The Initiation of Sustainable Energy Community for the City of Liberec

This project is one of the city's activities on a trajectory to achieve its stated mission. It focuses on the systematic preparation for initiating a sustainable energy community in Liberec, which will require systemic changes in the city of Liberec. The consortium formed by the Statutory City of Liberec, the Technical University of Liberec, Teplarna Liberec, a.s., and Leef Technologies s.r.o. have two years to set the rules for the operation of community energy in Liberec and to establish a company that will oversee and manage it all.

What do you mean by community energy?

It is the production of energy from renewable sources. In the case of Liberec, it will be photovoltaic panels, which the city administration wants to place on suitable municipal buildings and the buildings of housing cooperatives, manufacturing companies and other buildings.

At the Technical University of Liberec, under the leadership of <u>doc. Ing. Michal Petrů, Ph.D</u>. from the Faculty of Mechanical Engineering of TUL, technologies for measuring energy supply will be designed. The project should also strengthen Liberec's charging stations network for electric vehicles. The project will mainly involve <u>the Department of Machine Parts and Mechanisms</u>, <u>the</u> <u>Department of Power Engineerig Equipment</u>, as well as <u>the Department of Vehicles and Engines</u> and partially also colleagues from the Faculty of Mechatronics, Informatics and Interdisciplinary Studies.

Initiation of the Energy Community

The Liberec Energy Community can serve as a tool to strengthen the engagement of citizens and stakeholders on climate change issues while encouraging greater use of renewable energy sources that will contribute to the reduction of greenhouse gas emissions. The systematic approach consists of a series of interlinked activities in energy and transport emissions.

In addition to energy, which has a clear link to the creation of the Energy Community Liberec, transport was chosen. In the area of transport emissions, pilot activities will focus on the preparation of an infrastructure development plan for transport electrification. In addition to reducing greenhouse gas emissions, transport electrification will place greater demands on the distribution network and electricity consumption. At the same time, its potential for energy storage flexibility can be exploited in the context of the development of e-mobility. One of the issues being explored is how to link e-mobility and the development of community energy tailored to the city of Liberec.

The project will focus on technical issues (mapping technologies both on the consumption and production side and how to overcome barriers to their introduction, a plan for the development of transport electrification), contractual issues (how to build contractual relationships within the community) and especially on the communication side with potential stakeholders and members of the Energy Community Liberec.

Much attention will be paid to soliciting stakeholder feedback and building a communication platform for potential community members and the wider public.