

## ENERGY MARKET IN POLAND AND IN EUROPEAN UNION

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**Introduction.** From the time when Poland was accessed to UE (May 2004) the energy sector in Poland is the part of European sector and it is liable the same rules as other Member States in Europe. One of the major goals of the Community is to eliminate barriers between member states. The energy is the very important issue in new century all over the world, so the European Commission is taking steps to make the energy sector more efficient and environmentally friendly. Nowadays the European Union has to adjust and to face a series of profound changes. These are characterized by privatization, liberalization, deregulation and intensified competition. These challenges require an integrated policy linked to competitiveness, energy and the environment [1]. The European Commission has drafted ambitious plan to reform the energy sector in an effort to increase competition in the energy market, reduce reliance on energy imports, and improve climate control. In Lisbon in 2002, the leaders agreed to transform Western Europe into the "world's most competitive and dynamic economy" by 2010. The UE commission purposes to transform Europe into a highly efficient and low CO<sub>2</sub> energy economy by accelerating a new industrial revolution, activating change to low carbon growth, exploiting renewable sources [2]. If we consume more than we produce we will be obliged to either import more or to consume less. Even if we were to do that, we would never be self-sufficient in energy. Energy consumption can be at lower level if the efficient economy will be used (e.g. energy-saving projects, lighting, air-condition) [3]. The crisis in California shows how important for nowadays are long-term solutions and anticipating in the coming events at energy market [4]. Increased production and consumption of renewable energy is a significant part of modernizing the energy sector.

**Energy market competition.** The most important indicator for achieving growth and consumer prosperity in the European Union is well functioning energy markets that ensure secure energy supplies at competitive prices. To achieve this objective the EU decided to open up Europe's gas and electricity markets to competition and to create a single, common European energy market. The goal was to leave the protracted period of extreme high prices for customers and low prices for producer energy [5]. The process of market opening has significantly changed the functioning of the national markets, provided new market opportunities, led to the introduction of new products and services. Competition should initially lowered energy prices in Europe in line with market fundamentals [6]. In the theory of competition there are such a large number of buyers and sellers that none can individually effect the market price. This means that the demand curve facing an individual firm is perfectly elastic. Competition leads to efficiency growth, considering that the best performing entities are the ones that innovate, extend their market share and create new jobs. In order to guarantee conditions of competition the UE introduced energy law liberalization. The competition at energy market can be understand as the competition between enterprises which are engaged in electricity

activities. The electricity industry consists of five main activities: (1) the production or generation of electricity, (2) the transport of electricity on high voltage levels (transmission), (3) its transportation on low voltage levels (distribution), (4) the marketing of electricity to final customers (supply), and (5) the selling and buying of electricity on wholesale markets (trading). The biggest problem in the liberalization of the energy markets in the EU is that the liberalization is not centrally implemented by the EU, but by the Member States itself. This is the reason for completely different levels of market opening in the EU. Some states (Great Britain, Sweden, Finland, Germany and Austria) have already a completely opened market, other states did already implemented the liberalization to a quite high percentage and hope to finish the process during the nearest future (like The Netherlands or Spain), and other countries still have to make many efforts (for example France, Poland or Greece). These different rates of market opening in the EU result in a lack of real competition.

**The steps towards liberalization.** Energy liberalization in the European Union (EU) is occurring as a result of Directives, and policy papers and national initiatives, though this liberalization is occurring inconsistently and at various paces in the different Member States. Energy liberalization is also being implemented in the context of initiatives to encourage renewable energy and energy efficiency. The first important piece of Community legislation aimed at liberalizing the electricity sector was Directive 96/92/EC (First Electricity Directive). The Directive removed legal monopolies by requiring Member States gradually to allow large electricity customers to choose their suppliers. This Directive also obliged vertically integrated companies to grant third parties access (TPA) to their transmission and distribution networks. The Internal Market for Electricity Directive 96/92 establishes common rules for generation, transmission, and distribution of electricity. Under Article 11 of the Internal Market for Electricity Directive, a country may provide for priority for dispatch for electricity from renewable sources, wastes, and from combined heat and power processes. This allows for provisions that favour environmental friendly energy over other forms of electricity. The Second Electricity Directive 2003/54/EC aimed at complete market opening. It required that all non-household electricity customers became eligible by 1 July 2004 and the market must be opened up for all consumers by July 2007. The Second Electricity Directive places requirements in the four main areas covered by the earlier Directive but also requires the appointment of a sector regulator. The smaller countries have generally been slow in implementing the Directive. Only Austria (2001) and the Netherlands (July 2004) have introduced full retail competition. In September 1996, Poland first approved guidelines for implementing reforms in the energy sector. These guidelines establish an energy regulatory authority and allow third party access to the Polish electricity transmission grid. The objective was to create a competitive energy market through the privatization of the energy industry, and to attract the investment necessary for industrial modernization and environmental protection. Poland has signed a number of international agreements and accords on the environment, including adopting all obligations from the Convention on Climate Change, as well as other agreements to control trans boundary emissions [7].

#### **Challenges for the future.**

1. The most important challenge for the development of the Polish policy regarding the energy sector is to provide for the energy security of the state, conditioning both the implementation of the constitutional duties and tasks of the state e.g. security, competitiveness and environment protection. Energy security understood as a condition of the economy which provides for the current and prospective demand of the customers for fuels and energy in the way which is justified from the technical and economic point of view, complying with the requirements of the environmental protection. An integral element of the energy security of the state is the security of the imported energy carriers supply, which can be obtained exclusively by long-term diversification of access to natural gas and oil deposits. Improvement of competitiveness of domestic economic entities and products and services offered at international markets, as well as domestic market. Natural environment protection against negative results of the power industry processes, using such programming of the activities in the energy sector, among other things, as to ensure natural resources conservation for contemporary and future generations.

2. Energy prices have been rising rapidly over the past years. The most important reason is the growing imbalance between global oil demand and supply. European energy prices depend heavily on global energy prices. Rapidly rising fuel prices and possible supply disruptions can have serious consequences for economic growth, political stability and EU's competitive position.

3. To improve the environment, the EU Commission in 2007 proposes that 20 % of its energy mix should come from renewable sources by 2020 (from the present 6 %), where as biofuels should have a minimum target of 10 %. Improved energy efficiency and diversification between energy sources will be at the core of EU energy policy over the next years. It should also be essential for national, regional and city planners, as well as business enterprises and homeowners.

4. With the prospect of liberalization throughout the European energy markets, coupled with the increasing emphasis on climate change obligations and emissions targets, energy companies across Europe must make tough decisions and forge the right strategies if future profitability and security of supply is to be ensured.

#### **References**

1. Ilie L., Horobet A., Popescu C. Liberalization and Regulation in the EU Energy Market, MPRA, Paper no. 6419, s.2.
2. Borowski P. Rozwój energetyki – poszukiwanie niezależności energetycznej, Urządzenia dla energetyki, nr 3/08, s.78.
3. Ristinen R., Kraushaar J., Energy and the Environment, John Wiley and Sons, 2005, s. 232.
4. Sweeney J. The California Electricity Crisis, Hoover Institution Press, 2002, s. 282.
5. James T. Energy Markets: Price Risk Management and Trading, Wiley, 2007, s. 175.
6. Duarte J. Successful Energy Sector Investing: Every Investor's Complete Guide, Prima Lifestyles, 2002, s.86.
7. Borowski P. Biomasa jako odpowiedź na wzrost bezpieczeństwa energetycznego i zmiany klimatyczne, Przegląd Organizacji, nr 7-8/2008, s.28-32.
8. [www.mg.gov.pl](http://www.mg.gov.pl)
9. [www.europarl.europa.eu](http://www.europarl.europa.eu)

**Borowski P. Energy market in Poland and in European Union.**

The article discusses the energy market problem (liberalization and competition) in common market in Europe and the repercussion for Poland in the light of accession to EU. The process of liberalization of the electricity market 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. Without a competitive and efficient European electricity market, Europe's citizens will pay excessive prices for what is one of their most fundamental daily needs. The electricity market is also essential for Europe's competitiveness as energy is an important input for European industry.

**Key words:** energy market, competition, liberalization