



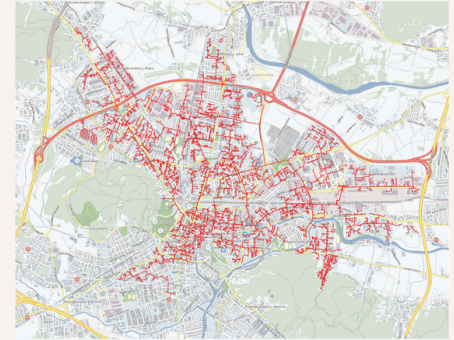
Ljubljana

Slovenia



Challenges

One of the primary challenges for the Ljubljana district heating network is transitioning away from fossil fuels. Despite a growing percentage of biomass and other energy sources in the mix and a gradual phase-out of coal, the remainder of it still in the network emits great amounts of greenhouse gases. Built in the 1960s, the system is showing marks of age, with an increase in heat losses and high maintenance costs every year due to older infrastructure.



Map of the Ljubljana DH network
Source: Energetika Ljubljana

Opportunities

The main opportunity arising from Ljubljana's DH system is in the phasing out of coal. While biomass is an alternative, the city of Ljubljana and the operator Energetika Ljubljana, together with the Austrian Institute of Technology (AIT) and Envirodual, partners in ENABLE DHC, are studying the feasibility of adding large-scale heat pumps connected to the river or to the city's wastewater treatment plants. The goal is to diversify the energy mix feeding the system, ensuring not only efficiency and sustainability but also affordability and protection against price shocks. The changes will allow for future expansions of the system in the coming decades as well.

Key facts

Population: 300.354
Network size: 283km
Customers served: 140.000
Heat produced: 1.149 GWh/year
Total heat sold: 979.2 GWh/year
Supply/return temp.: 112°C/70°C

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