

## **English Summary:**

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### **Liberalisation of the Energy Market for Electricity and Gas in the European Union:**

**A Survey and Implications for the Czech Republic**

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## **Executive Summary**

### **Liberalisation of the Energy Market for Electricity and Gas in the European Union: A Survey and Possible Implications for the Czech Republic**

This study deals with the legal foundations and the development of the policies of the European Union (EU) on the liberalisation of the energy market for electricity and natural gas from 1988 until March 2000 on the background of the sustainability goals and the environmental and climate policies of the EU. While the major driving force of the *deregulation efforts* by the European Commission has been the establishment of an *internal market for energy* (IEM), the implementation of EU climate policy commitments required a *re-regulation* in support of renewable energy. These developments being part of the *acquis communautaire* must be fully implemented by all new members. In this study the preparation of the Czech Republic for implementing these policies will be briefly reviewed and tentative implications will be discussed.

This study is organised in four parts. The *first* part deals with the political context of the EU: its widening and deepening and the evolution of its energy policy. The *second* part focuses on the liberalisation of the European market for electricity with a review of the structure of the electricity markets in Germany, France, Italy and Great Britain and of the three electricity networks, an assessment of EU liberalisation policy and its implementation in these four countries. The *third* part deals with the liberalisation of the European market for natural gas by offering an overview of EU liberalisation policy before the gas directive enters into force in August 2000. Finally part *four* discusses possible implications of energy liberalisation for the Czech Republic. The study concludes with a review of efforts by the Commission to resolve the conflict between liberalisation of energy markets and the climate policy driven sustainability goals.

*Chapter 1* reviews the stages of enlargement and deepening within the EU and chapter 2 focuses on the development of European energy law, energy policy and energy economy in net energy exporters (Netherlands, Denmark and Germany), in the large (France, Italy and Germany) and small net energy importers (Austria, Belgium, Finland, Sweden and Luxembourg) and in the cohesion states (Ireland, Greece, Spain and Portugal). It also discusses the development trends from an *internal energy market project* towards a *common energy policy*.

The development of the EU has been the result of a continuous process of a branching out into new policy areas, of deepening of its activities in the respective policy fields and of an enlargement of its membership from initially six (1952: UK, Ireland, Denmark), ten (1981: Greece), twelve (1986: Spain and Portugal) and fifteen (1995: Austria, Sweden, Finland) member states. Since the European Council in Helsinki in December 1999 the EU has been negotiating with twelve countries on the next stages of enlargement while a new Intergovernmental Conference (IGC) started in February 2000 to review the institutions and procedures until end of 2000. The EU - its founding institutions ECCS, EEC and EURATOM and its predecessor: the European Community - have gradually widened its scope by branching out to new policy areas. A major step ahead was the project to create an internal market by 1992.

Even though two of the founding institutions: the ECCS and EURATOM deal with two energy sources: coal and nuclear energy, „energy policy“ - in contrast to environment policy still lacks a separate chapter in the Maastricht (1992/1993) and Amsterdam treaties (1997/ 1999). Nevertheless two features of a supranational energy policy have gradually evolved: elements of a *common energy policy* (CEP) and of an *internal energy market* (IEM) in reaction to both external international challenges (oil crises of the 1970s: *security of supply* and climate policy requirements and energy cooperation of the 1990s) and internal developments (establishment of an *internal market*). The internal market project was the key policy driver and the DG for Competition policy was the major political actor within the European Commission for the liberalisation of the electricity and gas markets.

The *second chapter* reviews both the *primary treaty-based* and the *secondary European Community energy law* and the development of energy policy objectives in *six phases* and the *two stages* of the liberalisation policy efforts for electricity and gas. After a brief review of the European energy economy with a focus on the energy producers (Netherlands, Denmark and the United Kingdom), the large (Germany, France, Italy) and small energy importers (Austria, Belgium, Finland, Sweden, Luxembourg) and the cohesion countries (Ireland, Greece, Spain, Portugal), the project of an *internal energy market* with the liberalisation of the electricity and gas grids, the goals of a *common energy policy* and the efforts towards a *European energy policy* will be outlined, and the role of the four large EU countries will be assessed.

*Chapter 3* outlines the general framework of this market, the industrial structure, ownership and status of government regulation prior to the liberalisation of the electricity market for the four large EU countries: Germany, France, Italy and the UK. Then it discusses the consequences of the reform in this market. *Chapter 4* deals with the two stages of the liberalisation of the electricity market from the energy transit directive (1986-1992) to the directive on the internal market for energy (1991-1999) and it offers a brief overview of the trans-European electricity network. *Chapter 5* presents problems resulting from the implementation of EU electricity liberalisation for renewables. This is followed by a survey on the legal implementation of electricity liberalisation in all 15 EU states and a deepened presentation of the four large EU countries: UK, Italy, France and Germany including the specific effects on Germany until March 2000.

This survey of the national implementation of the electricity directive in all member countries illustrated that the EU is still far from *one* liberalised European electricity market. Since the electricity directive was implemented since 1999 many changes occurred: prices fell significantly, the concentration process and the pressure on local distributors increased challenging investments in energy savings and renewables. The EU goal to double the share of renewables to 12% until 2010 requires to bring liberalisation and sustainability into balance. According to the Kyoto Protocol (1997) EU members are committed to reduce their emissions of six greenhouse gases by 8%. The three Kyoto flexible mechanisms: *Joint Implementation*, *Emissions Trading* and *Clean Development Mechanisms* offer new

instruments that will assist EU countries in complying with this goal. In early 2000 the Communication of the European Commission: *Towards a European Climate Change Programme* and its Green Paper on *Greenhouse gas emissions trading within the European Union* opened the door for a conceptual and a political debate. The planned draft directive on energy efficiency and renewables by the Energy and Transport DG may specify the goals while policy guidance under preparation in the Competition DG will offer a framework for environmental subsidies.

*Chapter 6* presents the general features of European market for natural gas and describes the specific industrial structure and the ownership in Germany, France, Italy and Great Britain and the existing trans-European gas transmission networks. *Chapter 7* focuses on two stages in the EU gas liberalisation and the implementation of the EU gas directive into German law. On August 2000, the gas directive is scheduled to enter into force in all EU member states. Some energy experts assume that EU gas prices will drop significantly. For the natural gas market, similar trends but different speeds can be foreseen with respect to its liberalisation.

*Chapter 8* presents the Czech position paper on energy policy in the negotiations with the EU. It outlines the present structure and ownership in the Czech electricity and gas sectors and the legal requirements to adapt to the *acquis communautaire* with the double challenge of privatisation and liberalisation. Prior to joining the EU, the electricity and gas industries in the Czech Republic are confronted with a dual challenge of privatisation and liberalisation. Of the two generating and transmission companies until March 2000 about 33% of CEZ but 0% of Transgas were privatised. With respect to CEZ, according to the privatisation plan of the government by 2002 a decision will be made on the method of privatisation. Of the eight distribution companies privatisation reached between 15 and 34% for the municipalities. A sale of these 16 companies is planned between 2000 and 2002. In spring 2000, the privatisation strategy was still under discussion between the Czech Ministry of Industry and Trade and the Ministry of Finance. As the direct foreign investment in the Czech energy sector is still modest, it may be expected that foreign companies will purchase significant shares of both CEZ and Transgas.

For the decision makers in the Czech Republic, it may be of interest to draw lessons from the experience the United Kingdom and Italy had with privatisation of their electricity and gas industries. With respect to liberalisation, several consequences that can be observed in Germany with the intensification of competition and mergers among European electricity companies will become true in the Czech Republic within the next few years.

*Chapter 9* discusses fundamental conceptual tensions between liberalisation and sustainability. So far the consequences of the liberalisation of the electricity market have not favoured a sustainable development and the goal of the Commission to double the contribution of renewables by 2010. In Germany, the downward trend in electricity prices challenged the competitiveness of the new decentralised cogeneration CHP plants built by many municipal electricity distributors during the 1980s and 1990s. In Germany in March 2000 two laws were approved in the Federal Parliament to protect the co-generation plants and to support renewables.

There are several examples for an inclusion of environmental concerns into a liberalised electricity market. The *IEA Electricity Handbook* pointed out that in England and Wales the electricity, coal and gas reforms resulted in a 25% decline in the share of electricity generated from coal and to a shift to gas-fired power plants. But in systems largely based on non-fossil fuels competition may increase CO<sub>2</sub> emissions. As the European Commission, the IEA Handbook did not consider subsidies as the most market-friendly approach to environmental regulation. In the United States, the 1990 amendments to the Clean Air Act introduced a system of tradable emission permits, and in 1994 a regional programme was introduced in

Southern California, that allows a trade of emission permits for nitrogen oxides. The IEA study refers to one estimate according to which „the cost savings from the United States’ nation-wide acid rain emissions trading programme is 20 to 50 per cent by 2010.“ Of interest may also be the experience of the Sacramento Municipal Utility District (SMUD) in Northern California that made increasing of energy efficiency, improving the air quality and support for advanced renewable energy technologies major goals in a liberalised energy market.

In spring 2000, the Energy and Transport DG of the European Commission was drafting a new Directive on a sustainable energy policy in a liberalised internal energy market that was delayed several times. This draft Directive on a sustainable energy policy in a liberalised internal market for energy may overcome the contradictions and tensions between „sustainability“ and „competition“.

Thus, the experience with market based and compatible support schemes for renewables such as tradable green certificates requires further scientific scrutiny and political debate that fully includes the citizens and consumers. Furthermore, a fundamental rethinking of the regulatory process may be appropriate, as has been suggested by Jens-Peter Schneider who called for a re-regulation in the electricity sector based on co-operative network structures that combines support for innovation, fulfilment of environmental obligations with strategies of societal self-regulation. He considers as a major function of regulatory reforms to foster innovative processes, to limit negative consequences and to offer mechanisms for conflict resolution. Given the major deficits in the new German energy law of 28 April 1998, Schneider argued that regulatory law in the energy sector should itself become an object of innovative processes. Given the potential for harmonisation community law offers and due to the economic and ecological globalisation processes he expects an increasing openness of energy law towards innovation.

Both the new German Renewable Energy Sources Act that entered into force on 1 April 2000 and the forthcoming EU draft Directive on Renewables are first efforts for such a co-operative re-regulation as are the Communication on EU policies and measures to reduce greenhouse gas emissions: Towards a European Climate Change Programme (ECCP) (COM(2000)88) and the Commission Green Paper on tradable emissions permits (COM(2000)87) by the Environment Commissioner of 8 March 2000.

In the Czech Republic, as in many other Central and Eastern European countries, this tension between liberalisation and sustainability is also reflected in different approaches of the Ministry on Industry and Trade and the Environment Ministry to implement the *energy acquis* of the EU. Within the European Commission, this tension is also reflected in the *Climate Communication* and *Green Paper* of the Environment Commissioner, Margot Wallström, in the draft directive on renewables by the Energy and Transport Commissioner; Loyola de Palacio, and in the policy paper on environmental support schemes of the Commissioner on Competition policy, Mario Monti.

The appendix. includes 17 key documents (directives, decisions) of the European Union on the liberalisation of the electricity and gas markets, including the explanatory memoranda of the Commission on both policy areas and official summaries of EU policy papers on common energy policy, the internal market for energy and energy efficiency and a translation of the German Renewable Energy Sources Act that entered into force on 1 April 2000.