Developing Estonian energy policy hand in hand with EU energy packages

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2008 will go down in history books as the year when the energy sector was shaken up. The world’s energy markets witnessed the highest-ever oil prices in history, and the financial crisis that followed affected the energy markets notably. The European Union hotly debated the innovative 3rd Energy Package and its Climate and Energy Package. All these processes were also influenced by the preparations for signing a global climate agreement in 2009.

In parallel with negotiating the 3rd Energy Package and the Climate and Energy Package, Estonia prepared the National Energy Sector Development Plan for the next decade, which received significant contributions from the European Union energy packages.

The Estonian electricity system is unique

The 3rd Energy Package, which was negotiated in the European Union in 2008, will have a significant impact on the Estonian electricity and gas sector. Albeit small in the EU context, the Estonian electricity market is dominated by one company, Eesti Energia. The energy market today is characterised by very conservative regulation, strict requirements for market operators, and lack of a free market.

Estonia is the only EU Member State that was granted a transition period for the liberalisation of its electricity market by 2013, due to the investments Estonia needs to make in its electricity production, which relies heavily on oil shale. Since it is a partially closed electricity market, the state has set very clear operating restrictions for the oil shale power stations that belong to Eesti Energia.
The second special feature of the Estonian electricity system is that Estonia is not only highly dependent on oil shale, but it is also directly linked to a non-EU electricity system. Technically, Estonia could import almost all the electricity that it needs. This puts Estonia in a very different position from other EU Member States, since competition on the Estonian electricity market could come not only from within the EU, but also from non-EU countries whose electricity markets operate with entirely different rules and that can sometimes also be politically manipulated.

Preparing to open its electricity market, Estonia needs to secure a diversified energy supply. This can be achieved with a balanced portfolio of electricity production where no market operator has dominant market power and there are several competing electricity producers using different energy sources. To avoid discrimination of other market operators, it is important that the main electricity and gas suppliers be separated from producers.

Estonia is also interested in creating a joint Nordic-Baltic energy market that would be efficient, provide energy security, and reduce the environmental impact of energy production. For developing a joint well-functioning electricity market, it is important to link the Baltic and Nordic countries with new interconnections and simultaneously ensure the smooth functioning of the Baltic electricity market. Current regulation in Estonia, Latvia and Lithuania does not support the development of a joint efficient electricity market. With the help of different regulatory schemes, Baltic countries have been supporting domestic electricity producers, thus significantly distorting the development of a joint electricity market.

**The Estonian natural gas market depends on Russian gas supply**

The Estonian market for natural gas is even more monopolised: 100% of natural gas consumed in Estonia is produced by Gazprom, which also owns 37% of Eesti Gaas, the local natural gas supplier and main network company. 33% of Eesti Gaas belongs to E.oN/Ruhrgas. A similar ownership structure exists in Latvian and Lithuanian gas companies. However, in the entirety of Estonian energy consumption, the share of natural gas is relatively modest at around 15%.

Technically, the supply of natural gas in the Baltic states depends on natural gas storages in Latvia. For creating competition on the natural gas market, it is necessary to have alternative suppliers in the region and to develop an infrastructure for LNG (liquefied natural gas) terminals. This means that the main network company itself should be
interested in building up such a competing infrastructure. This is unlikely to happen as long as the main network company is owned by the natural gas monopoly.

While the electricity company Eesti Energia is wholly owned by the Estonian state and its ownership can be easily restructured, a similar approach is legally impossible in the natural gas market since Eesti Gaas is a private undertaking.

**Influence of the EU 3rd Energy Package on the Estonian energy situation.**

The measures of the EU 3rd Energy Package that have the biggest impact on Estonia (and other Member States) concern the ownership unbundling of the Transmission System Operators (TSO). Regarding the electricity market, Estonia supported from the start the principle that production and network companies must have different owners. This would ensure fair competition rules for all current and future electricity producers on the Estonian and neighbouring electricity markets and would prevent discrimination of market players.

It should be noted that according to various studies, Estonian TSOs have not been abusing their market position. Current legislation has established a clear framework for the Transmission System Operator, and the state-owned power utility Eesti Energia has not taken undue advantage of its 100% ownership position in the TSO. However, if the state were to sell a minority holding in Eesti Energia into private hands, it could notably increase the interest towards manipulating the market, as is shown by the experiences of other countries.

In the case of natural gas, Estonia was interested in the draft directive including a scheme that would allow the state to influence the ownership structure of a main network company. According to the draft directive, the Competition Board would carry out a supervisory procedure that would enable the state to influence, if necessary, such ownership.

For Estonia, the debate on the 3rd Energy Package was very interesting. The compromise reached at the end may have been somewhat more flexible than we expected, but we have found it completely acceptable. Estonia is determined to continue implementing its policy of unbundling the main network company, Põhivõrk, from the Eesti Energia group, and completing this task by the end of 2009 as planned.

**The Climate and Energy Package is a real challenge for Estonia**

For Estonia, the debate on the EU Climate and Energy Package involved considerable problems because of the unique nature of Estonia’s energy market. The production
of electricity from oil shale involves very high CO₂ emissions that, in the context of the Climate and Energy Package, will have significant impact on the price of electricity produced from oil shale. Although from the purely economic standpoint of the package the use of oil shale in the production of electricity should be stopped, it is extremely important for Estonian energy security that production of electricity using such a guaranteed resource continues.

From the beginning, the Estonian government stood by its view that the permission allowing states to keep the proceeds of emission quota auctions must include the requirement to use the money for energy sector restructuring. As for the modernisation of oil shale power stations, it must continue, but only to the extent that is necessary for securing the electricity supply in Estonia. At the same time, it would be necessary to build more power stations and keep the door open for a nuclear power plant.

Estonia is supporting the proposed measures, since its national energy strategy fits very well into the package’s structure. If you add in renewable energy sources, which in Estonia are believed to have even higher potential than the targets, Estonia is a strong supporter of the package.

For Estonia, a particular issue is the electricity that originates from third countries. As mentioned above, unlike in other EU Member States, the Estonian electricity system is isolated from the European grid and directly connected to the synchronous transmission grid of the CIS. Since Russian electricity producers are not participating in the emissions trade, it creates a situation in which, for instance, electricity produced from coal in Russia is several times cheaper than electricity similarly produced in an EU Member State. Import of such electricity would clearly distort the electricity market. In addition, it essentially constitutes a so-called carbon leakage on the electricity market, which cannot occur in Member States that are not electrically connected to non-EU countries.

Estonia itself made several proposals to the chairman and the Commission for solving the problem, but the rules of the World Trade Organisation (WTO) prohibit any restrictions to the electricity trade.

As a solution, the conclusions of the European Council include a provision that the Commission should revise the issue with the goal of preventing a carbon leak and prepare its solutions by 2010. As an interim solution, Estonia will be able to provide its domestic electricity producers with free emission quotas, if necessary. Naturally, higher emission quotas will also help to develop the Estonian energy system, since Estonia plans to use additional proceeds from the sale of such quotas in solving the challenges facing the energy sector.
Baltic Interconnection Plan

The Baltic Interconnection Plan that was initiated by the European Commission at the end of the year will notably speed up the development of technical facilities for connecting the Baltic countries to the energy networks of other EU Member States. Once this work is completed, there will be real competition on the local electricity and gas market and only then we can talk about the effective opening of the energy markets.

The development of new electricity connections also creates the possibility to increase production of wind power in Estonia. Estonian wind conditions are among the best in the European Union, although at the same time our electricity market is too small to use its entire wind potential. New connections would enable Estonia to put up more wind power generators in its territory, sell wind power to third countries and balance it with suitable power stations.

Development of a national energy policy

Estonian energy policy documents prepared on the basis of the 3rd Energy Package and the EU Climate and Energy Package provide guidelines for developing the energy sector during the next 15 years. These guidelines integrate well into the energy policy measures of the European Union in making the energy supply increasingly secure, environmentally friendlier, more efficient, and based on justified costs.

The Estonian electricity production market is set to be transformed over the next couple of years. The production of electricity by burning oil shale, at present the dominant source of electricity, must be modernised by 2016. By now Estonia has modernised about 400 MW of its oil shale power plants. Because of energy security considerations, Estonia will continue using oil shale for producing electricity, but it is also clear that the current capacity of oil shale electricity of about 2,000 MW is excessive. Especially considering that the price of oil shale electricity is going to increase significantly due to the price of the CO₂ quota. Estonia must gradually diversify its electricity production by building more co-generation plants that use different fuels, wind power farms, balancing stations and, in the long run, perhaps a small nuclear power plant.

In terms of energy security, Estonia’s objective is to have a sufficient number of power stations to cover its domestic electricity demand at all times. This approach is upheld by the planned energy and climate package that would allow the use of proceeds from the state-sponsored auction of CO₂ quotas for developing carbon-reduction technologies and...
renewable energy systems and for supporting investments into safeguarding national energy security.

With a view to making the energy market more efficient and to preventing any potential discrimination of market operators, the state plans to make changes in the ownership of the main network companies. Therefore, the principles of the 3rd Energy Package and the EU Climate and Energy Package are positively guiding the development of the Estonian energy sector while the provisions of the draft directives are sufficiently flexible and allow Estonia to solve potential problems.

International developments in climate and energy policy mean that all countries are facing major challenges in this area. Because issues of energy security and climate change are very important to Estonia as well, we will work to find solutions to these challenges and gain support on the matters closest to us, which will ultimately have a great impact on the further development of Estonia.