ASSESSMENT OF EXTERNAL COSTS IN OIL SHALE-BASED ELECTRICITY PRODUCTION IN ESTONIA

A. LAUR*, K. TENNO

Estonian Institute of Economics at Tallinn University of Technology 7 Estonia Blvd., Tallinn 10143, Estonia

J. APS

Baltic Environmental Forum 8 Rävala Blvd., Tallinn 10143, Estonia

In this paper, the authors analyze the nature and structure of external costs in Estonian oil shale-based power plants. The methods for internalizing these costs are also introduced. The external costs discussed here primarily include the expenses related to exhaustion of natural resources and environmental damage in the context of the formation of the oil shale-based electricity production price. The authors calculate these expenses currently and prognosticate various scenarios of oil shale-based electricity production price and external costs until 2010. The scenarios take into consideration possible developments of the legislation that regulates the energy sector, and other energy related factors in the Baltic Sea region and in the European Union in general.

More adequate assessment of the environmental costs is a factor that is increasingly influencing development trends of the energy sector on global scale. This is highly important also in Estonia since planning of further development of oil shale-based energy complex is still very topical.

^{*} Corresponding author: e-mail antonl@tami.ee