

## Experience in the demo region of Kaunas (Lithuania)

Bioenergy activity in the Kaunas demo region is funded by targeted EU structural funds and national programmes, and is driven by the initiative of district heating companies. Approx. 85 MW of bioenergy capacities have been installed in the region since 2010. Wood fuel is mainly used in households as the cheapest type of fuel, not only in Kaunas region, but in Lithuania as a whole. Further installation of large capacity wood-burning boilers in the DH sector would raise the price of firewood. This is unacceptable from social point of view because the purchasing power of the population is low, especially in the countryside.

Support for fuel conversion to RES does not always consider issues such as sustainable development of the region, assessment of sustainable biomass potential and social issues, especially in rural areas. As a result, communities' attitudes to and support for such projects is different and varied. On the one hand the population expects a reduction in heating costs. On the other hand, a high concentration of biomass boiler-houses in the area (e.g. Dainava district in Kaunas City) increases local pollution in nearby residential districts.

Municipal and regional authorities strongly support these projects, expecting to solve social support problems which are a heavy burden for municipal budgets. However, despite the number of projects implemented or under implementation, and the emergence of new independent heat producers, one of the main strategic aims – a reduction of heat tariffs for residents – has so far not been achieved. One of the reasons for this is that the methodologies for defining heat tariffs and heat purchasing prices from independent producers are inadequate (bioheat purchasing prices from independent producers are currently set too high).

These issues are well reflected in public media statements, made by Andrius Kupčinskas, the mayor of Kaunas City (newspaper “15min”):

*“We promote and seek to establish competition in the municipal heat sector, which is extremely important for every resident of Kaunas City, for public institutions, organizations and businesses, which consume heat from district heating. We would like to support the development of “green” energy and provide the residents of Kaunas with opportunities to feel the advantages of biomass fuel.”*

*“The business of biomass boiler-houses is very attractive due to imperfect legal regulation: it is extremely profitable to generate heat from biomass fuel for independent producers and especially in large cities; maybe, not as much as in the drugs or arms trade, but close to that.”*



***Mayor Andrius Kupčinskas participates in the opening ceremony of the construction of the first biomass boiler-house in Kaunas City***

The Strategic Management Plan of Bioenergy Sector for Kaunas Region was prepared within the framework of the Main stage of the Bioenergy Promotion project. Subsequently, contacts with the representatives of various municipalities of Kaunas region were maintained in order to offer advice and monitor implementation of Strategic Management Plan.

### ***Bioenergy strategy implementation meetings in Kaunas region***

There were three strategy implementation meetings arranged by LEI under the Bioenergy Promotion 2 project.

The first was arranged with Kaunas County Division of the Regional Development Department under the Ministry of Interior, which is responsible for developing, summarizing and co-ordinating implementation of regional and municipal plans. In the case of projects which apply for EU support, regional authorities provide support via selection and feasibility for the subsequent application process. Later, this authority monitors implementation of the plans via assessment of sustainability indicators for the region.

The second strategy implementation support meeting was a seminar on planning issues for municipalities “Aspects of Sustainable Development while Elaborating Municipal Renewable Energy Action Plans”. This seminar was arranged by the Lithuanian Energy Institute with support from the Kaunas Regional Development Authority. Participants heard presentations by speakers from the Ministry of Energy, Kaunas Regional Development department and the Association of Local Authorities in Lithuania. Topics included dealing with sustainability principles and commonly occurring problems in energy planning; main sustainability requirements in national operational programmes; complex assessment of the potential and use of RES; sustainability requirements for energy projects funded by the EU; the role and the activity principles of the biomass market; energy wood biomass resources; and sustainability principles and criteria in biomass production.



***LEI seminar for local stakeholders: municipal and regional authorities, planners and experts***

The third strategy implementation support meeting was a seminar/round table discussion “The Use of Biomass Fuel in Kaunas Region – current situation, problems and perspectives”. It was designed for bioenergy planners and focused on bioenergy practice and experience. Discussions showed that the situation and perspectives are less complicated in smaller municipalities, due to small scale boiler-houses. More complicated and efficient technologies, such as CHP plants are still too expensive for small-scale energy companies, and they use less efficient boilers. On the other hand, all companies, large or small agree that biomass prices are growing, and all investments are made on the assumption that biomass prices are about three times lower than those of natural gas. However, this situation is changing and the future is not so clear. The small heat producers agreed that entering into direct contracts with biomass fuel producers is a more appropriate way to buy fuel for them. Large companies, such as Kaunas City DH company buys fuel via Energy Exchange – Biofuel Trading system.