

## ***European Energy Policy and investment needs in Baltic electricity sector***

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Electricity is able to play the most prominent role in the future to reduce dependence on oil and gas and to make a significant contribution to greenhouse gas reduction. Electricity supply and efficiency are the key factors governing competitiveness of the economy in the future. Electricity will also have a major role in road transport in coming years.

But the electricity sector is confronting the issues of security of supply, competitiveness, and sustainability. All of which are very real concerns today. The biggest security problem with energy supplies in Europe is the sufficiency of energy resources, and increasing dependence on external energy sources outside the EU.

The energy policy of the European Union rests on three pillars:

- energy security
- sustainable development
- economic competitiveness

These three priorities are of equal importance.

The "Energy Policy for Europe" has three ambitious targets for 2020:

- 20% reduction in GHG
- 20% of energy derived from renewables
- 20% improvement in efficiency of energy use

In addition the European Commission's proposed third electricity market liberalisation package is currently going through the legislative process.

But to meet all those 20-20-20 targets, Europe has to deal with a number of challenges.

### **Nuclear generation**

In Europe, the overriding concern is clearly the generation of electricity. Today it is clear that the right energy mix without nuclear is not possible, this is true also for the Baltic countries. EU member states are divided on their approach to nuclear power, but nuclear technology, with its zero CO<sub>2</sub> emissions, should and will be back in Europe. Nuclear energy is thus cheaper than coal or oil shale energy that has had a price put on its carbon emissions.

But the new Build of Nuclear Power goes already ahead in Central-Eastern Europe.

New reactor units are about to be built in Slovakia and Bulgaria. Moreover CEZ, the Czech national electricity company, is pushing for new build in the country despite the moratorium decided by the current government.

In Slovakia, the European Commission gave on, 15 July this year, its conditional approval for the completion of units 3 and 4 at Mochovce. The reactors will provide an equivalent level of protection as the one provided by a full containment. Italy's Enel, majority owner of Slovakia's

dominant power producer, Slovenské Elektrárne, has announced that it would complete the units by 2013.

The Bulgarian government has approved the construction of the Belene nuclear power plant by Russia's AtomStroyExport. The Ministry of Regional Development has issued a construction permit to the state-owned utility, National Electric Company - NEK. The Nuclear Regulatory Agency and the European Commission had both given favourable opinions beforehand.

Bulgaria had to shut down units 3 and 4 at its Kozloduy NPP to meet the requirements of the EU accession treaty. It resulted in a general decrease in the region's generating capacity. The construction of a new NPP at Belene will compensate for the loss of capacity.

Although the coalition government in the Czech Republic declared, in January 2007, that no new nuclear unit will be constructed for the next 4 years, CEZ recently asked the Environment Ministry to conduct an environmental impact study for the potential construction of two extra units at its Temelin NPP. All Czech political parties, except for a small Green Party that is part of the governmental coalition, support today nuclear new build.

These announcements follow on from the recent declarations made in France concerning a second EPR, in the United Kingdom on the renewal of the nuclear fleet and in Italy regarding the restart of the country's nuclear programme. Nuclear power continues to gather momentum throughout Europe and especially in Central and Eastern Europe.

### **Investments in networks and interconnections**

One of the biggest challenges is the necessary investment into networks, especially cross-border interconnections. Huge investment is needed in transmission grids, including innovative research and development as well as actual construction in the coming years.

But some investment decisions are already delayed by 5 - 7 years and this represents a high risk to the security of supply. Planning and constructing cross-border connections is a long process. To build a high voltage line in Europe today takes on average from 7 to 10 years, this is even longer than building a power plant.

An interconnection project includes also investments in both countries and the amount of investment needed is not always equal, with one country often unwilling to invest in others. Also, uncertainty and incoherence in EU energy policy and regulation are obstacles to investment.

Lack of sufficient interconnections and minimising dependence on the Russian - Belorussian electricity system is also a major concern in the Baltic countries. Preparation, planning, negotiations, design and construction of the first interconnection between the Baltic and Nordic countries took all together nearly 9 years.

Governments need to play a stronger role in facilitating energy investment. The heart of the problem is a growing shortfall in the amount of capital necessary to achieve this aim, especially for the construction of interconnections, clean energy and new emissions-reducing technologies.

### **Financing investments**

But promoting innovation, improving energy security and the environment, these policies need also to make economic sense. That's why the role of investment finance is every year more relevant in the energy industry.

International financial institutions could have an important role in this, providing complimentary financing to commercial, state owned and municipal institutions. Among other international financial institutions, the Nordic Investment Bank is well placed to facilitate this process. Our mission is to support competitiveness and the environment. Being a highly rated international financial institution, we can assist energy industries with very long-term financing.

Our status as a multilateral financial institution is also a big advantage in cross-border activities. We can offer our expertise in putting together financial packages by pooling different sources. These strengths are particularly useful in the financing of energy and environmental improvements.

Energy investments need long-term financing, they do not recognise national borders, and are crucial if we are to improve the environment and support the competitiveness of the Nordic-Baltic region.

## **Conclusions**

- Electricity price will increase in the coming years, especially in the Baltic countries. But although electricity consumer price increases are inevitable, electrical energy will remain cheaper than petrol and diesel energy in the foreseeable future.
- The right energy mix without nuclear is not possible, particularly in the Baltic countries.
- The European electricity industry can be the first sector to be completely CO<sub>2</sub> emissions-free
- National strategies in the Baltic countries, which are currently country-specific, should take a Nordic-Baltic dimension, and incorporate more cross-border elements.
- The public and private sectors should share costs, risks and rewards in a more intelligent way. There is a clear need for innovative financing and new risk-sharing tools.

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