



Poltava

Ukraine



Challenges

Poltava, like many other Eastern European cities, enjoys an extensive district heating network, serving 95% of the city's buildings, both individual and commercial, with more than 80% of households connected to it. Despite the size, Poltava's DH network suffers from an ageing infrastructure, which results in big thermal losses and expensive repair works. Moreover, the network still relies on fossil fuels for heat generation, especially natural gas, which makes it inefficient according to the EU's EED and increases its carbon footprint.



Boiler house in Poltava
Source: Poltavateploenergo

Opportunities

There are many opportunities for investments in the Poltava DH network. In the analysis led by AEE INTEC, City Institute Lviv, and Poltavateploenergo (utility operator), most of the work will be concentrated on reducing operational inefficiencies. This means replacing old pipes and installing frequency converters, which aim to reduce water leakages and heat losses. It is also planned the reconstruction and modernisation of the boiler houses and the installation of advanced control and automation devices, and the establishment of cogeneration units for enhanced efficiency and sustainability.

On the heat generation side, there are plans to develop waste-to-energy solutions, making use of the city's solid waste production to generate heat. Plans also include the installation of biomass boilers and solar thermal systems. By reducing heat losses and increasing the share of RES/WH, the city plans become efficient in the near future.

Key facts

- Population: 286.600
- Network size: 215km
- Customers served: 130.000
- Heat produced: 756 GWh/year
- Total heat sold: 1,3 TWh/year
- Supply/return temp.: 90°C/65°C

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 Co-funded by the European Union

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