



SMALL CHP PLANTS IN LATVIA: REALITY AND POSSIBILITIES

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ABSTRACT

The paper analyses the energy situation in Latvia during crisis and its influence on new cogeneration projects. It also observes different steps which can be made to stimulate the development of small cogeneration using renewable fuels in Latvia.

Small combined heat-and-power (CHP) plants generate electricity together with the heat at high efficiencies (depending on technology and type of fuel) and therefore helps to save fuel, cut greenhouse gas emissions and reduce electricity costs. According to the Latvian Energy Policies (for the period of 2007-2016), one of its main aims is to increase the effective usage of renewable sources of energy and producing of energy in cogeneration process, including the stimulation of small cogeneration.

Today in Latvia there are 12 CHP plants with electrical capacity less than 0.2 MW and 39 CHP plants with electrical capacity 0.2 – 5 MW. During the last two years the amount of small CHP plant has increased from 36 to 51. Only 5 of existing CHP plants use renewable fuels, the others use natural gas.

The conditions for CHP producers, apart for small-scale CHP, have been difficult over the last few years. The development of small-scale CHP projects is hindered by the lack of experience with new technologies, as for example fuel cells or micro turbines, together with high interconnection. During last time, the procedure of taking business credits became more difficult, as well.

Latvia supports cogeneration by means of feed-in tariffs. The tariffs depend on the installed electricity capacity of the CHP units. The main weak point of the policy measures can be identified as discrimination between different cogeneration plants, and particularly of small and micro systems, because at least 75 % of the heat produced has to be supplied to the centralized district heating, hence the policy does not support industrial or auto-use of cogenerated heat. Another weakness is the absence of coordinated tariff policies for gas and electricity.

To stimulate the farther development of small cogeneration in Latvia it is necessary to simplify technical and administrative procedure for newly created CHP plants, especially for the ones with capacity less than 4 MW and the ones using renewable fuel. A few specific obstacles connected with economy crisis are as well analysed in the paper.

Keywords: different methods of stimulation of CHP development, small cogeneration, renewable fuels.