

Renewable Energy Market in Lithuania



Jurevičius, Balčiūnas & Bartkus

Professional Law Partnership

Subačiaus str. 7

LT-01127 Vilnius

Lithuania

Tel: +370 5 274 24 00

Fax: +370 5 274 24 44

E-mail: advocate@jbblegal.lt

<http://www.jbblegal.lt>



Iraida Žogaitė

Partner, Attorney-at-Law
Jurevičius, Balčiūnas & Bartkus
Professional Law Partnership
Subačiaus 7
01127 Vilnius
Lithuania
T +370 5274 2438
E iraida.zogaite@jbblegal.lt

What is the current state of the renewable energy market in Lithuania?

Renewable energy sources in electricity sector have been given considerable attention since the new Law on Electricity came into force on 1 January 2002. They are considered as an important tool which should help to reduce dependence of Lithuanian economy on Russian oil and natural gas resources as well as to reduce consequences of decommissioning Ignalina Nuclear Power Plant which shall remain the biggest producer of electricity in the country until the end of 2009. However, despite the fact that the resolution of the Government of the Republic of Lithuania (hereinafter-the Government) on affirmation of a procedure for the promotion of generation and purchase of electricity generated from renewable energy sources is in force since 2001, its effect is relatively modest.

Referring to the data possessed on December 2006, electricity generated from renewable sources has accounted for 3.6% of the total electricity consumption in the country.

•**Wind energy:** Wind-generated electricity has amounted to 3% in total and had installed capacity of 1 MW. However its share is expected to grow rapidly in the next few years.

•**Biomass:** Electricity generated from biomass and biogas was accountable for 6% of total amount of electricity generated from renewable resources. The usage of biomass fuels for electricity generation commenced only in April 2006. Since then the market share of this type of electricity was very limited, until Vilniaus Energija UAB started supplying electricity generated from wood waste. In 2006 biomass plants had installed capacity of 3 MW.

•**Biofuel:** The Government has also set a target of reaching 5.75% share for biofuels in

total amount of fuel consumption in transport sector till the end of 2010.

•**Geothermal energy:** Geothermal energy has not been widely applied to the electricity sector, although it is used for heating of individual houses.

•**Hydropower:** Hydro power plants were accountable for 91% of this amount. Almost 86% of all electricity generated by hydro power plants was produced by the Kaunas Hydro Power Plant. Total installed capacity of all hydro power plants in 2006 amounted to 128 MW.

•**Photovoltaic / Solar thermal energy:** Solar energy is considered inefficient for the generation of electricity in Lithuania because of the small amount of sunny days per year and is not used for this purpose.

In heating sector the emphasis is currently concentrated on the efficient usage and saving of the energy produced. As a result, the program on the modernization of the blocks of flats has been launched and it is highly expected to expand in the nearest future.

HOW DOES THE LITHUANIAN ELECTRICITY MARKET WORK IN TERMS OF GENERATION, TRANSMISSION AND SUPPLY?

The existing electricity market structure was created in 2002, when the new Law on Electricity came into force. The state controlled vertically integrated company which was holding a monopoly in the electricity market was divided into separate companies on the basis of technological phases: generation, transmission and distribution/supply. Consequently, electricity generation, transmission and distribution/supply activities have been legally unbundled. Electricity generation and independent supply sector became unregulated, except for those having 25% share of the electricity sales market. Transmission, distribution and public supply activities, as a natural monopoly, remained under regulation. Pursuant to the Law on Electricity, the following activities are subject to licensing by the National Control Commission on Prices and Energy (hereinafter-the NCCPE): (i) electricity market operator; (ii) electricity transmission; (iii) electricity distribution; (iv) public and independent supply. The NCCPE also sets price caps for electricity transmission and public supply.

The state enterprise Ignalina Nuclear Power Plant which generates about 70% of electricity is still dominant on the Lithuanian electricity market. Following the commitment to the European Union, it must be decommissioned till the end of 2009. However, in June 2007 the Parliament passed the Law on the Nuclear Power Plant providing that Lithuania and its strategic partners (Latvia, Estonia and Poland) would construct a new nuclear power plant till the 2015-2018 to replace the current one.

Lithuania has a single national transmission network company Lietuvos Energija AB. It functions as the owner of the electricity transmission grid (110-330 kV), system operator and market operator.

Distribution activities in Lithuania are mainly carried out by two distribution companies: state owned Rytų Skirstomieji Tinklai AB (hereinafter -RST AB) and private company Vakarų Skirstomieji Tinklai (hereinafter - VST AB). RST AB is responsible for the maintenance, reliability and development of low and medium voltage electricity networks located in the eastern part of Lithuania, while VST AB - in the western and central part of Lithuania. They also operate as public electricity suppliers. Other distribution companies are small or industrial enterprises with internal networks directly connected to transmission networks within their territories.

There are two types of suppliers: public and independent. Both can trade in electricity at auction and/or under bilateral contracts with producers and customers. A public electricity supplier is obliged to supply electricity to all customers when there is no possibility or preference to choose a supplier at tariffs approved by the NCCPE, while independent suppliers supply electricity to customers at a contractual price. Customers are allowed to choose their supplier freely and purchase electricity at negotiated prices as well as change a supplier without any negative consequences. In 2006, in the electricity supply sector, 7 companies held licences of public suppliers, 20 companies were licensed as independent suppliers, whereas 5 companies were actually engaged in the activities of the independent supplier. Only Lithuanian suppliers operate on the electricity supply market without any foreign capital undertakings being engaged in such activities.

There is little competition in both generation and supply sectors of electricity. However, the situation is expected to change as a result of construction of interconnections with Poland and Sweden which consequently shall integrate Lithuania to electricity systems of Western Europe and Scandinavia. The link with Poland is currently under construction and a decision which of two Baltic countries - Lithuania or Latvia - the Electricity Bridge to Sweden should be built from is to be made in the nearest future.

WHAT ARE THE JURISDICTION'S TARGETS FOR GENERATION FROM RENEWABLE SOURCES? WHAT SUBSIDY AND INCENTIVE MECHANISMS ARE THERE FOR RENEWABLE ENERGY?

In the nearest future further development of wind power plants is to be given priority with the aim to reach a total capacity of 200 MW by the end of 2010. Moreover, possibilities for creation of new on-shore and off-shore wind power plant parks and geothermal power plants are to be explored by 2012. Incentives are provided for construction of new small hydro power plants with the maximum capacity up to 10 MW as well as construction of new and further development of existing co-generation plants using biofuel (wood waste in particular). The share of electricity generated from renewable energy sources in the total electricity consumption in the country should reach 7.7% in 2009 which shall amount to 995.2 GWh (of which 320.4 GWh - by wind power plants; 452 GWh - by hydro power plants; 219.5 GWh - by biomass power plants and 3.2 GWh - by solar and geothermal power plants).

Electricity generated from renewable energy sources is purchased at higher tariffs approved by the NCCPE. In particular, electricity generated from biofuel and hydro-power is purchased at the price of LTL

0,2/kWh (approx. EUR 0,058/kWh) and from wind power - LTL 0,22/kWh (approx. EUR 0,064/kWh).

Purchasing prices are guaranteed until December 31, 2020.

Power plants using renewable energy sources are given a 40% connection fee discount when connecting to the existing systems of energy undertakings.

EXPECTATIONS AS TO FUTURE DEVELOPMENTS IN THE MARKET

The major challenge to Lithuanian electricity market and its economy as a whole in the nearest future shall be the decommissioning of the Ignalina Nuclear Power Plant by the end of 2009 under the commitment to European Union.

Even after the decision to build a new nuclear power plant has already been taken by the Government and despite secured self-efficient generating capacities at least till 2013, further development of the usage of renewable energy sources for electricity generation shall be given a considerable attention. Hydro power plants and the Kaunas Hydro Power Plant in particular will remain the main source of "green" electricity, however, the amount of wind power plants and electricity they generate should increase significantly in following 4 years.

Construction of electricity bridges with Poland and Sweden shall remain among strategic national projects with the aim of integrating Lithuania to Western Europe's and Scandinavian electricity networks, ensuring reliable supply of electricity, reducing country's energy dependence on Russian Federation after the decommissioning of Ignalina Nuclear Power Plant and enhancing overall competitiveness of the electricity market.