between them. All the above, of course, is assuming that, whatever the chosen method of analysis, it will be properly implemented. We should now briefly turn to the *Dutch NOx* case, which we have already extensively analysed in Chapter 6. Suffice it here to recall that, as with respect to other pre-EU ETS emission trading schemes,[1524] the Court simply ruled that, since the Dutch authorities had chosen to allocate free of charge intangible assets embodying a market value – as tradable emission allowances are – instead of selling them or putting them up for auction, the State was waiving revenues in the sense of Article 107(1) TFEU.[1525] In line with settled case law,[1526] a direct connection between the measure and a renunciation of income by the Member State was, therefore, clear. Neither further assessments nor peculiar tests were necessary to prove and establish this.

That said, in our view the interpretation of the foregoing Court case law as an application of the remoteness test in the State aid field should be very welcome when compared with the potential application of a rule of reason doctrine. However, our goal is not to find and choose the lesser of two evils. Nor we should support any extension under the State aid regime of the numerous and unclear methods of analysis that have been applied in free movement cases. We

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[1523] For a more detailed explanation of this approach see Chapter 7, paragraph 2.

[1524] See, for instance, Commission Decisions of 08 February 2001, State aid N 653/99, *Danmark CO_2 quotas* (*Danish CO_2 scheme*), OJ 2000 C322/8 and Commission Decision of 28 November 2001, State aid N 416/2001, *British emission trading scheme*, OJ 2001 C 88/16.

[1525] See Case C-279/08 P, *Dutch NOx*, *cit.*, paras 106-112, which upheld, on this point, the General Court ruling in Case T-233/04, *Netherlands v. Commission*, [2008] ECR II-591, paras 63-78. The General Court, in turn, upheld, on this point, the Commission Decision of 24 June 2003, State aid N 35/2003, *NOx emission trading scheme (Dutch NOx scheme)*, OJ 2003 C227/19, para. 3.2. In that regard, see further, Slot P. J. (2013) NOx Emission Trading Rights: A Government Gift or Value Created by Undertakings?. *European State Aid Law Quarterly* **12**(1) 61-68, and Catti De Gasperi G. (2010) Making State Aid Control "Greener": The EU Emissions Trading System and its Compatibility with Article 107 TFEU. *European State Aid Law Quarterly* **9**(4) 785-806.

[1526] *E.g.*, Case C-387/92, *Banco Exterior de España SA v. Ayuntamiento de Valencia* (*Banco Exterior de España*), [1994] ECR I-877.

should instead find the best solution in terms of legal certainty, effectiveness of State aid control, Member States' regulatory sovereignty and coherence with the structure of the State aid regime and the relevant jurisprudence.

In the author's opinion, Member States would not be better off in terms of degree of legal certainty and regulatory sovereignty should the Court choose to employ a sort of remoteness test in the State aid field. Indeed, it is well acknowledged that defining this test has caused and still generates several problems in the area of law where it was first applied, *i.e.* tort law.[1527] Although we will not linger over these problems as the issue falls outside the scope of our research, this is a circumstance that should be taken into account when deciding whether to extend the rule of remoteness to other fields of law such as EU State aid law. Moreover, applying the remoteness test in internal market judgments has been highly controversial, and this has therefore attracted criticism. Actually, this test has never been clearly articulated by the CJEU in this area of EU law.[1528] In the relevant judgments, in fact, the Court has simply stated that when the pattern of trade is too uncertain and indirect the contested measures are excluded from the purview of EU law.[1529] It is only in a recent and isolated case, *Guarnieri & Cie*, that it seems to have in a way developed its previous case law as an application of a sort of – still unclear and indefinite – causation-based test.[1530] However, in its following judgments it has neither further elaborated on this test or even mentioned again the concept of a causal link.[1531] Hence, it is still unclear how this causation-based test should be employed and which rules are applicable to it, how remote the causal link should be, and whether positive presumptions are or should be applied. That said, we should also highlight that the judgements delivered by the

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[1527] See, in that respect, Snell J. (2002) *Goods and Services in EC Law: A Study of the Relationship between the Freedoms*. Oxford: Oxford University Press, pp. 124 ff.

[1528] See, *ex plurimis*, Oliver P. (1999) Some Further Reflections on the Scope of Articles 28–30 (ex 30–36) EC. *Common Market Law Review* **36**(4) 783–806; Biondi A. (1999) In and Out of the Internal Market: Recent Developments on the Principle of Free Movement. *Yearbook of European Law* **19**(1) 469-491; Doukas D. (2007) Untying the Market Access Knot: Advertising Restrictions and the Free Movement of Goods and Services. *Cambridge Yearbook of European Legal Studies* **9** 177-215; Oliver P. (2010) *Oliver on Free Movement of Goods in the European Union*, *cit.*, p. 167 ff.

[1529] Just to give some examples we might recall the very simple and generic wording adopted by the Court in Case C-69/88, *Krantz*, *cit.*, para. 11; Case C-379/92, *Peralta*, *cit.*, para. 24; Case C-96/94, *Centro Servizi Spediporto v. Spedizioni Marittima del Golfo*, *cit.*, para. 41; Case C- 412/97, *ED*, *cit.*, para. 11; C-266/96, *Corsica Ferries*, *cit.*, para. 31; Case C-190/98, *Graf*, *cit.*, para. 23.

[1530] Case C-291/09, *Guarnieri & Cie*, *cit.* More precisely, in this case the CJ ruled that "*the possibility that nationals of other Member States would therefore hesitate to sell goods to purchasers established in that Member State who have the nationality of that State is too uncertain and indirect for that national measure to be regarded as liable to hinder intra-Community trade […]. The causal link between the possible distortion of intra-Community trade and the difference in treatment at issue is therefore not established*" (emphasis added) (para. 17).

[1531] *E.g.*, Case C-602/10, *Volksbank România*, *cit.*, para. 81.

Court on internal market cases have not always been consistent with the rule of remoteness,[1532] and in many cases where fulfilment of the cross-border specificity requirement was at the very least uncertain the CJ has not applied the remoteness test.[1533]

The degree of legal uncertainty and the number of questions actually increase when trying to extend the remoteness test to analysing national support measures under the State resources criterion. In this respect we shall, first of all, recall that under the above-quoted internal market cases this test has been applied to appraise the effects of relevant domestic measures on inter-States trade. Even though it is quite difficult to carry out a proper assessment of such effects – especially by employing undefined qualitative criteria, such as those assumedly applicable under the remoteness test – it should be still easier than evaluating the potential impact of a domestic support measure on the public budget, let alone an undefined analysis of the existence of a causal relationship between such a measure and any potential burden on State resources. Moreover, the remoteness test might raise a number of dangerous issues in the State aid context. Indeed, there are several kinds of support measures that meet the State resources criterion under the conventional State aid assessment although they might be deemed to not necessarily involve a cost to the government, to be entirely neutral from the point of view of the State budget or even to give rise to net increases in State revenues.[1534] Examples include State guarantees,[1535]

[1532] Suffice it here to recall a famous judgment on an environmentally related case (Case C-67/97, *Bluhme*, *cit.*), where the Court ruled that a legislative measure prohibiting the keeping on an island, Læsø, of any species of bee other than the subspecies *Apis mellifera mellifera* "*has a direct and immediate impact on trade, and not effects too uncertain and too indirect*" for the measure to fall outside the scope of Article 34 TFEU (para. 22).

[1533] *E.g.*, Joined Cases C-363/93 and C-407-411/93, *Lancry*, [1994] ECR I-3957; Joined Cases C-485/93 and 486/93, *Maria Simitzi v. Dimos Kos*, [1995] ECR I-2665; Joined Cases C-321-324/94, *Pistre*, [1997] I-02343; Case C-448/98, *Guimont*, [2000] ECR I-10663; Case C-281/98, *Angonese*, [2000] ECR I-4139; Case C-62/00, *Mary Carpenter*, [2002] ECR I-6279; Case C-515/99, *Reisch*, [2002] ECR I-2157; Case C-159/00, *Sapod Audic v. Eco-Emballages SA*, [2002] ECR I-5031; Case C-300/01, *Doris Salzmann*, [2003] ECR I-4899; Case C-6/01, *Anomar*, [2003] ECR I-8621; Case C-148/02, *Carlos Garcia Avello v. Belgian*, [2003] ECR I-11613; Case C-71/02, *Karner*, [2004] ECR I-3025; Case C-72/03, *Carbonati Apuani* v. *Carrara*, [2004] ECR I-8027; Case C-200/02, *Zhu and Chen v. Secretary of State for the Home Department*, [2004] ECR I- 9925; Case C-293/02, *Jersey Potatoes*, [2005] ECR I-9543; Case C-441/04, *A-Punkt Schmuckhandel v. Schmidt*, [2006] ECR I-2093; Case C-403/03, *Egon Schempp v. Finanzamt München V*, [2005] ECR I-6421; Case C-110/05, *Moped Trailers*, [2009] ECR I-519; Case C-142/05, *Mickelsson & Roos*, [2009] ECR I-4273. For a thorough critical analysis of this case law see Oliver P., Enchelmaier S. (2007) Free Movement of Goods*:* Recent Developments in the Case Law. *Common Market Law Review* **44**(3) Issue 3, pp. 649-704, where the authors have clearly explained why some of these judgments have, indeed, determined an erosion of the requirement for an interstate element.

[1534] *E.g.*, Case C-404/97, *Commission v. Portugal*, [2000] ECR 1-4897.

[1535] *E.g.*, Case C-387/92, *Banco Exterior de España*, *cit.*, para 14; Joined Cases T-204/95 and T-270/97, *EPAC v. Commission*, [2000] ECR II- 2267, para. 80; Case C-275/10, *Residex Capital IV CV v. Gemeente Rotterdam*, [2011] I-13043, para. 30; Case C-672/13, *OTP Bank Nyrt v. Magyar Állam and Magyar Államkincstár*, ECLI:EU:C:2015:185, para. 43.

soft loans,[1536] capital contributions,[1537] systems of parafiscal charges and licensing or concession fees.[1538] With respect to all these kind of measures the interested parties will surely try to argue that their potential negative impact on the public budget is too remote and uncertain.

It goes without saying that things might have been slightly different had the proposed extension of the rule of remoteness 'targeted' the appraisal of public support measures under the fourth and fifth conditions for the applicability of Article 107(1) TFEU – *i.e.*, the distortion of competition and the effect on intra-EU trade conditions. Indeed, these stages of analysis would, of course, be more suitable for undertaking a properly structured remoteness test. Still, in such a case some questions should also be answered: do we really need to apply the free movement law's rule of remoteness under the State aid regime? Have not the founding fathers of the EEC already provided for a very similar rule by defining the notion of aid in such a way that it does not cover domestic measures that do not meet the fourth and fifth conditions for applying Article 107(1) TFEU? To reach the very same outcome that a remoteness test would deliver, should it not be enough that the competent European Institutions begin to carry out a proper analysis of public support measures under these conditions?

Actually, under the State aid regime the evaluation framework would include both a qualitative assessment, as the remoteness test is, and a quantitative, data-based, appreciability threshold, which is set under the successive *de minimis* regulations.[1539] In this regard we should recall that the Court has consistently rejected the adoption of a *de minimis* rule in the internal market area of EU law, and that this might be the reason why applying a remoteness rule is so important in this context.[1540] In any event, when comparing the just-quoted free movement

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[1536] *E.g.*, Joined Cases C-62/87 and 72/87, *Exécutif régional wallon and SA Glaverbel v. Commission*, [1988] 1573, para. 4; Case T-16/96, *Cityflyer Express Ltd v. Commission*, [1998] II-757, para. 53.

[1537] *E.g.*, Case 323/82, *SA Intermills v. Commission*, [1984] 3809, para. 31; Case C-457/00, *Belgium v. Commission*, [2003] I-6931, paras 43-45 and 83-84.

[1538] *E.g.*, Case C-390/98, *H.J. Banks & Co. Ltd v. The Coal Authority* (*Banks v. The Coal Authority*), [2001] ECR I-6117; Commission Decision of 17 August 2009, State aid N 362/2009, *French toll highways - Prolongation of Concession*, OJ 2009 C 264/1, and related decisions.

[1539] Now, Commission Regulation (EU) No. 1407/2013 of 18 December 2013 on the application of Articles 107 and 108 of the Treaty on the Functioning of the European Union to *de minimis* aid (New General *de minimis* Regulation), OJ 2013 L352/1.

[1540] See, to that effect, Joined Cases 177–178/82, *Van de Haar*, [1984] ECR 1797; Case 269/83, *Commission v. France* (*Periodicals*), [1985] ECR 837; Case 103/84, *Commission v. Italy*, [1986] ECR 1759; Case C-49/89, *Corsica Ferries*, [1989] ECR 4441; Case C-21/88, *Du Pont de Nemours Italiana v. USL di Carrara*, [1990] ECR I-889; Case C-1/90, *Aragonesa*, [1991] ECR I-4151; Case C-126/91, *Yves Rocher*, [1993] ECR I-2361; C-277/91, *Ligur Carni*, [1993] ECR I-6621; Case C-412/93, *Leclerc-Siplec*, [1995] ECR I-179; Case C-265/95, *Farmers' Protests*, [1997] ECR I-6959; Case C-67/97, *Bluhme*, *cit.*; Case C-184/96, *Foie Gras*, [1998] ECR I-6197; Case C- 169/98, *Commission v. France* [2000] ECR I- 1049; Case C-112/00, *Schmidberger*, [2003] E.C.R. I-5659; Case C-212/06, *Flemish Care Insurance*, [2008] ECR I-1683.

cases where the CJ has refuted the *de minimis* rule and those cited above where it has found that the domestic measures under scrutiny met the remoteness test, there is no relevant factual distinctness. Hence, we might deem that the two tests cover the very same grounds.[1541] Let us, however, assume that the distinction between factual similarity and conceptual distinctiveness that has been put forward has some relevance for solving practical issues in an efficient way.[1542] In the words of the supporters of this distinction this simply means that, as compared with the remoteness test, under a *de minimis* test more measures that have a negligible impact on trade can be excluded from the purview of EU law.[1543] This is actually a desirable outcome since it allows for safeguarding a certain degree of Member States' regulatory power and, importantly, this seems to be the goal pursued by those scholars and Advocates General who propose also applying the rule of remoteness in the State aid field.

In conclusion, in our opinion, the above considerations evidence that the approach provided under the State aid regime for appraising the effects of the relevant domestic measures on inter-States trade ensures that Member States' sovereignty is much more safeguarded than under the free movement law's remoteness test. Actually, as has been stated, this test is "*a de minimis framework detached in form from its competition law roots and more attuned to the Court's usual approach to free movement law*".[1544] The same holds true when comparing the rule of remoteness with the methodology so far applied under the State aid regime for appreciating the impact of public support measures on the public budget.

8.2. Article 11 TFEU: an 'Objective Justification' for Sustainable Energy Measures?

[1541] In that regard, Opinion of Advocate General Jacobs of 11 July 2002 in Case C-112/00, *Schmidberger*, *cit.*, para. 65, and Opinion of Advocate General Jacobs of 24 November 1994 in Case C-412/93, *Leclerc-Siplec*, *cit.*, paras 42 ff. However, the Court has recently confirmed the distinction between qualitative remoteness test and *de minimis* in Case C-212/06, *Flemish Care Insurance*, *cit.*, para. 52.

[1542] See, in that respect, Opinion of Advocate General Fennelly of 16 June 1998 in Case C-67/97, *Bluhme*, *cit.*, para. 19; Opinion of Advocate General Fennelly of 15 June 2000 in Case C-74/99, *Imperial Tobacco*, fn. 126; Oliver P. (2011) Of Trailers and Jet Skis: Is the Case Law on Article 34 TFEU Hurtling in a New Direction?. *Fordham International Law Journal* **33**(5) 1423-1471, at p. 1432.

[1543] *Ibidem*. See also, to that effect, the clear distinction between the situations which the *de minimis* and the remoteness rules apply to provided by Professor Shuibhne in Shuibhne N. N. (2013) *The Coherence* of *EU Free Movement Law*: *Constitutional Responsibility and the Court of Justice*, *cit.*, at p. 157. An evident example of such distinction is actually provided by the CJ's reasoning in Case C-67/97, *Bluhme*, *cit*., paras 20-23.

[1544] Shuibhne N. N. (2013) *The Coherence* of *EU Free Movement Law*: *Constitutional Responsibility and the Court of Justice*, *cit.*, at p. 165. Similarly, Opinion of Advocate General Jacobs, *cit.*, in Case C-112/00, *Schmidberger*, *cit.*, para. 65.

In this paragraph we will deal with the possible legal and practical implications of the codification of the environmental integration clause under the Treaty when addressing a national support measure at the classification stage. More precisely, this clause is now enshrined in Article 11 TFEU and explicitly sets out a legal duty for the European Institutions to integrate environmental protection requirements into the policies and activities of the EU,[1545] "*in particular with a view to promoting sustainable development*".[1546]

Some EU law experts have, therefore, argued that the implications of the environmental integration clause include the obligation to prioritise environmental protection over other conflicting objectives whenever it clashes with them.[1547] In their opinion, the foregoing should apply irrespective of the importance of the other Treaty objectives, which environmental protection should, instead, be balanced against. The legal duty provided under Article 11 TFEU should, therefore, also impact on the competition and market integration policy goals that are at the heart of assessing State support measures.[1548] We do not definitely subscribe to this reading of the environmental integration principle. Indeed, the effects of a national support measure on competition and trade – and, thus, the underlying EU objectives – have to be properly weighed against environmental goals under Article 107(3)(c) TFEU, as we have explained in Part II of this doctoral thesis.

However, apart from the above explicit and easily rebuttable allegations, other arguments have been put forward that, if endorsed, would generate the very same result of prioritising environmental protection objectives over EU competition and internal market goals. Indeed, some scholars have claimed that, on account of the environmental integration principle,

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[1545] For an exhaustive analysis of the possible legal significance of Article 11 TFEU for European Institutions and Member States see, *inter alia*, Krämer L. (2013) 'The Integration Challenge: Integrating Environmental Concerns into other EU Policies' and McIntyre O. (2013) 'Implementing Article 11 TFEU in EU Policy', in Kingston S. (ed.) *European Perspectives on Environmental Law and Governance*. Abingdon/New York: Routledge, pp. 83-101 and 125-144; Sjåfjell B. (2015) 'The Legal Significance of Article 11 TFEU for EU Institutions and Member States', in Sjåfjell B., Wiesbrock A. (eds) *The Greening of European Business under EU Law: Taking Article 11 TFEU Seriously, cit.*, pp. 51-72; Durán G., Morgera E. (2012) *Environmental Integration in the EU's External Relations*. Oxford: Hart Publishing, pp. 25 – 54.

[1546] Article 11 TFEU reads as follows: "*Environmental protection requirements must be integrated into the definition and implementation of the Union policies and activities, in particular with a view to promoting sustainable development*".

[1547] For explicit allegations to that effect see, *inter alia*, Schumacher T. (2001) The Environmental Integration Clause in Article 6 of the EU Treaty: Prioritising Environmental Protection. *Environmental Law Review* **3**(1), 29-43.

[1548] *Ibidem.* The author explicitly states that the word 'implementation' provided under Article 11 TFEU extends to the operative phase of other Treaty provisions the requirement to prioritise environmental protection and that this phase includes assessing the compliance of domestic measures with the Treaty provisions on quantitative restrictions and state aid.

sustainable energy objectives and other eco-friendly purposes deserve peculiar treatment in comparison to different EU goals when addressing domestic measures under all Union policies.[1549] Importantly, some of them explicitly contend that the above holds true when assessing a national support regime at all stages of State aid analysis, including the identification of State aid, and that their allegations find support in the EU jurisprudence on the selectivity and State resources requirements.[1550]

Both whether the outcomes of cases are positive or negative, and whether or not the competent European Institutions have explicitly endorsed a similar reasoning, seem irrelevant. Indeed, these scholars recognise that the CJEU and the Commission have failed to provide an adequate conceptual basis for allowing sustainable energy and environmental goals to be taken into account at the classification stage. However, they maintain that what is relevant is that the mentioned European Institutions have the intention of shielding and have effectively excluded certain domestic measures promoting sustainable energy and other eco-friendly investments from the application of Article 107(1) TFEU. Actually, in their view, the Court and the Commission have done so by leveraging on certain elements of the State aid test, such as the selectivity and the State resources requirements, which allegedly provide grounds for using justificatory arguments with respect to environmental measures.[1551] This is deemed to be an

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[1549] See, *inter alia*, Wiesbrock A. (2015) 'Sustainable State Aid: a Full Environmental Integration into the EU's State Aid Rules?', in Sjåfjell B., Wiesbrock A. (eds) *The Greening of European Business under EU Law: Taking Article 11 TFEU Seriously*, *cit*., pp. 75-96; and Gormley L. W. (2005), 'The Genesis of the Rule of Reason in the Free Movement of Goods', in Schrauwen A. (ed.) *Rule of Reason*: *Rethinking another Classic of EC Legal Doctrine*, *cit.*, pp. 21-33, suggesting that, although in the internal market field of EU law the dichotomy between Treaty derogations and mandatory requirements has to be maintained, an exception solely for environmental protection goals is feasible

[1550] Wiesbrock, for instance, has quoted several cases where, in his view, the Court has leveraged on the selectivity and the State resources requirements to provide an adequate, although not explicit, application of the environmental integration clause. However, many of the decisions quoted are those on energy support measures rendered by the Commission decisions after the *PreussenElektra* ruling, which, as already extensively explained, are rather confusing and cannot be considered as providing any evidence about the path to be followed under the State origin criterion. Apart from that consideration, in our view it is relatively easy to question the interpretation of the decisions on sustainable energy support schemes and other environmental measures provided by the scholars supporting an application of Article 11 TFEU at the classification stage. Indeed, the interpretation finds no grounds in the wording of the competent European Institutions in the cases under discussion. Neither it can be deemed corroborated by subsequent EU decisional practice. In the State aid parts of the decisions most frequently quoted, in fact, neither the CJ nor the Commission ever mentioned Article 11 TFEU or alluded to environmental and energy-related objectives. See, Wiesbrock A. (2015) 'Sustainable State Aid: a Full Environmental Integration into the EU's State Aid Rules?', in Sjåfjell B., Wiesbrock A. (eds) *The Greening of European Business under EU Law: Taking Article 11 TFEU Seriously*, *cit*., pp. 75-96.

[1551] *Ibidem.* This view is actually shared by several scholars, although not with specific reference to energy support measures or the environmental integration clause. See, for instance, de Cecco F. (2012) 'State Aid and Self-Government: Regional Taxation and the Shifting Space of Constitutional Autonomy', in Shuibhne N. N., Gormley L. W. (eds) *From Single Market to Economic Union: Essays in Memory of John A. Usher*, *cit.*, and Rubini L.

implicit recognition by the European Institutions of their allegation that an exception from the *objective* exercise that characterises the definition of aid should be provided with respect to sustainable energy and environmental goals, on account of the legal obligation provided under Article 11 TFEU. More precisely, in their opinion, this obligation should be read in conjunction with the sustainable development and environmental protection objective, provided under Article 3(3) TEU, and the duty to ensure consistency between the Union's policies and activities, now established under Article 7 TFEU.[1552] The result is that the mandatory nature of these articles requires a case-by-case evaluation of the suitability of the relevant measures for achieving the targeted environmental objective at the classification stage also; that is to say, it calls for a reconsideration of the effect-based doctrine with respect to environmental protection and energy-related objectives.[1553] The EU State aid regime would not otherwise comply with Article 11 TFEU.

A similar understanding of Article 11 TFEU would lead to the very same practical effects that the rule of reason doctrine would bring about, and would run counter to the principles of the objective nature of the concept of aid and of the irrelevance of the aim of the State measure, which have been clearly endorsed by the EU jurisprudence.[1554] The only difference lies in the fact that these consequences would be confined to the assessment of environmental and energy-related measures. This makes the topic even more important for the purposes of our analysis. Hence, we should analyse whether the CJEU and the Commission have ever shielded national measures promoting sustainable energy and other eco-friendly investments from application of the State aid prohibition on the basis of the environmental integration clause.

The first problem to be addressed is, however, whether Article 11's sphere of application can be widened to such a degree that it can even end up bearing on Treaty provisions that do not provide any scope for environmental policy goals to be taken into account. This is, in fact,

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(2009) The 'Elusive Frontier': Regulation under EC State Aid Law, *cit. Contra*,Opinion of Advocate General Mengozzi delivered on 17 July 2008 in Case C-487/06P, *British Aggregates, cit.*, maintaining that "[w]*hile in some cases the Community judicature has taken into account, at the classification stage, the intentions of the national legislature and the objectives pursued by the measure adopted, it has done so solely for the purpose of determining whether the conditions establishing the existence of aid were present, and not in order to exclude from the outset the possibility that the measure was covered by Article 87(1) EC*".

[1552] In that regard see also, Bjørnebye H. (2010) *Investing in EU Energy Security*: *Exploring the Regulatory Approach to Tomorrow's Electricity Production*. The Netherlands: Kluwer Law International, and Kingston S. (ed.) *Greening EU Competition Law and Policy*. Cambridge: Cambridge University Press.

[1553] See, Wiesbrock A. (2015) 'Sustainable State Aid: a Full Environmental Integration into the EU's State Aid Rules?', in Sjåfjell B., Wiesbrock A. (eds) *The Greening of European Business under EU Law: Taking Article 11 TFEU Seriously*, *cit.*, pp. 75-96.

[1554] In that regard see Chapters 2 and 7.

certainly the case for the first paragraph of Article 107 TFEU. A negative answer in that respect would, thus, have the effect of directly dismissing any allegation in favour of the relevance of environmental considerations for classifying a measure as State aid. Therefore, we will briefly deal with this issue.

In this regard, we shall first of all recall that Article 11 TFEU is included in Part One, Title II of the TFEU, which is headed "*Provisions Having General Application*". Nonetheless, the Treaty does not specify the precise legal status of the environmental integration clause.[1555] Whether it should be considered as a general principle of EU law is, therefore, only for the CJEU to establish. However, the Court has not yet explicitly considered the issue. Actually, the conventional wisdom now holds that the integration clause enshrined in Article 11 TFEU simply constitutes a programmatic provision.[1556] In any event, should this clause be regarded as a general principle of EU law,[1557] this would not mean that it would amount to a rule able to dismantle the State aid control system neatly framed by the founding fathers of the EEC. Indeed, as with all the general principles of EU law, the scope of the environmental integration clause would still be limited by the wording of the Treaty provisions whose tenor it allegedly specifies.[1558] These principles are, in fact, nothing more than tools for interpreting other provisions of the Treaties and of EU secondary legislation, including those on competition policy. According to the CJEU case law they cannot, therefore, be used as instruments for construing *contra legem* other Treaty articles.[1559]

[1555] According to some esteemed experts in environmental law, there are no other provisions that can be assimilated to Article 11 TFEU, and it should therefore be distinguished from all the other Treaty provisions for classification purposes also. See, in that respect, Krämer L. (2002) *Manuale di diritto comunitario per l'ambiente*. Milan: Giuffré Editore, at p. 176.

[1556] For an exhaustive analysis in that regard see Tridimas T. (2007) *The General Principles of EU Law*. Oxford: Oxford University Press, and Groussot X. (2006) *General Principles of Community Law*. Groningen: Europa Law Publishing. However, some authors have provided a number of arguments in favour of a revision of the mentioned conventional wisdom. See, for instance, Dhondt N. (2003) *Integration of Environmental Protection into Other EC Policies*, Groningen: Europa Law Publishing; and Wasmeier (2001) 'The Integration of Environmental Protection as a general Rule for Interpreting Community Law'. *Common Market Law Review* **38**(1) 159-177.

[1557] Actually, long ago the integration clause was considered a binding rule by some scholars and not a mere programmatic provision: see, Hailbronner K. (1993) 'EG-Verkehrspolitik und Umweltschutz', in Rengeling H.W. (ed.) *Umweltschutz und andere Politiken der Europaischen Gemeinschaft*. Cologne: Carl Heymanns Verlag, pp. 149-170; Kramer L. (1995), *EC Treaty and Environmental Law*. London: Sweet and Maxwell, at p. 58.

[1558] With regard to the limited effects the environmental integration clause can have on other Treaty provisions see, Winter G. (1996) On the Effectiveness of the EC Administration: The Case of Environmental Protection. *Common Market Law Review* **33**(4) 689-717.

[1559] For general findings on the intrinsic limitations in the application of the principles of EU Law see Case C-105/03, *Pupino*, [2005] ECR I-5285, para. 47, where the Court stated that, although the principle of consistent interpretation is one of the most fundamental and well-established principles of EU Law, it cannot serve as the basis for an interpretation of national law *contra legem*.

Hence, if we apply this reading of the general principles of EU law to the relationship between Article 11 TFEU and the definition of aid, the result may at the very most be that the environmental integration clause should be understood as a requirement to be balanced against all the other requirements provided under the first paragraph of Article 107 TFEU.[1560] However, in our view, such an understanding of Article 11 TFEU would also clash with the very wording of Article 107(1) TFEU, as interpreted under the Court case law. Indeed, as extensively explained in this and other parts of this doctoral thesis, this provision does not provide any scope for environmental policy goals to be taken into account. Neither it can be alleged that the phrase "[s]*ave as otherwise provided in the Treaties*" might also refer to Article 11 TFEU. As a result, in the author's opinion, when we decide to consider the integration clause as a general principle, maintaining that it can have some effects on the qualification of State measures as aid is tantamount to stating that it can be used as an instrument for construing *contra legem* Article 107(1) TFEU. Any CJEU judgment subscribing to a similar statement would, therefore, amount to a judicial amendment to a Treaty provision, which does not seems to be justifiable as a legitimate application of the legal duty set out under Article 11 TFEU. It is, in fact, only for the European Council to adopt a decision amending the TFEU's articles on the substantive policies and actions of the EU, by following the simplified revision procedure recently introduced by the Treaty of Lisbon and provided under Article 48(6) TEU.[1561]

Actually, the CJ has so far struck out any explicit or implicit attempt by the General Court and the Advocates General to extend the scope of the environmental integration clause to such a degree as to result in a *de facto* revision of the Treaty articles regulating the State aid regime and granting free movement rights.

Regarding the State aid regime, we might recall the General Court rulings delivered in the *British Aggregates* and *Dutch NOx* cases, both of which we have already analysed in several parts of this work.[1562] What we have not yet explained is that the General Court also justified its finding that the disputed environmental measures did not fulfil the selectivity criterion on

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[1560] A clear-cut explanation of the limited impact the environmental integration clause can have on the Treaty provisions on competition law when it is considered a principle of EU law is again provided by Winter. See Winter G. (1996) On the Effectiveness of the EC Administration: The Case of Environmental Protection. *cit.*, at 700.

[1561] Before the Treaty of Lisbon entered into force the process was much more demanding. Indeed, only one revision procedure was provided under Article 48 TCE, which, save for certain important improvements, roughly corresponded to the current ordinary revision procedure, disciplined under Article 48 TUE, paragraphs 2 to 5. This was also the procedure that had to be applied to amendments of the EU's internal policies and actions.

[1562] See, Case T-210/02, *British Aggregates v. Commission*, [2006] ECR II-2789, and Case T-233/04, *Netherlands v. Commission*, *cit.*

the ground that, in its view, the European Institutions have to take the environmental integration clause into account in conjunction with Article 107(1) TFEU. Indeed, according to this Court, Article 11 TFEU provides that environmental protection requirements have to be integrated even into the definition and implementation of arrangements ensuring that competition is not distorted within the internal market.[1563] The CJ has, however, rightly rejected the General Court's reasoning, stating that it amounted to an error of law and a clear misconstruction of the concept of aid.[1564] Indeed, as clarified by the CJ, the generic obligation provided under Article 11 TFEU to take into consideration environmental protection requirements does not justify excluding environmental and energy-related measures from the scope of the prohibition laid down in Article 107(1) TFEU. According to this Court, in fact, the eco-friendly objectives that such measures might pursue can be usefully taken into account under the compatibility assessment.[1565]

As a result of the foregoing, the General Court has also reconsidered its position regarding the role that Article 11 TFEU might play under the definition of aid. In fact, in more recent rulings dealing with sustainable energy support mechanisms, such as the *Austrian Green Electricity Act 2008* and the *EEG 2012* cases, it has not even quoted Article 11 TFEU.[1566] Actually, it is worth stressing that in the *Austrian Green Electricity Act 2008* judgment the General Court clearly stated that maintaining that Member States are free to set their priorities with respect to environmental protection objectives and to balance them with the goals of the State aid regime is tantamount to disregarding Article 107(1) TFEU.[1567]

Turning to the CJ attitude towards any 'intrusion' of the environmental integration clause into the well-established understanding of the Treaty's free movement provisions, clear examples are again provided by judgments addressing certain FIT and GC schemes that have been adopted for fostering the electricity from RES and CHP installations. This is the case, for

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[1563] Case T-210/02 *British Aggregates v. Commission*, *cit.*, paras 117 and 144-146, and Case T-233/04, *Netherlands v. Commission*, *cit.*, paras 99-100.

[1564] See, Case C-487/06P, *British Aggregates*, *cit.*, paras 84-93; Case C-279/08P, *Dutch NOx, cit.*, paras 75 and 79. the Opinion of Advocate General Mengozzi delivered on 17 July 2008 in Case C-487/06P, *British Aggregates*, *cit.*, paras 95-102 and the Opinion of Advocate General Mengozzi delivered on 22 December 2010 in Case C-279/08P, *Dutch NOx*, *cit.*, para. 63.

[1565] Case C-487/06P, *British Aggregates*, *cit.*, paras 84-85 and 90-92; Case C-279/08P, *Dutch NOx*, *cit.*, para. 75. See, in a similar vein – although not addressing the environmental integration clause – Case C-409/00, *Spain* v *Commission*, *cit.*, paras 53-54, and Case T-109/01, *Fleuren Compost*, *cit.*, para. 54.

[1566] Respectively, Case T-251/11, *Austrian Green Electricity Act 2008*, *cit.*, and Case T-47/15, *German EEG 2012*, *cit.* See also Case T-172/14 R, *Stahlwerk Bous*, *cit.*

[1567] See, Case T-251/11, *Austrian Green Electricity Act 2008*, *cit.*, para. 118.

instance, in the *PreussenElektra, Essent Belgium* and *Ålands Vindkraft* judgments.[1568] As we have seen in Chapter 6, in the internal market part of these rulings the Court seems to have recognised the widely perceived need to grant more flexibility to Member State policies aimed at supporting the generation of green electricity.[1569] Nonetheless, while in *PreussenElektra* it stressed that Article 11 TFEU provides for the integration of environmental protection requirements into the definition and implementation of other Union's policies,[1570] in the more recent *Ålands Vindkraft* and *Essent Belgium* rulings it did not even go that far.[1571] Actually, in none of these cases has the CJ espoused the Advocates General Jacobs' and Bot's calls to rely on Article 11 TFEU as a legal basis for revising the justification framework established under Article 36 TFEU for directly discriminatory restrictions of free movement rights.[1572] More precisely, Advocate General Bot has held that the environmental integration clause justifies the pre-eminence of the environmental protection imperative requirement over other considerations and requires different treatments from other mandatory requirements.[1573] Hence, alongside with other Advocates General who have dealt with eco-friendly national measures,[1574] Advocates General Jacobs and Bot have prompted the Court to blur the boundaries of the traditional distinction between distinctly and indistinctly applicable measures in terms of available justifications, at least with regard to environmental objectives.[1575] Indeed, while the possible

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[1568] Case C-379/98, *PreussenElektra*, *cit.*; Joined Cases C-204/12 to C-208/12, *Essent Belgium*, *cit.*; Case C-573/12, *Ålands Vindkraft AB v Energimyndigheten* (*Ålands Vindkraft*), ECLI:EU:C:2014:2037. See, to that effect, also Case C-195/12, *IBV & Cie SA v. Région wallonne* (*IBV & Cie*), ECLI:EU:C:2013:598, para. 56.

[1569] *Ibidem*, respectivelly, paras 73-74, 91-95 and 78-82.

[1570] See Case C-379/98, *PreussenElektra*, *cit.*, para. 76.

[1571] See, Case C-573/12, *Ålands Vindkraft*, *cit.*, para. 81, where the Court mentioned only Article 194(1)(c) TFEU, and Joined Cases C-204/12 to C-208/12, *Essent Belgium*, *cit.*, para. 94, where it simply stated that renewable energy support mechanisms are capable of contributing to attaining the objectives set out in Articles 11 and 194(1) TFEU. See, to that effect, also Case C-195/12, *IBV & Cie*, *cit.*, para. 59.

[1572] See, Opinion of Advocate General Jacobs delivered on 26 October 2000 in Case C-379/98, *PreussenElektra*, *cit.*, paras 220-234, whose proposed model has also lately been labelled as normative appealing by Stephen Weatherill in Weatherill S. (2012) Free Movement of Goods, *cit.* See also, Opinion of Advocate General Bot delivered on 8 May 2013 in Joined Cases C-204/12 to C-208/12, *Essent Belgium*, *cit.*, paras 92-97, recently supported, for instance, by Steinbach A., Brückmann R. (2015) Renewable Energy and the Free Movement of Goods. *Journal of Environmental Law* **27**(1) 11.

[1573] See Opinion of Advocate General Bot, *cit.*, in Joined Cases C-204/12 to C-208/12, *Essent Belgium*, *cit.*, paras 96-97. This view is actually shared by Gormley L. W. (2005), 'The Genesis of the Rule of Reason in the Free Movement of Goods', in Schrauwen A. (ed.) *Rule of Reason*: *Rethinking another Classic of EC Legal Doctrine*, *cit.*, suggesting that, although the dichotomy between Treaty derogations and mandatory requirements has to be maintained, an exception solely for environmental protection goals is feasible.

[1574] Recently, Opinion of Advocate General Trstenjak delivered on 16 December 2010 in Case C-28/09, *Air quality*, *cit.*, paras 83 and 89-91.

[1575] In reality, the CJ has frequently been asked to expressly confirm the applicability of all the imperative requirements to distinctly applicable measures. See, Opinion of Advocate General Jacobs in Case C-379/98,

justification of distinctly applicable measures is confined to the derogation grounds listed in Article 36 TFEU, which do not expressly include environmental protection, in order to defend non-discriminatory restrictions the Member States can invoke also the mandatory requirements elaborated by the Court case law. [1576]

In the *PreussenElektra* ruling, and in all the other pertinent judgments, such as the recent *Air quality* and *Essent Belgium* cases,[1577] the CJ has circumvented the issue by either incorrectly classifying the eco-friendly legislation as indistinctly applicable or directly sidestepping the classification question.[1578] However, it has never reversed the above-explained conventional dichotomy. Indeed, as also recognised by distinguished environmentalists, extending the application of certain mandatory requirements to directly discriminatory restrictions would have amounted to a judicial amendment to Article 36 TFEU.[1579] As previously explained, in fact, a similar approach would not have been defensible as a legitimate application of the environmental integration principle provided under Article 11 TFEU. Moreover, importantly, consistency reasons would have required the Court to extend the scope of application of all the imperative requirements of public interest to discriminatory restrictions on trade.[1580] In the

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PreussenElektra, *cit.*, and Opinion of Advocate General Jacobs delivered on 21 March 2002 in Case C-136/00, *Rolf Dieter Danner*, [2002] ECR I-08147. A.G. Jacobs' arguments had in some ways been previously advanced by distinguished academics: see, *inter alia*, Jans J. H. (2000) *European Environmental Law.* Groningen: Europa Law Publishing, p. 251, and Oliver P. (1999) Some Further Reflections on the Scope of Articles 28–30 (ex 30–36) EC, *cit*. Moreover, they were further elaborated on shortly after the *PreussenElektra* ruling by, *ex plurimis*, Cruz B. J., de la Torre F. C. (2001) A Note on PreussenElektra, *cit.*; Oliver P., Jarvis M. A. (2003) *Free Movement of Goods in the European Community: under Articles 28 to 30 of the EC Treaty*, *cit.*, pp. 216-220; and Davies G. (2003) *Nationality Discrimination in the European Internal Market.* The Hague: Kluwer Law International, pp. 22-27, who has argued that a distinction should be drawn between substantively and simply formally discriminatory measures, such as the StrEG 1998 under scrutiny in the *PreussenElektra* case.

[1576] For a thorough analysis of this traditional approach see, Barnard C. (2013) *The Substantive Law of the EU: The Four Freedoms*, *cit.*, chs. 4 and 6, and, with a specific focus on the energy sector, Delvaux B. (2013) *EU Law and the Development of a Sustainable, Competitive and Secure Energy Policy: Opportunities and Shortcomings*. Antwerp: Intersentia, pp. 170-222, and de Sadeleer N. (2014) *EU Environmental Law and the Internal Market*, *cit.*, pp. 259-308.

[1577] Case C-28/09, *Air quality*, *cit.* and Joined Cases C-204/12 to C-208/12, *Essent Belgium*, *cit.*

[1578] See, *inter alia*, Case C-2/90, *Walloon Waste*, *cit.*; Case C-203/96, *Dusseldorp*, *cit.*; Case C-389/96, *Aher-Waggon*, *cit.*; and, more recently, Case C-28/09, *Air quality*, *cit.*, and in Joined Cases C-204/12 to C-208/12, *Essent Belgium*, *cit.*

[1579] See, Johnston A., Neuhoff K., Fouquet D., Ragwitz M., Resch, G. (2008*)* The Proposed new EU Renewables Directive: Interpretation, Problems and Prospects. *European Energy and Environmental Law Review* **17**(3) 126-145. *Contra*, Delvaux B. (2013) *EU Law and the Development of a Sustainable, Competitive and Secure Energy Policy: Opportunities and Shortcomings*, *cit.*, p. 217, providing a different explanation of A.G. Jacobs' call for relying on Article 11 TFEU as a legal basis for blurring the mentioned dichotomy with regard to environmental protection.

[1580] Likewise, Johnston A., Neuhoff K., Fouquet D., Ragwitz M., Resch, G. (2008*)* The Proposed new EU Renewables Directive, *cit. Contra*, Gormley L. W. (2005), 'The Genesis of the Rule of Reason in the Free Movement of Goods', in Schrauwen A. (ed.) *Rule of Reason*: *Rethinking another Classic of EC Legal Doctrine*,

author's opinion, there is just one way for the CJ to solve the issue with respect to certain important goals, and to exit the current status of legal uncertainty that its abovementioned inconsistent and ambiguous attitude has generated in the internal market field of EU law, without, however, acting in breach of the Treaty. This is to reverse the narrow reading it has so far applied to the derogation grounds spelled out in Article 36 TFEU. For instance, to give relevance to the pre-eminent sustainable energy goals, the CJEU might simply broaden the scope of the "*health and life of human, animals and plants*" derogation provided under Article 36 TFEU in a way that would enable such goals to fit within it. Actually, this approach has been recommended by several distinguished scholars. [1581] The fact that certain directly discriminatory measures would then barely pass the proportionality assessment – as would be the case with respect to FIT schemes framed like the German FIT scheme under scrutiny in the *PreussenElektra* case –[1582] should not be regarded as a problem. Indeed, first of all, this is precisely the purpose of the proportionality test to be applied in EU internal market and State aid law. The ultimate aim of this test and the solution for passing it is the revision by the concerned Member State of the elements of the measure that are beyond what is necessary to protect the public interest at issue. Secondly, cases like *Essent Belgium* and *Ålands Vindkraft* prove that tradable GC schemes fostering electricity from RES and CHP installations can certainly pass the proportionality test when they are properly framed.[1583]

As a result of all the above considerations, and in contrast to the view expressed by some distinguished academics,[1584]we do believe that conformity by a certain Member State action to an EU interest or general principle, even one as relevant as environmental integration, should not have any role to play when determining whether this action qualifies as State aid. Our conclusion also finds support in the words of some of those scholars who place great emphasis

cit., pp. 21-33, suggesting that, although the dichotomy between Treaty derogations and mandatory requirements has to be maintained, an exception solely for environmental protection goals is feasible.

[1581] See, *inter alia*, Johnston A., Block G. (2012) *EU Energy Law*, *cit*., pp. 347-348, and Jacobs F. (2006) The Role of the European Court of Justice in the Protection of the Environment, *cit*. Regarding the express derogations from other free movements rights, suffice it here to recall that Articles 45(3), 52(1) and 62 TFEU include "*public health*" among the justification grounds.

[1582] This is clearly evidenced by the proportionality assessment of the German FIT scheme provided by A.G. Jacobs. See A.G. Jacobs Opinion, *cit.*, paras 234-237. The same might be deemed true for purely environmental measures: see the negative result on proportionality in Cases C-463/01, *Commission v. Germany*, [2004] ECR I-11705, and C-320/03, *Commission v. Austria*, [2005] ECR I-9871.

[1583] See, Joined Cases C-204/12 to C-208/12, *Essent Belgium*, *cit.*, paras 96 ff., and Case C-573/12, *Ålands Vindkraft*, *cit.*, paras 83 ff.

[1584] Biondi A. (2013) State Aid is Falling Down, Falling Down: an Analysis of the Case Law on the Notion of Aid, *cit*., at 1732.

on the fact that environmental protection requirements should have an impact on all other potentially conflicting objectives, including the competition policy goals which are at the heart of the assessment of State measures and conducts of undertakings under Articles 101, 102, 106 and 107 TFEU.[1585] Actually, some eco-friendly authors have even stated that a different attitude towards the definition of aid would certainly result in the implementation of support measures which appear to be energy-efficient and environmentally effective but, in reality, are inconsistent with Article 11 and the polluter-pays principle.[1586]

[1585] See, *ex plurimis*, Kingston S. (2011) 'Why Environmental Protection Goals Should Play a Role in EU competition policy: a legal systemic argument' and 'State aid' in Kingston S. (ed.) *Greening EU Competition Law and Policy*. Cambridge: Cambridge University Press, *cit.*; de Sadeleer N. (2014) 'Competition Law and the Environment: Part III Introduction', 'State Aids and Environmental Protection' and 'Part III Conclusions' in de Sadeleer N. (ed.) *EU Environmental Law and the Internal Market*. Oxford: Oxford University Press.

[1586] *Ibidem*.

CONCLUDING REMARKS

The starting point of this doctoral thesis was an analysis of the reasons, which appear to be corroborated by scientific evidence and supported by strong consensus at the international level, underlying the efforts made by the European Union to adopt binding international commitments and targets in the environmental and energy fields.

The key finding of the foregoing was a recognition of the significant differences and diverging results emerging from cost-benefit analysis in connection with the implementation of policies purporting to enable a transition to a broader and more sustainable mix of energy sources, in general, and renewable energy systems, in particular. In fact, a wide catalogue of international actors, including certain developed and emerging economies, have embraced a conservative view whereby the costs associated with environmentally friendly policies significantly outnumber the potential benefits thereof. On the other hand, certain countries have recognised the need to implement a comprehensive set of measures to counteract the negative externalities of increasing levels of greenhouse gases emissions. In particular, the European Union has been a front-runner with respect to the latter. However, it appears that, at least in the first stage, the European Union has failed to adequately factor in security of supply challenges, infrastructural needs and carbon leakage and competitiveness issues in the process, leading to the establishment of ambitious policy objectives with respect to an environmentally mindful energy mix.

The expansive set of policies described above has required substantial financial support at State level, the vast majority of which has been channelled towards renewable sources, identified as the most efficient and cost-effective available technological option. The scale of the state-financed aid, however, has quickly reached excessive levels, despite the sophisticated and comprehensive framework established by the European Union to govern State aid. Our analysis identified two key factors underlying the foregoing failure to steer public intervention in the energy market towards aid measures addressing market failures. First, a notification deficit, the affirmation of which was also facilitated by the jurisprudence of the Court of Justice. Second, the previously-applicable, renewable-centric, compatibility framework, lacking *ad hoc* provisions for the assessment of infrastructural needs and stipulating a case-by-case burdensome authorisation process in connection therewith.

Against the above mentioned background, which was discussed in depth throughout the first part of this doctoral thesis, we then attempted a comprehensive analysis of the revised

compatibility framework applicable to energy aid measures, established in the context of the State aid Modernisation (SAM) initiative and the additional reforms implemented in the period 2012-2014.

The third part of this thesis consisted of an extensive critical review of EU court judgments and decisions made by the Commission on energy aid measures that have elaborated on the notion of energy aid by narrowing down its scope and setting strict boundaries to super-national jurisdiction over energy-support regimes. With respect to the foregoing, and with a view to putting the research question into a forward-looking perspective, in the last part of the thesis we evaluated certain theories and interpretations of the case law that, if embraced by EU courts, would further restrict the perimeter of the State aid review.

On the basis of all the foregoing, certain actions and initiatives purporting to remedy the remaining deficiencies of the new compatibility framework to foster "good aid" in the energy field may be identified and will be described below. Moreover, the same exercise will be carried out with a view to identifying what, in the author's view, is the best interpretative option for the notion of energy aid.

1. Compatibility framework: the way forward

An analysis of the new compatibility framework set out in the period 2012-2014 has been carried out at two levels.

The first, more general, level of analysis was aimed at considering whether the new EU State aid provisions governing the compatibility assessment of national energy support measures are able to overcome the issues associated with the previous regime. That is to say, whether they provide sufficient, clearly defined, simplified and effective grounds for dealing with the market failures and challenges currently faced by the energy sector and described in Part I of this doctoral thesis. In the author's opinion, in fact, a positive answer to this question would, first of all, mean that Member States are, in principle, incentivised to comply with the State aid regime and, thus, the notification deficit discussed throughout the thesis might be reduced. Moreover, a compatibility framework having the mentioned characteristics would steer public intervention in energy markets towards aid measures addressing market failures or reacting to the challenges faced by the relevant industry based on a clear long-term strategy. Our findings with respect to this level of analysis are, therefore, twofold.

A second, more specific, level of analysis concerned certain types of energy aid measures, specifically selected on the basis of their relevance in terms of both their 'supplementary' role in the pursuit of energy and climate change policy objectives and the potential obstacles they might pose to other goals set forth in the Energy Union Communication.[1587]

We will now briefly recall the most important findings under the two levels of analysis and, where relevant, we will identify potential remedial actions that, in our opinion, might be adopted within the EU State aid regime. More precisely, the proposed corrective actions are aimed at allowing the State aid control system to act as an effective catalyser of well-tailored support measures facilitating the pursuit of energy policy objectives in an efficient and cost-effective manner.

First level of analysis: first set of findings

The first conclusion emerging from our analysis of the recent far-reaching reforms of the framework for State aid control of energy aid measures is that Member States have no more reason to fear complying with the notification requirement mandated by Article 108(3) TFEU. Indeed, first of all, numerous grounds for exemption from the obligation to notify energy aid measures are now provided. Hence, most of the measures commonly employed by national granting authorities to support the energy sector, in general, and energy market operators and intensive users, in particular, can now be implemented without prior authorisation. Moreover, regarding the energy aid measures still subject to notification, most of these now fall within the scope of one – or even two – of the soft law instruments governing the compatibility assessment. The latter have, in fact, been reformed, broadened and further increased in number to amplify transparency and legal certainty. This should address the concerns arising under the previous regime in connection with the case-by-case authorisation process under Articles 107(3)(b) and (c) TFEU, which was then still being applied with respect to certain critical forms of energy aid. Indeed, this process was rather onerous, produced uncertain results and was deemed to potentially jeopardise support for important national policies and technological developments. In that regard it is also worth noting that, as we have evidenced, the great part of the notified

[1587] See, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank of 25 February 2015, *A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy*, COM(2015) 80 final, section 2.5.

energy aid measures adopted during the period of application of the reformed State aid framework have passed the compatibility test. Moreover, other than a few exceptions, when addressing most of these measures the Commission has not even opened a formal investigation procedure.

As a consequence of the foregoing, however, certain overlaps might be and have been detected among the currently applicable various grounds for authorisation. Moreover, in the author's opinion, the flexibility afforded in certain areas to intrinsically interventionist Member States might be undue. Member States, in fact, have declared that in 2014 they spent more than 43.5 billion EUR on environmental protection and energy-related objectives, amounting to more than 0.3 per cent of the EU-28 GDP in the reference year.[1588] Importantly, the data still does not include all information but only that on aid measures subject to annual reporting obligations, and the greatest part of public funds spent in the reference year financed measures supporting RES-e generators.

The foregoing findings are corroborated by the analysis under Part II of this doctoral thesis with respect to the broad array of regulations, decisions and communications adopted by the Commission in the time period 2012-2014, which have shaped a new, clearer and wider landscape for State aid control of energy aid measures.

The first key and far-reaching element of reform is the extensive reshaping and improvement of the analytical framework applicable to several State aid measures as part of the SAM initiative. Indeed, one of the ultimate goals of the initiative is to align the State aid provisions to the objectives of the Europe 2020 Strategy, which are also the headline targets of the 2020 Climate and Energy Package. More precisely, these objectives encompass the promotion of a resource-efficient, green and competitive economy, and the achievement of climate and energy sustainability targets in a cost-effective way.[1589]

With specific reference to the substantive rules governing the assessment of energy aid measures, it is, first of all, worth recalling that the scope of the environmental category of aid

[1588] The relevant figures on both absolute amounts and in terms of percentage of GDP are available at http://ec.europa.eu/eurostat/tgm_comp/refreshTableAction.do?tab=table&plugin=1&pcode=comp_sa_01&language=en (accessed 30 October 2016).

[1589] The Europe 2020 Strategy includes, among the targets to be met by 2020, a 20 per cent reduction in Union greenhouse gas emissions compared to 1990 levels, an increase in the share of Union energy consumption produced from renewable resources to 20 per cent, and a 20 per cent increase in energy efficiency compared to 1990 levels.

under the New GBER has been widened to a significant extent.[1590] Indeed, its reach now extends to grounds broadly similar to the previous environmental aid guidelines (EAG), with the further addition of aid for energy infrastructures. Moreover, the New GBER now also covers *ad hoc* energy-related aid awarded to large undertakings, and the notification thresholds set for certain types of energy support measures rank among the highest overall.[1591] The reform, in fact, aims to encourage greater reliance on this instrument, thereby further increasing the number of public support measures that can be implemented without prior authorisation.[1592] In this respect it is also worth recalling that the sphere of application of the general *de minimis* Regulation has been extended to encompass almost all types of energy aid measures.[1593]

The SAM reform has also included a revision of all the State aid guidelines and frameworks that provide the substantive rules governing the *ex ante* compatibility assessment of most types of aid measures that may be authorised under Article 107(3)(c) TFEU. The main ground for authorisation of non-exempt energy aid is represented by the new guidelines on State aid for environmental protection and energy (EEAG or Guidelines)[1594]. As already explained, the scope of the Guidelines has been widened to such an extent that they now cover not only types of support measures that might have an indirect influence on the functioning of the domestic energy markets but also the key forms of energy aid having direct effects on these markets and the creation of an Energy Union. Another noteworthy innovation is represented by the adoption of a new communication to deal with the public financing of important projects of common European interest, the IPCEIs Communication,[1595] which can be authorised on the basis of Article 107(3)(b) TFEU. With specific reference to the energy sector, the IPCEIs Communication covers all cross-border projects of major importance for the energy, climate

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[1590] Commission Regulation (EU) No. 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty, OJ 2014 L187/1.

[1591] Indeed, for investment aid for energy infrastructures the notification cap per undertaking and investment project is 50 million EUR. The notification cap for operating aid to promote RES-e granted on the basis of a competitive bidding process is, instead, 150 million EUR per year. See, New GBER, *cit.* Article 4(x) and (v).

[1592] Indeed, the ultimate goal of the reform was an increase of up to 90 per cent in the proportion of block-exempted aid measures.

[1593] Indeed, as a result of the reform, aid measures for undertakings active in the coal sector might now also fall outside the scope of EU State aid control system by virtue of their minor importance. See, Commission Regulation (EU) No. 1407/2013 of 18 December 2013 on the application of Articles 107 and 108 of the Treaty on the Functioning of the European Union to de minimis aid, OJ 2013 L352/1.

[1594] Communication from the Commission of 9 April 2014, Guidelines on State aid for environmental protection and energy 2014-2020 , OJ 2014 C200/1.

[1595] Communication from the Commission of 13 June 2014, *Criteria for the analysis of the compatibility with the internal market of State aid to promote the execution of important projects of common European interest*, OJ 2014 C 188/4.

and security of supply strategies of the Union or for the completion of the European internal energy market.[1596] As explained, without prejudice to the analysis of these projects under the EEAG, the application of the IPCEIs Communication might be the preferred option. Indeed, the IPCEIs Communication provides aid at higher rates, a greater diversification of support instruments and a larger number of important flexibilities and positive presumptions of compliance than would otherwise apply under the EEAG. Finally, from an energy perspective, it is also important to recall that the R&D&I Framework 2014,[1597] the Rescue and Restructuring Aid Guidelines 2014[1598] and the Agricultural Aid Guidelines[1599] have also been reformed in the context of the SAM initiative and might be useful for justifying aid measures favouring, in some ways, the energy sector. This is especially true given the growing importance that biofuels are gaining and the circumstance that the European R&I energy strategy has just been included among the five interrelated policy dimensions whose enhanced effectiveness constitutes the main goal of the Energy Union strategy.

In addition to the foregoing, the far-reaching reforms implemented in the abovementioned reference period also encompass adoption of the Almunia SGEI package. This package includes various instruments specifying, *inter alia*, the compatibility and exemption conditions which are in principle also applicable to aid measures implemented to compensate undertakings entrusted with energy-related services of general economic interest. Although the Commission has always adopted a very strict approach to the application of Article 106(2) TFEU's exception for energy aid measures, successive electricity and gas directives and the EU's past case law have included, *inter alia*, security of supply obligations imposed by Member States upon prospective candidates for PSO status.[1600] Hence, the instruments introduced under the Alumina SGEI package might provide additional grounds for authorisation for financial

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[1596] The IPCEIs Communication, actually, provides an indicative list of frameworks and strategies covered thereunder, which includes all cross-border plans that foster the achievement of the goals and targets delineated under the Europe 2020 Strategy, the 2020 Energy Strategy, the 2030 Climate and Energy Framework, the Energy Security Strategy, the Resource Efficiency Flagship Initiative, and the Trans-European Transport and Energy networks.

1597 Communication from the Commission of 21 May 2014, *Framework for State aid for research and development and innovation*, OJ 2014 C198/1.

[1598] Communication from the Commission of 9 July 2014, Guidelines on State aid for rescuing and *restructuring* non-financial undertakings in difficulty, OJ 2014 C249/1.

[1599] European Union Guidelines for State aid in the agricultural and forestry sectors and in rural areas 2014 to 2020, OJ 2014 C 204/1.

[1600] See, now, Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC, *cit.*, Article 3, and Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC, OJ 2009 L211/94, Article 3.

mechanisms aimed at ensuring security and reliability of electricity and gas supplies, other than those under the EEAG.

A third element of reform is represented by the EU ETS Guidelines, which specify the framework for assessing temporary forms of aid in favour of certain electro-intensive users and conventional electricity generators. More precisely, the types of aid measures concerned have been allowed, under the 2009 ETS Directive, to compensate sectors and subsectors or power generators particularly affected by the changes to the EU ETS in effect from 2013 onwards.[1601] Hence, although rather problematic, they purport to remedy the carbon leakage and competitiveness issues raised by the new provisions.[1602]

The foregoing new frameworks for the assessment of energy-related aid measures do not, however, exhaust the array of compatibility rules applicable to energy aid that qualify for derogations under Article 107(3) TFEU. Specific eligibility and compatibility conditions are still established under the Methodology for stranded costs compensation schemes[1603] which have also been approved under Article 106(2) TFEU. Moreover, although *the* non-nuclear energy State aid regime now also covers aid measures for undertakings active in the coal and steel sectors, peculiar assessment criteria are still applicable to certain aid measures favouring these sectors.[1604] Finally, the very few energy aid measures not covered by any of the foregoing compatibility frameworks may nonetheless be directly approved under Article 107(3)(c) TFEU or Article 107(3)(b) TFEU on a case-by-case basis. A trend may, however, be detected in that respect from the analysed case law. The Commission's efforts to simplify and reach a high level of uniformity among the rules applicable in the context of the State aid control system are going far beyond the scope of the SAM reform. An example is provided by the recent decisions on nuclear energy aid, which evidence that, whenever possible, the Commission will apply to those

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[1601] Directive 2009/29/EC of the European Parliament and of the Council of 23 April 2009 amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading scheme of the Community, OJ 2009 L 140/63.

[1602] More precisely, the following new aid measures have been allowed: operating aid for compensating indirect emission costs borne by energy-intensive industries active in sectors deemed vulnerable to carbon leakage, investment aid for constructing highly efficient power plants such as those that are CCS-ready, and aid in the form of transitional free allocations of allowances to the electricity sector for modernising electricity generation.

[1603] Commission Communication of 26 July 2001, *relating to the methodology for analysing State aid linked to stranded costs*, n.p., communicated to the Member States by letter ref. SG (2001) D/290869 of 6 August 2001.

[1604] With regard to the coal sector, see, Council Decision 2010/787/EU of 10 December 2010 on State aid to facilitate the closure of uncompetitive coal mines, OJ 2010 L 336/24. As per the steel sector, see, Communication from the Commission, *Rescue and restructuring aid and closure aid for the steel sector*, OJ 2002 C 70/21, and Communication from the Commission, Multisectoral framework on regional aid for large investment projects, OJ 2002 C 70/8

support measures falling outside the scope of the EEAG the same compatibility requirements provided thereunder.

First level of analysis: proposed remedial actions with respect to the issues identified under the first set of findings

On the basis of the foregoing considerations, certain proposed corrective actions may be identified. First of all, the nuclear sector could be included within the scope of the EEAG. Secondly, the overlaps among the currently applicable grounds for authorisations might be better addressed, especially when they concern aid awarded to heavy polluters, heavily polluting sectors and conventional electricity generators. Thirdly, the Methodology is out-dated and it may not be advisable to extend its application to justify kinds of measures other than those expressly included within its scope, such as power purchase agreements. Hence, it could be repealed. The same holds true regarding the residual sector-specific frameworks for the assessment of aid to undertakings active in the coal and the steel industries.

Finally, and more importantly, we do not welcome the extension of the simplified rules provided under the New GBER to operating aid measures aimed at promoting RES-e, especially in combination with a notification threshold that, under certain circumstances, might reach 150 million EUR per year. Indeed, first of all, this inclusion has blurred the traditional distinction between block exemption regulations – which, in this field, have so far only covered investment aid and fiscal aid measures – and guidelines. The rationale for this distinction is actually sound: in general, operating aid measures have always been regarded as more distortive and requiring a more rigorous and comprehensive assessment because, unlike investment aid measures, they relieve undertakings of their day-to-day costs. For the very same reason, they may be authorised only in very exceptional cases. This is especially true with respect to operating aid for the production of RES-e, whose inadequate design by several granting authorities has so far generated serious problems in the EU energy markets, as we have seen. As already explained, in our opinion, in fact, in the short and medium terms these problems cannot be avoided by implementing the new safeguards that have been introduced to counterbalance the above-addressed pro-aid reforms.

First level of analysis: second set of findings

In the context of the SAM reform, the Commission has identified and defined seven common assessment principles for the *ex ante* compatibility assessment of all kinds of aid measures, which we have extensively analysed. These principles have, therefore, been incorporated into both the EEAG and the IPCEIs Communication. A set of common principles that, to a certain extent, pave the assessment path established under the abovementioned soft law instruments is also provided under the New GBER. The overall framework of analysis has, therefore, been reshaped in an effort to simplify the compatibility analysis and achieve greater uniformity among the criteria the Commission should use to evaluate State aid measures, while guaranteeing the efficiency and effectiveness of the State aid control regime.

Regarding the common compatibility conditions provided under the EEAG and the IPCEIs Communication, in principle these mirror the three-stage balancing test, albeit with an important extra requirement that aid be transparent and renewed favour towards measures providing for the selection of beneficiaries through a bidding process. However, the previous stages of analysis have been simplified and clarified. In fact, first of all, some noteworthy substantive changes have been introduced with respect, in particular, to the more problematic requirements. Secondly, the clear-cut separation between standard and detailed assessment has been blurred. As explained, this is not just an element of simplification. It actually makes the evaluation of most types of aid more rigorous and demanding. Indeed, all energy support measures are now subject to a comprehensive assessment. A number of positive presumptions of compliance have, however, been established with respect to certain types of energy aid. Moreover, the flexibility required for dealing with energy support measures that diverge in their objectives and structures has been preserved by specifying supplementary compatibility conditions for each class of aid that, generally speaking, are less numerous, clearer and more up-to-date than those provided under the previous guidelines.

As a result of the foregoing considerations, and on the basis of our understanding of the new compatibility criteria provided under the EEAG and the IPCEIs Communication, generally speaking these criteria certainly guarantee more transparency and legal certainty, to the advantage of both Member States and interested undertakings – *i.e.*, beneficiaries and competitors. Moreover, they improve the efficiency of the State aid control system and coherence and consistency in assessing the various types of energy aid measures. Furthermore, in principle, they facilitate correction of the more frequent State aid errors detected by the

European Court of Auditors, which also have the greatest financial impact. Indeed, if properly applied, these compatibility criteria may ensure that Member States devise support measures better suiting underlying objectives and facilitate the implementation of measures as necessary to rectify actual failures of energy markets, providing the minimum amount of aid possible with a view to minimising distortive effects and bringing about an adequate incentive effect.

That said, as we shall explain, some further amendments, clarifications and restatements may be advocated with respect to the eligibility and compatibility conditions provided under the EEAG and the IPCEIs Communication.

Turning to the set of common and specific criteria provided under the New GBER, according to our analysis these are less clearly defined, excessively flexible and not exhaustively disciplined. Moreover, compliance with some of the common principles included in the Guidelines is presumed. Importantly, in contrast with the greater emphasis on the incentive effect criterion placed under the EEAG to rectify the frequent State aid errors detected by the European Court of Auditors in that respect, the substantive incentive effect test has been dropped for all energy aid schemes and most individual aid covered by the New GBER. In the author's opinion, when combined with the broader perimeter of the new block exemption regime, these characteristics of the assessment criteria provided thereunder might encourage Member States to attempt the granting of incompatible aid that might go unnoticed and generate a greater degree of legal uncertainty, to the detriment of beneficiaries.

An extensive revision of the block exemption regime may, therefore, be advocated. Indeed, in the author's opinion, the safeguarding mechanisms incorporated as part of the SAM agenda in the New GBER, in order to counterbalance the pro-aid reform of the compatibility framework and the resulting decentralisation of State aid implementation, may not be enough to ensure the effectiveness of the State aid control system. More precisely, we should recall that these safeguarding mechanisms consist of the new transparency requirements in the introduction of an *ex post* evaluation mechanism for certain aid schemes and in the systematisation, refinement and simplification of the Commission's *ex post* monitoring powers. Regarding the new transparency requirement, the Commission seems, in fact, to have great confidence in the fact that any risk of abuse of the wider scope of the New GBER by Member States might be avoided thanks to the ability of competitors of beneficiaries of block-exempted aid to detect incorrect applications of the regulation and to complain in these respects. However, this might not be the case, not least because it is an onerous and difficult task for non-experts to accomplish. With

reference to the monitoring and reporting systems, suffice it here to recall that, notwithstanding the fact that they were also included in previous general block exemption regulations, the European Court of Auditors has evidenced in several successive reports that they have never been adequately implemented. In fact, the related sanctioning system – *i.e.*, withdrawal from the benefits of block exemption – has never been applied, notwithstanding the numerous violations reported. Further, regarding the *ex post* evaluation mechanism, it is worth noting that this has been introduced only for large energy aid schemes with an average annual budget exceeding EUR 150 million. Moreover, certain types of aid have been excluded from its scope of application and the Commission has already stated that it might decide not to subject certain large aid schemes to evaluation.[1605]

Notwithstanding the above considerations regarding the New GBER, however, it is worth noting that the *ex post* evaluation mechanism represents one of the major innovations of the EEAG. However, as we have extensively discussed, a proper evaluation as set out under the EEAG and the Guidance Paper on Evaluation becomes a complex, expensive and time-consuming task that, in our view, may place a disproportionate burden on Member States. As a result, a number of remedial actions are proposed.

On a final note, a noticeable exception to the generalised systematisation and clarification of the rules governing the *ex post* control system is, however, represented by the new IPCEIs Communication.

First level of analysis: proposed remedial actions with respect to the issues identified under the second set of findings

On the basis of the foregoing considerations, certain proposed corrective actions may be identified with respect to the EEAG, the IPCEIs Communication, the New GBER and the *ex post* control mechanisms. The proposed actions will be addressed in turn.

EEAG

With regard to the EEAG, a number of amendments may be recommended.

[1605] See, Guidance Paper on Evaluation, *cit.*, section 4.1., 2nd paragraph and footnote 14.

We shall start with the less challenging of these. The Commission has admitted that the introduction of the new compatibility criterion requiring Member States to satisfy certain transparency conditions may in the future lead to the simplification, reduction or even elimination of the annual reporting obligations established under the Commission Implementing Regulation and the various guidelines and frameworks.[1606] This may not be advisable, in particular given the complex compromises that the Commission has had to make– especially in the EEAG – to include compatibility conditions for new types of aid, in an attempt to reconcile the conflicting interests and various EU policies characterising and governing the EU's energy markets. In these circumstances, in fact, it may be important to ascribe a new role to annual reports. Annual reports may, in fact, provide useful grounds for double-checking the great number of measures usually implemented by Member States. Indeed, as our analysis of specific types of measures included in the EEAG evidences, great potential harms to the effectiveness of State interventions may arise as a result of the coexistence of aid measures tackling different – also conflicting – market failures, as they might counteract each other.[1607] This would, in turn, cause a relevant waste of taxpayers' money. Hence, it might be advisable to require Member States to compile more comprehensive annual reports so that the interactions between different aid measures active during the year are ready identifiable and easier for the Commission to analyse.

Turning to the first proposed amendment of the provisions of the EEAG, the general method for determining eligible costs has been simplified and slightly amended so as to identify more accurately the real costs of the various investment options open to the beneficiary. Moreover, peculiar and suitable approaches have been introduced with respect to aid to energy infrastructures and for generation adequacy. However, the abovementioned improvements to the general method have no impact on the main principle underlying the atypical approach adopted for determining eligible costs under the environmental and energy aid regime, and the resulting potential failure of the covered aid measures to generate the expected incentive effect.

[1606] See, in that respect, Transparency Communication, *cit.*, pp. 3 and 5, and GBER, *cit.*, recital 27.

[1607] For instance, certain supply-side mitigation aid measures that purposely increase the supply of variable and intermittent power, such as renewable electricity, might raise security of supply problems. These problems might be addressed by implementing the so-called capacity remuneration mechanisms. However, such mechanisms, in turn, hinder the phasing-out of environmentally and economically harmful subsidies. Moreover, they might run counter to the Energy Union's goals because they typically compensate certain selected domestic generators for the mere availability of capacity over a certain period of time and, thus, they reserve for them the relevant amount of generation. Further, they may discourage investments in energy infrastructures, whose financial support is now also included in the EEAG.

Indeed, in our opinion, to the extent that eligible costs will continue to be limited to extra costs – thus, covering only a portion of the costs of the investment – and given that one straightforward option is to simply avoid these extra costs by investing in cheaper technologies, the financial rationale for environmentally friendly and energy-related investments may appear questionable. Therefore, aligning the general method for determining eligible costs with respect to these forms of investments with that applied in other guidelines and frameworks may be advisable.

A second adjustment to the EEAG may take the form of including the so-called 'matching clause' within the assessment of the sixth compatibility requirement – *i.e.*, the avoidance of undue negative effects on competition and trade. This clause was already contained in the R&D&I Framework 2007 and has now been extended to appraising the important cross-border projects covered by the IPCEIs Communication. Given that it requires analysis of the potential competitive disadvantage EU undertakings might face with respect to competitors located outside the Union, it may be a useful tool for analysing environmental and energy aid measures. More precisely, on the one side, it may allow Member States to properly argue that the potential beneficiaries of an aid measure face a competitive disadvantage in the context of international trade: this competitive disadvantage might arise either because their international competitors have received or will receive financial assistance for pursuing objectives similar to those under scrutiny or because the latter are not subject to binding environmental or energy-related targets. On the other side, the arguments put forward in that respect by the Member States concerned may help the Commission to properly balance, on a case-by-case basis, the positive effects of the measure in terms of attaining the targeted objective and its negative impacts. Indeed, neither Member States nor the Commission would have to resort to overly rigid and generalised criteria such as the predetermined electro-intensity and trade intensity requirements established with respect to aid to energy intensive users (EIUs).

Given the foregoing considerations, the adoption of a 'matching clause' may also be advisable with respect to measures falling within the scope of the EU ETS Guidelines.

The third amendment to the provisions of the EEAG that may be recommended concerns the sphere of application of the compatibility conditions set thereunder, which have been further narrowed down. Indeed, as mentioned, the Guidelines provide that environmental and energy aid schemes that are excluded from the scope of the New GBER only due to their large budget will be assessed according to the simpler common and type-specific compatibility principles

set out under that Regulation.[1608] This is certainly a further element of simplification. However, two sets of considerations may be made in this respect. First of all, this provision may be deemed to amount to a sort of 'informal' revision of the already high notification thresholds provided under the New GBER. Hence, it may be argued that, although the Commission has great discretion in assessing aid measures under Article 107(3) TFEU, and that the guidelines provide only indications of how the analysis is to be conducted, the last-mentioned soft law instrument may not provide for 'derogations' from the rules set out under general block exemption regulations. Moreover, to the extent that the very same Commission has established these rules, one may assume that it had valid reasons for excluding from their scope of application aid schemes having budget exceeding certain ceilings. For the second consideration concerning the 'informal' widening of the scope of the New GBER under exam, we may recall our findings on the shortcomings of the common and specific compatibility criteria provided under that regulation. A further broadening of its perimeter may, therefore, be inadvisable. As a result of the foregoing, repealing of the provision of the EEAG under discussion may be recommended.

IPCEIs Communication

Regarding the IPCEIs Communication, while the first action advocated has a mainly clarificatory character, the other pertains to the inclusion of elements provided in other guidelines and frameworks.

As per the first abovementioned action, a technical review of the compatibility criteria provided under the IPCEIs Communication may be recommended. Indeed, in contrast with the EEAG, under this Communication the relevant criteria appear to somehow lack clarity and a systematic dimension, which may result in ambiguity in the interpretation thereof.

Regarding the other recommendations, these pertain to the integration of the IPCEIs Communication with the *ex post* monitoring and evaluation requirements provided under other guidelines and frameworks, including the EEAG. Indeed, regarding the monitoring system, the Communication simply provides that the execution of projects authorised thereunder must be subject to regular reporting. Concerning the evaluation mechanism, notwithstanding that aid to

[1608] The only exception to the foregoing being the *ex post* evaluation of the aid measures concerned, which will, instead, follow the rules provided under the EEAG. See, EEAG, *cit.* 244.

IPCEIs certainly involves a great number of monies and, given their intrinsic cross-border nature, might generate problematic negative effects on the EU energy market as a whole, under the IPCEIs Communication the Commission has only announced that, where appropriate, it may ask for an *ex post* evaluation to be conducted. However, neither selection criteria nor indications of how the possible evaluation process should take place are provided.

New GBER

In the author's opinion, the absence of sufficiently detailed compatibility criteria to guide the granting authorities in the process of devising adequate support measures exempted from the prior notification obligation may not result in the awarding of "*good aid*". Moreover, the broader perimeter of the new block exemption regime might encourage Member States to attempt the granting of incompatible aid that might pass unnoticed and generate a greater degree of legal uncertainty, to the detriment of beneficiaries. With respect to the foregoing, it is also worth recalling that under the previous block exemption regulation, which was far more limited in scope, the results of monitoring exercises carried out both by the Commission and the Court of Auditors have evidenced a frequent lack of compliance with conditions set forth thereunder.

This said, one might argue that the aim of reducing the administrative burden for Member States and the case-overload ostensibly experienced by the Commission might be nullified by the new evaluation process framed under the GBER. However, several of the new energy aid regimes covered by the New GBER might still have to be assessed according to the – now more demanding – compatibility test set out in the EEAG. Moreover, when this is not the case, the initial evaluation they have to go through does not definitely allow a great reduction in Member States' and the Commission's administrative burdens. The ultimate results might, instead, be an increased level of legal uncertainty for those undertakings that might wish to apply for aid and discriminatory outcomes. Indeed, those companies that promptly ask for and receive the aid – *i.e.*, within the first six months of implementation of the measure – will be better off than their latecomer competitors.

As a result of the foregoing, and to the extent that all the energy aid measures covered by the New GBER have been implemented for years or even decades by numerous Member States, we may recommend that these measures be properly regulated through a joint effort by the Directorates-General having different, but strictly connected and complementary, fields of

expertise with respect to the energy sector; that is to say, DG ENER, DG COMP, DG ENVIRONMENT and DG CLIMA. In particular, among the various legislative options available, the author advocates the use of directives, as they allow Member States to properly factor in national circumstances which are particularly relevant for the proper devising of national energy policies.

The *Ex Post* Evaluation Mechanism

A great number of issues have been detected in Chapter 3, paragraph 4 of this doctoral thesis with respect to the evaluation mechanism established under the New GBER. However, the possible remedial actions in that regard are absorbed by the above-provided recommendations on the conversion of the block exemption regulation. Hence, we shall focus on the corrective actions that may be undertaken within the context of the EEAG.

A first recommended remedial action consists of a further clarification of the criteria provided under the EEAG for the selection of aid schemes covered by the evaluation obligation. As evidenced in the relevant part of the thesis, in fact, the established criteria are not sufficiently specific for the granting authorities to be able to form a preliminary opinion on whether a certain domestic aid scheme is subject to evaluation or not. Moreover, the Commission enjoys discretion in the field. Hence, in the author's opinion, given the complexity of the evaluation process, most Member States will not spontaneously submit evaluation plans together with the related notification form. They will, instead, understandably wait for a possible Commission solicitation in that respect. Importantly, when the Commission later judges such cases as subject to evaluation, the above-envisaged Member States' behaviour might cause a great delay in the authorisation process; evaluation plans are, in fact, to be approved in the context of the decision authorising the related aid scheme. This, in turn, might generate counterproductive impacts on the energy policy objectives the aid measures in question aim to pursue and detrimental effects for the potential beneficiaries. By contrast, in the formulation of complex evaluation plans, over-compliant Member States will incur additional administrative burdens and financial expenses that might eventually turn out to be unnecessary, with a consequent waste of taxpayers' monies.

Turning to the other remedial actions we wish to advance, these encompass both 'technical' proposals for reform and a final, more general, but important suggestion. Both sets of proposals

stem from the statement – clearly substantiated in Chapter 3 – that the evaluation process is complex, expensive and time-consuming.

Regarding our 'technical' proposals for reforms, we should first recall that any evaluation plan should clearly set out a number of substantive elements, which are provided under the EEAG and further explicated in the Guidance Paper on Evaluation. Although all these elements are rather challenging in their elaboration and successive development, we have explained that the most crucial and problematic aspect of the evaluation process consists of delineating the appropriate methodology for identifying the causal impact of the aid scheme concerned, undistorted by other variables, and its successive application. This, indeed, represents a very burdensome task because it requires devising a hypothetical scenario, the so-called 'counterfactual' situation, by applying statistical methods and techniques of rather difficult practical implementation. Moreover, the Commission has also recognised that all the abovementioned methods have limitations and might be deemed valid only when certain assumptions hold.[1609] This means that not only will it be very difficult to establish a credible counterfactual situation in most cases but *ex post* evaluations may also not succeed in generating reliable results with respect to many aid schemes. [1610] In this regard, it is important to recall that Member States are required to rely upon these results when devising successive support measures, and the Commission should take them into account in its decision-making practice and for framing future block exemption regulations and guidelines. Therefore, in our opinion, any misrepresentation of the effects of the financial mechanisms subjected to evaluation might generate very dangerous knock-on effects throughout the European Union's economies.

As a result of the above considerations we believe that, in order to avoid reliance on 'false positives' or 'false negatives',[1611] it is at the least necessary for the Member States and the Commission to be aware of the limits of each evaluation plan. An interesting preliminary proposal has been put forward for consideration by the mentioned European Institution which aims to avoid ambiguous results and, thus, might also serve our purposes. Our

[1609] See, Guidance Paper on Evaluation, *cit.*, p. 9.

[1610] Indeed, most of the experts agree on the fact that the evaluation techniques developed so far are not able to take into account every eventuality. Evidence of the great challenges the establishment of a credible counterfactual might generate is considered to be clearly provided by the evaluations of the first six New GBER-based schemes approved by the Commission, which concerned R&D and regional aid measures.

[1611] For a clear explanation of these concepts, although with an EU antitrust law perspective, see, Whish R., Bailey D. (2015) *Competition Law*. Oxford: Oxford University Press, at *pp. 203-204*.

recommendations further elaborate on this proposal. A distinguished expert has, in fact, advised the Commission to define standards of proof of increasing level of rigour at least.[1612] Four levels of analysis have, thus, been identified and the intensity of the assessment required thereunder properly determined.[1613] Importantly, it is only at the third level of analysis that comparison in terms of performances of beneficiaries and non-beneficiaries has to take place and, thus, the counterfactual situation has to be established. Indeed, the first two levels of scrutiny encompass, respectively, a proper assessment regarding the incentive effect the aid measure is required to deliver, and a demonstration that it has reached its targets in terms of objectives.[1614] The fourth identified level of analysis is even more important because it has been rightly devised so as to fill the gaps in the cost-benefit analysis of State aid measures developed by the Commission in its Guidance Paper on Evaluation. Indeed, as has been rightly held, a proper cost-benefit analysis should not be confined to a comparative assessment of the positive and negative effects of the aid on markets and competition. It should, instead, also include an appraisal of the costs incurred by the Member State in running the measure and those borne by the recipients in complying with the requirements provided thereunder.[1615] In our view, as well as considering the proposal delineated above the Commission could also further elaborate on it. For instance, it might provide both indicative performance parameters for each identified level of analysis and prospective complexities of and hindrances to the performance of each level other than that providing the minimum standard of proof. A further element may be then introduced in order to properly deal with the concerns we have put forward above, while avoiding Member State attempts to simply elude more burdensome but possible scrutiny of their measures. The granting authorities may be required to declare which standard of proof they want to rely on in their evaluation plans, and the reasons and envisaged difficulties underlying the choice of standards

[1612] See, Nicolaides P. (2016) 'Ex Post Evaluation of State Aid Measures', in Nicolaides P. (ed.) State Aid Uncovered: Critical Analysis of Developments in State Aid 2015, *cit.*, pp. 294-299.

[1613] *Ibidem*.

[1614] The first level of analysis concerning the incentive effect should not be underestimated. Indeed, as mentioned, over the past decade almost all the annual reports of the European Court of Auditors on the implementation of the EU budget have indicated failure to ensure that aid measures deliver the required incentive effect among the three most recurrent types of detected State aid errors. This is even truer with respect to the Special Report on enforcement and compliance with State aid rules that the European Court of Auditors issued in October 2016, where, as already explained, the absence of an incentive effect was indicated as one of the main four categories of State aid errors detected in the period 2010-2014. See, European Court of Auditors, Special Report 24/2016 of 4 October 2016, More Efforts Needed to Raise Awareness of and Enforce Compliance with State Aid Rules in Cohesion Policy, *cit.*, pp. 27-29.

[1615] See, Nicolaides P. (2016) 'Ex Post Evaluation of State Aid Measures', in Nicolaides P. (ed.) State Aid Uncovered: Critical Analysis of Developments in State Aid 2015, *cit.*

other than the higher one. As part of its assessment of each evaluation plan, the Commission may then properly examine the justifications put forward in that respect and, where inadequate or flimsy, it might make its approval of the plan conditional upon performance of the level of analysis it judges more appropriate.

Apart from the above more 'technical' proposals for reform, a more general but important suggestion may be provided. The new system based on *ex post* self-assessments of State aid is certainly a good first answer to the regulatory vacuum in the energy field. The *ex post* evaluation mechanism might, in fact, be an important instrument of 'negative harmonisation'. However, its role may be better confined to those aid measures that are still at an experimental stage. In the author's view, in fact, to the extent that several financial instruments qualifying as aid have been implemented for years or even decades by numerous Member States, it would be advisable for the competent Directorates-General – *i.e.*, DG ENER, DG COMP, DG ENV and DG CLIMA – to work together in order to formulate a legislative proposal definitively disciplining at least these instruments. To properly comply with a similar task in a consistent way it would be enough for them to build on their extensive experience with such aid instruments by carrying out joint *ex post* evaluations of energy aid schemes that have already been implemented. Such a joint effort by Directorates-General having different but strictly connected and complementary fields of expertise would certainly be more efficient and reliable in terms of results than *ex post* evaluations carried out by Member States. Without going so far as to adopt a 'one-size-fits-all' approach, in fact, this would allow the Commission to take into account all the variables and concerns that each type of State aid regime has evidenced over the years. Moreover, a similar assessment at the EU level would be more cost-effective and allow for combining data on similar measures adopted by different Member States. Hence, in the author's opinion, positive harmonisation may be the best answer, at least for long-standing support mechanisms.

Second level of analysis: proposed remedial actions with respect to the relevant issues identified

The analysis provided in this thesis of the new compatibility framework set out in the EEAG has encompassed also a detailed assessment of certain types of energy aid measures, specifically selected on the basis of their relevance in terms of their direct impact on the

functioning of energy markets, their 'supplementary' role in the pursuit of energy and climate change policy objectives, and the potential obstacles they might pose to other goals set forth in the Energy Union Communication. However, we shall only discuss in here provisions that, as a result of our analysis, may require remedial actions.

The Revised Framework for Aid to RES

The rationale for a comprehensive review of the compatibility conditions for aid to RES provided under the EAG has been clearly analysed in Chapter 4. Suffice here to recall that the starting point of such review has been the recognition by the Commission of the increased significance of subsidised RES in the energy market as a consequence of the heavy national support to renewables[1616] and the consequential rapid and radical economic and technological changes that have reshaped the relevant industry and market since the introduction of the EAG. These circumstances have led to, *inter alia*, further market fragmentation, market and cross-border distortions, competitiveness and carbon leakage issues, short-term network instabilities and long-term generation adequacy concerns. As a result of the foregoing a comprehensive overhaul of the framework applicable to the more distortive form of operating aid granted in favour of RES-e generators has been provided under the EEAG. More precisely, new, modified or prolonged aid schemes cannot be devised in the form of support mechanisms revolving around feed-in tariffs and guaranteed purchases (*i.e.*, FIT schemes). The reformed framework, in fact, provides a transition towards so-called 'market-based instruments', that is to say, feed-in premium (FIP) systems and tradable green certificates (TGC) schemes. However – surprisingly – the requirements established in the Guidelines for these two types of market mechanisms to pass the compatibility test differ significantly. As clearly demonstrated, in fact, FIT schemes are subject to cumulative conditions capable of increasing renewables' exposure to market signals. Moreover, in principle, an obligation to select the beneficiaries through competitive bidding processes is provided, albeit with a number of exceptions. This reform should be welcomed. Unfortunately, however, the same may not be deemed to be true as regards

[1616] Indeed, in the year when the SAM reform was launched, the largest amounts of public support went to renewable energy sources (about 41 billion EUR), followed by public interventions for energy demand (about 27 billion EUR) and support to energy efficiency (about 9 billion EUR). Among renewable energy sources, solar energy received most support in 2012 (about 15 billion EUR), followed by wind (about 11 billion EUR) and biomass (about 8 billion EUR). See, Ecofys (2014) *Subsidies and Costs of EU Energy – Final Report, cit.*, figures S-2 and 3-1, table 3.1., and pp. ii and 21.

TGC schemes. Indeed, as explained, the requirements established in the Guidelines for this type of scheme to be authorised are significantly less challenging than those provided with respect to FIP systems and, in the author's opinion, do not encourage Member States to increase renewables' exposure to market signals when devising TGC schemes. Actually, the latter are even allowed to impose purchase obligations on electricity suppliers with respect to green certificates.

It may be, therefore, advisable to bridge the gaps between the two disciplines applicable to FIT schemes and TGC schemes. Moreover, as with other respect, further cooperation among the various Directorates-General which have important complementary expertise with respect to the energy sector may be recommended when devising the specific compatibility framework for important aid schemes such as those under scrutiny. Indeed, it has not passed unnoticed that, in contrast with the EEAG, the DG ENER Guidance seems to indicate a preference towards FIP schemes.

Another general gap of the reform that may need to be bridged pertains to the role of cooperation mechanisms in the assessment of RES-e support measures.[1617] Indeed, the rationale and importance of a widespread use of these mechanisms for ensuring, *inter alia* the achievement of the 2020 national renewables targets on the best cost-benefit basis – hence, also to the benefit of the Member States – has been clearly explained and is also recognised by the Commission.

That said, what may be advocated is a wider legislative initiative on the part of DG COMP and DG ENER governing the types of renewable energy support schemes on which it has now gained enough experience, in combination with the relevant cooperation mechanisms.[1618] In fact, both the sections of the EEAG on FIP and TGC schemes and the DG ENER Guidance have been extensively criticised by distinguished economists and lawyers. However, the foregoing criticism might be better addressed at statutory level, soft law instruments and Guidance appearing to be a second-best option. Among the various legislative options available, the use of directives may be advocated, as they allow Member States to properly

[1617] An explanation on how these mechanisms might be structured in the contest of national support schemes has been more recently provided in one of the documents accompanying the DG ENER Guidance. However, this is just a staff working document, which neither has binding nature nor it is structured and formulated as a quasi-legislative instrument.

[1618] With that regard, it is worth recalling that Renewable Energy Directive (see, Renewable Energy Directive, *cit.*, Articles 6, 7, 9 and 11) has simply introduced cooperation mechanisms on an optional basis. Moreover, the report reviewing the application of this Directive with respect to, *inter alia*, the effectiveness of the cooperation mechanisms will be presented only in 2021.

factor in those national circumstances that are particularly relevant for the proper devising of national energy policies.

Aid for Energy Intensive Users

The forms of aid for Energy Intensive Users provided under the EEAG encompass aid in the form of reductions in, or exemption from, environmental and energy-related taxes, which were already included in the EAG, and the new type of aid in the form of reductions from the funding of RES support. According to our analysis, both these kinds of fiscal aid measures may generate dangerous outcomes, as clearly explained in Chapter 4 of this doctoral thesis. However, given the energy prices gap evidenced in the last years between the EU and its major economic partners, their implementation may be of paramount importance to ensure the international competitiveness of the EU industry and avoid carbon leakage issues. Hence, it may be advisable to properly discipline them. A distinction should be made, however, with that respect.

As regards aid in the form of reductions in, or exemption from, environmental and energy-related taxes, it may be argued that reliance on a formal legal basis might be more appropriate. Indeed, the Commission has gained significant experience in the field since the 1994 Environmental Aid Guidelines[1619] and more detailed provisions would better addressed all the variables that need to be balanced out to make sure that these forms of aid are properly targeted and do not hamper the effectiveness of EU environmental policy's objectives. Also in this case, the adoption of a directive may be recommended for the very same reason provided with respect to other forms of aid.

Vice versa, resort to legislation to deal with the new type of aid in the form of reductions from the funding of RES support may be not recommended in this pilot phase. However, a set of amendments to the relevant provisions of the EEAG may be proposed to remedy the related issues we have identified in previous parts of the thesis. Indeed, a number of potential contradictions have been detected between the objectives that the European Institutions aimed to achieve and the new framework. The framework, may, in fact, not be capable to ensuring

[1619] Indeed, environmental and energy-related tax reductions and exemptions were already covered by both the 1994 EAG and the 2001 EAG. See, Information from the Commission, *Community guidelines on State aid for environmental protection* (1994 EAG), OJ 1994 C72/3, section 1.5.3., and Information from the Commission**,** *Community guidelines on State aid for environmental protection* (2001 EAG), OJ 2001 C37/3, paras 22-24 and section E.3.2.

that the fiscal relief be limited to the minimum extent necessary, the effectiveness of RES support regimes be guaranteed, distortions of competition be avoided and the public acceptance of the support to RES not be hampered.

Regarding the amendments that we propose, first of all, Member States may be required to prove the scale of the competitive pressure faced by EIUs and the unsustainability levels of the RES regime triggering the support. Secondly, the exemption from the application of the common assessment principle should be terminated. Indeed, as explained, rather than compatibility conditions, the *ad hoc* requirements applicable to EIUs are mere eligibility criteria, aimed at identifying sectors exposed at risk of relocation or international competitive disadvantage on the basis of electro-intensity and trade-intensity parameters. Hence, a presumption of compliance is established with respect to important conditions such as the incentive effect, the necessity and the proportionality of the aid. Strictly connected important issues have been identified. Indeed, eligible beneficiaries are either undertakings belonging to the energy-intensive sectors listed in the EEAG or undertakings satisfying certain minimum electro-intensity and trade intensity requirements. This *ex ante* appraisal, however, may not ensure, *per se*, that aid be properly targeted. Moreover, Member States have broad discretion in selecting undertakings not listed. As a result of the foregoing considerations, it may be advisable to obliterate the above described criteria in their entirety and replace them with the so-called matching clause already provided under the IPCEIs Communication.

Aid for Generation Adequacy

On the basis of the analysis provided and the related findings extensively discussed in Chapter 4, paragraph 2.3., the new provisions on aid for generation adequacy, in general, and capacity remuneration mechanisms (CRMs), in particular, may be probably considered the most problematic novelty of the EEAG. This is especially due to the rather dangerous nature of this form of aid, which may well impair most of the Energy Union goals. The foregoing has been explicitly acknowledged by the Commission both in the Energy Union Communication and in the recently published Report on Sector Inquiry.[1620] Nonetheless, to the extent that, as

[1620] Indeed, under Energy Union Communication the Commission has stated that "[a] *fully functioning* [int. ener mkt] *is the best means to reduce the need for* [CRMs]. […] *effective application of* [the EEAG] *can only be a first step to ensure that divergent national market arrangements, such as* [CRMs] *and uncoordinated renewables support schemes become more compatible*". Moreover, under the Report on Sector Inquiry it has held that there is

evidenced, several CRMs have been implemented by Member States in the last decade without prior notification, the inclusion of compatibility conditions in the context of the EEAG was probably necessary. However, in the author's opinion, the criteria provided are not that strict, being very general. This is probably due to the lack of experience and EU legislation in the area. Indeed, rather than being prescriptive in character regarding the construction and assessment of measures – the word "*should*" being broadly employed - the EEAG set forth a number of general principles. This finding may not be contradicted by the circumstance that the Report on Sector Inquiry and the final papers on the related working groups refer to the 'principles' provided under the EEAG as to 'requirements', the wording of the Guidelines being rather clear with that respect.

Our findings with respect to the new provisions of the EEAG would have led us to recommend the adoption of an adequate legislation in the field. However, given that a recent package of legislative proposals includes also proposals for improving national generation adequacy policies, it worth waiting the outcome of the legislative process.[1621]

2. The State origin criterion: the way forward

In Part III of this doctoral thesis we have provided an extensive analytical review of the judgments of the EU Courts and decisions of the Commission on energy aid measures that have elaborated on the State origin criterion. In our opinion, the analysis has provided extensive practical evidence on how certain approaches to interpreting the State origin criterion, in general, and the State resources condition, in particular, have set strict boundaries to the

a "[…] *risk that* [CRMs] *distort cross-border electricity trade and competition.* […] *may also discourage investment within national borders when it would be more efficient to reinforce interconnection*". See, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank of 25 February 2015, *A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy*, COM(2015) 80 final, and Commission Staff Working Document of 30 November 2016 accompanying the Report from the Commission: Final Report of the Sector Inquiry on Capacity Mechanisms, SWD(2016) 385 final.

[1621] More precisely, the package includes a proposal for a new Regulation on risk-preparedness in the electricity sector repealing Directive 2005/89/EC. The package furthermore includes revisions of Regulations (EC) No. 713/2009 and 714/2009 as well as of Directive 2009/72/EC. See**,** Directive 2005/89/EC of the European Parliament and of the Council of 18 January 2006 concerning measures to safeguard security of electricity supply and infrastructure investment, OJ 2006 L 33/22; Regulation (EC) No 713/2009 Of The European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators, OJ 2009 L211/1; and Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No 1228/2003, OJ 2009 L211/15.

supranational jurisdiction over energy support regimes and have overstepped into areas within the precinct of other elements of this notion and of the compatibility assessment. As clearly evidenced in detail, the resulting legal uncertainty and notification deficit have been, so far, rather problematic.

In our opinion, the analysis of certain judgments of the Court of Justice and Commission's decisions have also evidenced that the approach with respect to this condition of the notion of aid generates discriminations between Member States based on their systems of property ownership. In fact, the organisational model chosen by the Member State for the administration and development of the energy sector seems to represent the key element for determining the applicability of the State aid control regime to this sectors. Indeed, as substantiated with clear evidence from the case law, a problematic trend may be detected: the more the EU progresses towards energy market liberalisation, the more the risk that this might have an even greater impact on the effectiveness of the State aid control regime in future energy cases.

Notwithstanding the circumstance that future, potentially risky, paths within the context of the assessment of the imputability criterion have also been detected in judgments dealing with aid measures other than those aimed at promoting the energy sector, from the analysis provided it is clear that the most problematic element is the State resources requirement.

As a result of the foregoing considerations, the extensive analysis of the relevant case law provided in Part III of this thesis and the broad array of arguments put forward thereunder, in our opinion, in order to preserve the effectiveness of the State aid control regime there is no other option than for the Court of Justice to rectifying its case law opting in favour of the cumulative approach. Moreover, this would also make the interpretation of the notion of aid more consistent with the wording of Article 107(1) TFEU.

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Commission Decision of 16 December 2016, State aid SA.38760, *Drax 3rd Unit Biomass Conversion*, n.y.p.

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