

ELECTRICITY SECTOR DEVELOPMENT PLAN ADOPTED IN ESTONIA

In spring 2009, the Government of the Republic of Estonia adopted Electricity Sector Development Plan for the period of 2008-2018 (the "Development Plan"), describing the strategy of the Government in the sector of electricity. The Development Plan is based on research and analyses conducted on the current status and perspectives of the Estonian electricity market. The plan outlines strategic choices in electricity production as well as the technological developments influencing such choices. Most importantly, actions and measures are outlined to achieve the overall target which is the secure and sustainable supply of electricity in Estonia for reasonable price.

The Development Plan envisages major changes in the Estonian electricity sector in the coming years. Electricity sector in Estonia is currently highly concentrated, with the state-owned public limited company AS Eesti Energia producing over 95 per cent of electricity. Almost 94 per cent of the electricity is produced from oil shale. The extensive use of oil shale has significant impact on the environment. For example, in 2005 the amount of waste produced by energy sector formed over 67 per cent of total waste produced in Estonia. Thus, the share of oil shale in electricity production should be gradually reduced. As stated in the Development Plan, the measures used for reducing the negative environmental impact include raising taxes and imposing additional obligations on undertakings that use oil shale for electricity production.

The Development Plan offers five scenarios on how to structure electricity production in Estonia, differing by the ratios between the sources of energy used for production. All scenarios involve the use of wind energy and oil shale. Two scenarios involve the use of nuclear energy, whether by establishing a nuclear power plant in Estonia, or by obtaining a share in Lithuanian or Finnish nuclear power plants.

For the first time in history, the Development Plan considers the possibility of establishing a nuclear power plant in Estonia. The use of nuclear energy requires greater amount of investments, but at the same time considerably lowers the price of electricity and the emission of carbon dioxide. The Development Plan states a need to establish legislation regulating the aspects related to the establishment of a nuclear power plant. Moreover, the need for an agency responsible for fulfilling the necessary safety requirements as well as the need to start training nuclear energy specialists is emphasized. According to the Development Plan, the decision on whether to establish a nuclear power plant in Estonia should be made by the end of 2013. AS Eesti Energia is currently exploring the different locations for the potential nuclear power plant whereas the favourite candidate seems to be Pakri, an island in the Gulf of Finland, near to the northern coast of Estonia.

At the same time, Estonia is looking to gradually increase the amount of renewable energy used in electricity production. In 2007, renewable energy sources formed only 1.75 per cent of all the energy sources used for producing electricity. By the year 2010, this amount should be at least 5.1 per cent, by 2015 at least 15 per cent and by 2020 at least 25 per cent. The effective use of wind energy plays an important part for Estonia in meeting the environmental requirements and renewable energy targets that the European Union has established. In Estonia, there is great potential for establishing both on- and offshore wind farms and a remarkable number of wind farms

projects have been initiated within the last few years. In June 2009, 40 MW Aulepa wind farm was opened in Estonia, being the largest wind farm in the Baltic states.

According to the Development Plan, the increase of the share of renewable energy will require amendments to current legislation. Lack of legal framework is currently hindering the development of offshore wind farms. Further, the effectiveness of current methods of financing the use of renewable energy needs to be improved. The competent ministries have recently introduced bills for increasing the subsidies for wind energy producers as well as creating the necessary legislative basis for establishment of offshore wind farms. Adoption of the respective amendments to the existing laws would hopefully significantly increase the share of renewable energy in the overall energy production in Estonia.