



European analysis: Constraints of National Support Schemes within EC law

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Table of contents

1	General legal framework.....	3
2	Three case studies	5
2.1	Germany.....	5
2.1.1	A brief history of District Heating and Cooling in Germany	5
2.1.2	The District Heating and Cooling market in Germany	6
2.1.3	Analysis of support measures in Germany	6
2.2	Austria.....	16
2.2.1	The District Heating and Cooling market in Austria	16
2.2.2	Analysis of support measures in Austria	16
2.3	Norway.....	22
2.3.1	The District Heating and Cooling market in Norway	22
2.3.2	Analysis of support measures in Norway	22
3	Impact of the Renewable Energy Directive	27
4	Result	31

In this task the determining features a national support scheme for District Heating and Cooling should have to be accepted under State aid rules shall be established.

1 General legal framework

More and more national measures, including support schemes, are subject to European control in order to ensure that these measures do not distort competition and trade within the European Union. State aid control is one of the main pillars of this competition policy.

State aid control aims to secure competition and trade between the Member States and guarantee the functioning of the internal market. State aid is, according to Article 107 of the Treaty on the Functioning of the European Union (TFEU), any aid granted by a Member State or through State resources in any form whatsoever. If these aids distort competition by favouring certain undertakings or the production of certain goods Article 107 TFEU deems them, in so far as it affects trade between Member States, to be incompatible with the internal market. Support measures are steering measures however and part of the political instruments available to Member States. If support measures fall under the definition of State aid State aid control therefore faces a conflict of objectives in light of the political sphere of activity of the Member States.

In order to resolve this conflict and because in some circumstances governmental interventions are necessary and beneficial for society in general and the economy in particular, there is room for State aid that can be considered compatible with the internal market.

The competence for State aid control lies within the European Commission, as Article 108 TFEU states. Member States are obliged to inform the European Commission of any plans to grant or alter aid. If the European Commission considers that any such plan is not compatible with the internal market having regard to Article 107, it initiates a certain procedure which is referred to as notification procedure. Until this procedure has resulted in a final decision, the Member State concerned is not allowed to put the proposed measures into effect. The European Commission complemented the fundamental rules of State aid control through a series of acts that provide for a number of exemptions and work as guidelines for the evaluation of State aid. The European Commission has therefore established a system of rules to monitor and assess State aid in the European Union. The Community Guidelines on State Aid for Environmental Protection¹ are in particular important to the District Heating and Cooling sector and possible support measures.

When evaluating possible support measures for District Heating and Cooling in the light of State aid control the first focus will therefore be on the question of whether the planned support measure constitutes State aid according to Article 107 TFEU. While Article 107

¹ OJ C 82, 01.04.2008, p. 1.

TFEU only provides a very broad definition of State aid there are however elements which can and were disputed and leave room for support measures which are not subject to State aid control. If the support measure in question is State aid, as defined in Article 107 TFEU, then the next step in evaluating this measure would be the question of whether the beneficiaries, which will in most cases be District Heating and Cooling companies, are certain undertakings that are being favoured according to Article 107 TFEU. Additionally the support measure must distort or threaten to distort competition. Following this analysis the support measure in question must also affect trade between member states. If this is the case the support measure has to undergo notification procedures. In this final step the viability of the support measure as State aid in the context of the system of rules of State aid control is verified.

Establishing criteria and analyzing these possibilities will be done in the context of three case studies in which national authorities have negotiated with the European Commission on terms for allowing the introduction of national support legislation for District Heating and Cooling. These three case studies deal with support measures proposed by Germany, Austria and Norway.

While Norway is not a Member State of the European Union, it is a member of the European Free Trade Association (EFTA). The EFTA is a free trade organization between Iceland, Norway, Switzerland and Lichtenstein. The EFTA operates parallel to, and is linked to, the European Union.

Norway, as one of three EFTA countries, is part of the European Union Internal Market through the Agreement on a European Economic Area (EEA). In order to ensure free competition and the proper transposing and enforcing of relevant European Union law, the European Free Trade Association Surveillance Authority performs the executive role of the European Commission in the countries of the EFTA which are part of the EEA. This competence also extends to State aid control, which follows similar proceedings and rules to the ones described for the European Union, making it a viable case study for this European analysis.

2 Three case studies

In order to analyze the case studies of German, Norwegian and Austrian District Heating and Cooling support measures, these have to be put into the historical context and a market perspective.

2.1 Germany

By absolute numbers Germany is, together with Poland the biggest market for District Heating in the European Union.

2.1.1 A brief history of District Heating and Cooling in Germany

District Heating has been closely linked to Combined Heat and Power from as early as 15 December 1900, when the first Combined Heat and Power plant was put into operation in Dresden.² After the two world wars the District Heating systems lay in ruins, much like most of Germany. However the rebuilding of the sector started soon and as early as 11 January 1950 the first Combined Heat and Power plant “*Gaisburg*” was put into operation in Stuttgart.³ Development was fast, with double-digit growth rates per year. But it was not before the oil crises of the 1970s when the development rapidly accelerated. Due to the oil price shock domestic fuels, such as coal, and issues such as energy efficiency came into focus. This resulted in massive investments in District Heating and Combined Heat and Power and the retrofitting of existing plants and building of new plants to operate on domestic coal. After the German reunification the existing systems in the eastern part of Germany were retrofitted and refurbished, leading to vast benefits for society in general and the environment in particular.

However the market liberalization for electricity put Combined Heat and Power and therefore also District Heating and Cooling as a major heat sink in jeopardy in the 1990s. Due to the solely price driven competition on the then liberalized electricity market Combined Heat and Power plants generally could not be operated in an economical fashion anymore.⁴ The relatively higher investment and operating costs of Combined Heat and Power plants as opposed to mere condensing power plants, the relatively long payback period and the lack of internalization of external costs are not favourable under the market conditions set by the liberalization.

² Rapp, Euroheat & Power, 3/2001, p. 19.

³ Rapp, Euroheat & Power, 5/2001, p. 25.

⁴ Baur et al., Förderung von KWK-Anlagen, 2002, p. 22; Burgi, Klimaschutz durch KWK-Förderung, 2009, p. 21.

2.1.2 The District Heating and Cooling market in Germany

According to the Federal Statistical Office in Germany District Heating has a market share of 13.3 % relating to all occupied accommodations. Traditionally, there is a great difference in regards to District Heating market share between West- and East-Germany. The market share is around 9 % in West-Germany and around 30 % in East-Germany. In cities with over 100,000 inhabitants, natural gas and District Heating have a combined market share of 70 to 80 %. District Heating alone has a market share of 30 % in this environment.

The total installed District Heating capacity in Germany is around 57,000 MW. Total heat supply was around 350,000 TJ in 2007.

Approximately 84 % of District Heating is generated in Combined Heat and Power. Natural gas and hard coal are the main types of fuel being used in Combined Heat and Power with biomass gaining in importance.

In Germany around 60 % of the final energy consumption of households is attributed to space and water heating. The share of renewable energy sources in the heating market was at around 6.6 % in 2007. The share of renewable energy sources in the electricity production had a higher growth rate due to the very strong support framework of the EEG and was at 14.2 % in 2007.

2.1.3 Analysis of support measures in Germany

The ecological benefits of Combined Heat and Power and District Heating and Cooling and the relatively low costs to achieve these benefits were generally never in doubt. The German government therefore put an emphasis on Combined Heat and Power and District Heating and Cooling as solutions for reaching environmental targets, such as greenhouse gas reduction targets. With the effects of the market liberalization for electricity not favouring ecologically beneficial solutions support measures had to be introduced to encourage investments in these energy efficiency technologies.

Due to the aforementioned close link between Combined Heat and Power and District Heating and Cooling and to counter the negative effects of the market liberalization of electricity Combined Heat and Power support measures first focused on promoting the use of Combined Heat and Power in electricity production, indirectly supporting District Heating and Cooling as the most important heat sinks for Combined Heat and Power operations.

Different possible support measures were being discussed in order to promote the use of Combined Heat and Power.

- Tender-System: A model where production capacities for certain technologies, in this case, Combined Heat and Power are tendered. Producers are guaranteed to sell their electricity for a fixed price for a limited amount of time. Buy-off and payment falls within

the competence of the grid operators. These get reimbursed by a fee on the electricity price.

- Quota-System: This is a market based instrument, where a public agency issues tradable certificates for the production of electricity from Combined Heat and Power. Certain groups are obliged to present a quota of these certificates at a pre-determined time. This offsets the additional costs for electricity from Combined Heat and Power as opposed to conventional production of electricity. There are a plethora of possible models for such an instrument. For instance the certificates could either have a more or less verifying function or form a separate market, creating an additional revenue stream for Combined Heat and Power plant operators. Additionally the obligated parties could either be the electricity producers themselves, the end-user, the electricity distributor or any combination of these groups.
- Bonus-System: Electricity from Combined Heat and Power is eligible for a bonus on top of the market price for electricity. There are two main possibilities for such a system. The tax refund model refunds or exempts the producers from taxes, for instance an electricity tax, if applicable. The allocation model obliges the electricity end user to finance the bonus for electricity from Combined Heat and Power. Electricity distributors or a central agency collect the bonus payment of the end users and allocate these payments via the grid operator to the Combined Heat and Power plant operators. Because of balancing issues certain allocation rules apply in order to guarantee equal charges for all grid operators.

2.1.3.1 Support for electricity from Combined Heat and Power

The legislator first favoured a Quota-System as support measure for Combined Heat and Power.⁵ During the consultation process the Quota-System was in the end replaced by a Bonus-System based on an allocation model. The purpose of this Combined Heat and Power Act (KWKModG) is to contribute to the objective of reducing annual carbon dioxide emissions by 10 million tons by 2005 and by a total of around 23 million tons, but not less than 20 million tons by 2010. This is to be achieved by protecting for a restricted period and modernizing Combined Heat and Power plants, in the interests of saving energy and environmental protection.

As a basic instrument the Combined Heat and Power Act obliges grid operators to connect Combined Heat and Power plants to their grid and to purchase the electricity from cogeneration. For electricity from cogeneration a bonus is paid by the grid operator on top of the market price for electricity or the price the Combined Heat and Power plant operator achieved by marketing the electricity himself. By means of a management system the costs for this bonus are shifted towards and divided upon all electricity end-consumers. The bonus is granted for a limited time only and serves to offset higher investment costs for Combined Heat and Power plants in comparison to condensing power plants.

⁵ Decision of WG Energy of the factions SPD and Bündnis 90/ DIE GRÜNEN, 7 July 2001, p. 1.

The Act also serves as the implementation of Directive 2004/8/EC on the promotion of cogeneration based on a useful heat demand in the internal energy market (Cogeneration Directive).

This system shares some similarities with the Act on Granting Priority to Renewable Energy Sources (EEG). The purpose of this Act is to facilitate a sustainable development of energy supply, particularly for the sake of protecting the climate and the environment, to reduce the costs of energy supply to the national economy, also by incorporating external long-term effects, to conserve fossil fuels and to promote the further development of technologies for the generation of electricity from renewable energy sources.

As a basic instrument the Act obliges grid operators to connect power plants producing electricity from renewable energy sources to their grid and give priority to buying their electricity. This is similar to the Combined Heat and Power Act. However for electricity from renewable energy sources a feed-in tariff system is introduced. Grid operators are obliged to buy the electricity from renewable energy sources at this fixed tariff. As opposed to the Combined Heat and Power Act there is no market element present. But another and very important similarity in regards to State aid control that is shared between both acts is the management system to shift the costs towards and divide them upon all electricity customers.

2.1.3.1.1 State aid control (Article 107 TFEU)

This basic system of requiring private electricity supply undertakings to purchase electricity at above market prices and distributing the financial burden between privates was subject of intense discussions between the German government and the Commission. The predecessor of the Act on Granting Priority to Renewable Energy Sources, the (draft) Law on feeding electricity from renewable energy sources into the public grid (StrEG) was notified as a State aid to the Commission by the German Government by letter of 14 August 1990 in accordance with Article 93(3) of the Treaty (now Article 107 TFEU). The Commission authorized the notified draft by letter of 19 December 1990 on the basis that first it was in accordance with the European energy policy aims, and secondly that renewable sources of energy constituted only a minor part of the energy sector and that the additional revenues and the accompanying repercussions on electricity prices were small. Nevertheless the Commission requested the German Government to send it information on the application of the Law on feeding electricity from renewable energy sources into the public grid and emphasized that any extension or amendment of that law shall be subject to prior notification. Following numerous complaints from electricity supply undertakings, the Commission informed the Federal Minister for the Economy in a letter of 25 October 1996 of its doubts as to whether, in view of the increase in the production of electricity derived from wind energy, the Law on feeding electricity from renewable energy sources into the public grid was still compatible with the State aid provisions. The Commission made several proposals for amendment in relation to the provisions on wind energy and stated that, if the Bundestag were not prepared to amend the law in that respect, the Commission might find

itself obliged to propose appropriate measures within the meaning of Article 93(1) of the Treaty (now Article 107 TFEU), in order to make the Law compatible with State aid rules.⁶

However, in the “*PreussenElektra*” case, the Court of Justice decided in 2001 that a statutory provision of a Member State which, first, requires private electricity supply undertakings to purchase electricity produced in their area of supply from renewable energy sources at minimum prices higher than the real economic value of that type of electricity, and, second, distributes the financial burden resulting from that obligation between those electricity supply undertakings and upstream private electricity network operators, does not constitute State aid within the meaning of Article 92(1) of the Treaty (now Article 107 TFEU).⁷

The Court of Justice noted that an obligation to purchase electricity produced from renewable energy sources at minimum prices, such as that laid down by the amended Law on feeding electricity from renewable energy sources into the public grid, results in a certain economic advantage for producers of that type of electricity, since it guarantees them higher profits than they would make in its absence with no risk involved. Since only advantages granted directly or indirectly through State resources are to be considered aid within the meaning of Article 92(1) (now Article 107 TFEU), the Court of Justice decided that the distinction made in that provision between “*aid granted by a Member State*” and aid granted “*through State resources*” does not signify that all advantages granted by a State, whether financed through State resources or not, constitute aid. In the opinion of the Court of Justice it is intended merely to bring within that definition both advantages which are granted directly by the State and those granted by a public or private body designated or established by the State. The obligation imposed on private electricity supply undertakings to purchase electricity produced from renewable energy sources at fixed minimum prices does not involve any direct or indirect transfer of State resources to undertakings which produce that type of electricity, the Court of Justice states. As a conclusion, the allocation of the financial burden arising from that obligation for such private electricity supply undertakings as between them and other private undertakings cannot constitute a direct or indirect transfer of State resources either. In those circumstances, the Court of Justice concludes, the fact that the purchase obligation is imposed by statute and confers an undeniable advantage on certain undertakings is not capable of conferring upon it the character of State aid.⁸

In German jurisprudence it is indisputable that these basic principles also apply to the principles found in the support measures for electricity from cogeneration in the Combined Heat and Power Act.⁹

There has been no change in the practice of the Court of Justice that would challenge this interpretation. On the contrary, the Court of Justice has emphasized in various cases

⁶ Case C-379/98 *PreussenElektra* [2001] ECR I-2099, paragraphs 11 and 12.

⁷ Case C-379/98 *PreussenElektra* [2001] ECR I-2099, paragraph 66.

⁸ Case C-379/98 *PreussenElektra* [2001] ECR I-2099, paragraphs 54 and 58 et seq.

⁹ Büdenbender/Rosin, KWKG-AusbauG, Einführung, marginal number 56; Ehrlicke, *Recht der Energiewirtschaft* 2003, p. 57 et seq.; Salje, *Kraft-Wärme-Kopplungs-Gesetz 2002*, 2nd print run, 2004, Einführung, marginal number 73 ; Burgi, *Klimaschutz durch KWK-Förderung*, 2009, p. 33.

following the “*PreussenElektra*” case, that for advantages to be capable of being categorized as State aid, they must be granted directly or indirectly through State resources and be imputable to the State.¹⁰ This thinking has not been revoked by the Court of Justice’s judgment on public broadcasting bodies and public service contracts, “*Bayerischer Rundfunk and Others v GEWA – Gesellschaft für Gebäudereinigung und Wartung mbH*”¹¹, since procedures for the award of public service contracts and State aid control is based on a different background from the point of view of competence.¹²

In its Communication on the application of State aid rules to public service broadcasting¹³ the European Commission does regard the State financing of public service broadcasters “normally” to be State aid. According to the European Commission public service broadcasters are usually financed out of the State budget or through a levy on TV-set holders. Such a system is being categorized by the European Commission to grant advantages directly or indirectly through State resources. The European Commission further elaborated on these views in their 2009 Communication on the application of State aid rules to public service broadcasting.¹⁴ The European Commission consequently took this stance during the State aid procedures on the financing of public service broadcasters in Germany.¹⁵ Germany argued that the license fee financing used in Germany does not constitute State aid in favour of public service broadcasters. According to Germany, revenues from the license fee did not involve any State resources since the license fee revenues were paid by the holders of radio and TV sets directly to the public service broadcasters (therefore not involving State resources) and were neither controlled by nor imputable to the State. Germany used the “*PreussenElektra*” case to argue that neither the compulsory character of the fee, nor the fact that the collection of the fee was governed by public law, nor the fact that the recipient of the license fee is a public body and that the use of the license fee revenues by that body are subject to budgetary provisions and the control of Courts of Auditors could constitute the State aid character of the licensing fees. Germany denied the existence of State aid, because the license fee is paid directly by the owners of radio/TV sets to the public service broadcasters and is never under the control of the State. The European Commission did not follow Germany’s arguments but considered that the license fee revenues constitute State resources which are under State control.

However this assessment has no influence on the analysis concerning the support measures for District Heating and Cooling in Germany with regards to the bonus payment for electricity from Combined Heat and Power in the framework of the Combined Heat and Power Act. The European Commission does not deny the general implications of the

¹⁰ Case C-482/99 *France v Commission* [2002] ECR I-4397, paragraph 24; Case C-126/01 *Ministre de l’économie, des finances et de l’industrie v GEMO SA* [2003] ECR I-13769, paragraph 24.

¹¹ Case C-337/06 *Bayerischer Rundfunk and Others v GEWA – Gesellschaft für Gebäudereinigung und Wartung mbH* [2007] ECR I-11173.

¹² Burgi, *Neue Zeitschrift für Verwaltungsrecht* 2007, p. 383; id., *Klimaschutz durch KWK-Förderung*, 2009, p. 35.

¹³ OJ C 320, 15.11.2001, p. 5 et seq.

¹⁴ OJ C 257, 27.10.2009, p. 1 et seq.

¹⁵ See letter from the European Commission, 24.04.2007, C (2007) 1761 FINAL.

“*PreussenElektra*” case, but regards the case of the license fee revenues to be fundamentally different to that of the “*PreussenElektra*” case, regardless of Germany’s arguments. As said by the European Commission, the license fee is a compulsory levy imposed on owners of radio/TV sets. The European Commission draws the conclusion that the collection of the license fees follows procedures similar to those of tax collection. As an example the European Commission refers to the circumstance that public service broadcasters determine the license fee debt through an administrative act and are able – in case of non-payment – to enforce their claim by way of an administrative enforcement procedure. As a consequence the European Commission considered that the financing of public service broadcasters through license fees is not comparable to the situation in the “*PreussenElektra*” case, where the benefit to the undertaking in question resulted from legally imposed minimum quotas and fixed prices. In particular the private law relationship between the beneficiary and the third party is of great importance. Since the obligation to pay the fee exists irrespective of whether or not TV set owners actually watch public television, the fee cannot therefore be regarded as the counter part for a service rendered to the owners of TV and radio sets. The European Commission further notes that public service broadcasters enjoy a financial guarantee enshrined in the German Constitution as interpreted by the German Constitutional Court. By explicitly stipulating this guarantee in the Interstate Treaty on Broadcasting the public service broadcasters are given a direct claim against the competent Länder to receive adequate financing, allowing them to fulfil their public service mission. In the eyes of the European Commission the license fee financing mechanism is the form through which the Länder have decided to honour their legal obligations towards the public service broadcasters. For the European Commission it does not under these circumstances matter that the compensation is not paid as a direct contribution from the State budget but that instead of first collecting the license fees from radio/TV set owners and then re-distributing the revenues to public service broadcasters, the Länder have granted the public service broadcasters the sovereign right to collect these fees directly.

Developments in the area of public broadcasting have therefore no influence on the conclusions derived from the “*PreussenElektra*” case in light of the aforementioned support measure.

Intermediate result

The obligation of grid operators to connect Combined Heat and Power plants to their grid and to purchase the electricity from these plants and pay a bonus on top of the market price for such electricity or the price the Combined Heat and Power plant operator achieved by marketing the electricity himself does not constitute State aid according to Article 107 TFEU.

2.1.3.1.2 Free movement of goods (Article 34 TFEU)

Article 34 TFEU prohibits quantitative restrictions on imports and all measures having equivalent effect between Member States. Article 34 TFEU only applies to the free movement of goods between the Member States. The abovementioned system of obliging grid operators to connect Combined Heat and Power plants to their grid, to purchase the

electricity from Combined Heat and Power and to pay a bonus on top of the market price for electricity may affect the free movement of goods between Member States.

While the quality of electricity as a “good” has been debated¹⁶, the Court of Justice evidently regards electricity as a good in terms of Article 34 TFEU. According to the Court of Justice it is accepted in Community law and in the national laws of the Member States, that electricity constitutes a good within the meaning of the free movement of goods.¹⁷ This opinion of the Court of Justice goes back to 1964, where the Court accepted that electricity may fall within the scope of the Treaty.¹⁸

The support measure in question aims to increase electricity generation from Combined Heat and Power in Germany. Consequently the support measure is limited to Combined Heat and Power plants located in Germany and could therefore have an effect on the trade between Member States of electricity from Combined Heat and Power or conventional electricity in general. First of all it has to be noted though, that the support measure does not place quantitative restrictions on imports. The support measure could nonetheless qualify as a measure having equivalent effect. According to the Court of Justice *“all trading rules enacted by Member States which are capable of hindering, directly or indirectly, actually or potentially, intra-community trade are to be considered as measures having an effect equivalent to quantitative restrictions”*.¹⁹ This so called *“Dassonville-formula”* is very wide-ranged, encompassing a large variety of measures.

The support measure for increasing the share of electricity from Combined Heat and Power is to be considered a trading rule enacted by a Member State since the Act was enacted by Germany and is capable of affecting the trade between Member States. In the light of the judgments of the Court of Justice is of no concern in this context that the Combined Heat and Power Act does not aim to regulate trade between Member States, it still qualifies as a *“trading”* rule. The question at hand is whether this trading rule is capable of hindering intra-community trade. Supporting German Combined Heat and Power plants by granting the measures analyzed in detail above has consequences for electricity generators outside of Germany, whether or not they are operating on the basis of Combined Heat and Power. Due to the obligation to buy electricity from Combined Heat and Power from German plants demand for electricity from other countries may decrease. At the same time this may also affect the demand for conventional electricity from German power plant operators. The Court of Justice itself states that an obligation placed on traders in a Member State to obtain a certain percentage of their supplies of a given product from a national supplier limits the possibility of importing the same product by preventing those traders from obtaining supplies from traders situated in other Member States.²⁰ The Combined Heat and Power Act is therefore capable, at least potentially, which is sufficient in this context, of hindering intra-

¹⁶ See Case C-158/94 *Commission v Italy* [1997] ECR I-05789, paragraphs 14 et seq. for instance.

¹⁷ Case C-393/92 *Almelo v NV Energiebedrijf Ijsselmij* [1994] ECR I-01477, paragraph 28; Case C-158/94 *Commission v Italy* [1997] ECR I-05789, paragraph 17.

¹⁸ Case 6/64 *Flaminio Costa v E.N.E.L.* [1964] ECR 00585.

¹⁹ Case 8/74 *Procureur du Roi v Benoît and Gustave Dassonville* [1974] ECR 00837, paragraph 5.

²⁰ Case 72/83 *Campus Oil Limited v Minister for Industry and Energy* [1984] ECR 02727, paragraph 16; Case C-379/98 *PreussenElektra* [2001] ECR I-2099, paragraph 70.

community trade with electricity. It therefore qualifies as measure having equivalent effect to quantitative restrictions on imports. The measure could nevertheless be legitimized.

A justification is possible within the boundaries of the “*Cassis de Dijon*”-judgment of the Court of Justice.²¹ There the Court of Justice stated that obstacles resulting from disparities between national laws must be accepted in so far as those provisions are necessary in order to satisfy mandatory requirements relating in particular to the effectiveness of fiscal supervision, the protection of public health, the fairness of commercial transaction and the defence of the consumer.²² While the development of electricity from Combined Heat and Power does help protecting the public health, for instance by severely reducing particulate matter emissions and harmful emissions in general as opposed to the decoupled production of electricity and heat, the main aim of the Combined Heat and Power Act is the protection of the environment. The protection of the environment is not part of the original list of possible mandatory requirements within the framework of the “*Cassis de Dijon*”-judgment; but this list was expanded by the Court of Justice in the further course. In 1985 the Court of Justice concluded within the framework of the freedom of trade, that environmental protection is one of the Community’s essential objectives.²³ This development led to the addition of environmental protection as a mandatory requirement which may limit the application of the principle of the free movement of goods.²⁴ Whereas mandatory requirements are usually only able to justify undiscriminating measures, many commentators believe that the Court of Justice decided in its “*PreussenElektra*” judgment that the protection of the environment as a mandatory requirement may also justify discriminating measures.²⁵ While this assumption is debated within the scientific community it can be concluded that whether or not this is done within the framework of mandatory requirements the Court of Justice did decide that discriminating measures may be justified under the viewpoint of environmental protection. The use of Combined Heat and Power for producing electricity (and heat), is useful for protecting the environment in so far as it contributes to the reduction in emissions of greenhouse gases which are amongst the main causes of climate change which the European Union and its Member States have pledged to combat. This fact is also accepted by the European Union and its institutions. Directive 2004/8/EC of the European Parliament and of the Council of 11 February 2004 on the promotion of cogeneration based on a useful heat demand in the internal energy market and amending Directive 92/42/EEC states that the promotion of high-efficiency Combined Heat and Power based on a useful heat demand is a Community priority given the benefits of Combined Heat and Power with regard to saving primary energy, avoiding network losses and reducing emissions, in particular of greenhouse gases.²⁶ The Directive further identifies that the efficient use of energy by Combined Heat and Power can also contribute positively to the security of energy supply and to the competitive situation of the European Union and its Member States. It is therefore deemed

²¹ Case 120/78 *Rewe-Zentral AG v Bundesmonopolverwaltung für Branntwein* [1979] ECR 00649.

²² Case 120/78 *Rewe-Zentral AG v Bundesmonopolverwaltung für Branntwein* [1979] ECR 00649, paragraph 8.

²³ Case 240/83 *Procureur de la République v Association de défense des brûleurs d’huiles usagées (ADBHU)* [1985] ECR 00531, paragraph 13.

²⁴ Case 302/86 *Commission v Denmark* [1988] ECR 04607, paragraph 9.

²⁵ Case C-379/98 *PreussenElektra* [2001] ECR I-2099, paragraphs 73 et seq.

²⁶ OJ L 52, 21.2.2004, p. 50 et seq.

necessary to take measures to ensure that the potential is better exploited within the framework of the internal energy market. In its Communication “*Europe can save more energy by combined heat and power generation*” the European Commission also emphasizes that Combined Heat and Power can play an important role in fulfilling Europe’s Energy Policy objectives by contributing to energy security, sustainable energy, a better environment and combating climate change.²⁷ Furthermore Combined Heat and Power “*constitutes European technology know-how with growing export possibilities, promoting European competitiveness and offering opportunities for economic development, also at regional and local level*”. The Combined Heat and Power Act as a measure having equivalent effect to quantitative restrictions on imports under the aspect of supporting electricity from Combined Heat and Power is therefore legitimized due to environmental protection considerations.

Apart from the aforementioned framework of Court of Justice judgments Article 36 TFEU constitutes that “the provisions of Articles 34 and 35 shall not preclude prohibitions or restrictions on imports, exports or goods in transit justified on grounds of public morality, public policy or public security; the protection of health and life of humans, animals or plants; the protection of national treasures possessing artistic, historic or archaeological value; or the protection of industrial and commercial property. Such prohibitions or restrictions shall not, however, constitute a means of arbitrary discrimination or a disguised restriction on trade between Member States”. In its “*PreussenElektra*” judgment the Court of Justice notes that the policy of supporting electricity from renewable energy sources is also designed to protect the health and life of humans, animals and plants.²⁸ As has been analyzed above, Combined Heat and Power contributes to energy security, sustainable energy, a better environment and combating climate change. Support for electricity from Combined Heat and Power and from renewable energy sources therefore serve the same purpose and have the same function. It can therefore be concluded that support for electricity from Combined Heat and Power is also designed to protect the health and life of humans, animals and plants and therefore is legitimized under Article 36 TFEU. Support for electricity from Combined Heat and Power in the Combined Heat and Power Act thus does not violate the principle of the free movement of goods, Article 34 TFEU.

2.1.3.1.3 Intermediate result

The obligation of grid operators to connect Combined Heat and Power plants to their grid and to purchase the electricity from these plants and pay a bonus on top of the market price for such electricity or the price the Combined Heat and Power plant operator achieved by marketing the electricity himself does not constitute State aid according to Article 107 TFEU nor does it violate Article 34 TFEU.

²⁷ COM(2008) 771 final.

²⁸ Case C-379/98 *PreussenElektra* [2001] ECR I-2099, paragraphe 75.

2.1.3.2 Support for new and extended heating networks

In order to produce electricity from Combined Heat and Power sufficient heat sinks are needed. While amending the Combined Heat and Power Act the German government introduced an ambitious target of 25 % of electricity from Combined Heat and Power, which is necessary in order to reach the German climate change goals. To reach this target it became apparent that incentives had to be granted for opening up new heat sinks. District Heating and Cooling networks are the most important heat sinks for Combined Heat and Power but the development of these energy efficient infrastructures suffers from certain barriers, which are described in detail on the “*Country-by-country-database*” of the Ecoheat4EU-Project, accessible on the project’s website: <http://www.ecoheat4.eu>. With the amended Combined Heat and Power Act a new support scheme was therefore introduced, targeting District Heating networks directly. The aforementioned bonus payment now applies to new and extended heating networks as well, if they are supplied mainly by heat from Combined Heat and Power. The bonus is one Euro per meter of route for each millimetre of the nominal diameter of the newly-build heating pipe. The bonus may not exceed 20 % of the investment cost of the new or extended network, or five million Euros per project.

As with the bonus payment for electricity from Combined Heat and Power the grid operators are legally obliged to pay for this support. Through the familiar allocation system these costs are re-allocated to all electricity consumers. Since the abovementioned, established structure for the support measure was kept intact there is no necessity for a revised assessment on the characterization of this support measure as State aid according to Article 107 TFEU.

The same holds true for a possible violation of the principle of free movement of goods according to Article 34 TFEU. Expanding the support scheme to heating networks does not constitute a further discrimination of judicial relevance, since the heating networks need to be erected in the vicinity of a heat source, in this case a Combined Heat and Power plant. Due to this physical proximity of Combined Heat and Power plant and heating network a further discrimination (in addition to what has been stated above) of foreign producers is not foreseeable. The support for new and extended heating networks therefore does not violate Article 34 TFEU.

Intermediate result

The obligation of grid operators to pay a bonus for new and extended heating networks supplied mainly by heat from Combined Heat and Power does not constitute State aid according to Article 107 TFEU, nor does it violate Article 34 TFEU.

2.1.3.3 Intermediate result

Neither the obligation of grid operators to connect Combined Heat and Power plants to their grid and to purchase the electricity from these plants and pay a bonus on top of the market price for such electricity or the price the Combined Heat and Power plant operator achieved by marketing the electricity himself, nor the obligation of grid operators to pay a bonus for

new and extended heating networks supplied mainly by heat from Combined Heat and Power constitutes State aid according to Article 107 TFEU or violates Article 34 TFEU.

Member States therefore may introduce such support measures for District Heating and Cooling within the framework of European State aid and competition rules.

2.2 Austria

Austria is, much like Germany in that respect, dependant on energy imports. Energy imports have a share of 72.6 % of the total energy supply in Austria. This dependency is also affecting local energy policy, with a focus on energy efficiency and use of indigenous resources.

2.2.1 The District Heating and Cooling market in Austria

Austria is, going by total numbers, a relatively small District Heating and Cooling market but shows a comparably dynamic development. Both the use of District Heating and Cooling and Combined Heat and Power has been increasing steadily over the past years. This development is flanked by corresponding support measures.

2.2.2 Analysis of support measures in Austria

Support for Combined Heat and Power plants was achieved on the “Bundesland” level individually through so called “*Länderausführungsgesetze*” until 2000 in Austria. An Austria-wide support scheme for Combined Heat and Power plants entered into force on 1 January 2003, the Austrian Green Electricity Act.²⁹ This Act established a nationwide support system for green electricity, which also includes provisions for tariff support for Combined Heat and Power plants. The Green Electricity Act establishes a nation-wide equal sharing of costs associated with the promotion of electricity from Combined Heat and Power plants, comparable to the general approach laid out above in the analysis of German support measures for electricity from Combined Heat and Power. Support is granted to existing and modernized Combined Heat and Power plants if they are used for the public supply of District Heating. The support was introduced to ensure the continued operation and foster the modernization of Combined Heat and Power plants in combination with District Heating supply. The measure supports the plants through reimbursement of part of the costs associated with the operation of existing and modernized CHP plants for public district heating supply.

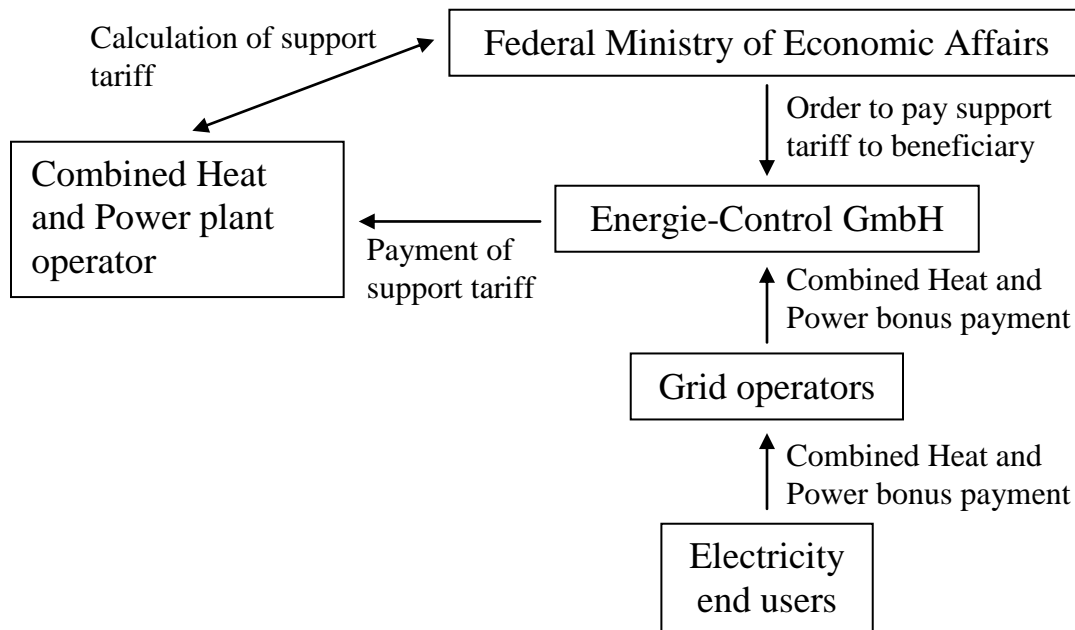
The Green Electricity Act provides different forms of support, for instance minimum prices and the obligation to purchase electricity from renewable energy sources or investment grants for medium-sized hydro power plants. For this analysis we will focus on the support tariff for

²⁹ “Bundesgesetz, mit dem Neuregelungen auf dem Gebiet der Elektrizitätserzeugung aus erneuerbaren Energieträgern und auf dem Gebiet der Kraft-Wärme-Kopplung erlassen werden (Ökostromgesetz – ÖSG)” BGBl. I No. 149/2002.

Combined Heat and Power plants. Existing and modernized Combined Heat and Power plants that are used for the public supply of District Heating may benefit from a support tariff in order to bridge the gap between market prices and the costs associated with the operation of Combined Heat and Power plants and cover the additional demand. Revenue from both heat and electricity sales are compared to the costs for operating the Combined Heat and Power plant. These costs include costs for fuel, maintenance, overhead and in case of modernized Combined Heat and Power plants an adequate return on capital employed. Pension payments, administrative costs and taxes are not part of this equation. The calculated difference may then be reimbursed through the support tariff. This support tariff is calculated by the Federal Ministry of Economic Affairs and Labour on a yearly basis. Combined Heat and Power plant operators have to file an application for the calculation of the additional demand at the Federal Ministry of Economic Affairs and Labour and provide all the necessary information with it. The Federal Ministry of Economic Affairs and Labour then calculates and determines the additional demand and the corresponding support tariff for electricity from Combined Heat and Power per kWh for each Combined Heat and Power plant per calendar year. The tariff support system itself is managed by the Austrian regulator, Energie-Control GmbH that grants the necessary support to the Combined Heat and Power plant operator based on the decision of the Federal Ministry of Economic Affairs and Labour. The law does not establish a purchase obligation for electricity from Combined Heat and Power, which is sold under market conditions. The system is financed by a bonus payment, collected by the grid operators from electricity end users together with the grid fee and shown separately from any other charges included in the same bill. The Green Electricity Act provides that the level of the bonus payment shall correspond to the expected outlays for additional expenses for Combined Heat and Power plants and may not exceed 0.15 cent per kWh in 2003 and 2004 and 0.13 cent per kWh in 2005 and 2006.

This bonus payment is calculated by the Federal Ministry of Economic Affairs and Labour a year in advance and is administered by Energie-Control GmbH.

Since the framework of this mechanism is important for the forthcoming legal analysis, the following graph shall illustrate the relatively complex procedure:



The general mechanics of the support measure have some similarities with the support measure for electricity from Combined Heat and Power in Germany, namely the market element and most importantly that the resources for the support are collected by the grid operators and shared equally among all electricity end users. There are some striking differences as well, which were subject of the negotiations between Austria and the European Commission.

Based on the findings of the aforementioned “*PreussenElektra*” judgment of the Court of Justice and the German example of a shared tariff support the Austrian government was of the opinion that the support measure for electricity from Combined Heat and Power did not constitute State aid and consequently did not notify the European Commission. In the context of a complaint procedure³⁰, the European Commission asked for the notification of the Green Electricity Act. The Austrian authorities however maintained their legal view, that the Act would not concern State aid. On the basis of the received information, The European Commission registered the measure as a non notified case on the basis of the information provided by the Austrian government.³¹ The European Commission is of the opinion that the support measure in question does constitute State aid and is subject to corresponding control.

In order to draw conclusions from this case study, the diverging opinions have to be analyzed from a legal perspective. Recalling from previous analysis, State aid is, according to Article 107 TFEU, any aid granted by a Member State or through State resources in any form whatsoever. If these aids distort competition by favouring certain undertakings or the production of certain goods Article 107 TFEU deems them, in so far as it affects trade

³⁰ CP 14/2002.

³¹ NN162/B/2003 (concerning the support for electricity from Combined Heat and Power).

between Member States, to be incompatible with the internal market. Article 107 TFEU therefore lays down four conditions:

1. There must be an intervention by the State or through State resources.
2. The intervention must confer an advantage on the recipient.
3. The intervention must be liable to affect trade between Member States.
4. The intervention must distort or threaten to distort competition.

Through the support mechanism of the Green Electricity Act, the operators of Combined Heat and Power plant generate income from a support tariff, which they would not receive from the market. To offset the difference between costs of operation and market prices for heat and electricity is, as has been laid out above, the main reason for the support measure. The measure therefore confers an advantage on the recipients. Since the measure solely favours Combined Heat and Power plant operators that supply heat to public District Heating systems, the beneficiaries constitute a selective group of undertakings. Similar to what has been stated in the analysis of the German support for electricity from Combined Heat and Power, the measure is liable to affect trade between member states and distort competition.

The controversial question in the negotiations between the Austrian government and the European Commission was therefore whether the support measure is financed directly or indirectly through State resources and whether this is imputable to the State.

As has been laid out in detail above, the Court of Justice denied this in the “*PreussenElektra*” judgment concerning the German “*Stromeinspeisungsgesetz*”, insofar as private grid operators and electricity suppliers were obliged to pay for the support measure, as the mere fact that a purchase obligation is imposed by statute and confers an undeniable advantage on certain undertakings is not capable to turn the private resources of the undertakings into State resources. The situation within the framework of the Austrian Green Energy Act, while sharing some of the basic principles, is deviating from the mechanics employed within the framework of the “*Stromeinspeisungsgesetz*” or the Combined Heat and Power Act. In the Austrian Green Energy Act, the resources for the support measure also originate from private sources, in this case the electricity end users, who are charged with the bonus payment by the grid operators. But unlike the systems employed in the “*PreussenElektra*” judgment or the support measure for electricity from Combined Heat and Power in Germany, the resources are then transferred to a body designated by the State, in this case the Energie-Control GmbH. This body is responsible for the distribution and administration of the support. From this point of view, the resources necessary for the support measure are levied from the private undertakings and electricity end users. Before its “*PreussenElektra*” judgment the Court of Justice decided that it is not necessary in regards to State aid control to make a distinction whether the aid is granted directly by the State or by public or private bodies established or appointed by it to administer the aid.³² There were three criteria established for such levies to constitute State resources:

1. The levy must be imposed by the State;

³² Case 78/76 *Steinike & Weinlig v Germany* [1977] ECR 00595, paragraph 21.

2. its earnings must be transferred into a State-designated body, which does not have to be State owned; nor do the earnings need to become State property; and
3. the earnings must be used to give an advantage to certain undertakings.

The European Commission takes the view that the “*PreussenElektra*” judgment did not alter this jurisprudence. According to the European Commission the levying mechanism turns the resources into State resources before they reach the beneficiary; it does not matter whether the resources were of private nature before. Another Court of Justice judgment, which is consulted by the European Commission to support their legal view, is the “*Pearle*” judgment of 2004³³, well after the “*PreussenElektra*” judgment in 2001. This judgment introduced the relatively new concept of imputability to the State in the parafiscal levy context. According to the Court of Justice advantages must not only be granted directly or indirectly through State resources to be considered State aid, but also be imputable to the State.³⁴ In this judgment the Court of Justice also stressed that resources have to be made available to the national authorities. The Court of Justice reasoned that since the costs incurred by the public body (for purposes of a marketing campaign) were offset in full by the levies imposed on the undertakings benefiting therefrom, the action did not tend to create an advantage which would constitute an additional burden for the State or that body.³⁵ As long as a body serves merely as a vehicle for the levying and allocating of resources collected for a purely commercial purpose previously determined and which had nothing to do with a policy determined by State authorities, such advantages are not imputable to the State.³⁶ In the case of the Austrian Green Energy Act this is clearly not the case; since the levying and allocating of resources follows a policy determined by State authorities and has no connection to commercial purposes. The possible interpretations of these cases however do not necessarily lead to the same conclusion the European Commission has drawn. However, regardless of the possible interpretations of the “*Steinike & Weinlig*”, “*PreussenElektra*” and “*Pearle*” cases in regards to the support for electricity from Combined Heat and Power within the framework of the Green Energy Act, the European Commission has made it clear that once the earnings are used in a way which is prescribed by the State, ruling out cases where the use of the earnings is decided by the companies themselves, maybe even if the State later on enshrines the result of their choice, it will consider the support measure in question to be State aid.

In order to avoid possible problems when introducing such a support measure, the possibility of involving bodies to distribute and administer the earnings should be considered carefully, since in the eyes of the European Commission will decide the applicability of State aid rules to such a measure.

It has to be noted that in the case the support measure does constitute State aid it does not mean that it may not be justified. On the contrary, in the case of electricity from Combined Heat and Power in Austria the European Commission has in the end decided not to raise

³³ Case C-345/02 *Pearle BV v Hoofdbedrijfschap Ambachten* [2004] ECR I-07139.

³⁴ Case C-345/02 *Pearle BV v Hoofdbedrijfschap Ambachten* [2004] ECR I-07139, paragraph 35.

³⁵ Case C-345/02 *Pearle BV v Hoofdbedrijfschap Ambachten* [2004] ECR I-07139, paragraph 36.

³⁶ Case C-345/02 *Pearle BV v Hoofdbedrijfschap Ambachten* [2004] ECR I-07139, paragraph 37.

objections. For their assessment the European Commission referred to the “Community Guidelines on State Aid for Environmental Protection”. After the negotiations between the Austrian government and the European Commission, which took place between 2003 and 2006, the Community Guidelines were revised³⁷. The general assessment however still remains and has not changed since.

The European Commission applies the Community Guidelines when assessing environmental aid in the context of State aid control. They serve as a tool to increase legal certainty and transparency of the European Commission’s decision-making. The Community Guidelines stipulate rules that are applied to aid for Combined Heat and Power in points 112 et seq. When applying these guidelines certain thresholds have to be honoured. For direct investment aids for instance the aid intensity must not exceed 60 % of the eligible investment costs for large enterprises, 70 % for medium-sized enterprises and 80 % for small enterprises.³⁸ Aid for Combined Heat and Power is only possible if the Combined Heat and Power unit satisfies the definition of high-efficiency cogeneration, as laid out in Directive 2004/8/EC of the European Parliament and of the Council of 11 February 2004 on the promotion of cogeneration based on a useful heat demand in the internal energy market and amending Directive 92/42/EEC and Commission Decision 2007/74/EC of 21 December 2006 establishing harmonised efficiency reference values for separate production of electricity and heat in application of Directive 2004/8/EC of the European Parliament and of the Council. Operating aid is possible when the costs of producing electricity or heat from Combined Heat and Power exceed its market price. These rules in general have not changed from the 2001 version the European Commission was assessing during their negotiations with the Austrian government. The reasoning is therefore still applicable. The European Commission stressed in their evaluation that the compensation for electricity from Combined Heat and Power can relate only to the extra production costs for environmentally friendly electricity production as compared to the production costs for energy based on conventional energy sources. Any support measure must, according to the European Commission, however only cover the plant depreciation and, if Member States can show that this is indispensable, a fair return on capital. The European Commission deemed the Austrian Green Energy Act to be fulfilling these criteria; the parameters are objective and aim to cover only the gap between revenues from the sale of electricity and heat and the costs to maintain operation of the plant. The European Commission concluded that the Austrian authorities have illustrated that the support granted under the measure at stake will not exceed the extra production costs of the electricity from Combined Heat and Power supported by the measure.

Intermediate result

A support measure for existing and modernized Combined Heat and Power plants utilizing a support tariff qualifies as State aid in the eyes of the European Commission when a levy system is being used, which is administered by a State-designated body and the earnings are used in a way which is prescribed by the State. Cases where the use of the earnings is

³⁷ OJ C 82, 1.4.2008, p. 1 et seq.

³⁸ OJ C 82, 1.4.2008, p. 20, points 114 et seq.

decided by the companies themselves, maybe even if the State later on enshrines the result of their choice are therefore ruled out.

The European Commission however regards such State aid as being justified if it aims to bridge the gap between market prices and the costs associated with the operation of Combined Heat and Power plants and cover the additional demand.

2.3 Norway

With Norway not being a Member State of the European Union, but a member of the EFTA and part of the European Union Internal Market through the EEA, the European Free Trade Association Surveillance Authority performs the executive role of the European Commission in regards to State aid control.

2.3.1 The District Heating and Cooling market in Norway

Norway is a small but emerging District Heating market. Since 98 % of the Norwegian electricity is produced through hydropower, the use of electricity to produce space heat, although being far from energy efficient, is predominant. In 2008 the total energy use in Norway was 819 PJ or 228 TWh. Electricity accounts for 57 % of the total energy use, or 130 TWh. The size of the heating market in Norway is about 62 TWh, including the residential, service and industrial sector. In 2008 District Heating delivered 12.59 PJ or 3.5 TWh of heat, thus accounting for 5.6 % of the heating market. Due to the high share of electricity from hydropower Combined Heat and Power does not play a significant role in the District Heating supply of Norway, representing just 2 % of the energy sources used for District Heating. Heat from waste incineration with a share of 34 % provides the major energy source for District Heating, followed by bio-energy with a share of 15 %, industrial surplus heat with a share of 13 % and heat pumps based on sewage or seawater with a share of 10 %.

Although just representing 5.6 % of the heating market and having a total installed capacity of 2,200 MW in 2008, District Heating showed a rapid development in Norway. In 10 years, from 1999 to 2008, District Heating has increased by more than 150%. This development was triggered by the discussions on energy efficiency, waste management and renewable energy sources and flanked by corresponding measures.

2.3.2 Analysis of support measures in Norway

Due to the market situation described above, the political objective of the Norwegian government is to change the energy system and use more renewable heat in the heating sector, building up a more flexible energy system. District Heating, due to its flexibility in utilizing different heat sources and the ability to supply heat from renewable energy sources on a broad scale and in urban areas, plays a major role in achieving these objectives.

Norway has various local renewable energy sources which can potentially be utilized with District Heating. There are different local renewable energy sources in the each of Norway's regions. What Norway is lacking however is the District Heating infrastructure to put these local renewable energy sources to use. This is considered to be the main barrier for growing the District Heating market share along with the corresponding costs.

The Norwegian government therefore introduced a support programme for investments in new District Heating infrastructure or extending existing District Heating infrastructure. The support was mainly granted to build up District Heating infrastructure in large cities with no previous District Heating, based on renewable energy. The measure supports investments that would otherwise not have been made, for instance to less profitable ventures.

The support measure works with a public service obligation system. A public service obligation in general describes an obligation put upon companies to provide certain services to the public. In the District Heating sector, especially in the Eastern parts of Europe companies were or are often subject to public service obligations, obliged to supply District Heating at certain conditions or even when the bills are not being paid. They usually get reimbursed for these services by various systems. Such public service obligations are not support schemes but are more closely linked to the idea of services of general interest or essential services for citizens. Public service obligations as support schemes are best known the transport sector. There a public service obligation also follows the idea of services of general interest but is more closely linked to giving out support to incentivize these services. The starting point is a transport route that has a social function, for instance for marginally populated areas, but does not provide enough profit and/or revenue to operate the transport in an economically feasible way in the free market. A public service obligation would in such a case oblige a company to maintain transport services on the routes in question. In order to incentivize the operation of the transport a governing body or other public authority would tender the transport publically under specific conditions. This type of public service obligation combined with tendering procedures is also employed in Norway, where regional airline transport routes to Northern Norway, which is very marginally populated, typically do not offer enough potential customers for profitable operations. Transport public service obligations are regulated under Regulation (EC) No 1008/2008 and have to be tendered, among other conditions which have to be met.

Perhaps starting with the experiences of utilizing such a public service obligation system in the transport sector, the Norwegian government decided to implement a similar system for the support of District Heating infrastructure. Therefore a public service obligation is tendered publically and different companies compete for the tender.

The public purchase of goods, services and infrastructure are in general subject to the so called public procurement rules. The framework for public procurement on the European level are Directives 2004/18/EC on the coordination of procedures for the award of public works contracts, public service contracts and public supply contracts and 2004/17/EC on the coordination of the procurement procedures of entities operating in the water, energy, transport and postal services sectors. This framework aims to create a level playing field for

private entities to compete for public contracts, and to increase the efficiency of public spending. Public procurement is not linked directly to State aid control but considering there is a detailed framework and set of rules it could be argued that public procurement is not subject to State aid control. This is not necessarily the case though, as Article 107 TFEU any aid granted by a Member State or through State resources in any form whatsoever constitutes State aid. So as long as public procurement transactions fall within the scope of Article 107 TFEU they would qualify as State aid. In the case of the public service obligation for District Heating in Norway, the system is being administered by Enova SF³⁹, a public enterprise owned by the Royal Norwegian Ministry of Petroleum and Energy. Enova SF is governed by an appointed Board of Directors. According to Enova SF's website its main mission is "to contribute to environmentally sound and rational use and production of energy, relying on financial instruments and incentives to stimulate market actors and mechanisms to achieve national energy policy goals". Taking into account the detailed analysis of the discussion about the involvement of State resources in support measures, the public service obligation tendered through Enova SF would in all probability considered to fall within the definition of State aid.

But since different private entities compete for the tender, the question has to be raised whether, and under which conditions, this public service obligation scheme favours the contracting entity by giving them an economic advantage. According to the Court of Justice measures which, *"are to be regarded as an economic advantage which the recipient undertaking would not have obtained under normal market conditions are regarded as aid"*.⁴⁰ Since the contracting entity is selected based upon a tender procedure, this implies that if the public service obligation corresponds to a normal commercial transaction and the designated body is paying a market price, no State aid is involved. The Court of Justice consequently states that *"where a State measure must be regarded as compensation for the services provided by the recipient undertakings in order to discharge public service obligations, so that those undertakings do not enjoy a real financial advantage and the measure thus does not have the effect of putting them in a more favourable competitive position than the undertakings competing with them, such a measure does not constitute State aid under European Union law"*.⁴¹

This raises the question when the State measure can be regarded as a compensation that does not grant a real financial advantage. Within the framework of State aid control, the use of competitive, transparent and non-discriminatory public tenders has been regarded as being sufficient to presume that no State aid is provided to the contracting entity.

³⁹ <http://www.enova.no/sitepageview.aspx?sitePageID=1346>.

⁴⁰ Case C-140/09 *Fallimento Traghetti del Mediterraneo SpA v Presidenza del Consiglio dei Ministri* [2010] (not yet published in ECR), paragraph 34.

⁴¹ Case C-140/09 *Fallimento Traghetti del Mediterraneo SpA v Presidenza del Consiglio dei Ministri* [2010] (not yet published in ECR), paragraph 35.

The Court of Justice has established four criteria that have to be met for such compensation to escape classification as State aid in a particular case.⁴²

1. The contracting entity receiving such compensation must actually have public service obligations to discharge, and the obligations must be clearly defined.
2. The parameters on the basis of which the compensation is calculated must be established in advance in an objective and transparent manner, to avoid it conferring an economic advantage which may favour the recipient undertaking over competing undertakings.
3. The compensation cannot exceed what is necessary to cover all or part of the costs incurred in the discharge of public service obligations, taking into account the relevant receipts and a reasonable profit for discharging those obligations.
4. The compensation must be determined on the basis of an analysis of the costs which a typical undertaking, well run and adequately provided with the requisite means so as to be able to meet the necessary public service requirements, would have incurred in discharging those obligations, taking into account the relevant receipts and a reasonable profit for discharging the obligations.

In order to avoid granting an economic advantage towards the contracting entity and correspondingly not falling under the scope of State aid control, these four criteria have to be carefully implemented in a possible support measure based on a public service obligation scheme. If the measure in question is challenged it will become necessary to provide all important information in order to assess this question. Information management and proper documentation are therefore key issues to be taken into account when contemplating such a support measure.

To summarize: In order to determine whether a public service obligation scheme involves State aid to the contracting entity, the key issue is to consider whether the procurement may grant any advantage which the undertaking would not receive under normal market conditions. The use of a competitive procurement procedure which is suitable to achieve a fair market price for the public service obligation creates a presumption that no State aid is granted towards the contracting entity. Furthermore the obligations for the contracting entity must be clearly defined and compensation determined on a detailed cost analysis.

Intermediate result

A support measure for District Heating and cooling based on a public service obligation and corresponding tendering procedure does not grant an economic advantage towards the contracting entity and therefore is compatible with the rules on State aid control if a fair market price for the public service obligation is achieved, the obligations for the contracting entity clearly defined and the compensation determined on a detailed cost analysis.

⁴² Case C-280/00 *Altmark Trans GmbH, Regierungspräsidium Magdeburg v Nahverkehrsgesellschaft Altmark GmbH* [2003] ECR I-07747, paragraphs 89 et seq.; Case C-206/06 *Essent Netwerk Noord BV, Nederlands Elektriciteit Administratiekantor BV, Aluminium Delfzijl BV v Aluminium Delfzijl BV, Staat der Nederlanden, Nederlands Elektriciteit Administratiekantor BV, Saranne BV* [2008] ECR I-05497, paragraphs 81 et seq. ; Case C-140/09 *Fallimento Traghetti del Mediterraneo SpA v Presidenza del Consiglio dei Ministri* [2010] (not yet published in ECR), paragraph 35.

3 Impact of the Renewable Energy Directive

Directive 2009/28/EC on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC (Renewable Energy Directive) establishes according to its Article 1 “a common framework for the promotion of energy from renewable sources“.

Part of the European Analysis within Work Package 4 is the assessment of the impact of this Directive within the framework of State aid control and possible support measures for District Heating and Cooling.

In order to determine whether the Renewable Energy Directive has any impact on the results of the analysis carried out above, the different provisions concerning District Heating and Cooling in the Renewable Energy Directive.

“Article 13

Administrative procedures, regulations and codes

(...)

3. Member States shall recommend to all actors, in particular local and regional administrative bodies to ensure equipment and systems are installed for the use of electricity, heating and cooling from renewable energy sources and for district heating and cooling when planning, designing, building and renovating industrial or residential areas. Member States shall, in particular, encourage local and regional administrative bodies to include heating and cooling from renewable energy sources in the planning of city infrastructure, where appropriate.

4. Member States shall introduce in their building regulations and codes appropriate measures in order to increase the share of all kinds of energy from renewable sources in the building sector.

In establishing such measures or in their regional support schemes, Member States may take into account national measures relating to substantial increases in energy efficiency and relating to cogeneration and to passive, low or zero-energy buildings. By 31 December 2014, Member States shall, in their building regulations and codes or by other means with equivalent effect, where appropriate, require the use of minimum levels of energy from renewable sources in new buildings and in existing buildings that are subject to major renovation. Member States shall permit those minimum levels to be fulfilled, inter alia, through district heating and cooling produced using a significant proportion of renewable energy sources.

The requirements of the first subparagraph shall apply to the armed forces, only to the extent that its application does not cause any conflict with the nature and primary aim of the activities of the armed forces and with the exception of material used exclusively for military purposes.

(...)“

The provisions concerning District Heating and Cooling in Article 13 of the Renewable Energy Directive can be divided according to their paragraphs in requirements for urban

planning and requirements to increase the share of renewable energies in the buildings sector and the introduction of minimum levels of energy from renewable sources in buildings.

Requirements for Member States to recommend to all actors to ensure that equipment and systems are installed for District Heating and Cooling when planning, building and renovating industrial or residential areas is further proof of the importance of District Heating and Cooling in the context of the European energy, climate change and renewable energies strategy. These requirements in itself could be considered a support measure since they raise awareness for District Heating and Cooling, especially among urban planners. It does however not constitute State aid and does not oblige or allow Member States to support District Heating and Cooling with measures similar to those described above.

Article 13 paragraph 3 of the Renewable Energy Directive therefore has no direct impact on the analysis at hand.

According to Article 13 paragraph 4 of the Renewable Energy Directive Member States shall introduce in their building regulations and codes appropriate measures in order to increase the share of all kinds of energy from renewable sources in the building sector. This provision certainly encompasses appropriate measures for District Heating and Cooling based specifically on renewable energy sources, especially taking Article 13 paragraph 3 of the Renewable Energy Directive into account. When introducing such measures Member States therefore have to take District Heating and Cooling into account. When doing so Member States are also free to *“take into account national measures relating to substantial increases in energy efficiency and relating to cogeneration”*⁴³. This gives Member States the opportunity to adapt and adjust support measures for renewable energy sources and energy efficiency technologies like District Heating and Cooling and Combined Heat and Power in the building sector. Policies regarding energy efficiency and renewable energy sources serve the same goal, namely reducing greenhouse gas emissions and reduce dependence on fossil energy imports. Therefore, according to Preamble paragraph 19 of the Renewable Energy Directive *“Member States should take into account the optimal combination of energy efficiency technologies with energy from renewable sources”*, it is stated that *“the improvement of energy efficiency is a key objective of the Community”*⁴⁴.

These findings have to be taken into account when analysing the possible impact of the provisions on the requirement of the use of minimum levels of energy from renewable sources in new buildings and in existing buildings that are subject to major renovation. At first glance, this provision might lead to the conclusion that support measures for fossil based District Heating and Cooling and Combined Heat and Power may not be possible anymore within the framework set by the Renewable Energy Directive. This however is not true. As described above, energy efficiency measures and measures concerning the use of renewable energy sources accompany each other to fulfil the European energy and climate change policies. One does therefore not exclude the other. The provisions set out in the Renewable

⁴³ Article 13 paragraph 4 of the Renewable Energy Directive.

⁴⁴ Preamble paragraph 10 of the Renewable Energy Directive.

Energy Directive shall not negatively affect provisions for the development of energy efficiency technologies such as District Heating and Cooling and Combined Heat and Power, as they are laid out in the Cogeneration Directive for instance. The Renewable Energy Directive itself acknowledges this fact not only in its preamble but also in Article 13 paragraph 4, when it advises Member States to permit the minimum levels for the use of energy from renewable energy sources *“to be fulfilled, inter alia, through district heating and cooling produced using a significant proportion of renewable energy sources”*. This provision would be redundant if it would merely re-state the provisions set out before, since District Heating and Cooling produced using a significant proportion of renewable energy sources would comply with the use of minimum levels of renewable energy sources, if these minimum levels are set accordingly. Furthermore by using the phrase *“inter alia”* the legislator utilizes a rule example, meaning these provisions can be fulfilled by similar measures as well. Since energy efficiency is already regarded as being of equal importance to the use of renewable energy sources within the framework of the Renewable Energy Directive itself, energy efficiency measures fitting the framework of the Renewable Energy Directive, other energy related legislation and the European energy and climate change goals may fulfil inter alia the provisions on minimum levels for the use of energy from renewable energy sources. This is further supported by the new legislative competence on energy in Article 194 TFEU which defines the Union policy on energy as aims to *“promote energy efficiency and energy saving and the development of new and renewable forms of energy”*.

Article 13 paragraph 4 Renewable Energy Directive therefore has no direct impact on the analysis at hand.

Another provision for District Heating and Cooling can be found in Article 14 of the Renewable Energy Directive:

*“Article 14
Information and training
(...)
5. Member States shall ensure that guidance is made available to all relevant actors, notably for planners and architects so that they are able properly to consider the optimal combination of renewable energy sources, of high-efficiency technologies and of district heating and cooling when planning, designing, building and renovating industrial or residential areas.
(...)”*

This is further proof of the importance of District Heating and Cooling both in the context of the use of renewable energy sources and energy efficiency (*“high-efficiency”*) measures, confirming the conclusions regarding Article 13 paragraph 4 of the Renewable Energy Directive.

Article 14 paragraph 5 of the Renewable Energy Directive however has no direct impact on the analysis at hand.

Intermediate result

The Renewable Energy Directive does not impact the analysis on the constraints of national support schemes within the framework of State aid control. The support of fossil based District Heating and Cooling is still possible within the set framework. The Renewable Energy Directive furthermore emphasises the footing of renewable energy and energy efficiency measures.

4 Result

The analysis of the two case studies from Germany and Norway have shown that it is possible to introduce support measures for District Heating and Cooling that do not constitute State aid.

The obligation of grid operators to connect Combined Heat and Power plants to their grid and to purchase the electricity from these plants and pay a bonus on top of the market price for such electricity or the price the Combined Heat and Power plant operator achieved by marketing the electricity himself does not constitute State aid according to Article 107 TFEU nor does it violate Article 34 TFEU. Neither does the obligation of grid operators to pay a bonus for new and extended heating networks supplied mainly by heat from Combined Heat and Power. Member States therefore may introduce such support measures for District Heating and Cooling within the framework of European State aid and competition rules.

A support measure for District Heating and Cooling based on a public service obligation and corresponding tendering procedure does not grant an economic advantage towards the contracting entity and therefore is compatible with the rules on State aid control if a fair market price for the public service obligation is achieved, the obligations for the contracting entity clearly defined and the compensation determined on a detailed cost analysis.

The analysis of the case study from Austria has revealed that a support measure for existing and modernized Combined Heat and Power plants utilizing a support tariff qualifies as State aid in the eyes of the European Commission when a levy system is being used, which is administered by a State-designated body and the earnings are used in a way which is prescribed by the State. Cases where the use of the earnings is decided by the companies themselves, maybe even if the State later on enshrines the result of their choice are therefore ruled out.

However the analysis has also shown that the European Commission regards such State aid as being justified if it aims to bridge the gap between market prices and the costs associated with the operation of Combined Heat and Power plants and cover the additional demand.

It can be concluded that the Renewable Energy Directive does not impact the analysis on the constraints of national support schemes within the framework of State aid control. The support of fossil based District Heating and Cooling is still possible within the set framework. The Renewable Energy Directive furthermore emphasises the footing of renewable energy and energy efficiency measures.