

OVERVIEW

of the BA Environmental Protection and Energy Committee's Contribution to Developing Baltic Energy Strategy

In the Baltic States, consumption of energy resources is increasing in all spheres, including the consumption of electric power, oil products and thermal energy. Nevertheless, the increase in electricity consumption significantly lags behind the increase of the gross national product. That is a consequence of the growing energy consumption by the private sector and the rapid growth of the economy. It must be taken into consideration that in 2009 the Ignalina Nuclear Power Plant will be shut down completely, and all existing reactors at the Narva power plants in Estonia must be shut down by 2016. For environmental reasons, Estonia plans to renew and modernize production capacity to meet only domestic needs. The Baltic States must seek other sources of energy, and thought must be given to constructing a new base-load power plant as soon as possible. Currently, the GDP of Latvia's economy is over 10%. It is estimated that in 2015 it will be 7%, but in the long term (by 2025), 5.5%. In contrast, the annual increase in electrical power has never exceeded 3.5%. Moreover, the European Commission plans to draft a new directive by the end of 2007 making legally binding what is now merely a recommendation—namely, to require that the share renewable energy sources in energy production increase up to 20%. It is significant that on 27 February 2006 the prime ministers of Latvia, Lithuania and Estonia agreed to develop a common Baltic energy strategy and to support a feasibility study for constructing a new nuclear power plant in Lithuania. It was also agreed that Poland would participate in this feasibility study. At the same time, each country is continuing to develop alternative sources of energy that are environmentally friendly and to cooperate with other energy-supplying countries.

The Baltic States have a well-developed internal system for transmitting electric power and natural gas, as well as providing district heating. The electric power and natural gas supply system in the Baltic States has well developed interconnections, but outside the region these connections are limited and oriented only toward Russia and Belarus.

It is possible for all three Baltic States to achieve great savings in energy consumption, especially in the sphere of heating supply.

In developing an energy policy for the Baltic States, it is very important to create a common infrastructure that is compatible with the energy networks of other EU member states. *Estlink*, the first electric power network connection between the Baltic States and Finland, started to function in 2006. The electric power connections between Lithuania and Poland, as well as the cable project that will connect Sweden and Latvia or Lithuania, is also important. It is also necessary to consider the possible integration of the Baltic States into UCTE (Union for the Co-ordination of Transmission of Electricity). The natural gas storage facility at Inčukalns, which is

used by the Baltic States and Russia, has strategic importance in ensuring energy independence. However, in view of the increasing demand for natural gas in the Baltic States and Russia, as well as Finland's interest in tapping into Latvia's natural gas storage facility, it is necessary to enlarge the present storage facility and to consider the possibility of constructing a new storage facility in Latvia.

Energy issues have always been among the priorities on the Baltic Assembly agenda. As the issues of energy supply and security have come to the forefront on a global level, the BA committees and Sessions have addressed various energy-related matters. On 17 December 2006 a BA resolution was adopted concerning energy security in the Baltic States in which the governments were urged to promote diversification of energy resources and to consider the possibility of constructing an LNG terminal in one of the Baltic States or a gas pipeline connecting the Baltic States with European gas grids, increasing energy efficiency, as well as supporting wider use of local resources and renewable energy sources and preparing a common energy strategy of the Baltic States. Currently, the draft of the energy strategy is being actively discussed. Energy issues are among Baltic – Nordic cooperation priorities. On 26 January 2007, for example, the Baltic Assembly's Environmental Protection and Energy Committee and the Nordic Council's Environment and Natural Resources Committee approved a Memorandum of Understanding highlighting the need to ensure a sustainable and reliable energy supply, as well as a transmission and consumption system which would be compatible with the common interests and political goals of EU member states. The BASREC collaboration in the Baltic Sea region and the Green Book on energy policy issued by the European Commission were also highlighted.

With regard to the energy issue, in 2007 the activities of the Baltic Assembly's Environmental Protection and Energy Committee include three priorities – energy security and forecasts of the energy deficit, social and economic assessment of reducing the energy deficit by using alternative resources, and opening up new opportunities for using renewable energy sources. On 25 – 26 January 2007 in Daugavpils, the BA Environmental Protection and Energy Committee held a seminar on the above-mentioned energy issues; not only experts from Estonia, Latvia and Lithuania, but also representatives from the Nordic Council and the Benelux parliament made reports at the seminar. (See attachment on *Positions of the Baltic, Benelux and Nordic Countries on Energy Issues.*)

Forecast of the energy deficit

Latvia imports 64% – 65% of primary energy resources and 30% – 40% of electricity. It is forecast that the demand for energy will increase from 7.051 TWh (in 2005) to 10.779 TWh (in 2016). Furthermore, in recent years the imported share in electric power supply has not dropped below 30%.

According to statistical data for 2006, **Estonia** is 33.9 % dependent on energy imports. It is planned that in Estonia electric power consumption will increase from 5.4 TWh in 2000 to 6.5 – 8.0 TWh in 2010.

According to the **Lithuanian** National Energy Strategy, by 2025 electricity consumption in Lithuania will increase from 1.4 to 2.1 times. It is planned that in

2007 Lithuania will produce 11.72 TWh of electricity and will consume 11.0 TWh, while in 2010 the figures will be 10.79 TWh and 12.2 TWh, respectively. It is planned that after the decommissioning of the Ignalina NPP, the current and the planned energy production capacity, in case of slow economic development, will satisfy the demand until 2020; however, in case of rapid economic development it will satisfy demand until 2015, and in case of very rapid development until 2011.

Alternatives for reducing the energy deficit

In order to avoid risks related to importing electric power and primary energy resources, **Latvia** will take measures aimed at increasing power self-sufficiency. It is planned that in 2012 domestic production will satisfy 80% of the demand, while in 2016 it will satisfy 100%. Solid fuels are regarded as the most appropriate resource for condensed power generation (coal combined with renewable energy sources such as wind + biomass). It is recommended that boiler houses be reconstructed for energy cogeneration by using other local energy resources.

It is planned that by 2020 in **Estonia** 20% of electric power will be produced by cogeneration. At present this figure is 13%. It is planned to increase the share of solid fuels, which currently dominate the primary energy supply of Estonia and represent 56% of the total supply; this percentage is far above the EU average of 18%. Oil, natural gas and renewable sources contribute 41% of total energy consumption; nevertheless, Estonia supports the construction of a new NPP in Lithuania.

The **Lithuanian** power system is dominated by nuclear power production; however, after the decommissioning of the Ignalina NPP, Lithuania expects that by 2010 renewables will constitute 12% of the total sources of primary energy, 7% of electricity in the total national electricity consumption balance will be produced from renewables, and it is planned that by 31 December 2010 biofuel will constitute 5.75% of the total national petrol and diesel market.

Opportunities for using renewable energy sources

- In order to promote energy independence and decrease energy costs, in 2006 the Ministry of Environment of the Republic of **Latvia** drafted the *Strategy for Using Renewable Energy Sources in the Period from 2006 to 2013*, and in 2007 the Ministry of Economics prepared draft regulations on production of electric power from renewable sources. In the policy on promoting the use of renewables, priority is given to the use of biomass – wood and waste. In the near future, the government will discuss the new programme on the production and use of biogas. The use of wind energy and solar energy are also encouraged. The new decision by the Cabinet of Ministers regarding financial support for using renewable energy sources should also be mentioned.
- In **Latvia**, a certain amount of electric power can be produced from wind. However, there are still two problems related to implementation of such projects: first, how to ensure base-load power, and second, how to compensate for large cost differences which arise from the fact that in Latvia wind energy, in comparison to other types of power sources, is still the most expensive. Reconstruction of the existing boiler houses will be essential for cogeneration.

- **Latvia** and **Estonia** are in favour of using renewables in order to increase energy efficiency; however, they express concern regarding the distribution of emission quotas for upcoming years. By 2008, the EU should agree on the Emission Trading Scheme for 2012. Rapid economic growth could lead to an inability to comply with the adopted emission standards.
- In 2005, in **Lithuania**, the proportion of renewables in power production constituted 10.8%. By 2025 it is planned to increase the share of renewables in primary energy resources to 20%; this goal can be achieved by an annual increase of 1.5% till 2012.

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