

LIBERALIZATION OF EU GAS SECTOR: IMPACTS AND PERSPECTIVES FOR FUTURE DEVELOPMENT

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Summary

The paper summarizes liberalization and EU gas market opening along with its prospects and forecasts. In order to establish a single European gas market, EU Directives must be observed. Furthermore, the objective of Europe's energy policy is the provision of sustainable, secure and competitive energy to European consumers. The European gas sector is committed to ensuring that natural gas – with strong environmental advantages – is able to play its full part in a competitive, secure and sustainable energy sector. As regards competitiveness, the European gas sector is ensuring a competitive and non-discriminatory energy market, within which gas plays an important part. A successful internal market is essential to the competitiveness of Europe and contributes to investment in infrastructure to support supply security, efficiency and service. In a competitive energy market, environmental concerns are addressed through market-based instruments. The paper also contains an analysis of the recent changes in the structure of gas demand and supply and its consequences for enhancing the competition in the EU gas market. It discusses the role of growing gas demand, taxation of gas production and trade along with the dependency of the EU gas sector. Liberalisation of the gas market is a very important tool which contributes to the development of the European economy, in order to achieve its goals of efficiency and competitiveness in an ever-increasing global marketplace. Clearly, the implementation of the EU Gas Directive can be viewed as a final step by the EU to accomplish an internal market for gas. The major objective is to promote increasing competition in the natural gas market, and

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to reduce gas prices for all customers and thereby to increase the competitiveness of (energy-intensive) European industries and economies. Moreover, this paper discusses prospects for increased consumption of natural gas and future trends of the European gas market within the European Union (EU) up to 2030, presuming that the liberalization effects can provide positive results on functioning of the European Gas Sector and thus contribute to a much lower increase in gas prices.

Key words: *EU gas sector, European gas market liberalization, development of European gas sector, EU energy policy.*

1. INTRODUCTION

The EU gas sector plays a vital role by being a valuable initiator of European economic development. The extreme importance of gas as an energy source has been proved by recent events which resulted in a break in gas supply from Russia and Ukraine to the EU. Europe and especially transition countries felt the biggest impact of the gas crisis in the beginning of 2009. Companies' losses that were counted in billions are indisputable evidence of EU's gas dependence. Furthermore, restrictions on CO₂ emissions, the nuclear phase out announced by some member states, high emissions from coal based generation, and barriers to rapid development of renewable generation are evident factors that seem to force the EU to be highly dependent on natural gas. EU is facing a growing dependency on foreign regions not only for the supply of oil but also for the supply of gas. The situation is further complicated by large investments that will be needed and uncertain investment conditions that prevail in some of the regions targeted to cover the future EU gas demand.

Natural gas accounts for a relatively large share of Europe's energy consumption, and with global reserves for over 60 years its market share is expected to continue to grow. Gas has long been the fuel of choice because of the efficiency in this form of energy distribution, its flexibility and control of its use, its low emissions of CO₂ and low levels of pollutants. These qualities make gas attractive for direct use in homes and businesses.

In order to take advantage of these gas features, the EU should create a proper atmosphere in order to give momentum to liberalization. However, there are multiple complications which make liberalization much harder. The European Union is facing numerous problems in its gas market. High concentration rate with a few large firms dominating the market, high degree of "vertical integration" whereby a single company controls all stages of the production and distribution of gas, and market fragmentation along national lines are still obstacles which EU needs to cope with. Some problems are effectively solved but some still exist due to unforeseen deviations in market functioning. Therefore, the basic hypothesis of this study is that liberalization effects can provide positive results on the functioning of the European gas sector and could contribute to a slower increase in gas prices.

After these introductory remarks, the second part of this study discusses the role of the EU gas sector within the EU Energy policy. The third part focuses on European gas

market liberalization and its impacts. The fourth part contains an analysis of the recent changes in the structure of the gas demand and supply and its consequences for increasing competition in the EU gas market. The final part of this study outlines prospects for increased consumption of natural gas within EU up to 2030 and other indicators which measure the general condition of the EU gas market in near future. The overall objective of this study is to define EU gas market liberalization effects and to detect problems that make liberalization less efficient in terms of a better perspective for the European gas sector.

2. ROLE OF THE EU GAS SECTOR WITHIN EU ENERGY POLICY

The process of liberalizing electricity and gas markets started about 10 years ago. During these 10 years, many of Europe's citizens have benefited from more choice and more competition, with improved service and security. The assessment carried out by the Commission and Europe's energy regulators has however demonstrated that the process of developing real competitive market is far from complete. The goal of Europe's energy policy is the provision of secure, competitive and sustainable energy to European customers. The role of this paper is to show how natural gas can contribute to achieve three aims – sustainability, competitiveness and supply security within a balanced energy policy framework (Eurogas Position Paper, 2008):

As regards competitiveness, the EU gas market is committed to ensure a competitive and non-discriminatory energy market, in which gas is an important component. A successful internal market is essential to the competitiveness of Europe, and contributes to give incentives to investment in infrastructure in order to support supply security, efficiency and service. In a competitive energy market, environmental concerns are readily addressed through market-based instruments.

When it comes to supply security, diversity of the sources of energy is the best means of ensuring that Europe continues to have access to the energy it needs. This requires full exploitation of Europe's indigenous energy sources with renewables and new technologies as supporting instruments until they are established, although it is essential that such support in the initial stages does not distort market competition.

As regards sustainability, natural gas as the most environmentally friendly fossil fuel can make a major contribution towards Kyoto objectives and beyond. New gas technologies and applications play a major part in meeting the challenges of climate change - through high efficiency boilers and appliances, in power generation (including CHP) and in applications such as road transport.

These comparative characteristics of strong environmental advantages are well-positioned in the policy debate, and capable of playing its full part in a competitive, secure and sustainable energy sector. In practice, far too many EU citizens and businesses are lacking a real choice of supplier. Market fragmentation along national borders, a high degree of vertical integration and high market concentration are the root cause why the internal market has not really been completed (Proposal for Directive 2003/55/EC, 2007).

The single market for gas will, gradually, produce a competitive and vibrant gas market across the European Union. Its main goal is to contribute to the achievement of the three main EU energy policy objectives of increased competitiveness through better service for energy consumers, security of supply, and protection of the environment including meeting the EU's Kyoto commitments to reduce emissions of greenhouse gases such as carbon dioxide (CO₂).

In November 2005, the European Commission published its first major review of the market liberalization process, and was highly critical of the slow progress towards an open, competitive market shown by many member states (Jackson and Harris, 2008). At the same time, the EC competition authorities launched an enquiry into the energy sector, publishing scathing observations on the lack of real competition in the gas market and identifying enormous barriers to entry for new gas suppliers.

The EU has detected that reliable energy supplies are vital for European consumers, for the competitiveness of its industry and for a well-functioning society (Kjärstad and Johnsson, 2008:877). In October 2000, the EU–Russia Energy Dialogue was initiated, in June 2003 a series of guidelines for Trans-European energy networks (TEN-E) were put forward in a decision by the European Parliament (1229/2003/EC) and the Directive 2003/55/EC concerning common rules for the internal gas market was adopted. However, in June 2005, the commission opened an inquiry into the functioning of the internal gas market caused by recent dramatic increases in gas and electricity prices and numerous complaints about various barriers to entry. The inquiry was published in November 2005 concluding that the progress of liberalizing the internal gas market had not moved forward as rapidly as predicted and wanted with respect to market concentration and market integration as well as transparency. Perhaps most relevant, the inquiry concluded that there were no clear trends towards more market based pricing mechanisms (European Commission, 2005).

These reports will give new resolve to the enforcement of competition rules by both European and national regulators. The expectations are that few of the key barriers faced by new market entrants will now be removed, giving an enormous boost to the development of gas trading, especially in the key German market. The temporary conclusion is that liberalization is not completely meeting expectations.

Do these facts make people think that liberalization can be 100% efficient? Obviously not, because in the past few years, gas prices have been dominated by two factors – the rising price of oil and the declining EU production of gas. It is very complex to predict the trend of oil prices which are directly linked to the level of gas prices. Comparative advantages of gas as an energy source in the framework of energy policy have already been mentioned. These advantages should systematically give impetus to creating the EU gas sector, mitigating all its negative effects through the liberalization process.

3. OPENING OF THE EUROPEAN GAS MARKET

First usage of gas started to change the European energy balance in the 60s, particularly in the Netherlands and the UK, because of its large domestic resources. Until the

end of the 80's, European gas policy was focused mainly on limiting the use of natural gas for electricity generation and promoting extraction of gas in the Community. This was to secure the availability of sufficient natural gas to 'highly valued' (small) consumers. Until 1990, the issue of gas market liberalization did not feature significantly on the policy agenda of the European Commission. Its concerns were focused primarily on issues of security of its supply. The gas industry was allowed to operate according to the individual wishes of each Member State government. Perhaps because of the strategic importance of energy supply, no serious attempts were made to establish a free market in either gas or electricity, in spite of the EU objective to establish a free market for other goods and services. In 1988, the Commission published the white paper entitled 'The Internal Energy Market' with the aim of EU Member States establishing a single market for energy by 1992. Clearly, the realization of a single market for energy presented more serious obstacles than for other commodities. From that point on, liberalization of gas and electricity markets has held an important place on the Commission agenda. The first relevant directive was adopted in 1990 and pertained to price transparency for industrial gas prices. Member States were required to inform the Commission about gas prices under clearly defined categories. The Price Transparency Directive and the gas and Electricity Transit Directive of 1990 could be regarded as first, preliminary steps to the opening-up of the European energy markets to competition. The Transit Directive enabled nominated gas companies to use the pipelines of other nominated gas companies, provided that gas crosses an internal European border. During 1991, the Commission started to work on its main proposal for the realization of a true internal energy market, which was stimulated by developments in the UK, where the liberalization of gas market was started. Discussion on liberalization of the gas markets in the EU continued, and after several years of debate a political agreement on a new EU Gas Directive was finally reached in December 1997. After being adopted by the Energy Council with a unanimous common position, the EU Gas Directive was finally approved by the European Parliament in June 1998 and entered into force on August 1998 (Van Oostvoorn and Boots, 1999:7-8).

The EU Gas Directive aimed to create a full competitive market in natural gas through common rules for transmission, distribution, supply and storage. Central to this aim was the requirement to open up the transmission network and storage facilities to third party access, so that eligible customers can buy gas directly from producers if they wish. The Directive established minimum degrees of market opening and also allowed new entrants to build pipelines (Van Oostvoorn and Boots, 1999:5). Thus, since 1998, things have been moving fast. Member States have prepared the implementation of the gas directive to allow competition and market opening to take effect as of 10 August 2000, the date by which Member States had to transpose the directive into national legislation. This date was a milestone in this process and is marked as the beginning of a new era in European gas market development and represented a fundamental change in the organization and operation of the European gas market. The basic objective of the internal market for natural gas, as in all other sectors of the European economy, was to create one large, single market in Europe by integrating national markets, which have hitherto been compartmentalized in separate markets typically dominated by one or a few players. In order to achieve a fully operational internal market in the gas, electricity and other sectors, the European Council

