Regulating Energy Supranationally: EU Energy Policy

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Introduction: "Energy is the Lifeblood of Our Society"

In November 2010, the European Commission published a "communication" on "Energy 2020" intended to inform the other main EU institutions about its "strategy for competitive, sustainable and secure energy". Although the authors of this document stated that "a common EU energy policy has evolved around the common objective to ensure the uninterrupted physical availability of energy products and services on the market, at a price which is affordable for all consumers (private and industrial), while contributing to the EU's wider social and climate goals" and that "the central goals for energy policy (security of supply, competitiveness, and sustainability) are now laid down in the Lisbon Treaty" – i.e. Art. 194 of the Treaty on the functioning of the European Union (TFEU) – they were in serious doubt whether "the existing strategy was likely to achieve all the 2020 targets", and they thought it "wholly inadequate to the longer term challenges". So since "EU energy and climate goals have been incorporated into the Europe 2020 Strategy for smart, sustainable and inclusive growth, adopted by the European Council in June 2010, and into its flagship initiative 'Resource efficient Europe's", the "urgent task" for

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¹ Commission Communication, Energy 2020 – A Strategy for Competitive, Sustainable and Secure Energy, 10th November, 2010, COM(2010) 639 final.

² Op. cit., p. 2, referring to the Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community of 13th December, 2007, OJ [2007] C 306/1.

³ On this provision, see below, at D.I.2.

⁴ Commission Communication, Europe 2020 – A Strategy for Smart, Sustainable and Inclusive Growth, 3rd March, COM(2010) 2020 final.

⁵ For an indicative roadmap of October 2010, see http://ec.europa.eu/governance/impact/planned-ia/docs/2011 env 003 resource efficient europe en.pdf.

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the EU should be "to agree the tools which will make the necessary shift possible and thus ensure that Europe can emerge from recession on a more competitive, secure and sustainable path".

Some major findings of the communication were:

The internal energy market is still fragmented and has not achieved its potential for transparency, accessibility and choice". "The EU is the level at which energy policy should be developed. Decisions on energy policy taken by one Member State inevitably have an impact on other Member States. The optimum energy mix, including the swift development of renewables, needs a continental market at least. Energy is the market sector where the greatest economic efficiencies can be made on a pan-European scale". "In international energy affairs, the EU could be much stronger and effective if it took charge of its common interest and ambition. Despite accounting for one fifth of the world's energy use, the EU continues to have less influence on international energy markets than its economic weight would suggest. 9

Thus, the conclusion drawn from these insights was:

We urgently need far-reaching changes in energy production, use and supply.

Consequently, the EU new energy strategy should focus "on five priorities:

- 1. Achieving an energy efficient Europe;
- 2. Building a truly pan-European integrated energy market;
- 3. Empowering consumers and achieving the highest level of safety and security;
- 4. Extending Europe's leadership in energy technology and innovation;
- 5. Strengthening the external dimension of the EU energy market". 10

The following study tries to analyze more deeply whether the strategy change proposed by the European Commission is appropriate and, in particular, if there is indeed a (political) need as well as a solid legal basis to go on shaping a genuine common energy policy at the European (supranational) level. After having discussed specific aspects of the energy sector, especially its main segments and the (actual and probable future) distribution of resources (B.), I shall look more closely at major (international and European) developments within the last decades before the actual legal framework at EU level will be dealt with in details, including its international law context (C., D.). Finally, I shall sketch the relationship between EU energy policy and Member States' policies (E.) and, finally, draw some general conclusions (F.).

⁶ Commission Communication, Energy 2020 – A Strategy for Competitive, Sustainable and Secure Energy, 10th November, 2010, COM(2010) 639 final, p. 3.

⁷ Ibid.

⁸ Commission Communication, Energy 2020 – A Strategy for Competitive, Sustainable and Secure Energy, 10th November, 2010, COM(2010) 639 final, p. 4.

⁹ Ibid.

¹⁰Commission Communication, Energy 2020 – A Strategy for Competitive, Sustainable and Secure Energy, 10th November, 2010, COM(2010) 639 final, p. 6.

Fundamental Facts About Energy and the Energy Sector

Basic Aspects

Energy originates from four fundamental forces of physics: gravity, electromagnetism, weak and strong nuclear force. These forces generate commercial energy in six familiar forms: mechanical, chemical, thermal, radiant, nuclear and electrical. In any system, energy can be turned from one form into another. Energy scarcity becomes a problem because of the second "law" of thermodynamics which requires that when energy is converted, it is reduced in quality and in its ability to do work.

Energy resources are still often publicly owned ¹¹ and considered basic wealth to a society. As such they are usually taxed – sometimes quite heavily. ¹² Although most economists favour markets and private ownership for the allocation of goods and services they do not deny that markets may fail and that then government might (or should) step in. One such case is a decreasing-cost industry. For example, the electricity industry's huge capital costs and economies of scale had marked it a "natural monopoly" for many years. ¹³ But actual or alleged problems with government ownership and regulation, along with technical changes in electricity generation, have led to moves toward deregulation and privatization. With the first development, institutional arrangements or governance structures (including spot purchases, long-term contracts, and vertical integration) in markets are likely to evolve. ¹⁴ Next, energy production, transport, and consumption produce a variety of pollutants often affecting others besides their producers. Because of these negative externalities, private markets will not allocate energy efficiently, and governments have stepped in to respond. ¹⁵

Energy was and is often produced in a technically complex industry. Uranium, e.g., requires sophisticated processing, natural gas is transported through complicated pipeline networks with computer systems to monitor and measure its location. With the "information (technology) revolution", even more technical choices influence how energy firms are organized and how they function. Finally, energy is – and will remain – a global business with many large national and multi- or transnational

¹¹ To be distinguished from State sovereignty over natural resources; cf. below, at fn. 86.

¹² Cf., e.g., National Research Council (ed.), Energy Taxation: An Analysis of Selected Taxes, 1980; Dahl, International Energy Markets. Understanding Prices, Policies, and Profits, 2004, pp. 65 et seq.; Toder, Energy Taxation: Principles and Interests, 2006, available at: http://www.urban.org/UploadedPDF/1001077_energy_taxation.pdf.

¹³ Cf., e.g., Schumacher, Innovationsregulierung im Recht der netzgebundenen Elektrizitätswirtschaft, 2009, pp. 128 et seq.; Dahl, International Energy Markets. Understanding Prices, Policies, and Profits, 2004, pp. 81 et seq.

¹⁴ Cf. Zylka, Marktaufsicht im Stromhandel, 2010, pp. 29 et seq.

¹⁵ Schumacher, Innovationsregulierung im Recht der netzgebundenen Elektrizitätswirtschaft, 2009, pp. 91 et seq.; Dahl, International Energy Markets. Understanding Prices, Policies, and Profits, 2004, pp. 199 et seq.

enterprises involved in its production, transportation, storage, and distribution. ¹⁶ So it is also quite important to develop a corporate culture that is compatible with the national cultures in every place where the company does business. ¹⁷

Status Quo and Perspectives

World energy consumption has doubled since 1970, and energy demand continues to rise in virtually all regions of the world, particularly in China and India. ¹⁸ However, the pattern of the increase if addressed in terms of per capita consumption, total national consumption increase or in terms of percentage increase looks very different, and the major challenge to the global energy system will be changing the present unsustainable patterns of energy, especially oil use in industrialized countries. Thus, policies for containing and eventually reducing fossil fuel consumption in the developed world seem to be a prerequisite for global moderation.

In EU-27, oil is still the most important fuel followed by natural gas and solid fuels (coal, lignite, peat) while nuclear reached a share of 1/7 of total energy consumption. Renewable energy sources (biomass, hydro, wind, solar, geothermal) have steadily increased their contribution but their share is still below 10%. Energy in its various forms is consumed in all parts of the economy, the greatest parts of final energy being used in transport, industry and households. EU import dependency stands close to 50%, it is particularly high for oil and (in a minor degree) for natural gas. ¹⁹

Legal Developments in the Energy Sector Relating to Europe

Overview

Energy policy in Europe and at a (Western) European level can be traced back to the first (European) supranational organization, the European Coal and Steel Community (ECSC) founded soon after the end of World War Two.²⁰ But also

¹⁶ To name but a few: BP (www.bp.com), Exxon Mobil Corp. (www.exxon.com) or Shell (www.shell.com).

¹⁷ Cf. more details, cf. Dahl, *International Energy Markets. Understanding Prices, Policies, and Profits*, 2004, pp. 499 et seq.

¹⁸ For details, see the IEA's World Energy Outlook (edition 2010), available at: http://www.worldenergyoutlook.org, and U.S. Energy Information Administration, International Energy Outlook, July 2010, available at: http://www.eia.gov/oiaf/ieo/index.html.

¹⁹ Cf. Commission Staff Working Document, Annex to the Green Paper "A European Strategy for Sustainable, Competitive and Secure Energy", SEC(2006) 317/2; European Central Bank, Energy Markets and the Euro Area Market Economy, 2010, pp. 12 et seq.

²⁰ Treaty of 18th April, 1951; see below, at II.1.

one of the Rome Treaties of 1957 was focusing on energy issues – i.e. the peaceful use of atomic energy – whereas the aims and tasks of the (then) European Economic Community (EEC)²¹ were hardly dealing with that topic at all. From its very beginnings, the European Atomic Energy Community (EAEC)²² has been cooperating closely with the International Atomic Energy Agency (IAEA).²³ Broader international aspects of energy policy were highlighted by the first "oil crisis" in the early 1970s, at least a particular aspect became evident, i.e. the need for security of supply from foreign, energy-producing (developing) countries for many industrialized (Western) states. So, within the framework of the OECD, a new institution, the International Energy Agency (IEA),²⁴ was established. In the 1980s, energy issues became a prominent topic also in East-West relations and, after the end of the "cold war", finally led to the conclusion of the Energy Charter treaty. 25 The last two decades – starting with the Rio summit on environment and development 1992²⁶ – have been characterized by tendencies of growing convergence between energy policy and environmental policy, as shown by the various international approaches to cope with climate change (caused by human activities [mis]using energy).

Developments in the Context of European (Economic) Integration

European Coal and Steel Community

The ECSC Treaty was signed in Paris on April 18, 1951 and brought France, Germany, Italy and the Benelux countries together in a "Community" (art. 1) with the purpose of organizing free movement of coal and steel and free access to sources of production. The idea of pooling Franco-German coal and steel production was not only an economic choice but also a political one, as these two raw materials were the basis of the industry and power of the two countries the underlying political objective being to strengthen Franco-German solidarity, banish the specter of war and open the way to European integration (ECSC Treaty, Preamble).²⁷

²¹ Treaty of 25th March, 1957; for more details, see below, at II.3.

²² Treaty of 25th March, 1957; see below, at II.2.

²³ http://www.iaea.org. On its objections and functions, see Art. 2, 3 of the IAEA Statute; also see the Agreement of 14th September, 1973 between IAEA and EAEC/Member States, available at: http://www.iaea.org/Publications/Documents/Infcircs/Others/inf193.shtml.

²⁴ http://www.iea.org; see also below, at III.1.

²⁵ http://www.encharter.org; see also below, at III.2.

²⁶ See, e.g., Beyerlin, Rio-Konferenz 1992: Beginn einer neuen globalen Umweltrechtsordnung?, Zeitschrift für ausländisches öffentliches Recht und Völkerrecht 54 (1994), pp. 124 et seq.

²⁷ On the quite dominant political motives of the first European Community see, e.g., Uertz, Von der Montanunion zur EU, in: Buchstab/Uertz (eds.), Nationale Identität im vereinten Europa,

The aim of that Treaty was to contribute, through a common market for "coal and steel" (art. 81), to economic expansion, growth of employment and a rising standard of living (art. 2 par. 1). Thus, the institutions of the new organization – a High Authority, an Assembly, a Council of Ministers and a Court of Justice (art. 7) – had to ensure an orderly supply to the common market by ensuring equal access to the sources of production, the establishment of the lowest prices and improved working conditions, and all of this had to be accompanied by growth in international trade and modernization of production (art. 3). In the light of the establishment of the common market, the Treaty introduced the free movement of products without customs duties or taxes, and it prohibited discriminatory measures or practices, subsidies, aids granted by States or special charges imposed by States and restrictive practices (art. 4).

The High Authority (later on: the Commission, according to the Merger Treaty²⁸) was the independent collegiate executive with the task of achieving the objectives laid down by the Treaty and acting in the general interest of the Community. It was a truly supranational body with power of decision supervising the modernization and improvement of production, the supply of products under identical conditions, the development of a common export policy and the improvement of working conditions in the coal and steel industries. The High Authority took decisions, made recommendations and delivered opinions (art. 14). It was assisted by a Consultative Committee made up of representatives of producers, workers, consumers and dealers (arts. 18, 19).

With regard to production, the ECSC played a mainly indirect, subsidiary role through cooperation with governments and intervention in relation to prices and commercial policy (art. 57). However, in the event of any decline in demand or shortage, it could take direct action by imposing quotas with the aim of limiting production in an organized manner or, for shortages, by drawing up production programs establishing consumption priorities, determining how resources should be allocated and setting export levels (arts. 58, 59).

In relation to price fixing, the Treaty prohibited practices which discriminated according to price, unfair competitive practices and discriminatory practices involving the application of dissimilar conditions to comparable transactions (art. 60). These rules also applied to transport. Furthermore, in certain circumstances, such as a manifest crisis, the High Authority could fix maximum or minimum prices either within the Community or in relation to the export market (art. 61).

So as to ensure that free competition was respected, the High Authority had to be informed of any action by Member States which was liable to endanger it (art. 67). Furthermore, the ECSC Treaty dealt specifically with the three cases which could distort competition: agreements, concentrations and the abuse of dominant

^{2006,} pp. 30 et seq., also available at: http://www.kas.de/upload/Publikationen/montanunion-zur-eu.pdf.

²⁸ Treaty establishing a Single Council and a Single Commission of the European Communities of 8th April, 1965, OJ [1967] 152/1.

positions. Agreements or associations between undertakings could be cancelled by the High Authority if they directly or indirectly prevented, restricted or distorted normal competition (arts. 65, 66).

The treaty also dealt with the commercial policy of the ECSC towards third countries. Although the powers of national governments remained in place, a number of competences were transferred to the Community such as setting maximum and minimum rates for customs duties and supervising the granting of import and export licenses, as well as the right to be kept informed of commercial agreements relating to coal and steel (arts. 71 et seq.). Furthermore, the power of the High Authority prevailed in the fields of dumping, the use by undertakings outside the jurisdiction of the Community of means of competition contrary to the Treaty and substantial increases in imports which could seriously threaten Community production (art. 74).

Its validity period being limited to 50 years (art. 97), the Treaty expired on 23 July 2002. ²⁹

European Atomic Energy Community

To tackle the general shortage of "conventional" energy (like, e.g. coal) in the 1950s, the six States finally establishing this other new international organization (Belgium, France, Germany, Italy, Luxembourg and the Netherlands) looked to nuclear energy as a means of achieving energy independence. Since the costs of investing in nuclear energy could not be met by individual States, the founding States joined together to form Euratom.³⁰

In the preamble of the EAEC Treaty, the signatories described themselves as:

- recognizing that nuclear energy represents an essential resource for the development and invigoration of industry and will permit the advancement of the cause of peace ...,
- resolved to create the conditions necessary for the development of a powerful nuclear industry which will provide extensive energy resources, lead to the modernization of technical processes and contribute, through its many other applications, to the prosperity of their peoples,
- anxious to create the conditions of safety necessary to eliminate hazards to the life and health of the public,
- desiring to associate other countries with their work and to cooperate with international organizations concerned with the peaceful development of atomic energy.

According to its art. 1, the general objective of the treaty is to contribute to the formation and development of Europe's nuclear industries, so that all Member States can benefit from the development of atomic energy, and to ensure security of

²⁹ Cf. Grunwald, Das Energierecht der Europäischen Gemeinschaften, 2003, pp. 181 et seq.

³⁰ Cf. Schroeder, Die Euratom – auf dem Weg zu einer Umweltgemeinschaft, Deutsches Verwaltungsblatt 1995, p. 322; id., Der Euratom-Vertrag, Juristische Arbeitsblätter 27 (1995), p. 728.

supply. At the same time, the treaty guarantees high safety standards for the public and prevents nuclear materials intended principally for civilian use from being diverted to military use. The powers of Euratom's institutions – the same ones as in the $E(E)C^{31}$ – are strictly limited to peaceful civil uses of nuclear energy.

The objective of the Euratom Treaty is to pool the nuclear industries of Member States. In this context, it applies only to certain entities (Member States, physical persons, and public or private undertakings or institutions, art. 87) which carry out some or all of their activities in an area covered by the Treaty, i.e. special fissile materials, source materials and the ores from which source materials are extracted (arts. 92, 197).

According to the Treaty, the specific tasks of Euratom are, in particular³²:

- To facilitate investment and ensure the establishment of the basic installations necessary for the development of nuclear energy in the EU (arts. 2 lit. c], 40 et seq.). The Commission regularly publishes nuclear illustrative programs³³ indicating, in particular, nuclear energy production targets and the investment required for their attainment. Persons and undertakings engaged in the industrial activities listed in Annex II to the treaty are required to notify the Commission of any investment projects (arts. 41, 42);
- To ensure that all users in the EU receive a regular and equitable supply of ores and nuclear fuels. In this context, the treaty prohibits all practices designed to secure a privileged position for certain users (art. 52 par. 2) and establishes an Agency the Euratom Supply Agency having legal personality and financial autonomy and being supervised by the Commission, which issues directives to it and possesses a right of veto over its decisions (arts. 53, 54) with a right of option on ores, source materials and special fissile materials produced in the territories of Member States and an exclusive right to conclude contracts relating to the supply of ores, source materials and special fissile materials coming from inside the Community or from outside (arts. 57 et seq., 64 et seq.);
- To make certain that civil nuclear materials are not diverted to other (particularly military) purposes.

The Euratom safeguards (arts. 77 et seq.) are applied in conjunction with those of the IAEA under tripartite agreements concluded between the Member States, the Community and the IAEA. Thus, this task is related to the one obliging the EAEC

³¹ Schroeder, Der Euratom-Vertrag, Juristische Arbeitsblätter 27 (1995), p. 728.

³² Cf. also, especially referring to Art. 31, 32, ECJ Case C-221/88, *Busseni*, [1990] ECR I-495; Trüe, EU-Kompetenzen für Energierecht, Gesundheitsschutz und Umweltschutz nach dem Verfassungsentwurf, Juristenzeitung 59 (2004), pp. 780 and 782; Kahl, Die Kompetenzen der EU in der Energiepolitik nach Lissabon, Europarecht 44 (2009), pp. 615 and 619; also ECJ, Case C-115/08, *Land Oberösterreich vs. ČEZ as*, [2009] ECR I-10265, paras. 100 et seq.

³³ Cf., e.g., Commission Communication "Nuclear Illustrative Programme" of 10th January, 2007, COM(2006) 844 final; also see http://ec.europa.eu/energy/strategies/2008/doc/2008_11_ser2/nuclear_illustrative_programme_pinc_updt_communication.pdf.

institutions to foster progress in the peaceful uses of nuclear energy by working with other countries and international organizations. More details on external relations of Euratom are laid down in arts. 101 et seq. of the EAEC Treaty.

Contrary to the case of the E(E)C Treaty,³⁴ no major changes have ever been made to the Euratom Treaty, which remained in force after Nov. 30, 2009.³⁵ The European Atomic Energy Community has not been merged with the (new) European Union (EU)³⁶ and therefore retains a separate legal personality (arts. 184, 185), while continuously sharing the same institutions. Of course, the Treaty amending the EU and EC Treaties³⁷ changed certain provisions of the Euratom Treaty via protocol on transitional provisions³⁸ but these modifications were limited to adaptations to take account of the new rules established by the Lisbon Treaty, particularly in the institutional and financial fields.

Energy-Related Provisions in European Community Law from the Treaty of Rome to the Lisbon Treaty

Although the EEC was interested in some issues of energy policy from the very beginning and the Commission presented a report on a "common energy policy" as early as 1962,³⁹ E(E)C primary law was silent on these issues for a long time. So, quite similar to the development in the field of environmental law,⁴⁰ relevant provisions were at first based upon the broad enabling clause which originally was laid down in art. 235 of the EEC Treaty and later on in art. 308 EC now having become – in a modified version – art. 352 TFEU.⁴¹ The Maastricht agreement⁴² added a new field of activity to art. 3 par. 1 (lit. u]) of the (renamed) EC Treaty, putting together three rather different spheres like energy, civil protection and tourism but without transferring explicit complementary powers to the European

³⁴ See more closely below, at D.I.

³⁵ Consolidated Version of the Treaty establishing the European Atomic Energy Community of 30th March, 2010, OJ [2010] C 84/1.

³⁶ Kahl, Die Kompetenzen der EU in der Energiepolitik nach Lissabon, Europarecht 44 (2009), p. 616.

³⁷ Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community of 13th December, 2007, OJ [2007] C 306/1.

³⁸ Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community of 13th December, 2007, OJ [2007] C 306/1, pp. 159 et seq.; cf. Kahl, Die Kompetenzen der EU in der Energiepolitik nach Lissabon, Europarecht 44 (2009), p. 616.

³⁹ Cf. Nettesheim, Das Energiekapitel im Vertrag von Lissabon, Juristenzeitung 65 (2010), p. 19.

⁴⁰ Cf. Schweitzer/Hummer, *Europarecht*, (5th ed.) 1996, p. 478; Scherer/Heselhaus, Umweltrecht, in: Dauses (ed.), *Handbuch des EU-Wirtschaftsrechts*, 2010, O. para. 9.

⁴¹ Nettesheim, Das Energiekapitel im Vertrag von Lissabon, Juristenzeitung 65 (2010), p. 19.

⁴² Treaty on European Union of 7th February, 1992, OJ [1992] C 191/1.

level. Wevertheless, the scope of supranational European energy policy grew steadily till the 1960s, and there has been a really rapid increase since the end of the last century. In order to implement that, the EC bodies used various legislative competences of an indirect nature, i.e. not specifically dealing with energy issues, but at least being related thereto. In particular, relevant secondary legislation was based upon arts. 95 (harmonization for completing a single [internal] market), 154 et seq. (trans-European networks [TEN] also in the area of energy infrastructures) and 175 (environment) of the EC Treaty (Amsterdam version 15). Some other EC regulations, directives, decisions or recommendations in this area referred to arts. 166 et seq. (research and technological development 16). On the other hand, common commercial policy powers (art. 133 of the EC Treaty) were extended to external energy policy issues, 17 even if (or maybe: because) arts. 101 et seq. of the Euratom Treaty would not apply to topics outside of nuclear energy.

No specific provision of the EC Treaty was mentioned in the recitals of the Commission decision on establishing the European Regulators Group for Electricity and Gas (ERGEG).⁴⁸ The regulation⁴⁹ replacing ERGEG by a new Community body (art. 2 par. 1) named ACER – Agency for the Cooperation of Energy Regulators (art. 1 par. 1) – referred once again ("in particular") to art. 95 of the EC Treaty because the agency's main tasks should be "to fill the regulatory gap at Community level and to contribute to the effective functioning of the internal markets in electricity and natural gas" (recital 5).⁵⁰

 ⁴³ Cf. Kahl, Die Kompetenzen der EU in der Energiepolitik nach Lissabon, Europarecht 44 (2009),
p. 604; Nettesheim, Das Energiekapitel im Vertrag von Lissabon, Juristenzeitung 65 (2010),
p. 20.
44 Hobe, Energiepolitik, Europarecht 44 (2009), Supplement 1, pp. 220 et seg.; Kahl, Die

⁴⁴ Hobe, Energiepolitik, Europarecht 44 (2009), Supplement 1, pp. 220 et seq.; Kahl, Die Kompetenzen der EU in der Energiepolitik nach Lissabon, Europarecht 44 (2009), p. 605.

⁴⁵ Treaty of Amsterdam amending the Treaty on European Union, the Treaties establishing the European Communities and certain related acts of 2nd October, 1997, OJ [1997] C 340/1; cf. Streinz, Der Vertrag von Amsterdam, Juristische Ausbildung 20 (1998), pp. 59 et seq.; Hilf/Pache, Der Vertrag von Amsterdam, Neue Juristische Wochenschrift 51 (1998), pp. 706, 712.

⁴⁶ Cf. Trüe, EU-Kompetenzen für Energierecht, Gesundheitsschutz und Umweltschutz nach dem Verfassungsentwurf, Juristenzeitung 59 (2004), p. 799; for more details see Grunwald, *Das Energierecht der Europäischen Gemeinschaften*, 2003, pp. 25 et seq.; Schumacher, *Innovationsregulierung im Recht der netzgebundenen Elektrizitätswirtschaft*, 2009, pp. 200 et seq.

 $^{^{47}\,\}mathrm{Cf}.$ Kahl, Die Kompetenzen der EU in der Energiepolitik nach Lissabon, Europarecht 44 (2009), p. 603.

⁴⁸ Decision 2003/796/EC, OJ [2003] L 296/34; cf. Britz, Vom Europäischen Verwaltungsverbund zum Regulierungsverbund?, Europarecht 41 (2006), pp. 62, 64 et seq.; Holznagel/Schumacher, Europäischer Regulierer für den Telekommunikations- und Energiewirtschaftssektor?, Deutsches Verwaltungsblatt 2007, pp. 411 and 416; Schumacher, *Innovationsregulierung im Recht der netzgebundenen Elektrizitätswirtschaft*, 2009, pp. 345 et seq.

⁴⁹ Regulation (EC) No. 713/2009, OJ [2009] L 211/1.

⁵⁰ http://ec.europa.eu/energy/gas_electricity/acer/acer_en.htm; also Bundesnetzagentur (Federal Net Agency, FNA), Entwurf des Vorhabenplans für das Jahr 2011, OJ FNA 2010, pp. 4315 et seq (4327).

International Organizations and Legal Instruments with Relevance for Energy Policy in Europe

International Energy Agency

The IEA was founded (by a decision of the OECD Council⁵¹) during the oil crisis of 1973–1974, so its initial role was quite naturally to co-ordinate measures in times of oil supply emergencies and was only later on expanded to include natural gas and electricity. The Agency's mandate (art. 6) has also been broadened to incorporate the "three E's" of balanced energy policy making: energy security, economic development and environmental protection. The IEA is an autonomous agency linked with the OECD, but not all OECD members participate in the Agency's work. The IEA decision also provides for accession by the EC (now EU) after this organization will have become an OECD member in conformity with its own provisions (art. 3 of the 1994 Council decision). Till then, the relationship between IEA and EU (i.e. the Commission and/or the European External Action Service, Art. 27 par. 3 of the EU Treaty⁵³) will be based upon art. 13 of the OECD convention of 1961 and Additional Protocol No 1⁵⁴

Current IEA work focuses on diversification of energy sources, renewable energy, climate change policies, market reform, energy efficiency, development and deployment of clean energy technologies, energy technology collaboration and outreach to the rest of the world, especially major consumers and producers of energy like China, India, Russia and the OPEC countries.⁵⁵

(European) Energy Charter

The Energy Charter Treaty of December 1994 as well as some related legal documents⁵⁶ are the results of a process the political foundation of which was provided for by the "European Energy Charter" being the concluding document of a conference at The Hague adopted by representatives of Western states (including

⁵¹OECD Decision establishing an International Energy Agency of the Organisation of 15th November, 1974, Bundesgesetzblatt (Federal Official Journal) 1995 II, pp. 739 et seq.

⁵² List of Member countries available at: http://www.iea.org/country/index.asp.

⁵³ Complemented by Decision 2010/427/EU, OJ [2010] L 201/30.

⁵⁴ For a survey on cooperation, see http://ec.europa.eu/energy/international/organisations/iea_en.htm; on the first IEA review of EU energy policy cf. Press Release of 4th September, 2008, IP/08/1293.

⁵⁵ Cf. http://www.iea.org/about/ems.asp. On the International Renewable Energy Agency (IRENA), the statute of which was signed at Bonn in early 2009, cf. http://www.irena.org; on EU membership, see Press Release of 23rd November, 2009, IP/09/1804; also Bundestags-Drucksache 17/3885, 25th October, 2010.

⁵⁶ http://www.encharter.org/index.php?id=7.

Canada and the U.S.) as well as members of the former Soviet Bloc. This "declaration" of December 1991⁵⁷ – a major element of the (then) Conference on Security and Cooperation in Europe⁵⁸ – was aiming at the promotion of "a new model for energy co-operation in the long term in Europe and globally within the framework of a market economy and based upon mutual assistance and the principle of non-discrimination". The preamble also mentioned the "support from the European Community, particularly through completion of its internal energy market". The declaration is focusing on "objectives" (title I), "implementation" (II) and "specific agreements" (III). The desire of the signatories of this document – not eligible for registration under art. 102 of the UN Charter – is to improve the "security of energy supply" as well as to maximise "the efficiency of production, conversion, transport, distribution and use of energy, to enhance safety and to minimize environmental problems, on an acceptable economic basis". However, its objectives were stated and their implementation should take place only within "the framework of State sovereignty and sovereign resources over energy resources" (Preamble).

The treaty concluded some year later⁵⁹ established the fundamental "legal framework in order to promote long-term cooperation in the energy field, based on complementarities and mutual benefits", in accordance with the objectives (and principles) of the Energy Charter mentioned before (art. 2). The "contracting parties" (art. 1 par. 2) – including the European Community as well as Euratom⁶⁰ – agree to be bound by duties in the fields of "commerce" (arts. 3 et seq.) and the promotion and protection of "investment" (art. 1 par. 6). So, without derogating from the provisions of GATT and related (WTO) instruments (art. 4),⁶¹ they consent to work together in order "to promote access to international markets on commercial terms" (art. 3), "and generally to develop an open and competitive market, for Energy Materials and Products" (art.1 par. 4), e.g. by alleviating "market distortions and barriers to competition in Economic Activity in the Energy Sector"⁶² (art. 6 par. 1). Part III of the treaty (arts. 10 et seq.) provides for broad guarantees for foreign "investors" (art. 1 par. 7) including minimum standards like "fair and equitable treatment", "most constant protection and security" and prohibition of "unreasonable

⁵⁷ Energy Charter Secretariat, The Energy Charter Treaty and Related Documents, 2004, pp. 213 et seq., available at: http://www.encharter.org/index.php?id=29.

⁵⁸ http://www.osce.org/who.

⁵⁹ On 16th and 17th December 1994; see Energy Charter Secretariat, The Energy Charter Treaty and Related Documents, 2004, pp. 39 et seq.

⁶¹ On Art. 7 of the ECT's transit provision, cf. Azaria, Energy Transit under the Energy Charter Treaty and the General Agreement on Tariff and Trade, Journal of Energy and Natural Resources Law 2009, pp. 559 et seq.

⁶² As defined in Art. 1(5) and understanding No. 2 to this provision.

or discriminatory measures", ⁶³ national as well as most-favoured nation treatment and efficient judicial redress before national courts. The settlement of disputes between an investor and a contracting party is not attributed solely to courts of the host state. The investor may choose to submit it to resolution by international conciliation or arbitration instead, and in this case, the other (State) party is bound to give its unconditional consent (art. 26). ⁶⁴ Miscellaneous provisions are dealing with "environmental aspects" (art. 19), but are also restating the content and limits of "sovereignty over energy resources" (art. 18).

The Council and Commission decision on the conclusion, by the European Communities, of the Energy Charter Treaty and the Energy Charter Protocol on energy efficiency and related environmental aspects⁶⁵ was having regard to the ECSC, in particular, art. 95 thereof, then to the EC Treaty (Maastricht version⁶⁶), in particular, art. 54 par. 2, the last sentence of art. 57 par. 2, arts. 66, 73c par. 2, 87, 99, 100a, 113, 130s par. 1 and 235, in conjunction with the second sentence of art. 228 par. 2 and the second subparagraph of art. 228 par. 3 thereof, and also to the Euratom Treaty, in particular, art. 101 par. 2 thereof.⁶⁷ The reasons for this approval (at supranational level) may be found in the following phrases of recitals 4–6:

"the principles and objectives of the Energy Charter Treaty are of fundamental importance to Europe's future, allowing the members of the Commonwealth of Independent States and the countries of Central and Eastern Europe to develop their energy potential, while helping to improve security of supply; ... the principles and objectives of the Energy Charter Protocol will help to provide greater protection for the environment, notably by promoting energy efficiency; ... it is necessary to consolidate the initiative and the central role of the European Communities, by enabling the latter to participate fully in the implementation of the Energy Charter Treaty and the Energy Charter Protocol".

Thus, ratifying the Energy Charter Treaty and the Energy Charter Protocol would "help attain the objectives of the European Communities". The last recital does clarify, however, that, "where the decisions to be taken by the Energy Charter Conference" (art. 34 of the treaty) "concern areas of mixed competence, the European Communities and the Member States are to cooperate with a view to achieving a common position, in accordance with the jurisprudence of the Court of Justice of the European Communities".

⁶³ On these widely used terms see, e.g., Montt, *State Liability in Investment Treaty Arbitration*, 2009, pp. 293 et seq.; Heiskanen, Arbitrary and Unreasonable Measures, in: Reinisch (ed.), *Standards of Investment Protection*, 2008, pp. 87 et seq.; Yannaca-Small, Fair and Equitable Treatment Standard: Recent Developments, in: Reinisch (ed.), *Standards of Investment Protection*, 2008, pp. 111 et seq.; Moss, Full Protection and Security, in: Reinisch (ed.), *Standards of Investment Protection*, 2008, pp. 131 et seq.

⁶⁴ Cf. Krajewski, Wirtschaftsvölkerrecht, (2nd ed.) 2009, p. 176.

 ⁶⁵ Decision 98/1817EC, OJ [1998] L 69/1; see also Decision 2001/595/EC, OJ [2001] L 209/32.
66 Supra, at fn. 32.

⁶⁷ Decision 98/171/EC, OJ [1998] L 69/1, recitals 1-3.

Energy Community (Treaty)

An Energy Community was created by treaty (for 10 years, at least, art. 97) between the (then) EC on the one hand and some Southeast European States (two of them later on becoming members of the EU⁶⁸ which conforms to the treaty's intention also to prepare accession) in late 2005.⁶⁹ Since that date, new parties joined this treaty (like Moldavia), others are in the process of joining. The Energy Community's main task is to create a legal and economic framework in relation to "Network Energy", i.e. electricity and gas sectors falling within the scope of directives 2003/54/EC and 2003/55/EC⁷¹ (art. 2 para. 2). According to art. 2 para. 1 of the Community treaty, a "stable regulatory and market framework" should be capable of "attracting investment in gas networks, power generation, and transmission and distribution networks, so that all Parties have access to the stable and continuous energy supply that is essential for economic development and social stability" (lit. a]). The establishment of a single regulatory space for trade in "Network Energy" would also be "necessary to match the geographic extent of the concerned product markets" (lit. b]), and it could "enhance the security of supply" of this space "by providing a stable investment climate by which connections to Caspian, North African and Middle East gas reserves can be developed, and indigenous sources of energy such as natural gas, coal and hydropower can be exploited" (lit. c]). Moreover, the Community intends "to improve the environmental situation in relation to Network Energy and related energy efficiency, foster the use of renewable energy, and set out the conditions for energy trade in the single regulatory space" (lit. d]), and, finally, it wants to "develop Network Energy market competition on a broader geographic scale and exploit economics of scale" lit. e]). Art. 5 of the treaty requires that the Energy Community should follow the "acquis communautaire" described in Title II (arts. 9 et seq.) which is referring not only to energy (arts. 10, 11), but also to environment, competition, renewables and to "compliance with generally applicable standards of the EC" (arts. 21–23), and includes the adaptation and evolution of that acquis (arts. 24, 25). Two other important titles of the treaty are focusing on a "mechanism for operation of network energy markets" (arts. 26 et seq.) and "the creation of a single energy market" (arts. 40 et seq.), respectively. All obligations under the Community treaty are without prejudice to existing legal duties of its parties under WTO law (art. 102).⁷²

⁶⁸ On this change of status (of Bulgaria and Romania) see Art. 99 of the Community Treaty.

 $^{^{69}}$ See Decision 2006/500/EC, OJ [2006] L 198/15; text of the Treaty ibid., pp. 18 et seq.

⁷⁰ On the first enlargement see http://www.energy-community.org/portal/page/portal/ENC_ HOME/ENERGY_COMMUNITY/Milestones.

⁷¹ Directive 2003/54/EC, OJ [2003] L 176/37; Directive 2003/54/EC, OJ [2003] L 176/57. On these "second generation" directives, cf. also below, at D.II.2.a).

⁷² See below, at 4.

Institutions of the Energy Community are empowered either to take "measures" (Ministerial Council, art. 47, and Permanent High-Level Group, art. 53) or issue "recommendations" (Regulatory Board, art. 58). In this body, the EU is represented by the Commission and ERGEG (now ACER⁷³), art. 59, and the latter group (agency) must be consulted before the EU position in the board will be taken.

The Council decision on the conclusion by the EC of the Energy Community Treaty⁷⁴ refers "in particular" to arts. 47 para. 2, 55, 83, 89, 95, 133 and 175, in conjunction with the first sentence of the first subparagraph of art. 300 para. 2 and the second subparagraph of art. 300 para. 3 of the EC Treaty. These references are clearly resembling the parallel ones in the Energy Charter Treaty decision, ⁷⁵ but there are slight divergencies as well.

World Trade Organization (WTO) and Energy

When the rules of the GATT 1947⁷⁶ were negotiated within the broader context of the "Havana Charter", ⁷⁷ regulating or even liberalising trade in energy was not a political priority. This industry sector was dominated by state run monopolies and thus governed by strict territorial allocation. Moreover, international trade in energy products and resources was heavily concentrated, cartelised and controlled by a few "multinational" enterprises. Therefore, till now neither the GATT nor the WTO⁷⁸ have been dealing with energy as a distinct sector. Evidently it was felt that general rules, including the disciplines on state trading (e.g. art. XVII GATT), ⁷⁹ would be sufficient to address the relevant issues. Also, no special agreement has been concluded on trade in energy within the framework of WTO law. ⁸⁰ On the other hand, WTO rules are applicable to all forms of trade, they apply to trade in energy products or services, too, and can be enforced through the WTO dispute settlement mechanism⁸¹ like rules related to other issues falling within the scope of application

⁷³ Supra, at II.3.

⁷⁴ Decision 2006/500/EC, OJ [2006] L 198/15, Art. 4(7).

⁷⁵ See Decision 98/171/EC, OJ [1998] L 69/1.

⁷⁶ http://www.fd.uc.pt/CI/CEE/OI/OMC.GATT/GATT-1947-ingles.htm; cf. Neugärtner, GATT 1947, in: Hilf/Oeter (eds.), *WTO-Recht*, (2nd ed.) 2010, § 3, pp. 81 et seq.

⁷⁷ http://www.worldtradelaw.net/misc/havana.pdf.

⁷⁸ Agreement establishing the World Trade Organization of 15 April 1994, OJ [1994] L 336/3.

⁷⁹Cf. http://www.worldenergy.org/publications/trade_and_investment_rules_for_energy/ii._ promoting_energyre lated_investments/2592.asp

⁸⁰ Cottier/Malumfashi/Matteotti-Berkutova/Nartova/de Sépubus/Bigdeli, Energy in WTO law and policy, p. 1, available at: http://www.wto.org/english/res_e/publications_e/wtr10_forum_e/wtr10_7may10_e.pdf; for a detailed analysis, cf. Selivanova, The WTO and Energy, August 2007, pp. 22 et seq., available at: http://ictsd.org/downloads/2008/05/the20wto20and20energy.pdf.

⁸¹ Cf. Annex II to the establishing the World Trade Organization of 15th April, 1994, OJ [1994] L 336/3; Yang/Mercurio/Li, WTO Dispute Settlement Understanding, 2005.

of WTO law. However, a few WTO members undertook limited commitments (under arts. XVI, XVII GATS) in three energy-related sectors: services incidental to mining and to energy distribution, and pipeline transportation of fuels. ⁸² Energy-related activities which are not exclusive to the energy industry are covered by other services sectors, such as transport, distribution, construction, consulting, and engineering. One exemption to most-favoured nation (MFN) treatment (i.e. non-discrimination, art. II GATS) has been made in pipeline transportation of fuels.

Energy services are included in the services negotiations (under art. XIX GATS) which started in early 2000.83 Annex B attached to a report of the chairman of the Council for Trade in Services delivered to the Trade Negotiations Committee in November 2005,84 provides a compilation of "sectoral and modal objectives" as identified individually or by groups of (WTO) members. Regarding energy services, these objectives include "scope of commitments", "regulatory issues and additional commitments" (art. XVIII GATS) and also "scheduling issues to be addressed" stating that the (current) absence of a specific energy services section should not prevent the scheduling of commitments as the relevant "guidelines" do only require "a sufficiently detailed definition to avoid any ambiguity as to the scope of the commitment". 85 As to the scope of commitments, the annex refers to the oil and gas sector only, pointing to, e.g., "exploration services, services incidental to mining, technical testing and analysis, and toll refining services", but on the other hand, it explicitly excludes negotiations in respect of "ownership of natural resources". 86 A collective request presented after the Hongkong ministerial conference in December 2005 tried to identify 12 types of activities relevant to the energy industry, belonging to three main sectors, namely business services, construction and distribution. A particular emphasis was placed upon the third mode (of four) of supply, i.e. a foreign company setting up subsidiaries or branches to provide services in another country. The request was neutral with respect to energy source, technology and whether offered onshore or offshore.⁸⁷

Thus, the current status of energy under WTO is bound to change since privatisation and liberalisation of the sector led to market reform which resulted

⁸² Cf. Selivanova, The WTO and Energy, August 2007, p. 17, available at: http://ictsd.org/downloads/2008/05/the20wto20and20energy.pdf.

⁸³ Cf, e.g., Lamy, Doha Round will benefit energy trade, available at: http://www.wto.org/english/news_e/sppl_e/sppl80_e.thm; Marceau, The WTO in the emerging energy governance debate, available at: http://www.wto.org/english/res_e/publications_e/wtr10_marceau_e.htm.

⁸⁴ WTO Doc. TN/S/23, 28th November, 2005, pp. 11 et seq. (17).

⁸⁵ WTO Doc. S/L/92, 28th March, 2001 (adopted by the Council for Trade in Services on 23rd March, 2001), p. 8 (no. 24); cf. Cottier/Malumfashi/Matteotti-Berkutova/Nartova/de Sépubus/Bigdeli, Energy in WTO law and policy, pp. 9 et seq, available at: http://www.wto.org/english/res_e/publications_e/wtr10_forum_e/wtr10_7may10_e.pdf.

⁸⁶ As noted before (at fn. 11), this reservation may be misleading since it seems first of all a public law issue whether (and how far as well as when) States set up rules permitting private property rights in respect for (certain) natural resources.

⁸⁷ See http://www.wto.org/english/tratop_e/serv_e/energy_e/energy_e.htm.

in a conceptual separation of goods and services trade. For example, oil and solid fuels such as coal clearly fall within the category of goods; they are easily stored and traded across State borders. But also natural gas can be traded either via pipelines or after being liquefied for the purposes of transportation to remote regions or for storage. So today production of energy goods comes within the scope of GATT, whereas energy-related services, including transmission and distribution, fall under the scope of GATS. Looking at electricity, however, issues are more complex. It qualifies as a good under WTO/GATT law for a rather formal reason since it has been defined as such in the Harmonized System Nomenclature on the codification of commodities⁸⁸ and being classified under code 2716. The same is true for the Energy Charter Treaty⁸⁹ and for EU law as well since the European Court of Justice explicitly recognized in the "Almelo" case⁹⁰ that the rules on the free circulation of goods of the E(E)C Treaty (arts. 28 et seq.) also applied to electricity.

Current EU Legal Framework

EU Primary Law

Introduction

Before the status and structures of European energy law after Lisbon will be looked at more closely, it seems necessary to point rather shortly to some more areas of global concern which are relevant also for the (new) EU since the organization itself acceded to international legal instruments and thus is not only obliged to fulfil the obligations deriving therefrom in good faith but each institution of the Union (as well as its member states) is also bound by internal law (art. 216 para. 2 TFEU) to ordinarily perform these duties. So, energy is addressed by a number of multilateral environmental agreements, in particular those relating to climate change, including the U.N. Framework Convention on Climate Change and its Kyoto Protocol. Another possible policy tool might be "green" public procurement if

⁸⁸ See the 2007 version, available at: http://www.wcoomd.org/files/1.%20Public%20files/PDFandDocuments/ HarmonizedSystem/2007/0527_2007E.pdf.

⁸⁹ See supra, at 2.

⁹⁰ ECJ Case C-393/92, Gemeente Almelo vs. Energiebedrijf Ijsselmij NV, [1994] ECR I-1477, para. 28.

⁹¹ Kahl, Die Kompetenzen der EU in der Energiepolitik nach Lissabon, Europarecht 44 (2009), pp. 613 et seq.; Nettesheim, Das Energiekapitel im Vertrag von Lissabon, Juristenzeitung 65 (2010), p. 21.

⁹² Adopted on 9th May, 1992, see http://unfccc.int/resource/docs/convkp/conveng.pdf.

⁹³ Adopted on 11th December, 1997, see http://unfccc.int/resource/docs/convkp/kpeng.pdf.

and insofar it would be implemented in conformity with the EU's obligations under the "plurilateral" WTO Government Procurement Agreement. Promotion of renewable energies might lead to conflicts with WTO rules on (or better: against) subsidies and, at least at the level of Member State legislation, even more with the EU State aid regime. And finally, while export (or import) restrictions would hardly be legitimate under art. XI GATT, there is controversy whether (energy) production control measures would violate disciplines of WTO law.

The New Energy Provision of the TFEU

Title XXI on "energy" of Part III of the TFEU, consists of a sole provision. At first look, that may be rather surprising since the provisions immediately preceding art. 194 and relating to "environment" (title XX) are much broader and more complex. And although the energy sector would at least in parts include "services of general economic interest" (art. 14 TFEU)⁹⁸ and, moreover, its central importance for most human and especially industrial and commercial activities might hardly be doubted, there is no clause similar to that laid down in art. 11 TFEU (related to environmental protection) in order to ensure that energy policy requirements must be integrated in the definition or at least implementation of other EU policies and activities. ⁹⁹

The text of art. 194 TFEU is nearly identical to that of art. III-256 of the Treaty establishing a Constitution for Europe 100 which did not come into force. This earlier version was inserted as the last section (10) of chapter III ("Policies in Other Areas") of title III ("The Policies and Functioning of the Union") of that treaty, after a longer section (9) on "Research and Technological Development and

⁹⁴ OJ [1994] L 336/273; cf. Cottier/Malumfashi/Matteotti-Berkutova/Nartova/de Sépubus/Bigdeli, Energy in WTO law and policy, pp. 19 et seq.

⁹⁵ Cf. Cottier/Malumfashi/Matteotti-Berkutova/Nartova/de Sépubus/Bigdeli, Energy in WTO law and policy, pp. 11 et sq.; Selivanova, The WTO and Energy, August 2007, pp. 23 et seq.

⁹⁶ Because Art. 107 TFEU is not applicable to EU subsidies; cf. Schweitzer/Hummer, *Europarecht*, (5th ed.) 1996, p. 398.

⁹⁷ Cf. Lamy, Doha Round will benefit energy trade, available at: http://www.wto.org/english/news_e/sppl_e/sppl80_e.thm; Cottier/Malumfashi/Matteotti-Berkutova/Nartova/de Sépubus/Bigdeli, Energy in WTO law and policy, pp. 16 et seq.; Selivanova, The WTO and Energy, August 2007, pp. 15 et seq.

⁹⁸ Cf. Knauff, Die Daseinsvorsorge im Vertrag von Lissabon, Eurparecht 45 (2010), pp. 730 et seq.; also Koenig/Kühling/Rasbach, Versorgungssicherheit im Wettbewerb, Zeitschrift für Neues Energierecht 2003, pp. 3 et seq.; Ruffert, Völkerrechtliche Impulse und Rahmen des Europäischen Verfassungsrechts, in: Fehling/Ruffert (eds.), *Regulierungsrecht*, 2010, § 3 No. 74 et seq.

⁹⁹ Kahl, Die Kompetenzen der EU in der Energiepolitik nach Lissabon, Europarecht 44 (2009), pp. 601 et seq., might not agree with this argument.

¹⁰⁰ OJ [2004] C 310, pp. 1 et seq.; for more details, see Trüe, EU-Kompetenzen für Energierecht, Gesundheitsschutz und Umweltschutz nach dem Verfassungsentwurf, Juristenzeitung 59 (2004), pp. 786 et seq.; Kahl, Die Kompetenzen der EU in der Energiepolitik nach Lissabon, Europarecht 44 (2009), pp. 605 et seq.

Space". Section 8 on "Trans-European Networks"¹⁰¹ was copied from arts. 154–156 of the EC Treaty and has now become title XVI of the TFEU's Part III. So, the EU shall go on contributing to the "establishment and development of trans-European networks in the areas of transport, telecommunications and energy infrastructures" (art. 170 para. 1) in order to help the objectives of a functioning internal market (art. 26) as well as strengthened economic, social and territorial cohesion (art. 174) and "to enable citizens of the Union, economic operators and regional and local communities to derive full benefit from the setting-up of an area without internal frontiers". EU action shall take place "within the framework of a system of open and competitive markets" and "aim at promoting the interconnection and interoperability of national networks as well as access to such networks" (art. 170 para. 2 TFEU).

After the publication of the (draft) "constitution for Europe", but before the conclusion of the Lisbon Treaty, the Commission presented a "Green Paper" on "a European Strategy for Sustainable, Competitive and Secure Energy", ¹⁰² followed by a "Communication" about "An Energy Policy for Europe". ¹⁰³ This latter document explained the (then) three main objectives of EU energy policy as follows:

Sustainability, related to "(i) developing competitive renewable sources of energy and other low carbon energy sources and carriers, particularly alternative transport fuels, (ii) curbing energy demand within Europe, and (iii) leading global efforts to halt climate change and improve local air quality";

Competitiveness, which would mean: "(i) ensuring that energy market opening brings benefits to consumers and to the economy as a whole, while stimulating investment in clean energy production and energy efficiency, (ii) mitigating the impact of higher international energy prices on the EU economy and its citizens and (iii) keeping Europe at the cutting edge of energy technologies";

Security of supply, referring to the task of "tackling the EU's rising dependence on imported energy through (i) an integrated approach – reducing demand, diversifying the EU's energy mix with greater use of competitive indigenous and renewable energy, and diversifying sources and routes of supply of imported energy, (ii) creating the framework which will stimulate adequate investments to meet growing energy demand, (iii) better equipping the EU to cope with emergencies, (iv) improving the conditions for European companies seeking access to global resources, and (v) making sure that all citizens and business have access to energy".

Although their order was modified, these objectives are (although much shorter) repeated in art. 194 para. 1 according to which the EU policy on energy shall aim, "in a spirit of solidarity between Member States, to

¹⁰¹ Cf. http://ec.europa.eu/energy/infrastructure/tent_e/ten_e_en.htm.

¹⁰²COM(2006) 105 final, 8th March 2006; also Nettesheim, Das Energiekapitel im Vertrag von Lissabon, Juristenzeitung 65 (2010), p. 25.

¹⁰³COM(2007) 1 final, 10th January 2007.

- (a) Ensure the functioning of the energy market,
- (b) Ensure security of energy supply in the Union,
- (c) Promote energy efficiency and energy saving and the development of new and renewable forms of energy".

A fourth objective mentioned in art. 194 para. 1 – to "promote the interconnection of energy networks" – was also dealt with in the "Green Paper" already, ¹⁰⁴ as one of the "core areas" for completing the internal electricity and gas markets should be "a priority interconnection plan" which was presented to the public in late 2006 (listing up five important aspects). ¹⁰⁵ The communication on energy policy reiterated this view, but also pointed to the objective of energy security. ¹⁰⁶ Moreover, it explained what was meant by insisting on "solidarity between Member States" by requiring the set up of "effective mechanisms . . . in the event of an energy crisis" thereby complementing the earlier statement that "rapid" solidarity was needed towards a country "facing difficulties following damages to its essential infrastructure". ¹⁰⁷

EU energy policy must be not only implemented "with regard for the need to preserve and improve the environment" in general (art. 194 para. 1), but a specific issue thereof is explicitly linked to the implementation of environmental objectives: Art. 192 para. 2 subpara. 1 lit. c) TFEU authorizes the Council acting unanimously in accordance with a special legislative procedure (art. 289 para. 2) and after consulting the European Parliament, the Economic and Social Committee (ESC) and the Committee of the Regions (CoR), to adopt "measures significantly affecting a Member State's choice between different energy sources and the general structure of its energy supply". On the contrary, such decision does not extend to a Member State's right "to determine the conditions for exploiting its energy resources", since art. 194 para. 2 subpara. 2 TFEU does not allow any prejudice to that (sovereign) right, too. 109

¹⁰⁴ Op.cit. (fn. 102), pp. 6 et seq.

¹⁰⁵COM(2006) 846 final, 10th January 2007; also Kahl, Die Kompetenzen der EU in der Energiepolitik nach Lissabon, Europarecht 44 (2009), pp. 608 et seq.

¹⁰⁶ Op.cit. (fn. 103), pp. 10 et seq; comments by Nettesheim, Das Energiekapitel im Vertrag von Lissabon, Juristenzeitung 65 (2010), p. 25.

¹⁰⁷ Op. cit. (fn. 103); cf. also Hobe, Energiepolitik, Europarecht 44 (2009), Supplement 1, pp. 226 et seq.; Nettesheim, Das Energiekapitel im Vertrag von Lissabon, Juristenzeitung 65 (2010), pp. 22 et seq.; Kahl, Die Kompetenzen der EU in der Energiepolitik nach Lissabon, Europarecht 44 (2009), pp. 607 et seq. and 613 (pointing also to Art. 122(1) TFEU).

¹⁰⁸ Cf. Nettesheim, Das Energiekapitel im Vertrag von Lissabon, Juristenzeitung 65 (2010), p. 23; Kahl, Die Kompetenzen der EU in der Energiepolitik nach Lissabon, Europarecht 44 (2009), pp. 610 et seq.; earlier already Trüe, EU-Kompetenzen für Energierecht, Gesundheitsschutz und Umweltschutz nach dem Verfassungsentwurf, Juristenzeitung 59 (2004), p. 781.

¹⁰⁹ Cf. Kahl, Die Kompetenzen der EU in der Energiepolitik nach Lissabon, Europarecht 44 (2009), pp. 611, 618 et seq.

Like other "principal areas", as for example "internal market", "economic, social and territorial cohesion", "environment" or "trans-European networks" (art. 4 para. 2 lits. al, cl, el, hl TFEU), "energy", too, belongs to those competences which are shared between EU and member States (lit. il). 110 Since art. 4 para. 1 does restrict this type of attribution of powers to competences which do not relate to the areas referred to in art. 3 (or art. 6), the exclusive competences of the Union regarding "common commercial policy" (art. 3 para. 1 lit. e]), "establishing of the competition rules for the functioning of the internal market" (lit. b]) and in the field of concluding international agreements as described in art. 3 para. 2 are not affected by the provisions of art. 4. Although "climate change" and "utilisation of natural resources" are energy-related topics at least, they were inserted (or looking at the second one – remained) part of the provisions on "environment" (art. 191 para. 1, third and fourth sentence TFEU). Anyway, the increased "Europeanization" of energy policy will probably lead to quite difficult issues as there would be three (or even more) provisions which could be used for the basis of EU secondary legislation but since the relevant legislative procedures are rather different, clear and sharp distinctions must be drawn between EU actions founded on art. 194, on art. 191 or on art. 114 TFEU. 111 Another question might arise from the fact that more stringent (protective) measures of Member States are explicitly permitted (if they conform to certain conditions) under art. 114 (paras. 4 et seq.) and 193 TFEU, while art. 194 does not deal with this problem.

As far as EU institutions plan to take measures "necessary to achieve the objectives" in art. 194 para. 1, i.e. that their aim and purpose is exclusively or at least essentially related to energy policy, the right way to follow would be the ordinary legislative procedure (art. 294 TFEU). If those measures were, however, "primarily of a fiscal nature", ¹¹² the Council has to act unanimously with a special legislative procedure (upon a Commission proposal as in each other case), but the Parliament (as well as the committees, i.e. ESC and CoR) would merely be consulted (art. 194 para. 3). ¹¹³

¹¹⁰ Nettesheim, Das Energiekapitel im Vertrag von Lissabon, Juristenzeitung 65 (2010), pp. 21, 22; Kahl, Die Kompetenzen der EU in der Energiepolitik nach Lissabon, Europarecht 44 (2009), p. 607.

¹¹¹ Kahl, Die Kompetenzen der EU in der Energiepolitik nach Lissabon, Europarecht 44 (2009), pp. 616 et seq.; Nettesheim, Das Energiekapitel im Vertrag von Lissabon, Juristenzeitung 65 (2010), p. 24.

¹¹² Cf. Kahl, Die Kompetenzen der EU in der Energiepolitik nach Lissabon, Europarecht 44 (2009), p. 612.

¹¹³ For a recent analysis of Union competences see also Schneider, *EU-Kompetenzen einer Europäischen Energiepolitik*, 2010.

EU Secondary Legislation

EU Policy on Energy Since the "Green Paper" of 2006

In early 2007 the EU Commission proposed a new energy policy 114 as a first resolute step towards becoming a low-energy economy, whilst making the energy we do consume more secure, competitive and sustainable. A common policy would be the most effective way to tackle today's energy challenges, which are shared by all Member States. This policy put energy back at the heart of EU action, the position it occupied when the European venture first got under way with the ECSC and the Euratom Treaties. The aims of the policy are supported by market-based tools (mainly taxes, subsidies and the CO₂ emissions trading scheme), by developing energy technologies (especially technologies for energy efficiency and renewable or low-carbon energy) and by Community financial instruments. In 2008, the Commission published a five-point "EU Energy Security and Solidarity Action Plan" focusing on "infrastructure needs and the diversification of energy supplies, external energy relations, oil and gas stocks and crisis response mechanisms, energy efficiency, and making the best use of the EU's indigenous energy resources". 115 In order to remedy the effects of the financial and energy crises which affected the European economy in 2008, a regulation enacted in the summer of 2009¹¹⁶ established a European Energy Programme for Recovery (EEPR) as a key element of an "Economic Recovery Plan" 117 to fund projects in three main areas, i.e. gas and electricity infrastructures, offshore wind energy, and carbon capture and storage. The Commission received 87 applications, and it decided to grant financial assistance to 58 projects, mainly in the first area. 118

In the spring of 2007, the Commission launched a discussion by publishing another "Green Paper", this time on advancing the use of "market-based instruments for environment and related policy purposes", ¹¹⁹ in particular within the context of the review of the energy taxation directive. In the same year, its "European strategic energy technology plan" aimed at steps towards a "low carbon

¹¹⁴ See already supra, at fn. 103.

¹¹⁵ COM(2008) 781 final, 13th November, 2008; cf. further the Green Paper "Towards a Secure, Sustainable and Competitive European Energy Network", COM(2008) 782 final, also of 13th November, 2008.

¹¹⁶ Regulation (EC) No. 663/2009, OJ [2009] L 200/31; modified by Regulation (EU) No. 1233/2010, OJ [2010] L 346/5.

¹¹⁷COM(2008) 800 final, 26th November, 2008; also Presidency Conclusions, European Council, 11th and 12th December, 2008, see http://register.consilium.europa.eu/pdf/en/08/st17/st17271-re01.en08.pdf.

¹¹⁸ Cf. COM(2010) 191 final, 27th April, 2010.

¹¹⁹COM(2007) 140 final, 28th March, 2007.

future"¹²⁰ was presented. Two years later, this EU body proposed various European industrial initiatives pointing to several possible forms of public funding, like income generated by the future emission allowance trading scheme, Community programs (EEPR or the Intelligent Energy – Europe programme ¹²¹) and, finally, lending by the European Investment Bank. ¹²² Intelligent Energy – Europe is part of the Competitiveness and Innovation Framework Programme (CIP) 2007–2013 established by a decision of Parliament and Council. ¹²³

"20 20 by 2020" is the short title of a communication on "Europe's climate change opportunity". In this document of January 2008, ¹²⁴ the Commission elaborated on the challenge for the European economy to adapt to the "demands of a low-emission economy with secure energy supplies". Respecting the principles set up by the European Council in 2007, Commission proposals were, in particular, aimed at updating the Emissions Trading System (ETS), ¹²⁵ establishing an EU framework for national commitments to cover the remaining emissions, fostering renewable as well as more energy efficiency, shaping rules for carbon capture storage (CCS), ¹²⁶ but without forgetting to take regard of the particular needs of energy-intensive industries.

On 17 November 2010, the Commission adopted a communication on "Energy infrastructure priorities for 2020 and beyond". ¹²⁷ A completely new infrastructure policy based upon a European vision would be needed to deliver the energy infrastructures for the next two decades including changes of the current practice of the TEN-E. ¹²⁸ A "blueprint for an integrated European energy network" was based upon a new method (for strategic planning) and would include the following steps:

Identifying an energy infrastructure map leading towards a European "smart supergrid" interconnecting networks at continental level,

 $^{^{120}}$ COM(2007) 723 final, 22nd November, 2007. On carbon capture storage cf. Maslaton/Wolf (eds.), CCS und Recht, 2009.

¹²¹ Cf. list of 15 energy projects for European economic recovery, Press Release, MEMO/09/542, 9th December, 2009, and above, at fn. 116, 117.

¹²²COM(2009) 519 final, 7th October, 2009.

¹²³ OJ [2006] 310/15.

 $^{^{124}}$ COM(2008) 30 final, 23rd January, 2008; also COM(2008) 772 final, 13th November, 2008 ("Energy efficiency: delivering the 20 % target").

¹²⁵ See http://ec.europa.eu/clima/policies/ets/index_en.htm.

¹²⁶ Cf. also COM(2009) 519 final, 7th October, 2009 ("Investing in the Development of Low Carbon Technologies – SET-Plan") and accompanying impact documents, SEC(2009)1295 – 1297.

¹²⁷ COM(2010) 677 final, 17th November, 2010; cf. also Bundesnetzagentur (Federal Net Agency, FNA), Entwurf des Vorhabenplans für das Jahr 2011, OJ FNA 2010, p. 4325.

¹²⁸ For an Implementation Report relating to the period 2002–2006 see COM(2008) 770 final, 13th November, 2008.

Focussing on a limited number of European priorities to be implemented till 2020" to meet the long-term objectives and where European action is most wanted", Identifying concrete "projects of European interest" necessary to implement these priorities in a flexible manner and building on regional cooperation so as to respond to changing market conditions and technology development, and Supporting the implementation of those projects through new tools, such as "improved regional cooperation, permitting procedures, better methods and information for decision makers and citizens and innovative financial instruments.

In order to speed up implementation, the Commission also described in its communication (four) elements of a complementary "toolbox". ¹³⁰

Selected Important Topics of EU Energy Policy

Internal Energy Market

To create a genuine, competitive international market also for energy is one of the EU's priority objectives. It would be a strategic tool by giving, on the one hand, European consumers a choice between different enterprises supplying energy, in particular electricity and gas, at reasonable prices, and, on the other hand, by making those markets accessible for all suppliers of energy, especially small ones and those investing in renewables. Another market-related issue would be the setting up of an adequate framework within which the mechanism for CO₂ emission trading could function properly. Of course, a crucial condition for implementing an internal energy market will be the existence of a reliable and coherent energy network in Europe, i.e. adequate infrastructure investment. Then, a truly integrated European market would also contribute to more diversification and thus to greater security of supply.

To reach these goals, a lot of legal instruments, mainly directives, were enacted during the last years (and often later modified thus setting up a "second" and even "third" generation of relevant legal provisions). A first very important issue – focusing on making markets (within the EU) more competitive – are "common rules" for the internal market(s) in "natural gas" and "electricity", respectively. Two (EP and Council) directives of July 2009¹³¹ were repealing former ones

¹²⁹ See below, at 2.a); also Commission call for proposals, see http://ec.europa.eu/energy/infra-structure/grants/doc/2011/2011_ten_e_call.pdf.

¹³⁰ Op.cit. (fn. 126), pp. 14 et seq.

¹³¹ Directive 2009/72/EC, OJ [2009] L 211/55, and Directive 2009/73/EC, OJ [2009] L 211/94; on implementation issues also Bundesnetzagentur (Federal Net Agency, FNA), Entwurf des Vorhabenplans für das Jahr 2011, OJ FNA 2010, pp. 4327 et seq.

(enacted in 2003¹³²), which had replaced legal acts of 1996¹³³ and 1998, ¹³⁴ and those were an improvement as well as an extension of specific directives getting legal force in 1990 (concerning a Community procedure to prices charged to industrial end-users¹³⁵) and 1991 (on the transit of natural gas through grids¹³⁶). Although the 2003 directives were deemed to have made a signification contribution towards the creation of an internal market in each of both areas, fully open markets enabling all consumers to freely choose their suppliers and all suppliers freely to deliver to their customers had not yet been achieved. 137 There were remaining obstacles to the sale of electricity and gas on equal terms and without discrimination or disadvantages within the Union. In particular, non-discriminatory network access and an equally effective level of regulatory supervision in each Member State (or even the whole EEA) did not exist in 2009. So, the "third generation" legal framework tried to further develop cross-border connections in order to secure the supply of all energy sources at the most competitive prices to consumers and industry within the EU. Moreover, by effectively separating networks from activities of generation and supply (effective unbundling), the legal acts aimed at managing the inherent risk of discrimination not only in the operation of the network but also in the incentives for vertically integrated undertakings to invest adequately in their networks. To preserve the interests of the shareholders of those enterprises as far as possible, Member States were reserved the choice between various modes of "ownership unbundling" or setting up either a system or a transmission operator which must be independent from supply and generation interests. ¹³⁸ Another fundamental provision of both new directives is the respect for public service requirements (art. 3), i.e. a universal service and common minimum standards following therefrom. And last but not least, consumer interests are at the heart of the directives, and quality of service should thus a central responsibility of both electricity and (natural) gas undertakings (annex I).

Although based upon art. 175 para. 1 (not on art. 95) EC, the EP and Council directive establishing a scheme for greenhouse gas emission allowance trading ¹³⁹

¹³² See already above, at fn. 71; cf., e.g., Lecheler/Gundel, Ein weiterer Schritt zur Vollendung des Binnenmarktes – Die Beschleunigungs-Rechtsakte für den Binnenmarkt für Strom und Gas, Europäische Zeitschrift für Wirtschaftsrecht 2003, pp. 621 et seq.

¹³³ Directive 96/92/EC, OJ [1997] L 27/20.

¹³⁴ Directive 98/30/EC, OJ [1998] L 204/1.

¹³⁵ Directive 90/377/EEC, OJ [1990] L 185/16.

¹³⁶ Directive 91/296/EEC, OJ [1991] L 147/37.

¹³⁷Cf. Commission Report on the "Progress in creating the internal gas and electricity market", COM(2008) 192 final, 15th April, 2008.

¹³⁸ Cf. Pießkalla, Die Kommissionsvorschläge zum "full ownership unbundling" des Strom- und Gasversorgungssektors im Lichte der Eigentumsneutralität des EG-Vertrags (Art. 295 EG), Europäische Zeitschrift für Wirtschaftsrecht 2008, pp. 199 et seq.

¹³⁹ Directive 2003/87/EC, OJ [2003] L 275/32.

which was extended and improved later on ¹⁴⁰ is aiming at the reduction of those emissions "in a cost-effective and economically efficient manner" and thus sets up fully harmonized conditions of allocation within the Union as well as – in order to avoid distortions of competition – harmonized rules on new entrants so as to ensure that all Member States adopt the same approach. The original legal act already stated explicitly that Community provisions relating to allocation of allowances by the Member States would be necessary to contribute to preserving the integrity of the internal market.

A first EP and Council decision laying down a series of guidelines for trans-European energy networks¹⁴¹ was replaced 7 years later (in 2003) by a second one 142 in order to incorporate new priorities stemming from the creation of a more open and competitive internal energy market ("first generation" directives). Conforming to this actualization, energy infrastructure should be constructed and maintained so as to enable the internal market efficiently, but without detracting from strategic and, where appropriate, universal service criteria. EC financial aid for construction and maintenance should therefore remain highly exceptional whereas private financing or financing by the economic operators concerned would be encouraged (art. 8 – "effects on competition"). The guidelines to be established by Community action (art. 5) should identify projects of common interest (art. 6, annex II), including those which have priorities (arts. 4, 7 and annex I). The 2003 decision was repealed by a legal act of the same character. The later one (of 2006)¹⁴³ not only took account of the alterations set up by the "second generation" of internal market directives but also laid down provisions related to a new category of top priority "projects of European interest" (art. 8 et seg., annex I) for each of which a European coordinator might be appointed. Based upon art. 156 ECT (now: art. 172 TFEU), Parliament and Council enacted in late 2009 a regulation putting up general rules of the granting of Community financial aid (for "projects of common interest" only, art. 2) in the field of trans-European networks as provided for in art. 171 para. 1 tir. 3 TFEU. EU aid might take one or several of the following forms: co-financing of studies related to projects, temporary subsidies on the interest on loans granted by financial bodies, contributions towards premiums for loan guarantees from financial institutions, direct grants to investments, but only in duly justified cases, and risk-capital participation for investment funds or comparable financial undertakings (art. 3 para. 1).¹⁴⁴

Two EP and Council regulations of 2005¹⁴⁵ and 2009, respectively, were dealing with conditions for access to the natural gas transmission networks. Both of them

¹⁴⁰ Directive 2029/29/EC, OJ [2009] L 140/63.

¹⁴¹ Directive 1254/96/EC, OJ [1996] L 161/147.

¹⁴² Directive 1229/2003/EC, OJ [2003] L 176/11.

¹⁴³ Directive 1364/2006/EC, OJ [2006] L 262/1.

¹⁴⁴ Directive 67/2010/EC, OJ [2010] L 27/20.

¹⁴⁵ Directive 1775/2005/EC, OJ [2005] L 289/1.

aimed, according to art. 1 para. 1, at setting up non-discriminatory rules for access conditions to natural gas "transmission" (art. 2 para. 1 no 1) systems taking into account the specificities of national and regional markets with a view to the proper functioning of the internal gas market and were including provisions on the setting up of harmonized principles for tariffs (art. 3), or the methodologies underlying their calculation, for access to the network (art. 4), the establishment of third party access services and harmonized principles for "capacity" (art. 2 para. 2 no. 3) allocation and "congestion management" (no. 5), the determination of transparency requirements (art. 6), balancing rules and imbalance charges (art. 7) and facilitating capacity trading (art. 8). As a part of the "third" reform package of summer 2009. the second regulation ¹⁴⁶ added (in art. 1) two more objectives, namely setting nondiscriminatory rules for access conditions to LNG facilities and storage facilities taking into account the special characteristics of national and regional markets, and facilitating the emergence of a well-functioning and transparent wholesale market with a high level of security of supply in gas and providing mechanisms to harmonize the network access rules for cross-border exchanges in gas. The new legal act intends to ensure optimal management of the gas transmission network in the EU by a European Network of Transmission System Operators for Gas (ENTSO for Gas) which should be established in the course of a rather complex procedure in which draft statutes for cooperation put up by system operators will be reviewed by the Agency (ACER) as well as the Commission before they may finally be adopted and ENTSO for Gas be established by the operators (arts, 4, 5). A main task of this network will be to elaborate network "codes" in a number of areas, reaching from network security and reliability rules to energy efficiency regarding gas networks (art. 6–8), in close cooperation with the Commission and ACER and monitored by this agency (art. 9).

A parallel development took place in the electricity sector where ENTSO for Electricity will soon be established. The 2009 regulation ¹⁴⁷ replacing a first one of 2003 ¹⁴⁸ aims at setting fair rules for cross-border exchanges in electricity which will include the establishment of a compensation mechanism for those "cross-border flows" (art. 2 para. 2 lit. b), the setting of harmonized principles for cross-border transmission charges and the allocation of available capacities of interconnections between national transmission systems as well as facilitating the emergence of a well-functioning and transparent wholesale market with a high level of security of supply (art. 1). The Commission is authorized to adopt guidelines (art. 18) relating to the inter-transmission system operator compensation mechanism in accordance with the principles set out in arts. 13, 14.

¹⁴⁶ Directive 715/2009/EC, OJ [2009] L 211/36.

¹⁴⁷ Directive 714/2009/EC, OJ [2009] L 211/15.

¹⁴⁸ Regulation (EC) No. 1228/2003, OJ [2003] L 176/1.

At last, directives on coordinating laws and procedures on public procurement are also relevant for entities operating in the energy sector, ¹⁴⁹ and a Council directive of 2003 had as its prominent objective the restructuring of the Community framework for the taxation of energy products and electricity. ¹⁵⁰ Having regard in particular to art. 93 EC (now: art. 113 TFEU), the directive was also motivated by reducing the existing different national levels of taxation, since the absence of Community provisions imposing a minimum rate of taxation on electrity and energy products other than mineral oil might adversely affect the proper functiong of the internal market (recitals 2–6).

In December 2010, the Commission presented a proposal for a regulation on "energy market integrity and transparency". ¹⁵¹ The development during the last 10 years of power exchange and standardized OTC contracts attracting a wide range of actors such as generators and suppliers, large energy users, pure traders or financial institutions, should be consolidated by creating sufficient confidence of all relevant actors in the integrity of these wholesale energy markets. So, rules should be enacted which clearly prohibit market abuse (including insider information and market manipulation) on wholesale markets in electrity, natural gas and related products. Those rules should be consistent with the provisions of the Market Abuse Directive, ¹⁵² and would not apply to financial instruments already covered by that legal instrument.

Energy Efficiency

Core policy orientations concerning this topic were set out in two communications of 2006^{153} and 2008^{154} the first one proposing an "Action Plan for Energy Efficiency" to realize its potential, the second one intended to explain how the 20% target (i.e. cutting the annual consumption of primary energy within the EU by that percentage by 2020) might be delivered.

An EP and Council directive enacted in 2004¹⁵⁵ dealt with promoting cogeneration based on a useful heat demand in the internal energy market. According to art. 1, the legal act which applies to "cogeneration" (art. 3 lit. a) and cogeneration

¹⁴⁹ Directive 2004/17/EC, OJ [2004] L 134/1; Directive 92/13/EEC, OJ [1992] L 76/14, as amended; on the relationship between regulation and public procurement cf. Ruffert, Völkerrechtliche Impulse und Rahmen des Europäischen Verfassungsrechts, in: Fehling/Ruffert (eds.), Regulierungsrecht, 2010, No. 46 et seq.

¹⁵⁰ Directive 2003/96/EC, OJ [2003] L 283/51.

¹⁵¹COM(2010)726 final, 8th December, 2010.

¹⁵² Directive 2003/6/EC, OJ [2003] L 96/16; Zylka, *Marktaufsicht im Stromhandel*, 2010, pp. 112 et seq.; Bundestags-Drucksache 17/4322, 21st December, 2010.

¹⁵³COM(2006) 545 final, 19th October, 2006.

¹⁵⁴COM(2008) 772 final, 13th November, 2008.

¹⁵⁵ Directive 2004/8/EC, OJ [2004] L 52/50.

technologies listed in annex I (art. 2) aims at increasing energy efficiency and improving security of supply by creating a framework for promotion and development of "high efficiency cogeneration" (art. 3 lits. h, i) of heat and power based on "useful heat" (art. 3 lit. b) demand and primary energy savings in the internal market, taking into account the specific national circumstances especially concerning climatic and economic conditions. Although the directive intended to take measures to ensure that the potential for use of cogeneration would be better exploited, it was based, in particular, on art. 175 para. 1 EC Treaty. For the purpose of determining the efficiency of cogeneration in accordance with annex III (and art. 4) of the directive, a Commission decision later on established harmonized efficiency reference values for separate production of electricity and heat. 156

Repealing an earlier Council directive of 1993,¹⁵⁷ an EP and Council legal instrument of 2006 "on energy end-use efficiency and energy services"¹⁵⁸ applied to energy and other companies, final customers as well as to the armed forces (art. 2) in order to enhance the cost-effective improvement of energy end-use efficiency (art. 3 lits. b, c) in the EU Member States by providing the necessary indicative targets (arts. 4, 5) as well as mechanisms, institutions and institutional, financial and legal frameworks (arts. 6–13) to remove existing market barriers and imperfections that impede the efficient end use of "energy" (art. 3 lit. a), and, moreover, by creating the conditions for the development and promotion of a market for "energy services" (art. 3 lit. e) and for the delivery of other "energy efficiency improvement measurers" (art. 3 lit. h) to final customers (art. 1).

In 2009, an EP and Council directive establishing a framework for the setting of ecodesign requirements for energy-using products¹⁵⁹ was not only substantially amended, but also recast in the interests of (legal) clarity.¹⁶⁰ The explicit purpose of this directive which does not apply to means of transport for persons or goods (art. 1 para. 3) is also ensuring the free movement of such products within the internal market (art. 1 para. 1, art. 6). All "energy-related products" (art. 2 no. 1) covered by implementing measures must fulfill certain requirements (art. 5: CE marking, EC declaration of conformity) to be placed on the market and/or to be put into service (art. 3, referring to definitions in art. 2 nos. 4, 5). The directive would thereby contribute to sustainable development by both increasing energy efficiency and the level of protection of the environment (art. 1 para. 2).

Complementary to the ecodesign directive, two other legal acts are focusing on labeling. As early as 1992, the Council enacted a directive "on the indication by labeling and standard product information of the consumption of energy and other

¹⁵⁶ Directive 2007/74/EC, OJ [2007] L 32/183.

¹⁵⁷ Directive 93/76/EEC, OJ [1993] L 237/28.

¹⁵⁸ Directive 2006/32/EC, OJ [2006] L 114/64, transformed in Germany by Federal Act of 4th November, 2010, Federal Official Journal part I, pp. 1483 et seq.

¹⁵⁹ Directive 2005/32/EC, OJ [2005] L 191/29.

¹⁶⁰ Directive 2009/125/EC, OJ [2009] L 285/10.

resources by household appliances" which was amended more than once and finally recast in 2010. Two years before, an EP and Council directive adopted a somewhat parallel regulation "on a Community energy-efficiency labeling program for office equipment" 163 since the most cost-effective measure for this field would be a voluntary "Energy Star" labeling program. The 2010 directive would also, by providing for more relevant details, further the aims of regulation 765/2008/EC containing general provision on market surveillance relating to the marketing of products. ¹⁶⁴ It is meant to establish a framework not only for the harmonization of national measures for end-user information (arts. 4 et seq.) on the consumption of energy and "other essential resources" (art. 2 lit. c) during use but also for "supplementary information" (art. 2 lit. d) concerning new "energy-related products" (art. 1 para, 2, art. 2 lit. a) other than those mentioned in art. 1 para, 3, thereby enabling end-users to choose more efficient products (art. 1 para. 1). Core information requirements (art. 4) refer to labels and "fiches", i.e. a standard table for information related to a product (art. 2 lit. b) as well as to mentioning the energy efficiency class of a product.

At the same day as the new labeling directive, also an EP and Council directive "on the energy performance of buildings" was published. 165 This legal act, too, was a new amended version of a former one (of 2002¹⁶⁶) and takes first of all account of the fact that buildings are a main cause of energy consumption within the EU, so its reduction and the use of "energy from renewable sources" (art. 2 no. 6) in the buildings sector would constitute important measures to diminish the Union's energy dependency as well as its greenhouse gas emissions. In order to improve the energy performance of buildings within the Union, the directive lays down, in particular, requirements as regards the common general framework for a methodology (art. 3, annex I) for calculating the integrated energy performance of "buildings" (art. 2 no. 1) and "building units" (art. 2 no. 8), the application of minimum requirements (arts. 4 et seq.) to the "energy performance" (art. 2 no. 4) of new buildings as well as of existing ones in the case of "major renovation" (art. 2 no. 10), national plans (art. 9) for increasing the number of "nearly-zero energy buildings" (art. 2 no. 2), energy certification for buildings (arts. 11 et seq.) and independent control systems for "energy performance certificates" (art. 2 no. 12) and inspections reports (art. 18). 167

¹⁶¹ Directive 92/75/EEC, OJ [1992] L 297/16.

¹⁶² Directive 2010/30/EU, OJ [2010] L 153/1.

¹⁶³ Directive 2008/106/EC, OJ [2008] L 39/1.

¹⁶⁴ Directive 2010/31/EU, OJ [2010] L 153/13.

¹⁶⁵ Directive 2010/31/EU, OJ [2010] L 153/13.

¹⁶⁶ Directive 2002/91/EC, OJ [2003] L 1/65.

¹⁶⁷ For a general survey, cf. also Britz/Eifert/Reimer, *Energieeffizienzrecht*, 2010; also Bundestags-Drucksache 17/3341, 20th December, 2010.

Renewable Energies

In 1997 the Commission published a White Paper on renewable energy ¹⁶⁸ which announced a target to double the Union's renewable energy share to 12% by 2010. The renewable energy policy to be founded on the need to address sustainability concerns surrounding climate change and air pollution would improve the security of Europe's energy supply and develop Europe's competitiveness and industrial and technological innovation. The White Paper also announced a renewable energy strategy and action plan. A key element of this plan was the establishment of European legislation to provide a stable policy framework and clarify the expected development of renewable energy in each Member State. The two key pieces of legislation (directives 2001/77/EC¹⁶⁹ and 2003/30/EC¹⁷⁰) set indicative 2010 targets for all Member States and required actions to improve the growth, development and access of renewable energy. In addition, a Biomass Action Plan was adopted in 2005¹⁷¹ to focus attention on the specific need for Member States to develop Europe's biomass resources.

Reports issued in 2007 (and 2009¹⁷²) as well as the Renewable Energy Roadmap¹⁷³ highlighted the slow progress Member States were making and the likelihood that the EU as a whole would fail to reach its 2010 target, mainly because of the merely indicative nature of the national targets and the uncertain investment environment provided by the existing legal framework. The Commission therefore proposed a new, more rigorous package of rules to drive forward the development of renewable energy and more solid, legally binding targets for 2020, and in spring 2009, a new Renewable Energy directive was enacted amending and subsequently repealing the directives of 2001 and 2003. ¹⁷⁴ The directive establishes a common framework for the promotion of "energy from renewable sources" (art. 2 para. 2 lit. a), sets mandatory national targets (art. 3, annex I) for the overall share of energy from those sources in "gross final consumption of energy" (art. 2 para. 2 lit. f), and for their share in transport (art. 5 para. 5, annex III; art. 21). Moreover, it lays down rules relating to statistical transfers between Member States (art. 6) and joint projects also with third countries (arts. 7–10), "guarantees of origin" (art. 2 para. 2 lit. j, art. 15), administrative procedures (art. 13), information and training (art. 14), and access to the electricity grid for energy from renewable sources (arts. 16). Not the least, the legal act sets up (in arts. 17-20) sustainability criteria for "biofuels" (art. 2 para. 2 lit. i) and

¹⁶⁸COM(97) 599 final, 26th November, 1997.

¹⁶⁹ Directive 2001/77/EC, OJ [2001] L 283/33.

¹⁷⁰ Directive 2003/30/EC, OJ [2003] L 123/42.

¹⁷¹COM(2005) 628 final, 7th December, 2005; cf. also the "EU Strategy on Biofuels", COM (2006) 34 final, 8th February, 2006.

¹⁷²COM(2009) 192 final, 24th April, 2009.

¹⁷³ COM(2006) 848 final, 10th January, 2007.

¹⁷⁴ Directive 2009/28/EC, OJ [2009] L 140/16.

"bioliquids" (lit. h). By decision of June 30, 2009, ¹⁷⁵ the Commission then established a template for National Renewable Energy Action Plans under the directive.

At the end, it might be appropriate to point to two more Commission communications dealing with specific issues, namely "support of electricity from renewable energy sources" and "Offshore Wind Energy" where the EU body required actions "needed to deliver on the Energy Policy Objectives for 2020 and beyond". ¹⁷⁷

European and Member States' Energy Policies – The German Example

The German National Renewable Energy Action Plan (as of July 2010)¹⁷⁸ might be a good example to show how supranational and national energy policies are interdependent. As the German government was working on a new overall national strategy for energy supply until 2050 defining key points of future German energy policy, the data and statements of the National Action Plan (NAP) have to be reviewed or even modified since the government adopted its new strategy in September 2010. ¹⁷⁹ In the NAP, the share of renewable energy in gross final energy consumption was estimated to be 19.6% in 2020, i.e. reaching a higher value than the directive's binding national target of 18%. ¹⁸⁰

In fact, most measures and instruments necessary to achieve this national target were already enacted: In the electricity sector, the revised Renewable Energy Act¹⁸¹ is the crucial basis for further development in the production of those energies. This also applies to the production of combined power and heating/cooling where the EEG is supplemented by a specific Act¹⁸² and by emissions trading. In the heating/cooling sector, the main package of measures includes a

¹⁷⁵ Decision 2009/548/EC, OJ [2009] L 182/33.

¹⁷⁶COM(2005) 627 final, 7th December, 2005.

¹⁷⁷ COM(2008) 768 final, 13th November, 2008.

¹⁷⁸ Adopted on 4th August, 2010; http://www.bmu.de/files/pdfs/allgemein/application/pdf/nationaler aktionsplan ee.pdf.

¹⁷⁹ Energiekonzept für eine umweltschonende, zuverlässige und bezahlbare Energieversorgung, 28th September, 2010, see http://www.bmwi.de/BMWi/Redaktion/PDF/Publikationen/energiekonzept-2010.property=pdf,bereich=bmwi,sprache=de,rwb=true.pdf.

¹⁸⁰ Directive 2009/28/EC, OJ [2009] L 140/16, Art. 3(1) and annex I.

¹⁸¹ Gesetz für den Vorrang Erneuerbarer Energien (EEG) of 25th October, 2008 (Federal Official Journal part I, pp. 2074 et seq.), as amended.

¹⁸² At the end of 2010, the Kraft-Wärme-Kopplungsgesetz of 2002 was modified in 2008 and did not, as originally planned, expire at the end of 2011.

Market Incentive Program, ¹⁸³ the Renewable Energies Heat Act, ¹⁸⁴ support programs by public financial institutions ¹⁸⁵ and the Energy Savings Ordinance. ¹⁸⁶ In the transports sector, compliance with the sustainability criteria for biofuels plays a major role. EU law obligations were implemented by the Biofuels Sustainability Ordinance ¹⁸⁷ and in the field of power generation by the Biomass Power Sustainability Ordinance. ¹⁸⁸ In order to fully transform the new Renewable Energy Directive into national law, the Federal Diet currently (January 2011) debates on a "European Law Adaptation Act for Renewable Energy" providing for some further adjustments and specifications for existing instruments and schemes for the promotion of renewable energies. This EAG EE includes the implementation of the role model function of renewable energy use and increased energy efficiency in public buildings, a rule on the use of certificates of origin as well as defining the basis for the issuance and recognition thereof, moreover improvement of grid connection conditions and adjustment of energy statistics.

In addition to measures taken at national level, a number of other efforts to promote the development of renewable energy have taken place at regional and local level, ¹⁹⁰ according to the distribution of legislative and administrative powers within the Federal Republic. ¹⁹¹

Conclusion

Finally, I would like to come back to "Energy 2020", i.e. the Commission communication referred to at the start of this paper. ¹⁹² The EU body rightly states there that the Union is "on the threshold of an unprecedented period of energy policy". ¹⁹³ But

¹⁸³ Several guidelines are available at: http://www.bmu.de/erneuerbare_energien/downloads/doc/43273.php.

¹⁸⁴ Gesetz zur Förderung Erneuerbarer Energien im Wärmebereich of 7th August, 2008 (Federal Official Journal part I, pp. 1658 et seq.), as amended.

¹⁸⁵ For a short survey, cf. http://www.iwr.de/foerderung/bund.html.

¹⁸⁶ Verordnung über energiesparenden Wärmeschutz und energiesparende Anlagetechnik bei Gebäuden, Version of 29th April, 2009 (Federal Offical Journal part I, pp. 954 et seq.).

¹⁸⁷ Verordnung über Anforderungen an eine nachhaltige Herstellung von Biokraftstoffen of 30th September, 2009 (Federal Official Journal part I, pp. 3182 et seq.), as amended.

¹⁸⁸ Verordnung über Anforderungen an eine nachhaltige Herstellung von flüssiger Biomasse zur Stromerzeugung of 23rd July, 2009 (Federal Official Journal part I, pp. 2174 et seq.), as amended.

¹⁸⁹ Europarechtsanpassungsgesetz Erneuerbare Energien (EAG EE), proposal by the Federal Government of 8th November, 2010, Bundestags-Drucksache 17/3629.

¹⁹⁰Cf. some examples in NREAP, adopted on 4th August, 2010; http://www.bmu.de/files/pdfs/allgemein/application/pdf/nationaler aktionsplan ee.pdf.

¹⁹¹ There are only various specific energy- and/or environment-related legislative powers a the federal level, according to arts. 30, 70 et seq. of the German Basic Law (Grundgesetz).

¹⁹² Supra, fn. 1.

¹⁹³ Op. cit. (fn. 1), p. 20.

is it really true that "Member States have agreed" that the great challenges ahead "will be tackled most effectively by policies and action at EU level, 194 by 'Europeanizing' energy policy" which will include "directing EU public funding support towards priorities that markets fail to meet and that bring the most European value"? Of course, a new (EU) strategy must - and will - "ensure better leadership and coordination at the European level, both for internal action and in relations with external partners". And for sure, it seems also necessary "to look beyond the timescale of the present strategy to ensure that the EU is well prepared for the 2050 objective of a secure, competitive and low-carbon energy system" and to outline a roadmap for the longer term. But although the European Parliament has continuously supported ambitious energy and climate change objectives (till 2020). 195 will the majority of the people within the EU be informed about the risks and challenges as early and as clearly as possible, will the ordinary citizen be asked whether he would be ready to follow the road leading to quite fundamental changes in normal day life? To quote once more the Commission's initial statement: "The well-being of our people ... depends on safe, secure, sustainable and affordable energy". ¹⁹⁶ So, democratic principles would require informed consent of the whole people since it might be neither sufficient nor the proper way to restrict public participation to persons immediately concerned. European programs, projects and actions - especially relating to (energy) infrastructure - must be based on democratic legitimacy - or they will fail at last and hardly reach the end of the "rocky road to a real transition", ¹⁹⁷ i.e. to necessary radical social and mental changes of most human beings in the post "peak oil" era.

¹⁹⁴ Including regional initiatives for issues of common interest for two or more States see COM (2010) 721 final, 7th December, 2010.

¹⁹⁵ See, e.g., Press Release, 25th November, 2010, http://www.europarl.europa.eu/en/pressroom/content/20101125IPR00549/html/Climate-EU-should-move-to-30-emissions-reduction-target-say-MEPs.

¹⁹⁶ Op. cit. (fn. 1), p. 2.

¹⁹⁷ Chatterton/Cutler, The Rocky Road to a Real Transition, April 2008, available at: http://sparror.cubecinema.com/stuffit/trapese/rocky-road-a5-web.pdf.