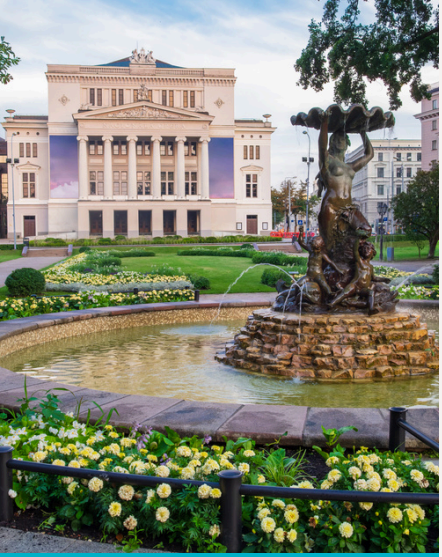


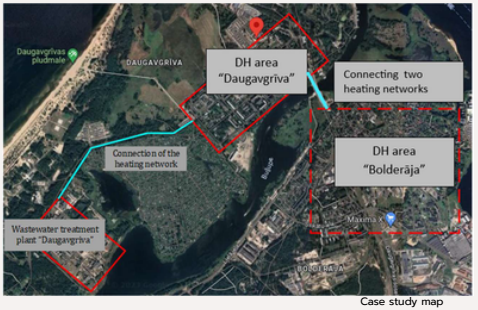
Riga

Latvia

ENABLE DHC

Challenges

Riga hosts one of the most extensive DH networks in the European Union, with more than 800 km of pipelines supplying heat to over 8,200 buildings across the city. Traditionally, heat production relied heavily on natural gas, but in recent years the share of biomass has been steadily increasing. Looking ahead, Riga's main challenge will be the transition to a 4th-generation district heating system. This involves further electrification, greater integration of renewable energy sources and waste heat, as well as the gradual shift toward lower temperature regimes within the network.



Case study map
Source: JSC RIGAS SILTUMS

Opportunities

REA and Ambiente Italia are teaming up with the JSC RĪGAS SILTUMS, the utility operator, to move forward with the changes needed to render the network efficient according to the EED. The transition from combustion technologies to renewable energy sources and waste heat from the wastewater treatment plant (WWTP) can bring about many opportunities. The first step for this transformation is the feasibility study of recovering waste heat from the Daugavgriva wastewater treatment plant and connecting two heating zones in the city that are currently not linked to one another. Within the ENABLE DHC project, the broader impacts of using WWTP waste heat will be assessed through key performance indicators spanning environmental, economic, and social dimensions. In addition, the project will examine the hydraulic stability of the system to ensure reliable integration.

Key facts

Population: 591.822
Network size: 830km
Customers served: 8.200
Heat produced: 3.170 GWh/year
Total heat sold: 2.700 GWh/year
Supply/return temp.: 120°C/70°C

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