Latvijas siltumuzņēmumu asociācija

To:
RTU Institute of Energy Systems and Environment
Azenes str. 12/1, Riga LV-1048, Latvia

18th of August, 2022
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Letter of support

The Latvian District Heating Association supports the project "Alternative biomass knowledge for transition towards energy independence and climate targets (bioenergy Observatory)" submitted by Riga Technical University.

Natural gas is the historically widely used energy resource in Latvia's centralized heat supply. Natural gas supply restrictions contributed not only to the rapid increase in the price of natural gas, but also to an increase in the price of wood chips and other wood fuel. For this reason, it is important to evaluate the rationality of using other available bioresources in energy.

The goal of the Bioenergy Observatory project is to acquire knowledge and summarize it in the form of a smart scientific database on the potential of using different biomass for energy production. During the project, results will be collected on at least 100 different types of biomass physical and chemical properties, as well as availability of biofuel in the national territory, technical limitations of use, socio-economic indicators, as well as environmental and sustainable aspects (predicted amount of generated emissions and ash).

It is expected that the database will include information on a wide variety of alternative bioresources: straw, reeds, grass, manure, fruit and vegetable residues, as well as many other residues from the forestry, agricultural and woodworking industries. As a result, each heat supply company will be able to evaluate and find a suitable solution for fuel diversification and reduction of heat energy production costs.

Yours sincerely

Valdis Vītoliņš
Member of the Board
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## Letter of support

The *FERGY JSC* supports the project "Alternative biomass knowledge for transition towards energy independence and climate targets (*bioenergy Observatory*)" submitted by Riga Technical University.

The existing situation in the energy sector requires communication between energy sector participants (heat supply companies, industry and boiler manufacturers, scientists, policy makers) in order to find an optimal solution for overcoming the crisis. The needs to decrease natural gas consumption, as well as the increase in the price of wood fuel, contribute to the search for alternative bioresources for heat energy production. At the same time, biomass properties (energy density, moisture, ash content, etc.) may differ significantly depending on the selected resource. This significantly affects the organization of combustion process, the efficiency of energy technology and the amount of emissions generated.

During the *Bioenergy Observatory* project, various alternative biomass will be collected, tested and acquired knowledge about fuels physical and chemical properties (straw, reeds, grass, manure, fruit and vegetable residues, as well as residues from the forestry, agricultural and woodworking industries).

In addition, there will be experimental research completed about several alternative biofuels combustion at high-capacity boilers. The knowledge gained can be used to adjust the organization of the combustion process depending on the type of fuel chosen. On the other hand, the results of combustion process modeling, obtained knowledge of flows and thermal load can be used in the design and production of new combustion equipment.

**FERGY JSC**
Chairman of the Board

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