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The State Aid Dimension of Environmental Aid

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Dedicated to all those who made my one year stay in the United Kingdom possible and to those who made it an unforgettable experience

Preface

This dissertation was originally submitted as a thesis in completion of an LL.M. programme in the field of International Commercial Law at the University of Birmingham, United Kingdom. This revised version is intended to reflect the state of law as of 1 January 2009.

For such a small book, there are numerous debts of gratitude: I would especially like to extend my appreciation to Dr. Luca Rubini, my supervisor for this thesis, for his continual encouragement and interest. His guidance and the many intellectually challenging discussions were formative as to how I chose to approach the topic of this book. The responsibility for any remaining errors of course remains mine.

This work is dedicated with affection to my parents, Antonia and all my friends and colleagues at the School of Law who made the last year possible in the first place and unforgettable at last.

Dresden, January 2009 Sebastian Woschech

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A. Introduction

Twenty years ago, in the summer of 1988, the issue of Climate Change first came to public attention after large parts of the Amazon Rain forest and the Yellowstone National Park were ablaze. Discovery magazine ran the headline "The greenhouse effect – this summer was merely a warm up"[1] and reported on the (now famous) testimony by James Hansen[2] before the US Senate in which he stated "with 99 percent confidence" that a recent rise in global temperature was occurring. "The greenhouse effect," he claimed, "has been detected and is changing our climate." [3]

Now, 20 years later, we know that the greenhouse effect has not only changed our climate but our whole society. At least since the Stern Review[4] revealed that climate change is a threat to the public purse it is on top of the political agenda. Environmental policy in general is now at the forefront of everyday's news. The issue makes Peace Nobel Prize laureates[5] and wins elections[6] but also creates droughts, famines and, more recently, the first environmental refugees.[7] The global scale of the problem calls for a global solution but in a multipolar world any such solution demands not only global cooperation but also local implementation.

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[1] October 1988 edition.
[2] Now head of the NASA Goddard Institute for Space Studies.
[3] The testimony on 23 June 2008 was based on: Hansen, et al., 'Global Climate Changes as forecasted by Goddhard Institute' (1988) 93 Journal of Geophysical Research 9341.
[4] Stern, *The Economics of Climate Change: The Stern Review* (CUP, Cambridge, 2007).
[5] In 2007 awarded to the Intergovernmental Panel on Climate Change (IPCC) and Al Gore "for their efforts to build up and disseminate greater knowledge about man-made climate change, and to lay the foundations for the measures that are needed to counteract such change.".
[6] See victory of the Australian Labor Party in November 2007 whose leader, Kevin Rudd, promised to sign the Kyoto Protocol as first political act after being sworn in.
[7] Gupta, 'Pacific swallowing remote island chain' online: <http://edition.cnn.com/CNN/Programs/anderson.cooper.360/blog/2007/07/pacific-swallowing-remote-island-chain.html> accessed: 01. January 2009.

Before conducting a legal analysis[8] of the measures with which the European Union tries to implement environmental policy "locally" this paper will briefly take a look at the international level and it is hoped that this will help to place the European measures into their international context.

B. European Environmental Policy placed into (the State Aid) context

I. International Measures

Whether as a consequence of Hansen's testimony or not, 1988 was the year in which the International Panel on Climate Change (IPCC) was jointly founded by the United Nations Environmental Program and the World Meteorological Organization. The IPCC is a scientific body tasked to evaluate the risk of climate change caused by human activity. Its first Assessment report (1990) served as a basis for the United Nations Framework Convention on Climate Change (UNFCCC) which was drawn up during the Earth Summit[9] in June 1992 in Rio de Janeiro. Although not setting binding targets the UNFCCC acknowledged the need to stabilize greenhouse gas (GHG) concentrations in the atmosphere and provided for regular "updates" of which the Kyoto Protocol is certainly the most prominent. The latter, adopted in December 1997, entered into force in February 2005 and can be called the so far most successful environmental treaty. It contains binding targets to reduce GHG-emissions and has been ratified by 182 nations to date.[10] By ratifying the Kyoto Protocol in May 2002[11] the EU and its Member States (MS) committed themselves to

[8] The analysis will concentrate on the State Aid dimension of these measures.
[9] Formally known as the United Nations Conference on Environment and Development (UNCED), June 1992.
[10] See: <Http://unfccc.int/files/kyoto_protocol/status_of_ratification/application/pdf/kp_ratification.pdf> accessed: 01 January 2009.
[11] Pursuant to Article 175(1) of the Treaty establishing the European Community.

reducing emissions of six key GHG[12] by 8% against 1990 levels over the five-year period 2008-2012.[13] The Kyoto Protocol allows for flexibility in the way that parties achieve their targets. Making use of this flexibility the EU Commission emphasized the need for a common and coordinated approach, including economic instruments[14] and a fair distribution of the reduction-burdens amongst the MSs[15]. However, the Commission also stressed that in the absence of Community provisions it is for each MS to formulate appropriate policies.[16]

This now leads us to the "local" European measures. A short look at their development will reveal that, in contrast to the international efforts that mainly focus on climate change, they address environmental degradation as a whole. A look at the development of European environmental legislation and regulation will clarify why the latest environmental policy measures deserve further attention from a competition and in particular state aid perspective.

[12] Annex A of the Protocol.
[13] Article 3(1) in conjunction with Annex B of the Protocol.
[14] Commission (EC), 'Preparing for Implementation of the Kyoto Protocol' (Communication) COM (99) 230 final, 19 May 1999.
[15] Council Decision (EC) 2002/358/EC concerning the approval of the Kyoto Protocol [2002] OJ L130/1.
[16] Commission (EC), 'Community Guidelines on State Aid for environmental protection' [2001] OJ C37/3, para 70.

II. European Measures

1. The Evolution of Environmental Legislation and Regulation

In the 1960s and 1970s market integration was at the forefront of public policy, and in the 1980s industrial policy was dominant on the EC agenda, but now the most controversial public policy issue is environmental policy.[17] This is reinforced when looking at *(a)* the history of Environmental provisions in the Treaty (legislation) and at *(b)* the changing approach to environmental regulation. These will now be dealt with in turn.

a) The EEC Treaty remained silent on environmental issues. Early cases of environmental legislation[18] were based on Article 100 EEC [now 94][19] and could only go as far as was necessary for the functioning of the Common Market. Environmental policy (only) served the attainment of the Common market. This started to change when the Single European Act (1987) firstly introduced environmental policy in the Treaty[20] and change became evident when the Maastricht-Treaty (1993) introduced the environment as a Treaty-objective of its own.[21] The final "upgrade" of the environment to a general principle of EC Law was accomplished by the Treaty of Amsterdam (1997) according to which environmental protection requirements *must* now *be integrated* into the definition and implementation of other Community policies.[22] *Wasmeier* aptly calls the resulting "merger" of environmental and

[17] Basaran, 'How should Article 81 address agreements that yield environmental benefits' (2006) 27 ECLR, page 479, Fn. 1.
[18] Eg. Council Directive (EEC) 75/716 on the sulphur content of certain liquid fuels [1975] OJ L 307/22.
[19] Art. 100 EEC was confirmed as legal basis by the Court in Case 92/79 Commission v Italy [1980] ECR 1115.
[20] Articles 130r, 130s, 130t, 100a(3)+(4) EEC [now 174, 175, 176, 95(3)+(4) EC].
[21] Articles 2 and 3(1)k EC [now 3(1)l].
[22] Article 6 EC.

economic objectives into one overall concept an "environmental common market"[23]. The growing legislative importance of the environment equally reflects itself in a changing regulatory approach.

b) A common characteristic of early European environmental regulation was a so called "command-and-control" approach. This is an approach that strictly regulates certain environmental aspects in often absolute terms. Certain levels of pollution are not allowed to be exceeded[24] or certain behaviour is forbidden[25]. This approach however has inherent disadvantages. One frequently raised objection is the fact that it does not provide any incentive to go beyond the level of protection prescribed by the regulations.[26] A further problem is that different economic actors have different avoidance costs so that an obligatory reduction can distort competition. One final point of critique addresses the underlying perception of the role of the state. The command-and-control approach implies that the state knows best how to efficiently and cost effectively provide environmental protection. However, this is often not true.

Consequently and in line with the integration principle in Article 6 EC the EU has left this approach behind and turned to the use of market-based regulatory instruments (MBIs).[27] These are based on the economic insight that most environmental problems have their origins in the misworkings of the economic system.[28] More specifically, environmental pollution comes with a cost for society and these external costs are not fully accounted for in the economic

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[23] Wasmeier, 'The Integration of Environmental Protection as a General Rule for Interpreting Community Law' (2001) 38 CMLRev. 160.

[24] E.g. Council Directive (EEC) 78/1015 on the permissible sound level of motorcycles [1978] OJ L349/21, see Annex I.

[25] E.g. Council Directive (EEC) 78/319 on toxic and dangerous waste [1978] OJ L84/43, see Article 3(2).

[26] Vedder, *Competition Law and Environmental Protection in Europe – Towards Sustainability?* (Europa Law Publishing, Groningen, 2003), page 47.

[27] The Sixth Environmental Action Programme (2001) suggests policies "encouraging the market to work for the environment", COM (2001) 31 final, page 15.

[28] Pearce, *Blueprint for a Green Economy* (Earthscan Publications, London, 1995).

process. Addressing this market failure MBIs seek to internalize these costs by giving them a price. The main legal tool with which this can be achieved is the application of the "polluter pays principle" [29] according to which the polluter should bear the costs of his damage to the environment. A simple application of this principle would be to oblige the producer of a car to recycle it after its lifespan.[30] However, such measures always tend to (arbitrarily) hallmark an economic operator as *the polluter*.[31] Avoiding the difficulties involved in appointing the polluter can be achieved by imposing a (pigovian) tax on the use of the externality.[32] This can be done by taxing each unit of pollutant emitted.[33] However, setting the tax at the correct level can involve considerable costs.[34] Other measures avoid this by using the market forces of supply and demand to set the price at the correct level.[35] Such tradable permit schemes achieve reductions in pollution or resources[36] at the lowest overall costs to society[37] through the provision of market incentives to trade. All MBIs have in common that they make pollution a real economic cost and companies will tend to maximize their profits by reducing this cost component and therefore reducing at the same time pollution. Following a report by the European Environment Agency[38] the Commission plans to increasingly make use of MBIs[39] because

[29] Already mentioned in the first environmental action programme (1973) OJ C 112/1, part I, title II, no. 5.
[30] So called "cradle to the grave" regulation.
[31] In this case the producer. But is not the consumer with his demand for the car the real polluter? Should he pay?.
[32] Proposed by Pigou in *Wealth and Welfare* (London, 1912).
[33] Council Directive (EC) 2003/96 restructuring the taxation of energy products and electricity (Energy Taxation Directive), OJ L283/51.
[34] Hussen, *Principles of Environmental Economics* (Routledge, Rev. Ed., London, 2008), p. 106.
[35] E.g. Council Directive (EC) 2003/87 establishing a scheme for greenhouse gas emission allowance trading [2003] OJ L275/32, p. 32.
[36] E.g. individual transferable quotas for fisheries in Iceland since 1984.
[37] Stavins, 'Market-Based Environmental Policies: What can we learn from the U.S. Experience?' Harvard University, Research Working Paper, Series 2, 2003.
[38] European Environmental Agency, *Market-based instruments for environmental policy in Europe* (Office for Official Publications of the EC, Copenhagen, August 2005).

they provide flexible and cost-effective means to correct certain market failures. However, if market based instruments are to bring about these corrections, it is essential that the markets in which they operate are not distorted.[40] This is where competition policy and State aid control play a significant role. Before turning to the main part of this paper that will analyse some of these measures from a State Aid perspective we will now have a short look at the specific measures with which European environmental policy tries to fulfil its international obligations outlined above. This will help to identify those measures that need special attention from a state Aid perspective.

2. Specific Environmental Legislation

Concomitantly with the growing prominence of the environment in the Treaty the number of environmental issues addressed by the European Union rose dramatically. To date more than 620 Acts addressing all aspects of the environment are in force. The Sixth Environmental Action Programme identified four priority areas for environmental action: climate change, nature and biodiversity, environment and health and natural resources and wastes.[41] Of these "Climate Change" is in the light of the on-going international efforts and the scientifically proven urgency[42] certainly the most dynamic. Although the EU took its first climate-related initiatives in the early 90s, in the light of Kyoto the

[39] Commission (EC), 'Commission Staff Working Document Accompanying the Green Paper on market-based instruments for environment and related policy purposes' (Working Paper) COM (2007) 140 final, 28 March 2007.
[40] Commission (EC), 'State Aid Scoreboard – Spring 2008 Update' (Report) COM (2008) 304 final, 21 May 2008, p. 10.
[41] Art. 1(4) of Council Decision (EC) 1600/2002 of the European Parliament and of the Council of 22 July 2002 laying down the Sixth Community Environment Action Programme [2002] OJ L242/1.
[42] IPCC, *Climate Change 2007 – Working Group I Contribution to the Fourth Assessment Report* (CUP, Cambridge, 2007); predicts a global temperature rise of up to 6.4°C and urges immediate action to avoid irreversible changes of the climate.

pace has picked up dramatically. In January 2007, as part of an integrated climate change and energy package[43], the European Commission proposed options for an ambitious global agreement.[44] These were endorsed by the Council in March 2007 which committed the EU to reducing GHG by at least 20% by 2020. To underpin their commitment EU leaders set further targets, i.e. reductions of energy consumption by 20% and an increase of renewable energies' share to 20% by 2020.[45] Called upon by the Council the Commission presented a detailed Energy and Climate Change package[46] setting out the mechanisms with which to achieve the Council's political commitments. This package touches upon many issues which deserve special attention from a state aid point of view, namely the introduction of new guidelines on State aid[47], the promotion of renewable energy and (amendments to) the EU Emission Trading System (EU ETS).

[43] Commission (EC), 'An Energy Policy for Europe' (Communication) COM (2007) 1 final, 10 January 2007.
[44] Commission (EC), 'Limiting global climate change to 2 degrees Celsius - The way ahead for 2020 and beyond' (Communication) COM (2007) 2 final, 10 January 2007.
[45] Council (EC), 'Brussels European Council 8/9 March 2007' (Presidency Conclusions) 7224/1/07 Rev 1, 2 May 2007.
[46] Commission (EC), '20 20 by 2020 - Europe's climate change opportunity' (Communication) COM (2008) 30 final, 23 January 2008.
[47] Commission (EC), 'Community guidelines on State aid for environmental protection' [2008] OJ C 82/1, 1 April 2008.

III. Where does State Aid control come into play?

All the measures above have in common that they make use of market mechanisms and, quite naturally, rely on undistorted competition for their functioning. Preserving effective competition is therefore a precondition for the attainment of Europe's ambitious environmental targets. Following the ordoliberal approach to competition, it is this author's view that the state/regulator should provide the general framework for functioning competition but should not further interfere unless this becomes necessary. Following this thin line of necessity, the Member States, the ECJ and the Commission in principle agree that State Aid is only the "second best" option to achieve optimal allocation of resources.[48] However, State Aid can still be necessary to effectively correct market failures[49] and to pursue non-economic objectives that cannot be achieved by market forces alone[50]. Especially in the field of Environmental Aid this raises interesting questions about the interplay of competition and State Aid: Where is the border between setting the right incentives for environmental protection and distorting competition? When do exemptions from environmental regulation undermine competition and therefore frustrate their very objective? Are all market based instruments deployed by the EU compatible with competition in general and State Aid regulation in particular? Looking for answers to these questions we find the Commission claiming that competition policy and environmental policy are not mutually antagonistic[51] and Article 6 EC implies that environmental policy and other policies such as state aid control can be integrated. However, this does not change the author's impression that, as pointed out by the questions above, there

[48] Commission (EC), 'State Aid Action Plan – Less and better targeted state aid' (Consultation Document) COM (2005) 107 final, 7.6.2005, para 23.
[49] Ibid. para 10.
[50] Biondi/Rubini, 'Aims, Effects and Justifications: EC State Aid Law and Its Impact on National Social Policies' in Dougan/Spaventa (eds), *Social Welfare in EU Law*, p. 80.
[51] 2001-guidelines, supra n. 16, para 3.

seems to be some tension between competition, state aid and environmental protection: How do we integrate without subordinating the one or the other?
This paper will set out to answer those questions. In the light of the recent Energy and Climate Change package it will focus on analysing the State Aid dimension of the measures that support renewable energy sources and aid in the form of tax exemptions. A special focus of this paper lies on the centrepiece of the European efforts to reduce emissions, the European Emission Trading System.

Before conducting a legal analysis of these measures the general approach to the concept of State Aid by the ECJ shall briefly be recalled (I.). Elements of the definition that are of importance for the state aid appraisal of *specific* environmental measures such as feed-in tariffs, green certificates, tax exemptions and the EU-ETS will be dealt with in detail at the point of their importance to the legal analysis (next chapter). However, more attention at this point deserves to be given to the justification stage (II.) as the recently issued 2008-guidelines give new impetus to this part of the debate.

C. The concept of (environmental) State Aid

I. The Definition of State Aid

None of the Treaty provisions on State Aid contains a definition of 'Aid'. However, to establish whether a measure constitutes State Aid article 87 EC names the relevant criteria that need to be fulfilled. This provision is commonly dissected into five cumulative[52] and interdependent[53] parts. There must be (1.) an aid that is of advantage for its recipient; this aid must be (2.) granted by a MS or through State resources; it must be (3.) of a selective nature; (4.) it must distort competition and affect trade between MSs. Each of these will be dealt with below.

The concept of Aid, although related to the term of subsidies[54] is to be given a wider definition since it not only embraces positive benefits, but also fiscal and social measures[55] which, in various forms, mitigate the charges which are normally included in the budget of an undertaking"[56] and have equally disruptive market *effects* as subsidies.[57] This shows that the Court identifies aids by reference to their effects rather than their causes or aims.[58]

[52] Kurcz/Vallindas, 'Can General Measures be … selective?' (2008) 45 CMLR 160.
[53] Plender, 'Definition of Aid' in Biondi/a.o. (eds), *The Law of State Aid in the European Union,* 5.
[54] Article 16 GATT.
[55] Bacon, 'The concept of state aid' (2003) 24 ECLR 54.
[56] Case 30/59, *Steenkolenmijnen* [1961] ECR 1, para 19; Case C-200/97 *Ecotrade* [1998] ECR I-7907, para 34.
[57] Quigley/Collins, *EC State Aid Law and Policy*, 4.
[58] Case 173/73, Italy v Commission ("Family allowances")[1974] ECR 709, para 27; Case C-480/98, Spain v Commission [2000] ECR I-8717, para 16.

1. Advantage

Any "Aid" only qualifies as State Aid under Article 87 EC if it entails an advantage being given to the recipient.[59] Such an advantage cannot be determined in absolute terms because 'advantage' - being a specification of the general principle of equality[60] - is a relative concept that requires a comparator. In the words of Advocate General (AG) Jacobs, the crucial point is whether the undertaking obtains a benefit which it would not have received in the normal course of events on the private market.[61]

2. Granted by a Member State or through State Resources

The wording of this limb seems to indicate two alternative criteria ("or") and gives rise to the question whether an effect on State resources is a constitutive element of aid or whether it is sufficient that certain economic advantages are conferred upon specific undertakings as a result of conduct attributable to the State? After equivocating on this issue[62] the ECJ finally clarified its position in its influential *Preussen Elektra* judgment[63]. It followed its previous ruling in *Sloman Neptun* where it took the view that "the distinction between aid granted by the State and aid granted through State resources is not to include under Article 87 (1) aid that does not emanate from State resources, but to extend the

[59] Quigley/Collins, n. 55, 19.
[60] Ross, 'State Aids and National Courts: Definitions and other Problems' (2000) 37 CMLRev. 407.
[61] Opinion in Case C-256/97, *DMT* [1999] ECR I-3913, para 31.
[62] Suggesting a wide definition (alternatives): Case 78/76, *Steinike* [1977] ECR 959; Case 290/83, *"poor Farmers"* [1985] ECR 439; Joined Cases 67,68,70/85, *VanderKooy* [1988] ECR 219; Case 57/86 *Greece v Commission* [1988] ECR 2855; See in contrast (cumulative): Case 82/77, *VanTiggele* [1987] ECR 25; Joined Cases C-72,73/91, *Sloman Neptun* [1993] ECR I-887; Case C-189/91, *Kirsammer-Hack* [1993] ECR I-6185; Joined Cases C–52,53,54/97, *Viscido* [1998] ECR I–2629; *Ecotrade,* supra n. 56.
[63] Case C-379/98 [2001] ECR I-2099.

notion of State aid to aid granted by private or public bodies appointed or created by the State" [64]. Therefore, under the law as it stands, financing through State resources is a constitutive element of State Aid.[65]

In terms of how this "effect on the public purse" is to be approached the Court chose a broad interpretation comprising any direct or indirect advantage granted by the state.[66] This includes (environmental[67]) tax exemptions[68], publicly managed funds to support producers of renewable electricity[69], obligatory para-fiscal levies[70], state guarantees[71], and apparently even a release from the polluter pays principle[72] as long as these advantages are imputable to the state[73]. The Court recently gave guidance on this issue by listing a couple of indicators which might be relevant in determining the state imputability of a measure.[74]

3. Selectivity

The selectivity criterion distinguishes between objectionable State Aid and general legislative measures applying to all undertakings without distinction. So far the Court has avoided giving a clear definition of 'general measures'. Instead it has chosen a negative approach giving guidance on which measures are selective. Due to an extensive body of case law it is now clear that measures that

[64] Supra n. 62, para 19.
[65] Kuhn, 'Implications of the 'PreussenElektra' Judgment' (2001) 28 Legal Issues of Economic Integration, 367.
[66] *SlomanNeptun*, n. 62, para 19.
[67] Case C-143/99, *Adria-Wien* [2001] ECR I-8365.
[68] Case C-387/92, *Banco de Crédito* [1994] ECR I-877.
[69] Commission Decision *N707/2002* – Netherlands, 'MEP Stimulating renewable energy' [2003] OJ C148/11.
[70] Case C-126/02 *GEMO* [2003] ECR I-13769; Commission Decision *NN162a/2003* – Austria, 'Support of electricity production from renewable sources' [2003] OJ C221/8.
[71] Case C-404/97, *Commission v Portugal* [2000] ECR I-4897.
[72] Commission Decision 1999/227/ECSC *Georgsmarienhütte* [1999] OJ L83/72.
[73] *VanderKooy*, n. 62, para 35.
[74] Case C-482/99, *Stardusk* [2002] ECR I-4397, para 56.

favour particular industries[75], sectors[76], and parts of MS's territory[77] are considered selective and So are measures that allow the authorities a certain degree of discretionary power.[78] Less clear is the treatment of advantages arising out of (eco-)taxation schemes. There a measure which at first sight seems selective might be justified "by the nature or general scheme of the system"[79] or "by reason relating to the logic of the system"[80]. This will be dealt with in detail when considering exemptions from eco-taxes.

4. Distortion of Competition and Effect on inter-state Trade

From the wording of Article 87 ("threat") follows that no actual distortion of competition is required. To require this would favour those MS that are in breach of their notification obligation to the detriment of those which do comply with the procedure set out in Article 88 (3).[81] AG Capotorti even considers a presumption that any public aid distorts competition as permissible.[82]

The ECJ's approach to the last requirement, i.e. the effect on inter-state trade, is very broad. As pointed out by AG Tizzano there are no minimum thresholds below which inter-state trade is not affected[83] and even aid on a local or regional level can distort competition. In most cases where there is a distortion of

[75] Italy v Commission, supra n. 58.
[76] *Adria-Wien,* supra n. 67.
[77] *Vademecum – Community Rules on State Aid* (2007) <http://ec.europa.eu/comm/competition/state_aid/studies_reports/vademecum_on_rules_2007_en.pdf> accessed: 01 January 2009.
[78] Case C-241/94 *France v Commission* ("Kimberly Clark") [1996] ECR I-4551, para 23-24.
[79] *Italy v Commission*, n. 58, para 15.
[80] Case C-53/00 *Ferring* [2001] ECR I-9067, para 17.
[81] Case 301/87 *France v Commission* [1990] ECR I-307, para 33.
[82] Opinion in Case 730/79, *Philip Morris* [1980] ECR 2671, 2698.
[83] The Commission's Regulation (EC) No 1998/2006 of 15 December 2006 on the application of Articles 87 and 88 to *de minims* aid [2001] OJ L379/5 seems to conflict but is reconcilable if assumed that it finds its basis in Article 87(3)(c) of the Treaty.

competition the ECJ will assume an effect on inter-state trade. As a result of this broad approach some authors even question the relevance of the last two criteria.[84]

II. The Justifications for environmental State Aid

1. The legal base for environmental State Aid

In the early days of aid for environmental protection Article 87(3)(b) EC could theoretically be used as a base for justification. However, due to a very restrictive interpretation by the ECJ[85] the Commission resorted to other provisions. Amongst these is Article 86(2) EC which is applicable when public service obligations with an environmental element are at stake.[86] However, by far the most common legal base for environmental State Aid is Article 87(3)(c) EC. Although a direct application of this provision is possible[87] in most cases it will be referred to in conjunction[88] with the Environmental Guidelines of the Commission[89]. Recently revised and of paramount importance for the correct implementation of environmental State Aid these guidelines merit further attention.

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[84] Ross, n. 60, 415.
[85] Joined Cases 62/87 and 72/87 *Glaverbel* [1988] ECR 1573, para 22: "a project should not be described as being of common European interest, unless it forms part of a transnational European programme, which is supported by several Member States or results from a concerted action to fight a common threat.".
[86] E.g. Commission (EC), IP/05/771of 22 June 2005.
[87] Commission Decision N 570/2004 – Germany, 'Promotion of life cycle management' [2005] OJ C 327/11; N 304/2003 – Netherlands, 'AKZO Nobel' [2003] OJ C 81/5.
[88] Kliemann, 'Aid for Environmental Protection' in: Rydelski (ed.), *The EC State Aid Regime* (Cameron May, London, 2006) page 325.
[89] Current version: 2008-guidelines, supra n. 47.

2. The History of the Environmental Guidelines – 1974 to 2008

Although the first Community Guidelines on State Aid for Environmental Protection were issued in 1994[90], policy instruments by the Commission that deal with State Aid for environmental protection date back as far as 1974[91]. The so called "Environmental Frameworks" which came in the form of Communications by the Commission to the MSs gave the necessary guidance and formed the progress in this policy field. The early frameworks adopted the polluter pays principle and allowed for degressive forms of investment aid.[92] The initial view of the Community with respect to State Aid was that it was only of a transitional character as environmental protection should not in principle depend on policies which rely on grants of aid, and place the burden of combating pollution on the Community.[93] Any aid to companies for the adjustment to new environmental standards was supposed to end in 1980. However, after realizing that the transitional period was too short, the framework was prolonged multiple times until 1993. During this time the Commission realized that the need for environmental aid was still prevalent and adopted the first Environmental Guidelines in 1994.[94] The first guidelines reiterated the importance of the polluter pays and the integration principle and emphasized that aids are only the second best solution. The scope of the early frameworks was extended from mere investment aid to horizontal support measures and operating aid. Especially concerning the latter the 1994-guidelines were very restrictive. This also meant that the newly introduced possibility to support renewable energy with investment aid did not yet extend to operating aid.

[90] Commission (EC) Guidelines on State aid for environmental protection [1994] OJ C72/3.
[91] See letter from the Commission to the MSs S/74/30807 of 7 November 1974, with the Communication form the Commission to the MSs of 6 November 1974 in annex.
[92] Commission Communication attached to Council Recommendation of 3 March 1975 [1975] OJ L194/1.
[93] Ibid. point 4c.
[94] Supra n. 90.

On the basis of the experience gained with the first guidelines and in the light of the developments on the international scene outlined above, the Commission adopted new guidelines[95] in 2001. These devoted considerable attention to CO2 reduction in the wake of the Kyoto Protocol[96] and have a positive stance with regard to measures to promote renewable energy.[97] This can be seen by the extension of operating aid to the latter[98]. Further attention is devoted to the specific case of tax reductions.[99] In the light of a rising use of eco-taxation by MSs the Commission thought it necessary to clarify its stance on this form of operating aid.

In the context of the recently issued Energy and Climate Package the Commission is putting forward measures to achieve the ambitious "20/20 by 2020" targets set out by the Council. To streamline these measures with the State Aid practice the Commission thought it necessary to issue new guidelines as part of the above package. These bring considerable change to the environmental State Aid regime.

3. The 2008 Environmental Guidelines

The new 2008-guidelines give guidance on the circumstances in which State aid will be justified. "They set out how MSs may grant environmental aid to ease the burden of the shift to a low-carbon economy."[100] To do this the scope of the guidelines has further broadened. As long as the aid is well-targeted the guidelines now allow for very generous aid, considerably exceeding the intensity allowed by previous guidelines. This shows in the fact that aid which is

[95] 2001-guidelines, supra n. 16.
[96] Ibid. para 2, 68-70.
[97] Ibid. 24.
[98] Ibid. 54-65.
[99] Ibid. 47-53.
[100] Kroes, 'State Aid and climate change' (SPEECH/08/273).

granted following a competitive procedure can have an intensity of up to 100 percent.[101] Several new measures have been introduced such as aid for the acquisition of clean transport vehicles, aid for environmental studies, waste management, CO2 capture and storage and most importantly, aid involved in tradable permit schemes[102]. Key areas of the old guidelines as for example the rules governing aid for renewable energy remained, apart from an increased maximum intensity, largely unchanged.

To ensure the attainment of the declared goal of "better targeted aid"[103] the guidelines underwent some structural changes that reflect the shifting focus of the Commission. The guidelines are now split in a standard assessment and a detailed assessment depending on the measures' potential impact on competition and the environment. The Commission therefore intends to direct its control away from "unproblematic" aid towards such measures that merit a closer scrutiny. A further example of this is that although the possibility for tax exemptions of up to 10 years was kept it was made contingent upon the fulfilment of a strict necessity- and proportionality test if the companies do not pay at least the minimum Community tax rate.[104]

With the bifurcated approach of the new guidelines the Commission responds to the frequently levelled criticism of a generally high administrative burden for MSs and aid providers.[105] To alleviate this burden even further the Commission has finally followed the calls[106] for a block exemption in the field of environmental aid.

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[101] Supra n. 47, para 77, 97, 104, 116, 123.
[102] Ibid. 55-56; the Commission considered its experience as insufficient to give guidance on tradable permit schemes in the 2001-guidelines (para 71).
[103] State Aid Action Plan, supra n. 48.
[104] Supra n. 47, para 155-159.
[105] Holmes, 'Environmental Aid: a Case for Fundamental Reform (2)' [2006] EStAL 739.
[106] Ibid.; Vedder calls it "obscure" that the 2001-guidelines instead of a group exemption regulation were adopted 'The new Community guidelines on state aid for environmental protection – integrating environment and competition?' (2001) 22 ECLR 366.

4. The General Block Exemption Regulation (GBER)

Chapter one of the GBER[107] deals with the general conditions for exemption. Amongst other requirements it stipulates that all aid granted pursuant to the block exemption must be transparent and have an incentivising effect.[108] According to Article 6(1)(b) any environmental aid granted under the GBER shall not exceed the threshold of EUR 7,5 million.

Chapter two contains the specific conditions for different categories of aid. Section four thereof deals with the exemption of environmental aid measures. It exempts amongst others investments to go beyond Community standards, investments in energy saving measures, investment aid for the promotion of renewable energy sources and aid in the form of tax reductions. The conditions for such aid are largely based upon the 2008-guidelines but vary as to the way of the cost calculation. Essentially the GBER allows disregarding operating benefits when providing environmental investment aid.[109]

[107] Commission Regulation (EC) No 800/2008 General Block Exemption Regulation [2008] OJ L214/3.
[108] Ibid. Article 5 and 8, respectively.
[109] Ibid. recital 49.

5. An appraisal of the current approach to environmental aid

The recent revision of the environmental guidelines and the GBER are to be highly welcomed. For the first time the Commission's approach to environmental aid seems to have a framework which is coherent and fits well with the Community's external obligations as well as internal policies.
With regard to the external obligations of the Community and the increasing importance of fighting environmental problems in general and climate change in particular the broadened scope of the guidelines (horizontally as well as concerning the possible intensity of aid) is essential. That this does not lead to a distortion of competition is ensured by the internal policies of the Commission. The policy-mantra of "better targeted aid" comes to life in the bifurcated approach of the 2008-guidelines which allows for a deeper scrutiny of those cases that have the greatest potential to distort competition and trade. The second policy-mantra of "better regulation and simplification" manifests itself in the GBER. In the author's eyes the effect of the latter will be immense. Due to a complete abolition of bureaucratic burdens for those aid measures falling under the GBER their use will increase tremendously. This is acceptable from a competition point of view as the impact of each individual measure will be negligible. However, from an environmental perspective the impact will be enormous. Due to the subject matter of environmental protection it is not the one expensive and prestigious project that makes a difference (for instance, a carbon capture plant) but rather hundreds of small and inexpensive "grassroot-projects". Only with an increasing use of the latter will Europe be able to meet its "20/20 by 2020" targets. This also closes the circle to Europe's international obligations.

In the author's eyes the reason for this coherent approach is twofold. Firstly it is due to the fact that the 2008-guidelines are part of bigger Energy and Climate

Change package and need to be seen in context with this. The second reason however is more fundamental: Article 6 EC, calling for an integrated approach to environmental matters, seems to work.

III. Interim Conclusion

So far we have had a look at the place of environmental State Aid in "the bigger picture" of international and European environmental policy. We have found that environmental State Aid has undergone a considerable development. It has transformed from a merely transitional instrument to a key instrument in achieving Europe's international obligations. Environmental State Aid is here to stay and the pace of its development has even recently picked up. This is partly due to a growing awareness of the "environmental problem" and partly to a changing regulatory approach. New regulatory market-based instruments raise new questions in terms of their reconcilability with the State Aid regime. The Commission has reacted by issuing the 2008-guidelines which give guidance on how the Commission is going to treat the plethora of measures ranging from familiar investment subsidies to more novel forms of operating aid. By doing so the Commission has, as noted above, created a coherent and accessible framework which even grows in significance by means of the recently issued GBER.

However, in the author's eyes the accessibility of the Commission's guidance bears a danger. Many authors seem to forget that it is not the Commission that has the final say on whether a measure constitutes State aid or not but the ECJ. They also seem to forget that it is not the environmental guidelines that define the notion of State Aid but only the Treaty. In this context it is important to recall that the guidelines are just the *second* step. The justification of a measure

cannot be a substitute for the first and most important step: The admittedly sometimes less accessible analysis of whether a measure constitutes State Aid under the Treaty. Even the Commission sometimes avoids giving a clear answer to the first question by leaving the "State-Aid-Classification" open and ultimately justifying the measure under the guidelines.[110] This might give a quick go-ahead for the measure at issue but ultimately leaves obscurity and legal uncertainty as to its State-Aid quality.

The following parts of the paper therefore set out to shed some light on the state-aid quality of some of the most frequently used regulatory instruments. By doing this it is hoped to bring some more legal certainty to this issue. The first of the following three parts will deal with measures that, under the guidelines, would be classified as operating aid, i.e. aid for renewable energy sources (D.). Then this paper turns to a special case of operating aid: aid in the form of exemptions from environmental taxes (E). The last and final part of the paper will deal with the state aid implications of the EU ETS (F).

[110] E.g. Commission Decision *NN30b/2000* – Netherlands, 'Zero tariff for green electricity' [2002] OJ C30/14.

D. Aid for Renewable Energy Sources

Many MS have, in order to fulfil their share of Europe's Kyoto-targets[111], introduced support measures in order to stimulate the production and use of renewable energy sources. Amongst these the most successful in terms of legal certainty and incentivising effect is the model of feed in tariffs. Proof for this is that out of 7500 Megawatt of wind power installed Europe-wide in 2006, 6500 Megawatt were installed in countries that adopted this form of support.[112] Although the *PreussenElektra* judgement of the Court has clarified the State Aid dimension of feed-in tariffs the main arguments shall be reviewed since they resurface in the discussion of other support measures. Thereafter this paper will analyse the green-certificate system which is the second most used support system for renewables in Europe.

[111] European Environment Agency, 'Kyoto burden-sharing targets for EU-15 countries' see: <http://dataservice.eea.europa.eu/atlas/viewdata/viewpub.asp?id=1888> accessed: 01 January 2009.

[112] Enercon, 'European Commission puts forward proposal to reach renewables target' (2008) 1 Windblatt 5.

I. An Assessment of feed-in tariffs under the EC State Aid regime – A critical analysis of *PreussenElektra*

Of the wide array of existing support schemes for renewable electricity in Europe the most wide-spread and most relevant concerning the amount of support granted are feed-in Tariffs (FiTs).[113] FiTs are a price-based policy which set the price to be paid for renewable energy per kWh generated (in the form of guaranteed premium prices), combined with a purchase obligation on utilities (supply companies or grid systems).[114] By doing so they encourage the production of renewable energy by overcoming the cost disadvantage of renewable energy sources. Although firstly implemented in the US in 1978[115] it was the German "Strohmeinspeisungsgesetz" (StEG)[116] that brought FiTs to European attention. It will be recalled that the German law obliged electricity companies operating a general supply network to purchase electricity produced by downstream undertakings from renewable sources at a minimum above-market price. In what can now be called a landmark judgement[117] the ECJ had to deal with the question whether Article 87 precluded such a purchase obligation.

It found that the obligation constituted an advantage for the producers of renewable energy as they received guaranteed prices above market-level.[118] The crucial remaining question was whether it was enough that the advantage was conferred by the State or whether it had to be provided directly or indirectly through state resources. As we have seen above the ECJ preferred a narrow

[113] DelRío/Gual, 'An integrated assessment of the feed-in tariff system in Spain' (2007) 35 Energy Policy 995.
[114] Ibid.
[115] US Public Utility Regulatory Policies Act (1978), cited in: Lesser/Su, 'Design of an economically efficient feed-in tariff' (2008) 36 Energy Policy 981, 982.
[116] Gesetz über die Einspeisung von Strom aus erneuerbaren Energien of 7 Dezember 1990, Bundesgesetzblatt I, page 2633 (amended 1994, page 1618; 1998, page 730).
[117] PreussenElektra, supra n. 63.
[118] Ibid, para 54; not disputed by the parties to the case.

interpretation of Article 87 and found that the financing through State resources is a constitutive element of the concept of State Aid, hence the FiT at hand did not constitute State Aid. The crucial element for the Court was the fact that the StEG required *private* companies to pay other undertakings a higher price for renewable electricity, so that the resources involved were coming from private companies and *not* the State.[119] The question of how to recover the costs occurring through the purchase obligation was fully left to the discretion of the concerned company.

The judgement was widely debated and received negative as well as positive critiques. Prominent amongst those who criticized the judgement was *Slotboom* who claimed that the notion of a 'charge on the public account' was too vague to have a distinguishing character.[120] Further critique came from *Roger* who argued[121] that an obligatory charge on the public purse would not fit easily with *Commission v Portugal*[122] where it was held that loan guarantees, even though not called upon, constitute State aid. More fundamentally however *PreussenElektra* received criticism for moving away from the effect-based approach to State Aid and being based on a rather formalistic legal distinction.[123] It has been argued that the anticompetitive *effects* that State Aid regulation tries to restrict may be even greater where the costs of the measure is not borne by the State by the competitors of the aided company.[124] It was further argued that a narrow interpretation would open the possibility for creative MSs to circumvent the State Aid provisions.[125]

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[119] Hancher/Ottervanger/Slot, *EC State Aid* (Sweet&Maxwell, London, 2006) para 20-14.
[120] Slotboom, 'State aid in Community law: a broad or narrow definition?' (1995) 20 ELRev. 296.
[121] Rodger, 'State aid – a fully level playing field?' (1999) 20 ECLR 254.
[122] Supra n. 71, para 45.
[123] Torre/Cruz, 'A note on PreussenElektra' (2001) 26 ELRev. 492.
[124] Winter, 'Re(de)fining the notion of state aid' (2004) 41 CMLR 483.
[125] Koenig/Kühling, 'EC control of State aid granted through state resources' [2002] 7 EStAL 16.

However, these arguments have been comprehensively addressed by *AG Jacobs* who took the view that such concerns should not be exaggerated.[126] He argued that the narrow reading of Article 87 was more natural, gave rise to fewer consequential problems and was to be preferred since it provided more legal certainty.[127] The judgment was also welcomed by environmentalists as it encouraged the MSs to experiment with environmental legislation. Along these lines the findings in *PreussenElektra* have been characterized as an additional fifth possibility to grant environmental operating aid.[128]

With the benefit of hindsight it is possible to give a less "emotional" appraisal. It can be said that *PreussenElektra* has jump-started the production of green electricity and thereby contributed to Europe's leading role in this technology field today. However, this success did not come at the cost of a *circumvented* State Aid regime. The rare cases where MSs try to use *PreussenElektra* to grant advantages without coming under the purview of Article 87 are limited[129] and hard to criticize considering that they are simply making use of the scope of the Treaty provisions as interpreted by the Court. Other cases concerning fixed minimum prices[130] even though they extended the purchasing obligation to public undertakings[131] were found to be in line with the Court's judgement. A further reason that kept the judgement from being abused was that less economically powerful nations prefer a tighter control over their environmental support instruments and resort to FiTs that make use of centrally managed funds

[126] Opinion in *PressenElektra*, supra n. 63, para 158.
[127] Ibid. 151, 157.
[128] Vedder, supra n. 106, page 371.
[129] E.g. see: Commission Decision *NN661/1999* – UK, 'Competitive Transition Charge' [2002] OJ C113/3.
[130] Commission Decision N415a/01 – Belgium, 'Mécanisme des certificats verts' [2001] OJ C30/14.
[131] Commission Decision concerning the successor of the StEG the Erneuerbare-Energien-Gesetz, NN27/2000 – Germany, 'Law on promotion of electricity generation from renewable energies' [2002] OJ C164/5.

to finance the costs of the purchase obligation[132]. These systems have been considered by the Commission to constitute State Aid.[133]

II. An Assessment of Green Certificate Schemes under the EC State Aid regime – and the German approach to legal reasoning

An alternative market instrument frequently used to promote the production of renewable energy is the Green Certificate Scheme (GCS). In terms of economic efficiency it is comparable with the FiTs analysed above.[134] Differences however exist in the functioning of the scheme. Despite minor variations in detail GCSs impose upon electricity suppliers the obligation to ensure that a certain quota of the sold energy stems from renewable sources. The obligation can be met by either producing this energy themselves or by buying green certificates from producers of green energy that have been issued those certificates by the State as proof for their production of a certain amount of green energy.

Similar to the FiTs, the producers of renewable energy benefit from both a guaranteed demand and a price above the market price. However, in contrast to FiTs the price is not fixed by the government but depends on supply and demand. Only the demand is influenced by the renewable-quota imposed by the government. Due to this the price for renewable energy in GCSs can only be indirectly ascertained whereas FiTs fix a specific price-level. It is submitted that GCSs therefore provide a lower level of legal certainty which in turn is essential for long-term investment decisions.

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[132] Renner-Loquenz, 'State aid in feed-in tariffs (2006) Competition Policy Newsletter, Number 3, Autumn, page 61 et seq.
[133] Commission Decision NN162a/2003, supra n. 70.
[134] Stavins, 'Correlated uncertainty and policy instrument choice' (1996) 30 JEEM 218.

We will now turn to the legal analysis of the GCSs under Article 87. Since the ECJ did not decide on the issue yet it lends itself to an analysis pursuant to the *Gutachtenstil* that is known from German law. This is a systematic approach of logical reasoning[135] based on known facts and often deployed in order to solve cases for which no precedent exists.[136]

The Green Certificate Schemes could constitute State Aid under Article 87. For this to be the case they must fulfil all the conditions set out in Article 87(1), that is to say they must (1.) constitute an advantage, (2.) favour certain undertakings or the production of certain goods and by doing so (3.) distort or threaten to distort competition and affect trade between member states. However, to constitute state aid any such favour must be (4.) granted by the State or through State resources.

1. The issuance of the Green Certificates could constitute an *advantage*. According to settled case law this is the case when the undertaking obtains a benefit which it would not have received in the normal course of events on the private market.[137] The green certificates merely verify that the energy produced by the undertaking is green. However, despite their intangible nature, there is a market on which the certificates can be sold. The obligation on all distributors to attain a certain amount of such certificates therefore results in an additional income for producers of green electricity that they would otherwise not have received. The certificates therefore constitute an advantage.

[135] E.g.: D could be a thief. For this to be true he must have taken an item that was not owned by him. An item is not owned by someone if it is not part of his property. Here the item was part of X's property and not D's. Consequently the item was not owned by D. By taking it he became a thief.

[136] The author is aware of the Commission Decisions on GCSs (infra). However, since it is the ECJ that ultimately decides on the interpretation of the Treaty and since it has not done so yet in this regard, the *Gutachtenstil* seems reasonable for a purely legal analysis. MSs thinking about introducing a GCS are of course advised to lend attention to the Commission's decision practice on this matter and the 2008-guidelines.

[137] Opinion of AG Jacobs in *DMT*, supra n. 61, para 31.

2. This advantage must also be conferred *selectively*. The Court found this to be the case when particular industries[138] or sectors[139] are favoured. The GCSs only favour producers of renewable energy. They are therefore selective.

3. They must furthermore distort or threaten to *distort competition and affect the trade* between MSs. As we have seen above, even a presumption of a distorting effect on competition can be enough to fulfil this criterion.[140] Here the producers of green electricity receive an advantage over all other power utilities. This distorts competition between them. Since electricity is eligible for free movement within the EC the GCSs have an effect on intra-Community trade as well.

4. Lastly the advantage must be granted via state resources. Pursuant to *PreussenElektra* any purchase obligation on private entities to buy from other private entities does not involve state resources. Equally the purchase obligation in GCSs does not contain a public actor. The certificates themselves simply constitute authorised proof that green energy had effectively been produced.[141] By issuance of these certificates the State does not forgo revenue and no effect on the public purse is caused.[142] The advantage granted by the GCSs therefore does not involve state resources.

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[138] *Italy v Commission*, supra n. 58.
[139] *Adria-Wien*, supra n. 67.
[140] Supra, n. 82.
[141] Merola/Crichlow, 'State Aid in the Framework of the CO2 Emissions Allowance Trading Directive' (2004) 27 World Competition 33.
[142] Könings, 'Emission trading – why State aid is involved' (2003) Competition Policy Newsletter , Number 3, Autumn, 77-78.

It is submitted that since the GCSs do not fulfil all the criteria set out by Article 87(1) they do not constitute State Aid. A justification is therefore unnecessary.

When confronted with GCSs the Commission followed *PreussenElektra* and came to the same conclusion as this author.[143] However it continued assessing the justifiability of the notified scheme under the State Aid guidelines. It found that the guidelines allow for the notified GCSs since the conditions set out under "Option 2" to grant operating aid to renewable energy sources were fulfilled.[144] In the author's eyes this was unnecessary, and has been rightly called a *cautionary* compatibility test[145].

[143] Commission Decision N550/2000 – Belgium 'Green Electricity Certificates' [2001] OJ C330/3; Commission Decision N504/2000 – UK 'Renewable obligation and capital grants' [2002] OJ C30/15.
[144] Para 61 and 62 of 2001-guidelines [now para 110 of 2008-guidelines].
[145] Kliemann, n. 88, 345.

III. Aid calculated on the basis of external costs

1. The Concept

The two above mentioned mechanisms build on market-forces to determine the amount of "Aid" paid to support renewable energy sources. However, they depend on *political* decisions as to where the feed-in prices or the quota for certified green energy should be set. Not so much a mechanism to grant aid but more a method to calculate the legitimate level of aid is to determine the amount of aid on the basis of the "avoided external costs". This method tries to determine the level of aid for renewable energy by calculating the costs that society would otherwise have to bear if the same quantity of energy were produced by a conventional plant. Could these external costs be properly measured this method would, from an environmental and economic point of view, be the best option. It acknowledges that energy production from traditional sources comes with an (negative external) cost for society.[146]

Aware of the advantages of this approach but equally aware of the difficulties in estimating and monetizing the exact socio-environmental damages the Commission has put considerable efforts in its ExternE research project.[147] Since 1991, the ExternE project has involved more than 50 research teams in over 20 countries and has managed to become a well-recognised source for methods and results of externalities estimation. To put the findings of the ExternE project to use the 2001-guidelines contained the option to grant aid on the basis of avoided external costs[148]. However according to the knowledge of this author no MS has made use of this option to date.

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[146] Kliemann, supra n. 88, 345.
[147] <http://www.externe.info/> accessed: 01 January 2009.
[148] 2001-guidelines, Option 3, para 63, 64.

This might have triggered the Commission to remove this option from its prominent place and "spread" it all over the 2008-guidelines. Furthermore its significance has been reduced by subjecting it to the detailed assessment[149] and restricting this calculation method to "exceptional cases".[150]

2. Is "Aid" calculated on the basis of external costs State Aid at all? – The unknown consequences of *Altmark*

We have seen that "Option 2", that allows for Green Certificate Schemes, has lost much of its significance since the *PreussenElektra* judgement of the court. It was found by *Kliemann* that its main function now is to serve as guidance for a cautionary compatibility test in case the Commission is not sure about the State Aid quality.[151]

It is submitted that the former "Option 3" has the same destiny in the light of the ECJ's *Altmark* judgement[152]. This judgement, so it is submitted, could be applied (by analogy) to the aid calculated on the base of avoided external costs. In *Altmark* the Court addressed the old conflict between those who consider payments for public services as State Aid justifiable under Article 86(2) ("State Aid approach")[153] and those who consider such payments not as advantage[154] but as simple compensation which puts the service provider back on an equal footing with its competitors ("compensation approach"). Before going into the details of the judgement it is recalled that services of general economic interest are characterized by the fact that the private benefit of using these services is

[149] 2008-guidelines, para 13 in conjunction with 161.
[150] Ibid. para 35.
[151] Supra, n. 145.
[152] Case C-280/00 *Altmark* [2003] ECR I-7747.
[153] E.g. Opinion of AG Léger, ibid. para 76.
[154] Brevern, 'Kommentar zum EuGH-Urteil vom 22.11.201 (Ferring)' (2001) Europäische Zeitschrift für Wirtschafts- und Steuerrecht, 587.

usually lower than the social benefit[155] and universal access and full coverage may not be offered by the market itself[156]. This is interesting because it is reminiscent of external environmental costs[157] which are, due to market failures, not fully accounted for without the necessary "compensation" in form of "aid". This leads us back to *Altmark* where the Court took an intercessory standpoint by stating that the payment was to be considered as mere compensation as long as four strict conditions are fulfilled.[158] In short, the obligation must be clearly defined, the parameters of the compensation must be clearly established beforehand, the compensation may not exceed what is necessary to cover the costs incurred and the compensation must be determined on a traceable cost analysis. Since the judgement was issued after the 2001-guidelines any influence on the latter is impossible. However, the thoughtful reader cannot deny certain similarities to the conditions under which aid calculated on the basis of avoided external costs may be granted. The 2001-guidelines call for an internationally recognized method of calculation[159], a reasoned cost analysis as well as for a demonstration that no overcompensation is granted.[160] These similarities are not surprising since the subject matter is similar as well. Or could the production of positive externalities not be seen as a "service of general interest"?

It is submitted that the *Altmark* judgement is (analogously) applicable to determine the State Aid character of support for renewable energy production calculated on the basis of avoided external costs. Hence, as long as the payments stay within the scope of the criteria set out by *Altmark* they cannot be considered State Aid. This gives the MSs more freedom to experiment with this third way of granting operating "aid" which, from an environmental and a competition

[155] Szyszczak, *The Regulation of the State in Competitive Markets in the EU*, p. 248.
[156] Commission (EC), 'Green Paper on Services of General Interest' COM(2003)270 final, para 85.
[157] In the Case of renewables these external costs are positive.
[158] *Altmark*, supra n. 152, para 89-93.
[159] Para 63, here the link to the Commission's ExternE efforts can be seen.
[160] Ibid.; the same requirements reappear in the 2008-guidelines, para 161.

viewpoint, is the most effective. The Commission's supervisory role in this regard is therefore, despite the new guidelines, slightly reduced.

It is suggested that more research has to be done on the interplay between *Altmark* and aid calculated on the basis of avoided external costs. It is hoped that this paper pointed out that there are interesting interrelations. The relevance of this could arise in the future as it is not hard to imagine that, in the light of combating climate change, "positive-externality-production" will in the near future be considered an essential public service. However, as of yet no article or book is known to the author that dedicates more than one paragraph on the issue of aid granted on the basis of avoided external costs. It is further suggested (and hoped) that MSs will finally dare to make use of the "third Option".

E. The State Aid Dimension of Environmental Taxation

I. State Aid elements in environmental taxation – Aiding the environment?

As mentioned at the outset of this paper, a further way to internalize external environmental costs is via the introduction of a pigovian tax. By doing so the detrimental environmental effects of the use of certain materials, energy sources or products becomes a direct part of the individual's tax burden. In recent years a significant number of such eco-taxes, especially in the field of energy products, have emerged. These eco-taxes are examples of general systems where the favouring of certain undertakings is an incidental consequence inherent in the system.[161] As such they do not have more State Aid implications than any other general tax-measure.

However, eco-tax schemes might constitute State Aid where they allow for exempting or reducing the liability of certain undertakings. This can be necessary because the introduction of new eco-taxes comes with a significant financial burden that can seriously threaten the international competitiveness of (the most energy intensive) undertakings.[162] Since the environmental objective is usually pursued by the tax-measure itself any such exemption directly contravenes the polluter-pays principle and comes by its very nature with a negative environmental impact.[163] According to the most recent available State Aid statistics 53% (€ 7.5 billion) of all Aid granted by the MS in 2006 fell under this category of tax exemptions.[164] The high amount of aid granted shows that the Commission considers eco-tax exemptions necessary in order to adapt to new standards. However, this is only the case as long as the adverse effects can

[161] Bacon, 'State Aids and General Measures' (1997) YEL 308.
[162] Renner-Loquenz, 'State Aid in Energy Taxation Measures: First Experiences from Applying the Environmental Aid Guidelines' (2003) EStAL 21.
[163] Hancher/Ottervanger/ Slot, supra n. 119, para 20-46.
[164] State Aid Scoreboard, supra n. 40, page 17.

be offset by the positive effects of the measure and when the exemptions do not undermine the general objectives pursued.[165] The new 2008-guidelines establish detailed proportionality and necessity criteria under which such aid can be justified.[166] However, it shall not be the subject of this thesis to "recite" the guideline's requirements. This appears to be the approach of a great part of the literature which seems to assume that *any* eco-tax exemption is considered State Aid and consequently directly "jumps at" reciting the guideline's justification criteria. This paper will choose a different and perhaps less well-beaten track and focus on establishing under which circumstances eco-tax exemptions constitute State Aid in the first place. Each of the criteria set out under Article 87(1) will be addressed in turn.

II. A legal appraisal of eco-tax exemptions under Article 87 EC

1. Advantage

As we have learned above, an advantage is a relative concept that requires a comparator. Applied in the field of taxation this is the normal application of the tax system. This means that in order to establish whether an advantage exists, it becomes necessary to determine the common system applicable, i.e. the standard level of taxation.[167] If by comparison with this standard level certain undertakings receive a more favourable tax treatment and such undertakings are in a "legal and factual situation that is comparable in the light of the objective pursued by the measures in question"[168] then an advantage exists. In such a case the first criterion would be fulfilled.

[165] 2008-guidelines, para 151.
[166] Ibid. 157-159.
[167] DiBucci, 'Direct Taxation – State Aid in the form of Fiscal Measures' in: Rydelski, *The EC State Aid Regime,* page 77.
[168] Case C-75/97 *Belgium v Commission* ("Maribel bis/ter") [1999] ECR I-2671, para 28-31; Case C-308/01 *Gil Insurance* [2004] ECR I-4777, para 68.

2. Granted by a Member State or through State Resources

Given the fact that the power to tax lies exclusively in the hands of the State any tax-exemption or reduction is undeniably imputable to the state. Equally unproblematic is the second criterion which calls for a financing by State resources. According to established case-law this criterion is not only fulfilled by direct payments by the State but also by measures by which the public authorities grant to certain undertakings a tax exemption which, although not involving a transfer of State resources, constitutes forgone revenue for the state and places the person to whom the tax exemption applies in a more favourable financial situation.[169]

3. Distortion of competition and inter-state trade

State aid only falls within the scope of Article 87(1) of EC if the measure affects competition and trade between the Member States. It is sufficient that the beneficiary of the measure (regardless of its legal status or financing) exercises an economic activity and such economic activity involves trade between the Member States.[170] It is settled case law that the mere fact that the aid strengthens the undertaking's position compared with that of other companies which are competitors in intra-Community trade leads to the conclusion that inter-state trade is affected.[171]

[169] Case C-387/92 *Banco Exterior* [1994] ECR I-877, para 14.
[170] Lap/Goris, 'E.U. state aid policy and direct business taxation' (2002) 13 I.C.C.L.R. 41.
[171] *Philip Morris*, supra n. 82.

4. Selectivity and the "nature of the system"

In cases of tax measures, the selectivity criterion is often the most complicated element to assess.[172] It is fulfilled where undertakings in a comparable situation are disproportionately affected by a tax measure, with no objective justification stemming from the general aim of the scheme.[173] Conversely, a measure whose selective effect is justified by the nature of the general system to which it belongs will be regarded as a general measure.[174] This calls for a two-step assessment. Firstly the selectivity has to be established and secondly, if so, it has to be determined whether an objective justification for the selectivity is to be found in the logic of the tax system. The logic of the tax system has to manifest itself clearly enough to verify that the tax exemption matches the underlying rationale.[175]

This theoretical framework was put into practice in the ECJ's *Adria-Wien-Pipeline* judgement[176]. The case raised the question whether an Austrian measure which provided for exemptions from energy taxes but did so only for (energy-intensive) manufacturing companies should be regarded as state aid or not. The Austrian government argued that the exemptions were part of a wider package of measures to consolidate the budget, that they involved no discretion on behalf of the government as they were granted on the basis of objective criteria and that they benefited a very large number of undertakings.[177] The Court was not convinced and proceeded on the bases of the two steps outlined

[172] Lap/Goris, supra n. 170, 40.
[173] Golfinopoulos, 'Concept of selectivity criterion in state aid definition' (2003) 24 ECLR 546.
[174] Bacon, supra n. 161, 297; Case 173/73 *Italy v Commission* ("Italian textiles") [1974] ECR 709, para 15.
[175] Kliemann, supra n. 88, 322.
[176] Supra n. 67.
[177] Ibid. para 45.

above. It firstly recalled settled case law[178] and found that the large number of eligible undertakings did not provide any ground for concluding that the Austrian measure was of a general nature. Subsequently the Court proceeded to the second step and found that no justification for the measure was to be found in the nature or general scheme of the taxation system.[179] Neither the claim that only the manufacturing sector consumed large amounts of energy[180] nor the ecological considerations underlying the national legislation at issue[181], allowed for such a justification. Therefore the Court concluded that the measure constituted State Aid.

Further examples on how the selectivity criterion and the justification are dealt with can be found in a couple of Commission decisions concerning the production of green electricity. Although the exemption from taxation of green electricity under the UK Climate change levy was selective it could be justified as the objective of the tax measure was to reduce CO2 and the production of green electricity did not emit CO2.

The way the selectivity criterion is dealt with surfaces perhaps most clearly when assessing a change to the Dutch Zero rate in the energy tax for renewable gas. Energy production from renewable gas used to be exempted from the tax because it did not contribute to the CO2 production.[182] However, when the Dutch government updated its energy tax to extend the tax to electricity from renewable gas[183] the Commission's appraisal changed and the measure was held

[178] Ibid. para 48 citing: *Mirabel bis/ter*, supra n. 168.
[179] Ibid. 49.
[180] Ibid. 50.
[181] Ibid. 52.
[182] Commission Decision N168a/2001 –Netherlands 'Modifications energy tax' [2001] OJ C30/14.
[183] The new tax was still significantly lower than the tax on conventional energy sources.

to be State Aid.[184] This was due to the fact that the objective of the tax measure had changed as well. Whereas the levy used to be on the output of CO_2 it was now on the consumption of energy in general. The lower tax was therefore a selective advantage for electricity from renewable gas which could no longer be justified as being inherent in the nature of the tax measure.

III. Justification and some thoughts on the State Aid approach to eco-taxation

When State Aid is established it is necessary to ask whether it can be justified under Article 87(3)(c) EC. For State Aid in the form of reductions of or exemptions from environmental taxes the new 2008-guidelines give detailed criteria when the Commission considers such exemptions as justified. This paper does not intend to recite these in their entirety. However, some general notes will be made. The Commission is generally favourable towards measures that have a positive environmental impact. That is when they contribute at least indirectly to an improvement of the level of environmental protection and do not undermine the general objective pursued.[185] This can be ensured by giving the measures a degressive effect, by limiting the number of years of support or by concluding environmental agreements in return for such tax exemptions. Furthermore the Commission will always assess whether the exemptions are necessary and proportional. In the author's eye the latter two criteria represent the biggest change in this regard compared to the 2001-guidelines. By having regard to these general principles of law the Commission was able to reduced the scope of the guidance concerning taxation issues while allowing for more

[184] Commission Decision N652/2002 –Netherlands 'Fiscal reforms energy tax' [2003] OJ C104/9.
[185] 2008-guidelines, para 151.

flexibility. In the light of the multitude of different measures with which MS organise their environmental taxation this is to be welcomed.

It is further noticed that the ECJ has given insufficient guidance on tax exemptions as of yet. The difficulties with determining the selectivity of a tax exemption and its "justification" as being inherent in the nature of the tax measure remain. That is because any inquiry into "the nature of the system" requires to some extent an analysis of what the MSs might have thought when drafting the tax. This of course is connected to great uncertainties. It might be attributable to these uncertainties that many authors embrace the Commission's guidelines and almost exclusively focus on them.

It is true, at least the guidelines allow some certainty about whether to go ahead with a measure or not. However, this certainty only exists on the second stage of justification. Certainty on the first stage of whether a measure actually constitutes State Aid is still missing.

F. An Assessment of the EU-ETS under the State Aid Regime

I. An Introduction to the EU-ETS

As party to the Kyoto Protocol the EU and all its Member States are committed to meet the European Greenhouse Gas reduction goals. The cornerstone of these efforts is the community-wide Greenhouse Gas Emissions Trading Scheme which will help the EU and its MSs to meet their international law obligations under the Kyoto Protocol collectively. As the first multi-national emission-trading scheme in the world[186] the Directive on the community wide greenhouse gas emission allowance trading (EU-ETS) entered into force on 25 October 2003.[187] Before turning to the details of the EU-ETS and the State Aid implications thereof this paper will shortly describe (1.) the functioning of the tradable permit schemes in general and (2.) the detailed regulatory approach underlying the EU-ETS.

1. The functioning of tradable permit schemes

Tradable-permit schemes are a regulatory approach based on market mechanisms. For these market mechanisms to unleash their incentivising effect to reduce the emission of pollutants, two conditions have to be fulfilled. Firstly, a functioning market has to be established on which the "pollution-units" are traded and secondly, to leverage market forces, a certain scarcity has to be guaranteed. Due to these two underlying basic principles the EU-ETS is often referred to as a "cap and trade" system. In principle MSs will set a limit ("cap") on total CO2 emissions and allocate an equivalent number of emission-

[186] Commission (EC), 'Kyoto protocol' (MEMO/03/154) 3.
[187] Council Directive (EC) 2003/87/EC, supra n. 35.

allowances to undertakings participating in the scheme. These allowances are freely tradable ("trade") and are the common trading "currency" at the heart of the system.[188] At the end of each trading period operators are required to surrender the number of allowances commensurate to their actual emissions. The "beauty" of this system is that it allows for CO2 reductions in the most cost-effective way.[189] Companies with low reduction costs can reduce their emissions and sell their excess allowances to companies with high abatement costs. According to *Rusche* this creates a win-win situation[190]: companies with low abatement costs receive a payment, which is higher than the costs they have for abatement, whereas companies with high abatement costs pay less than they would have to pay for reducing their emissions. A further advantage is that as companies can sell superfluous permits they have an incentive to reduce pollution beyond the level set by the applicable legislation.[191]

2. The EU-ETS

The EU-ETS started on 1 January 2005. Covering almost half of all CO_2 emissions in the EU[192] it can truly be called the centrepiece of European policy on climate change.[193] The regulatory backbone of the Directive are the so called National Allocation Plans (NAPs). These plans must state the total quantity of allowances a MS intends to allocate to an operator of an installation during a specific trading period, and the rules applied to any such allocation during that

[188] Commission (EC), 'Q&A on the proposal to revise the EU-ETS' (MEMO/08/35), quest. 2.
[189] Commission (EC), 'Q&A on Emissions Trading and NAPs for 2008-2012' (Memo/06/452), quest. 2.
[190] Rusche, 'Emissions Trading' in: Rydelski(ed.) *The EC State Aid Regime,* 350.
[191] Glowacka, 'Trading with emissions allowances under the EU state aid law regime' [2005] SPEL 69.
[192] E.g. Combustion plants, oil refineries, iron and steel plants, etc.; see Annex I of Directive 2003/87/EC.
[193] Grubb/Neuhoff, 'Allocation and Competitiveness in the EU emission trading scheme' (2006) 6 Climate Policy 8.

period. Pursuant to Article 9 of the Directive each NAP has to be published and notified to the Commission and to the other MSs before the start of each trading period. The first trading period lasted from January 2005 to 31 December 2007 and the second trading period started on 1 January 2008 and will end in 2012. Although MS have considerable leeway in devising their NAPs they must obey a set of rules. NAPs must be based on transparent and objective criteria, including those listed in Articles 9 to 11 and Annex III of the Directive. Of particular interest is Article 10 of the Directive, which states that at least 90% of the allowances for trading period two has to be allocated free of charge.[194] This implies that the remaining 10% *can* be auctioned off. Needless to say, whatever allocation method is chosen by the MSs it must comply with the requirements of the EC Treaty, in particular the State Aid provisions[195]. If the Commission finds that a plan is not in line with the criteria of the EU Treaty it can reject it, in part or in full. It is only after the Commission has assessed the compliance of the NAPs that MSs can go ahead with the allocation of the allowances.

[194] 95% for the first trading period.
[195] Affirmed by: Commission (EC), 'Guidance on greenhouse gas emission allowance trading and force majeure' (Communication) COM(2003) 830 final, para 47.

II. An Analysis of the EU-ETS under Article 87: State Aid?

The 2001-guidelines firstly mentioned that means adopted by MSs to comply with the objectives of the Kyoto Protocol might have State Aid implications but considered it too early to lay down specific conditions for authorising any such aid.[196] This was followed by a non-paper in 2003 which stated (rather undifferentiatedly) that "NAPs will constitute state aid under Article 87(1) EC and will therefore have to be notified to the Commission for assessment under state aid rules"[197]. However, as clarified by a joint letter of two Director Generals in 2004, this did not mean that a formal notification of the National Allocation Plans under Article 88(3) of the EC Treaty was requested.[198]

Before a further analysis into the State Aid quality of NAPs can be conducted it seems necessary to structure the undifferentiated approach of the Commission. In the author's eyes two interdependent questions need to be asked. Firstly, does a NAP constitute State Aid even if the MS allocate all allowances within the limits and according to the requirements of the Directive? Secondly, should the answer to the first question be negative, under which circumstances would an allocation of allowances that goes *beyond* the scope of the Directive constitute State Aid? Both questions will now be addressed in turn. More fundamental and interesting from a legal point of view is the first question. It is due to this that it will receive more attention.

[196] Ibid. para 71.
[197] Commission (EC), 'The EU-ETS: How to develop a NAP' (Non-Paper) published by DG Environment on 1 April 2003.
[198] Letter of 17 March 2004 HNV C2/PV/amh/D(2004)420149.

1. The State Aid quality of NAPs "within" the Directive.

At this point of the paper it is assumed that the reader is familiar with the requirements of Article 87(1) EC. Based on this we will start analysing whether NAPs based on free allocation of emission allowances (grandfathering) constitutes State Aid with no further delay.

a) Advantage

As a benefit in the meaning of Article 87(1) one has to understand an advantage given to an undertaking that can be measured in money and which requires no consideration *quid pro quo*.[199] From a purely economic point of view the existence of an advantage depends on the perspective. From an efficiency perspective, grandfathered firms do not have a cost advantage over auctioned firms because both have to include the opportunity costs of holding the permit in the production price.[200] However, from an equity perspective grandfathered permits are a capital gift to the firm and an auctioned firm has a higher cash outflow since it has to buy its permits, and hence loses liquidity.[201] The latter approach seems to have been embraced by the Commission. In its appraisal of the UK emission trading scheme it stated that the state provided the operators with an intangible asset for free, which could be sold on a market.[202] The possibility of a future market place was held to be an indication for the monetary value of the allowances. This position was confirmed in the letter of 17 March

[199] Lorenz, 'Emission Trading – the State Aid Dimension' [2004] EStAL 400.
[200] Woerdman, 'Developing a European Carbon Trading Market: Will Permit Allocation Distort Competition and Lead to State Aid?' (July 2001) <http://www.feem.it/web/activ/_activ.html> accessed: 01 January 2009, page 3.
[201] Ibid. page 4.
[202] Commission Decision N416/2001 – UK 'Emission Trading Scheme' [2002] OJ C88/16.

2004[203] and consequently repeated in the assessment of the NAPs where the Commission held that "the allocation free of charge [...] confers a selective economic advantage to undertakings"[204].

However, this position has been criticized. In line with the reasoning in the *Belgian Green Certificate* Case it has been argued that no advantage is being granted and that the state simply facilitates the creation of a market.[205] This argument however forgets that in contrast to the EU-ETS the Green Certificate mechanism does not entail the *possibility* of auctioning the certificates.[206] Others insisted that no advantage was granted since any "advantage" would certainly be offset by the costs and risks that the undertaking would incur in order realize the value of the allowances[207] and that the allowances would simply be a legitimate counterpart, hence quid pro quo for the obligation to reduce emissions.[208] This in turn has been turned down by the Commission arguing (rather bluntly) that "the fact that companies will have to make expenses [...] does not change the existence of an advantage".[209]

Some critics of the Commission's approach go even further and argue that being allocated emission allowances constitutes not an advantage but a disadvantage since this "allowance" implies an obligation to reduce emissions whereas prior to the scheme external costs of emission were not internalized and emissions were therefore free.[210] However, *Rusche* identified the "trick" behind this argument by showing that it does not compare like with like as it equates

[203] Supra n. 198.
[204] E.g. Commission Decision of 2.4.2007 on Austrian NAP, para 9.
[205] UK Government in: supra n. 203.
[206] Könings, supra n. 142; Merola also admits this, supra n. 141, page 38.
[207] Reuter/Kindereit, 'EG-Emissionshandelsrichtlinie und Beihilferecht am Beispiel prozessbedingter Emissionen' (2004) DVBl 537.
[208] Könings, 'State Aid for Renewable Energy Sources' [2002] EStAL 32.
[209] Commission Decision on UK Emission Trading Scheme, supra n. 202.
[210] Reuter/Kindereit, supra n. 207.

companies under the emission trading scheme with those that are (nowadays rather unlikely) not under any kind of environmental regulation.[211]

So far both sides bring forward strong arguments. However the outcome of the debate becomes clear when having a look at the economic reality of the scheme. *Johnston* points out that the allocation of allowances to certain operators allowed them to realize enormous windfall-profits as they were able to pass on the increased marginal costs to their customers.[212] So even if one were to assume that the advantage of a free allocation is being offset by the costs incurred by the undertaking in order to realize the value of the allowances, there would be a "surplus" in this calculation which is caused by the windfall profits. The fact that "these advantages accrue to the operator without any environmental counterpart"[213] leads this author to conclude that the grandfathering of allowances constitutes an advantage for its recipient.

b) By the Member State or through State Resources

This criterion identifies aid that is imputable to the State and[214] is granted directly or indirectly through State Resources.[215] Both conditions of this criterion are disputed in the case of the grandfathering of allowances under the Directive.

[211] Rusche, supra 190, page 377.
[212] Johnston, 'Free Allocation of allowances under the EU-ETS'(2006) Climate Policy 119.
[213] DeSepibus, 'The EU-ETS put to the test of state aid rules' (September 2007) NCCR Trade Working Papers, No2001/34, page 12.
[214] See: *PreussenElektra*, supra n. 63.
[215] *Stardusk*, supra n. 74.

Although in the eyes of *Merola* the imputability "does not raise any difficulties, since it is clear that the NAP will be incorporated in the legislation of each Member State"[216] not all scholars share this ease. *DeSepibus* points out[217] that established case-law sees the criterion fulfilled only in cases of unilateral and autonomous decisions by the Member State.[218] Since the Directive imposes that 90% (95%) of the allowances are to be allocated for free an autonomous decision could be doubted. However, it is submitted that the Directive leaves considerable discretion as to the number of total allowances and the methods of implementation. Especially with rising percentages of allowances that may be auctioned, doubt as to the imputability will diminish further. This also seems to be the opinion of the Commission.[219]

The discussion around the issue of whether grandfathering can be considered a transfer of State resources received more scholarly attention. The Commission's argumentation is based on the case law of the ECJ which found that waiving revenue, which would otherwise have been paid to the Treasury entails State resources.[220] In essence the Commission argues that by not auctioning off the emission rights the State forgoes revenue, hence grants aid through State resources.[221] Subsequently the Commission refined its approach and held that grandfathering would only entail State resources to the extent that grandfathering was not prescribed by the Directive, hence in a case where the MS would have the possibility to auction the emission rights for the remaining 10% (5%) but refrained from doing so.[222]

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[216] Merola, supa n. 141, page 37.
[217] Supra n. 213, page 7.
[218] Case T-351/02, *Bahn v Commission* [2006] ECR II-01047.
[219] Commission Decision of 29.11.2006 on second Slovakian NAP.
[220] Case T-67/94, *Ladbroke v Commission* [1998] ECR II-00001, para 109.
[221] Commission Decision N35/2003 – Netherlands 'No_x trading scheme' [2003] OJ C227/8.
[222] Commission Decision of 20.10.2004 on French NAP; In fact only Denmark decided to auction the maximum of 5% during the first trading period.

However, the Commission's approach was heavily criticized. It was argued that any benefit from the tradability of the allowances stems from the trade between private parties. It is also exclusively the private parties' shoulders on which the burden lies and therefore no benefit would be drawn from state resources.[223] The role of the Member States was therefore nothing more than one of a "system administrator"[224]. Furthermore they argue that the Commission's main argument, that revenue was forgone because the allowances could have been auctioned, is based on the false assumption that only this could have been the alternative. In support it is argued that this assumption could only stand if there was a continuous practice of auctioning emission allowances.[225] This, however, is not the case.

In the light of the conflicting views a solution has to be found. In the author's eyes the arguments of the Commission's opponents are all strongly rooted in the ECJ's *PreussenElektra* judgement. However, analogies have to be drawn with care. In *PreussenElektra* the only influence by the State was the establishment of the purchasing obligation. In the case of emission allowances the influence is, as accepted by the Commission's opponents, the one of a "system administrator". The state therefore does not only establish a purchase obligation but initially even holds the subject of the future transactions, i.e. the allowances. As *Rusche* correctly points out: "The seller obtains the monetary advantage not when he sells the emission permit, but when the emission permit enters into its accounts through the allocation by the State"[226]. It is therefore concluded that grandfathering in general confers an advantage through State resources as the State forgoes revenue by not auctioning the allowances.

[223] Lorenz, supra n. 199, page 401.
[224] Reuter/Busch, 'Einführung eines EU-weiten Emissionshandels' (2004) 15 EuZW 43.
[225] Reuter/Kindereit, supra n. 207.
[226] Rusche, supra 190, page 380.

This general statement however has to be further qualified in line with the Commission's approach, i.e: where the State is obliged, by Community legislation, to grandfather the allowances no state aid is involved since the MS did not have the possibility to raise additional revenue without breaching secondary Community law.

This approach however raises an interesting question as to the state aid quality of the allowances grandfathered as part of the obligatory 90%, in case the MS does not make use of the possibility to auction the remaining 10 percent. *Lorenz* submits that in this case *all* grandfathered allowances would have to be considered as Aid since otherwise a "race" between the undertakings to get the first 90% of the allowances would start.[227] It is submitted that in the eyes of legal certainty the "retrospective" classification of "good" allowances as State Aid is to be dismissed. Preferable is the solution by *Rusche* who proposed a *pro-rata* approach.[228] The consequence would be that only 10 percent of the granted allowances would constitute State Aid. However, the debate around this issue is deemed to retain its theoretical character as due to a prior approval of the NAPs no illegal state aid due to this reason will have to be recovered.

[227] Lorenz, supra n. 199, page 401.
[228] Rusche, supra n. 190, page 381.

c) Selectivity

The criterion of specificity is the deciding element that separates measures that benefit the whole economy from those that constitute state aid.[229] The Commission did not seriously question this issue when assessing the emission trading schemes prior to the EU-ETS Directive. Since these only included specific sectors or companies in one particular MS the selectivity criterion was fulfilled.[230] According to *Merola* this changed with the introduction of the Directive.[231] He claims that it is now the Directive "selecting" the sectors to which the mechanism is applicable. Since the Directive's scope, so others argue, is based on objective and economic consideration it cannot be selective.[232] This consideration would hold true, if the implementing MS had no residual discretion as to the implementation and selection of the covered entities. In that regard it will be recalled that the CFI held that general measures, which leave the administration certain discretion when applying the general rule, fall within the scope of Article 87(1) EC.[233] Article 24 of the Directive explicitly allows for the extension of the scheme to additional activities and gases and thereby leaves considerable discretion to the Member State. It could now be argued that once a MS makes use of Article 24 the general nature of the scheme is jeopardised. However, counterarguments stressing the necessity of an approval by the Commission pursuant to Article 24(1) in conjunction with 23(2) of the Directive have tried to rebut this approach.[234] In return it has been pointed out that it is not only Article 24 of the Directive that grants MSs implementatory discretion. Recital 8 stresses that MS should have regard to the potential for industrial process activities to reduce emissions and *DeSepibus* adds that additional

[229] *Ecotrade*, supra n. 56, para 40.
[230] Letter from 17 March 2004, supra. n. 198.
[231] Merola, supra n. 141, page 39.
[232] Lorenz, supra n. 199, page 401.
[233] Case T-36/99, *Lenzing v Commission* [2004] ECR II-3597, para 130.
[234] Merola, supra n. 141, page 40.

discretion is involved when choosing the rules that govern new entrants, existing installations, the choice of the historical baseline and other benchmarks in advance to the allocation.[235] In the author's eyes these arguments are convincing and are confirmed when considering the variety of different approaches that were actually chosen in the NAPs. Even if the Commission should not embrace these subtle arguments to their full extent the Commission is very likely to find grandfathering to be selective. Even if it is just for the reason that the Directive does not yet extend to all sectors.

d) Distortion of Competition and effects on inter-state trade

As *Rusche* correctly summarizes, the academic literature in general does not dispute that these conditions are fulfilled in the case of grandfathered allowances.[236] An effect on competition is rarely denied if the conferral of a selective advantage strengthens the position of an undertaking.[237] As we have seen above, considerable windfall-profits are a result of the system of grandfathering that has been considered to be selective. An effect on trade can only be ruled out if the measure concerns a purely local economic activity.[238] However, this is not the case with emission allowances which are, pursuant to the Directive, regulated and allocated on a European level. A potential distortion of competition and an effect on inter-state trade can therefore not be denied.

[235] DeSepibus, supra n. 213, page 14 with reference to: Weishaar, 'The EU-ETS and State Aid: an assessment of grandfathering and the PSR system' (2007) 28 ECLR 373.
[236] Rusche, supra n. 190, page 381.
[237] Weishaar, supra n. 235, page 375.
[238] Lorenz, supra n. 199, page 403.

After we have found that all of the above conditions are fulfilled we can answer the first of the two above questions: Even if a Member State allocates emission allowances pursuant and within the scope of the EU-ETS Directive the allocation will be considered as State Aid. We now briefly turn to the second question, namely what behaviour "outside" the Directive's scope can constitute State Aid.

2. State Aid quality of NAP "outside" the Directive – Experiences of the first two trading periods

At the point of writing the Commission had adopted decisions on all of the NAPs of the first two trading periods. This allows for a brief review of the experience gained so far. In general it can be said that the NAPs notified by the MSs contained, despite the Commission's guidance[239], considerable differences as regards the basis for initial allocation, rewards for early action, allocation to new entrants and other allocation methods.[240] Since there is considerable political pressure on the Member States to devise NAPs which are as favourable to the domestic industry as possible the discretion granted by the Directive bears the inherent danger of provoking a circumvention of the State Aid rules. When it comes to the circumvention of Community rules for the benefit of national industries, MSs are generally quite "inventive". Due to this, several of the notified plans had to be amended because the methods used fell "outside" of the Directive and constituted State Aid. Nevertheless, these circumventions are mostly quite obvious from a state aid perspective. Since they therefore contain

[239] Commission (EC), 'Further guidance on allocation plans for the 2008-2012 trading period' (Communication) COM(2005) 703 final.
[240] Renner-Loquenz, 'State aid aspects in the implementation of the ETS' (2005) Competition Policy Newsletter, Number 1, Spring, page 16.

no “legal challenges” the most frequent deviations from the Directives scope shall simply be listed hereafter.

Most frequently the Commission required changes under three circumstances. Firstly, if the quantity of allowances intended to be issued was not consistent with the MS’s obligation to achieve its Kyoto target, secondly, if the allocation exceeded projected emissions and thirdly, if a MS intended to intervene in the market after the initial allocation.[241] A complete rejection of allocation rules due to a high potential to generate distortions of competition or state aid was required in cases of long term allocation guarantees, preferential rules for certain sectors, discrimination within the power generating sector, separate reserves, allocation based on electricity purchases and banking of allowances.[242]

After a very thoughtful analysis of the Commission’s reasoning in its decisions on the NAPs of both trading periods *DeSepibus* identified a trend.[243] Whereas during the first trading period the Commission restricted its appraisal of the NAPs to verify whether MSs allocated excessive allowances to their installations[244] it progressed to analysing the detailed allocation methodologies[245]. Interestingly, and in contrast to the more and more self-assertive approach to analyse allocation methodologies, all of the Commission’s decisions are formulated in the subjunctive.[246] In the author's eyes these seemingly irreconcilable tendencies have two good reasons but also constitute an “explosive mixture”.

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[241] Ibid. page 17.
[242] For further references and the concerned NAPs: Seinen, ‘State aid aspects of the EUETS: the second trading period’ (2007) Competition Policy Newsletter, Number 3, Autumn, page 103 et seq.
[243] Supra n. 213, page 19.
[244] E.g. Commission Decision of 20.10.2004 on first French NAP.
[245] E.g. Commission Decision of 29.11.2006 on second German NAP, where the Commission held that the allocation guarantees „were likely to be found incompatible with the common market, if a formal State aid investigation was opened“., para 23.
[246] Ibid. “were likely to be […] if […]”.

Firstly, with the second trading period starting, the Commission has now gathered sufficient experience during the "trial and error"-phase of the first period. It came to the conclusion that not only the excessive allocation of allowances is a threat to the functioning of the EU-ETS but also the use of allocation methodologies that distort competition. Equally the growing confidence can be explained with the run-up to the issuance of the 2008-guidelines which now contain provisions on "Aid involved in tradable permit schemes"[247] and reflect the Commission's experiences.[248]

Secondly, the careful use of the subjunctive is due to the peculiar legal base of the NAP-decisions: They deal with State Aid matters but are based on the Directive instead of Article 88(3). Consequently any Commission's decision is no formal decision pursuant to Article 88(3) but simply a decision with unsure legal consequences as to its state aid implications. The "explosive mixture" of the two, i.e. showing strength on the one side but linguistically admitting methodological weaknesses in the own approach on the other side, will provoke an increasing number of legal challenges.[249] This, so it is submitted, is a positive effect because these future judgements might help to clarify the legal nature of the Commission's Decisions on State Aid aspects of NAPs under the Directive.

However, one also has to ask for further reasons for these legal challenges. Of course one could argue that they are due to the fact that litigious lawyers will always find something to argue about in order to make a living. But, and even more essentially, these lawsuits are first and foremost proof that the current system and the legal uncertainty surrounding the State Aid implications of the

[247] 2008-guidelines, para 139-141.

[248] Although some might have hoped for the guidance to be based on Article 87(3)(b) (e.g. Merola, supra 141, page 45 et seq.) they are based on Article 87(3)(c) EC (see para. 140). Furthermore, although being more detailed as what regards emission trading than the draft-guidelines (10 May 2007) it can be said that the still very general character of the guidelines is, when considering the considerable experience gathered so far, rather disappointing.

[249] E.g Case T-28/07, *Fels-Werke v Commission* [2007] OJ C283/27.

EU-ETS are unsatisfactory and provide (unnecessary) impetus for dispute.
With this in mind and pursuant to Article 30 of the EU-ETS Directive the Commission started a review of the legal framework of the EU-ETS.

III. A look ahead – The review process of the EU-ETS

The Commission set out its agenda for the review in a Communication in November 2006.[250] This Communication set out four broad categories of issues on which the review would focus, i.e. the scope of the scheme, further harmonisation and predictability, robust compliance and enforcement and the involvement of third countries. Following this structure four meetings within the framework of the European Climate Change Programme were conducted in spring/summer 2007. These meetings and an extensive consultation with stakeholders eventually lead to a proposal to revise the EU Emission trading system[251], issued on 23 January 2008, as part of the "Climate action and renewable energy package"[252].

The main changes proposed will, if approved by the Parliament, come into force with start of the third trading period in 2013 and considerably change the EU-ETS. Most decisively from a State Aid perspective is that the national caps will be abolished and there will be only one EU-wide cap. This will immediately bring the state aid debate about differing allocation methodology to a halt.

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[250] Commission (EC), 'Building a global carbon market - Report pursuant to Article 30 of Directive 2003/87/EC' (Communication) COM (2006)676 final.
[251] Commission (EC), 'Proposal for a Directive amending Directive 2003/87/EC (Communication) COM(2008)16 final.
[252] See: <http://ec.europa.eu/environment/climat/climate_action.htm> accessed: 01 January 2009.

Furthermore, a much larger share of allowances will be auctioned instead of grandfathered and for those that nevertheless will be allocated for free, harmonised rules will be introduced. With these measures the possibility for MSs to grant allowances "outside" the Directive's scope will literally be extinguished. Since it is estimated that around 60% of the allowances will be auctioned in 2013[253], with the proportion increasing in later years, even the State Aid implications "inside" the scope of the EU-ETS will decrease in time. This, so it is submitted will leave a legally streamlined mechanism.

The remaining proposed changes are less interesting from a legal point of view. However, they will have considerable impact on the environmental leverage of the EU-ETS. It is proposed to extend the scope to other industries[254] and further gases[255]. This and an "opening" of the EU-ETS to other foreign emission trading systems will equally enhance competition and simultaneously guarantee that emission reductions can be achieved more cost-effectively.

Legally streamlined and strengthened in its positive environmental impact the EU-ETS will, at least after the implementation of the proposals in 2013, due justice to its denomination as *the centrepiece* of European efforts in the fight against climate change.[256]

[253] MEMO/08/35, supra n. 188, question 13.
[254] E.g. aviation, aluminium and ammonia producres.
[255] E.g. nitrous oxide, perfluorocarbons.
[256] For further comments on the proposal see: Gorlach/Hermann/Holzer-Schopohl, 'The EU-ETS: coming of age? An assessment of the EU Commission proposal' (2008) 2 CCLR 105.

G. Conclusion

This paper has addressed the State Aid Dimension of Environmental Aid and approached the issue in two big steps. The first step (Chapters A-C) was a rather general look at the issue of environmental aid in its international and local/European context as well as the theoretical and legal foundations of environmental regulation and aid. The second step (Chapters D-F) focused on more specific issues and tried to provide a detailed legal analysis of those issues that the author deemed most controversial, topical and interesting from a legal perspective. It is hoped that this two-step approach fulfils a correlating two-fold purpose. Firstly, to make the interesting and more and more relevant issue of environmental aid accessible to those who do not yet have a profound knowledge in this field of law (e.g. interested (law) students). And secondly, and more importantly, to provide some food for thought even for those that deal with environmental aid on a regular basis, be it lawyers, legislators or scholars.

Each of the above Chapters has already been concluded in some form and therefore it shall not be subject of this final chapter to merely repeat these findings. Instead this conclusion shall name the issues that this author considers most important and of the highest future relevance.

Falling within the first and general step that this paper took is the issue of further international cooperation. Although Europe has been the global pacemaker in the efforts concerning climate action so far, further international efforts are needed. The recently proposed changes that would open the EU-ETS to other foreign emission trading systems are to be welcomed and signalize that Europe is on the right way. Whether these measures will be matched by an equally ambitious international effort remains to be seen. Fact is that, as mentioned at the outset of this paper, global problems need for global solutions and that

European and international progress in the fight of climate change are interdependent. Due to this interdependence the upcoming UN Climate Change Conference in Copenhagen in 2009 is eagerly awaited. Should an ambitious Treaty succeeding the Kyoto Protocol be adopted it would certainly provide new impetus to the debate on environmental aid in Europe. In this case some of the points that this paper focused on in the second step will become even more important.

It will be seen whether the Commission's approach to exempt small amounts of environmental aid (GBER) will pass the economic state-aid scrutiny in the light of the predicted rapid increase of small "grassroot-projects" outside the Commission's control.

Furthermore it is predicted that aid calculated on the basis of external costs will become more and more important. The author's suggestion to treat this "aid" as compensation for a public service pursuant to the *Altmark* judgement is admittedly a novelty but has potential to find further support as the impacts of climate change multiply and climate action becomes more and more essential.

The last and final point that shall be highlighted in this conclusion is the importance of the reform of the EU-ETS. Already a step in the right direction the current EU-ETS is still riddled by legal uncertainties. The proposed changes[257] will alter this appraisal and ultimately shift the focus of the debate. Whereas currently the focus is on the rather theoretical question whether the system underlying the EU-ETS as a whole constitutes State Aid it is predicted that the debate will shift to the more practical issues of the implementation of the EU-ETS. This will make this field of law even more important. The practical consequences of the proposed changes will be an emission trading system that is

[257] i.e. first and foremost an increased percentage of auctioned emission allowances.

easily accessible and will therefore grow in its scope and influence. Such an EU-ETS will aptly be called the centrepiece of the European fight against climate change and hopefully set another positive example on the international stage.

With effective instruments at hand we now stand and recall Hansen's now famous testimony that he gave 20 years ago. "The greenhouse effect," he claimed, "has been detected and is changing our climate." It is hoped that in 20 years the political consensus will be that these instruments need to be put to use, globally. For this to be achieved the underlying concepts need to be "demystified" from a theoretical and a legal point of view. It is hoped that this paper contributed to such a "demystification"/clarification of the State Aid Dimension of Environmental Aid.

H. Bibliography

I. Books

Biondi, Andrea
Eeckhout, Piet
Flynn, James
The Law of State Aid in the European Union
2004, Oxford University Press, Oxford.

Dougan, Michael
Spaventa, Eleanor
Social Welfare in EU Law
2005, Hart Publishing, Oxford.

European Env. Agency
Market-based instruments for environmental policy in Europe
August 2005, Office for Official Publications of the European Communities, Copenhagen.

Hancher,Leight
Ottervanger, Tom
Slot, Piet Jan
EC State Aid
2006, Sweet&Maxwell, London, 3rd edn.

Hussen, Ahmed
Principles of Environmental Economics
2008, Routledge, Rev. Ed, London.

IPCC
Climate Change 2007 – Working Group I Contribution to the Fourth Assessment Report of the IPCC
2007, Cambridge University Press, Cambridge.

Pearce, David
Blueprint for a Green Economy
1995, Earthscan Publications, London.

Pigou, Arthur Cecil
Wealth and Welfare
1912, London.

Quigley, Conor
Collins, Anthony M.
EC State Aid Law and Policy
2003, Hart Publishing, Oxford.

Rydelski, Michael
The EC State Aid Regime: Distortive Effects of State Aid on Trade Competition & Trade
2006, Cameron May, London.

Stern, Nicholas
The Economics of Climate Change: The Stern Review
2007, Cambridge University Press, Cambridge.

Szyszczak, Erika
The Regulation of the State in Competitive Markets in the EU
2007, Hart Publishing, Oxford.

Vedder, Hans
Competition Law and Environmental Protection in Europe – Towards Sustainability?
2003, Europa Law Publishing, Groningen.

II. Essays

Bacon, Kelyn
State Aids and General Measures
1997, Yearbook of European Law (17), p. 269.

Bacon, Kelyn
The concept of state aid: the developing jurisprudence in the European and UK courts
2003, European Competition Law Review (24), page 54.

Basaran, Halil Rahman
How should Article 81 address agreements that yield environmental benefits
2006, European Competition Law Review (27), page 479.

Biondi, Andrea Rubini , Luca	Aims, Effects and Justifications: EC State Aid Law and Its Impact on National Social Policies, page 79. In: Michael Dougan and Eleanor Spaventa (eds), *Social Welfare in EU Law* 2005, Hart Publishing, Oxford.
Brevern, Daniel v.	Kommentar zum EuGH-Urteil vom 22.11.201 (Ferring)' 2001, Europäische Zeitschrift für Wirtschafts- und Steuerrecht, p. 586.
DeSepibus, J.	The European emission trading scheme put to the test of state aid rules September 2007, NCCR Trade Working Papers, Working Paper No2001/34, page 12.
Di Bucci, Vittorio	Direct Taxation – State Aid in the form of Fiscal Measures in: Michael Sánchez Rydelski (ed.), *The EC State Aid Regime: Distortive Effects of State Aid on Trade Competition & Trade* (Cameron May, London, 2006), page 77.
Enercon,	European Commission puts forward proposal to reach renewables target 2008, Windblatt (1), page 5.
Glowacka, Barbara	Trading with emissions allowances under the EU state aid law regime 2005, Selected Papers on European Law 66.
Golfinopoulos, Christos	Concept of selectivity criterion in state aid definition following the Adria-Wien judgment – measures justified by the "nature or general scheme of a system 2003, European Competition Law Review (24), p. 543.

Gorlach, Benjamin Hermann, Hauke Holzer-Schopohl, Olaf	The European Emissions Trading Scheme: coming of age? An assessment of the EU Commission proposal for a review of the scheme 2008, Carbon & Climate Law Review (2), page 105.
Grubb, Michael Karsten Neuhoff	Allocation and Competitiveness in the EU emission trading scheme: policy overview 2006, Climate Policy (6), page 7.
Hansen, James; et al.	Global Climate Changes as forecasted by Goddhard Institute for space Studies Three-Dimensional Model 1988, Journal of Geophysical Research (93), page 9341.
Holmes, Simon	Environmental Aid: a Case for Fundamental Reform (2) 2006, European State Aid Law Quarterly, page 735.
Johnston, Angus	Free Allocation of allowances under the EU Emission Trading Scheme – legal issues 2006, Climate Policy (6), page 115.
Kliemann, Annette	Aid for Environmental Protection in: Michael Sánchez Rydelski (ed.), *The EC State Aid Regime: Distortive Effects of State Aid on Trade Competition & Trade* (Cameron May, London, 2006), page 325.
Koenig, C. Kühling, J.	EC control of State aid granted through state resources 2002, European State Aid Law Quarterly (7), page 16.
Könings, Melvin	Emission trading – why State aid is involved: NOx trading scheme 2003; Competition Policy Newsletter, Number 3, Autumn, page 77.

Könings, Melvin — State Aid for Renewable Energy Sources: A Practical State Aid Manual for Going Green
2002, European State Aid Law Quarterly, page 19.

Kuhn, Tilman — Implications of the 'PreussenElektra' Judgment of the European Court of Justice on the Community rules on State Aid and the Free Movement of Goods
2001, Legal Issues of Economic Integration (28), p. 361.

Kurcz, Bartlomiej
Vallindas, Dimitri — Can General Measures be … selective? Some thoughts on the interpretation of a State Aid Definition'
2008, Common Market Law Review (45), page. 159.

Lap, Suzan P. T.
Goris, David R. A. — E.U. state aid policy and direct business taxation
2002, International Company and Commercial Law Review (13-1), page 37.

Lesser, Jonathan E.
Su, Xuejuan — Design of an economically efficient feed-in tariff structure for renewable energy development
2008, Energy Policy (36), page 981.

Lorenz, Moritz — Emission Trading – the State Aid Dimension
2004, European State Aid Law Quarterly, page399.

Merola, Massimo
Crichlow, Gloria — State Aid in the Framework of the EU Position after Kyoto: An Analysis of Allowances Granted under the CO2 Emissions Allowance Trading Directive
2004, World Competition (27), page 25.

Plender, Richard — Definition of Aid
In: Andrea Biondi, Piet Eeckhout and James Flynn (eds), *The Law of State Aid in the European Union*
(2004, OUP, Oxford), page 1.

Río, Pablo Del Gual, Miguel	An integrated assessment of the feed-in tariff system in Spain' 2007, Energy Policy (35), page 994.
Renner-Loquenz, B.	State aid aspects in the implementation of the Emission Trading Scheme 2005, Competition Policy Newsletter (1 Spring), page 16.
Renner-Loquenz, B.	State Aid in Energy Taxation Measures: First Experiences from Applying the Environmental Aid Guidelines 2003, European State Aid Law Quarterly, page 21.
Renner-Loquenz, B.	State aid in feed-in tariffs for green electricity 2006, Competition Policy Newsletter (3 Autumn), page 61.
Reuter, Alexander Kai Kindereit	EG-Emissionshandelsrichtlinie und Beihilferecht am Beispiel prozessbedingter Emissionen 2004, Deutsches Verwaltungsblatt, page 537.
Reuter, Alexander Busch, Ralph	Einführung eines EU-weiten Emissionshandels – Die Richtlinie 2003/87/EG 2004, Europäische Zeitschrift für Wirtschaftsrecht (15), page 39.
Rodger, Barry	State aid – a fully level playing field? 1999, European Competition Law Review (20), page 251.
Ross, Malcom	State Aids and National Courts: Definitions and other Problems A Case of Premature Emancipation? 2000, Common Market Law Review (37), page 401.
Rusche, Tim Maxian	Emissions Trading in: Michael Sánchez Rydelski (ed.), *The EC State Aid Regime: Distortive Effects of State Aid on Trade Competition & Trade* (Cameron May, London, 2006), page 350.

Seinen, Anne Theo — State aid aspects of the EU Emission Trading Scheme: the second trading period
2007, Competition Policy Newsletter (3 Autumn), page 103.

Slotboom, Marco — State aid in Community law: a broad or narrow definition?
1995, European Law Review (20), page 289.

Stavins, Robert — Correlated uncertainty and policy instrument choice
1996, Journal of Environmental Economics and Management (30), page 218.

Stavins, Robert — Market-Based Environmental Policies: What can we learn from the U.S. Experience (and related Research)?
John F. Kennedy School of Government, Harvard University, Faculty Research Working Paper, Series 2, 2003.

Torre, Fernando De La Cruz, Julio Baquero — A note on PreussenElektra
2001, Eurpean Law Review (26), page 489.

Vedder, Hans — The new Community guidelines on state aid for environmental protection – integrating environment and competition?
2001, European Competition Law Review (22), page 365.

Wasmeier, Martin — The Integration of Environmental Protection as a General Rule for Interpreting Community Law
2001, Common Market Law Review (38), page 159.

Weishaar, Stefan — The European emission trading system and state aid: an assessment of the grandfathering allocation method and the performance standard rate system
2007, European Competition Law Review (28), page 371.

Winter, Jan — Re(de)fining the notion of state aid in Article 87(1) of the EC Treaty
2004, Common Market Law Review (41), p. 475.

Woerdman, Edwin — Developing a European Carbon Trading Market: Will Permit Allocation Distort Competition and Lead to State Aid?
July 2001, The Fondazione Eni Enrico Mattei Note di Lavaro Series 51.2001; <http://www.feem.it/web/activ/_activ.html> accessed: 22 August 2008.

III. ECJ/CFI Cases and Commission Decisions

1. Cases decided by the European Court of Justice and the European Court of First Instance

Adria-Wien — Case C-143/99, Adria-Wien Pipeline GmbH and Wietersdorfer & Peggauer Zementwerke GmbH v Finanzlandesdirektion für Kärnten [2001] ECR I-8365.

Altmark — Case C-280/00, Altmark Trans GmbH and Regierungspräsidium Magdeburg v Nahverkehrsgesellschaft Altmark GmbH, and Oberbundesanwalt beim Bundesverwaltungsgericht ("Altmark") [2003] ECR I-7747.

Banco de Crédito — Case C-387/92, Banco de Crédito Industrial SA, now Banco Exterior de España SA v Ayuntamiento de Valencia [1994] ECR I-877.

Banco Exterior — Case C-387/92, Banco Exterior de España SA v Ayuntamiento de Valencia [1994] ECR I-877.

Commission v Italy	Case 92/79, Commission of the European Communities v Italian Republic [1980] ECR 1115.
Commission v Portugal	Case C-404/97, Commission of the European Communities v Portuguese Republic [2000] ECR I-4897.
Bahn v Commission	Case T-351/02, Deutsche Bahn AG v Commission of the European Communities [2006] ECR II-01047.
DMT	Case C-256/97, Déménagements-Manutention Transport SA (DMT) [1999] ECR I-3913.
Ecotrade	Case C-200/97, Ecotrade Srl v Altiforni e Ferriere di Servola SpA (AFS) [1998] ECR I-7907.
Ferring	Case C-53/00, Ferring SA v Agence centrale des organismes de sécurité sociale (“Ferring”) [2001] ECR I-9067.
France v Commission	Case C-241/94, French Republic v Commission of the European Communities (“Kimberly Clark”) [1996] ECR I-4551.
France v Commission	Case 301/87, French Republic v Commission of the European Communities [1990] ECR I-307.
GEMO	Case C-126/02, Ministère de l'Économie, des Finances et de l'Industrie v GEMO SA (“GEMO”) [2003] ECR I-13769.
Gil Insurance	Case C-308/01, Gil Insurance and Others v. Commissioners of Customs & Excise [2004] ECR I-4777.
Glaverbel	Joined Cases 62/87 and 72/87, Executif regional wallon and SA Glaverbel v Commission of the European Communities [1988] ECR 1573.

Greece v Commission	Case 57/86, Hellenic Republic v Commission of the European Communities [1988] ECR 2855.
Italy v Commission	Case 173/73, Italian Republic v Commission of the European Communities (“Family allowances”) [1974] ECR 709.
Italy v Commission	Case 173/73 Italian Republic v Commission of the European Communities (“Italian textiles") [1974] ECR 709.
Kirshammer-Hack	Case C-189/91, Petra Kirsammer-Hack v Nurhan Sidal [1993] ECR I-6185.
Ladbroke v Commission	Case T-67/94, Ladbroke Racing Ltd v Commission of the European Communities [1998] ECR II-00001, para 109.
Lenzing v Commission	Case T-36/99, Lenzing AG v Commission of the European Communities [2004] ECR II-3597.
Mirabel bis/ter	Case C-75/97, Kingdom of Belgium v Commission of the European Communities (Maribel bis/ter”) [1999] ECR I-2671.
Philip Morris	Case 730/79, Philip Morris Holland BV v Commission of the European Communities [1980] ECR 2671, 2698.
Preussen Elektra	C-379/98, PreussenElektra AG v Schhleswag AG, in the presence of Windpark Reußenköge III GmbH and Land Schleswig-Holstein [2001] ECR I-2099.
Sloman Neptun	Joined Cases C-72 and C-73/91, Firma Sloman Neptun Schiffahrts AG v Seebetriebsrat Bodo Ziesemer der Sloman Neptun Schiffahrts AG [1993] ECR I-887.

Spain v Commission	Case C-480/98, Kingdom of Spain v Commission of the European Communities [2000] ECR I-8717.
Stardusk	Case C-482/99, French Republik v. Commission of the European Communities ("Stardusk")' [2002] ECR I-4397.
Steenkolenmijnen	Case 30/59, De Gezamenlijke Steenkolenmijnen in Limburg v High Authority of the European Coal and Steel Community [1961] ECR 1.
Steinike	Case 78/76, Steinike & Weinlig v Federal Republic of Germany [1977] ECR 959.
Van der Kooy	Joined Cases 67,68,70/85, Kwekerij Gebroeders van der Kooy BV and others v Commission of the European Communities [1988] ECR 219.
Van Tiggele	Case 82/77, Ministère public du Kingdom of the Netherlands v Jacobus Philippus Van Tiggele [1987] ECR 25.
Viscido	Joined Cases C–52/97, C–53/97 and C–54/97, Epifanio Viscido (C-52/97), Mauro Scandella and Others (C-53/97) and Massimiliano Terragnolo and Others (C-54/97) v Ente Poste Italiane [1998] ECR I–2629.

2. Decisions by the European Commission

Georgsmarienhütte	Commission Decision 1999/227/ECSC of 29 July 1998 on aid granted by the Land of Lower Saxony (Germany) to Georgsmarienhütte GmbH [1999] OJ L83/72.
N 661/99 UK	Commission Decision of February 27, 2002 on State Aid N 661/99 – UK, 'Competitive Transition Charge' [2002] OJ C113/3.
NN 27/2000	Commission Decision of May 22, 2002 on State Aid NN27/2000 - Germany, 'Law on promotion of electricity generation from renewable energies' [2002] OJ C164/5.
NN 30b/2000	Commission Decision of November 28, 2001 on State Aid NN 30b/2000 – The Netherlands, 'Zero tariff for green electricity' [2002] OJ C30/14.
N 504/2000	Commission Decision of November 28, 2001 on State Aid N 504/2000 – UK 'Renewable obligation and capital grants for renewables technologies' [2002] OJ C30/15.
N 550/2000	Commission Decision of July 25, 2001 on State Aid N 550/2000 – Belgium 'Green Electricity Certificates' [2001] OJ C330/3.
N 168a/2001	Commission Decision, of November 28, 2001 on State Aid N 168a/2001 – The Netherlands 'Modifications energy tax 2001' [2002] OJ C30/14.
N 415a/2001	Commission Decision of November 28, 2001 on State Aid N 415a/2001 – Belgium, 'Projet d'arrêté relatif à la promotion de l'électricité verte - mécanisme des certificats verts' [2001] OJ C30/14.

N 416/2001	Commission Decision of November 28, 2001 on State Aid– United Kingdom, 'Emission Trading Scheme' [2002] OJ C88/16.
N 652/2002	Commission Decision of Dezember 11, 2002 on State Aid N 652/2002 – Netherlands 'Fiscal reforms energy tax' [2003] OJ C104/9.
N 707/2002	Commission Decision of March 19, 2003 on State Aid N 707/2002 – Netherlands, 'MEP Stimulating renewable energy' [2003] OJ C148/11.
N 35/2003	Commission Decision of September 24, 2003 on State Aid N 35/2003 – Netherlands, 'No_x trading scheme' [2003] OJ C227/8.
NN 162a/2003	Commission Decision of July 4, 2003 on State Aid NN 162a/2003 – Austria, 'Support of electricity production from renewable sources under the Green Electricity Act' [2003] OJ C221/8.
N 304/2003	Commission Decision of June 16, 2006 on State Aid N 304/2003 - The Netherlands, 'Aid in favour of AKZO in order to stop chlorine transport' [2003] OJ C 81/5.
N 570/2004	Commission Decision of July 5, 2005 on State Aid N 570/2004 – Germany, 'Promotion of investment to set up a closed life cycle management' [2005] OJ C 327/11.
French NAP	Commission Decision of 20 October 2004 concerning the national allocation plan for the allocation of greenhouse gas emission allowances notified by France in accordance with Directive 2003/87/EC of the European Parliament and of the Council.

German NAP	Commission Decision of 29 November 2006 concerning the national allocation plan for the allocation of greenhouse gas emission allowances notified by Germany in accordance with Directive 2003/87/EC of the European Parliament and of the Council.
Slovakian NAP	Commission Decision of 29 November 2006 concerning the national allocation plan for the allocation of greenhouse gas emission allowances notified by Slovakia in accordance with Directive 2003/87/EC of the European Parliament and of the Council.
Austrian NAP	Commission Decision of 2 April 2007 concerning the national allocation plan for the allocation of greenhouse gas emission allowances notified by Austria in accordance with Directive 2003/87/EC of the European Parliament and of the Council.

IV. Legislation and other official Community documents[1]

European Commission	First environmental action programme [1973] OJ C 112/1.
European Commission	Community guidelines on State aid for environmental protection (Information from the Commission) [1994] OJ C72/3.
European Commission	Communication of 19 May 1999 from the Commission to the Council and the European Parliament - *Preparing for implementation of the Kyoto Protocol* (Communication) COM (99) 230 final, 19 May 1999.

[1] The following documents are structured by the issuing institution and the time of publication.

European Commission Community Guidelines on State Aid for environmental protection [2001] OJ C37/3.

European Commission Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions on the *Sixth Environment Action Programme* of the European Community, "Environment 2010: Our future, Our choice" [COM (2001) 31 final - Not published in the Official Journal].

European Commission Commission (EC), 'Green Paper on Services of General Interest' (Green Paper) COM (2003) 270 final.

European Commission Commission (EC), 'Communication on guidance to assist Member States in the implementation of the criteria listed in Annex III to Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC, and on the circumstances under which force majeure is demonstrated' (Communication) COM(2003) 830 final of 7 January 2004.

European Commission State Aid Action Plan – Less and better targeted state aid (Consultation Document) COM (2005) 107 final, 7 June 2005.

European Commission Commission (EC), 'Further guidance on allocation plans for the 2008 to 2012 trading period of the EU Emission Trading Scheme' (Communication) of 22 Dezember 2005, COM(2005) 703 final

European Commission Commission's Regulation No. 1998/2006/EC of 15 December 2006 on the application of Articles 87 and 88 to *de minims* aid [2001] OJ L379/5.

European Commission — Commission Communication (EC) 'Building a global carbon market - Report pursuant to Article 30 of Directive 2003/87/EC' (Communication) of 13 November 2006, COM(2006)676 final.

European Commission — Communication from the Commission to the European Council and the European Parliament - An Energy Policy for Europe (Communication) COM (2007) 1 final, 10 January 2007.

European Commission — Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions - Limiting global climate change to 2 degrees Celsius - The way ahead for 2020 and beyond (Communication) COM (2007) 2 final, 10 January 2007.

European Commission — Commission Staff Working Document Accompanying the Green Paper on market-based instruments for environment and related policy purposes (Working Paper) COM (2007) 140 final, 28 March 2007.

European Commission — Commission (EC), 'Proposal for a Directive amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading system of the Community' of 23 January 2008, COM(2008) 16 final.

European Commission — Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - 20 20 by 2020 - Europe's climate change opportunity (Communication) COM (2008) 30 final, 23 January 2008.

European Commission — Community guidelines on State aid for environmental protection [2008] OJ C 82/1, 1 April 2008.

European Commission State Aid Scoreboard – Spring 2008 Update (Report) COM (2008) 304 final, 21 May 2008.

European Commission Commission Regulation No 800/2008/EC of 6 August 2008 declaring certain categories of Aid compatible with the common market in application of Article 87 and 88 of the Treaty (General Block Exemption Regulation) [2008] OJ L114/3.

European Council Council Directive 75/716/EEC of 24 November 1975 on the approximation of the laws of the Member States relating to the sulphur content of certain liquid fuels [1975] OJ L307/22.

European Council Council Directive 78/319/EEC of 20 March 1978 on toxic and dangerous waste, [1978] OJ L84/43.

European Council Council Directive 78/1015/EEC of 23 November 1978 on the approximation of the laws of the Member States on the permissible sound level and exhaust system of motorcycles [1978] OJ L349/21.

European Council Council Decision 2002/358/EC of 25 April 2002 concerning the approval, on behalf of the European Community, of the Kyoto Protocol to the United Nations Framework Convention on Climate Change and the joint fulfilment of commitments thereunder [2002] OJ L130/1.

European Council Council Decision 2002/1600/EC of the European Parliament and of the Council of 22 July 2002 laying down the Sixth Community Environment Action Programme [2002] OJ L242/1.

European Council Council 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 with the Community and amending Council Directive 96/61/EC [2003] OJ L275/32.

European Council — Council Directive 2003/96/EC of 27 October 2003 restructuring the Community framework for the taxation of energy products and electricity [2003] OJ L283/51.

European Council — Brussels European Council 8/9 March 2007 (Presidency Conclusions) 7224/1/07 Rev 1, 2 May 2007.

V. Other sources

European Commission — Commission (EC), 'The EU Emission trading system: How to develop a national allocation plan' (Non-Paper) published by DG Environment on 1 April 2003.

European Commission — Commission (EC), 'Kyoto protocol' (MEMO/03/154) of 23 July 2003.

European Commission — 'State Aid: Commission endorses €47.3 million aid to AVR in the Netherlands but orders recovery of €2.4 million (Press release) IP/05/771of 22 June 2005.

European Commission — Commission (EC), 'Question and Answers on Emissions Trading and National Allocation Plans for 2008 to 2012' (Memo/06/452) of 29 November 2006.

European Commission — Commission (EC), 'Question and Answers on the Commission's proposal to revise the EU Emissions Trading System' (MEMO/08/35) of 23 January 2008.

European Commission *Vademecum – Community Rules on State Aid* (2007) <http://ec.europa.eu/comm/competition/state_aid/studies_reports/vademecum_on_rules_2007_en.pdf> accessed: 22 August 2008.

Gupta, Sanjay Pacific swallowing remote island chain Online: <Http://edition.cnn.com/CNN/Programs/anderson.cooper.360/blog/2007/07/pacific-wallowing- remote-island-chain.html> accessed: 22.08.2008.

Kroes, Neelie State Aid and climate change –creating the right incentives for business' (SPEECH/08/273), 27 May 2008.