



THE SIGNIFICANCE OF DISTRICT HEATING FOR THE PROMOTION OF RENEWABLE ENERGY SOURCES DEMAND

L. Murauskaitė

*Lithuanian Energy Institute
Breslaujos g. 3, LT-44403 Kaunas – Lithuania*

ABSTRACT

The stimulation of energy producers and consumers for the use of renewable energy sources (RES) is one of the major goals of energy policy in Lithuania. Among other priorities of the development of energy from renewable sources, envisages utilisation of the existing region infrastructure and further development of necessary infrastructure while creating conditions for the development of RES. District heating infrastructure is suitable for implementing RES technologies on the demand side and consequently achieving energy and environmental policy goals. The paper presents justification of RES demand support measures on the example of solar thermal and geothermal energy. In this paper scenario of the use of solar thermal energy for the preparation of hot water is analysed, also scenario of the use of geothermal energy for the space heating purposes. Moreover, all analysed scenarios are in apartment buildings that are still connected to district heating system. Simulation of techno-economic analysis was done using EnergyPro modelling software package. Economic evaluation of the use of RES was done by the levelised cost of energy method.

Keywords: district heating, RES demand, solar thermal energy, geothermal energy