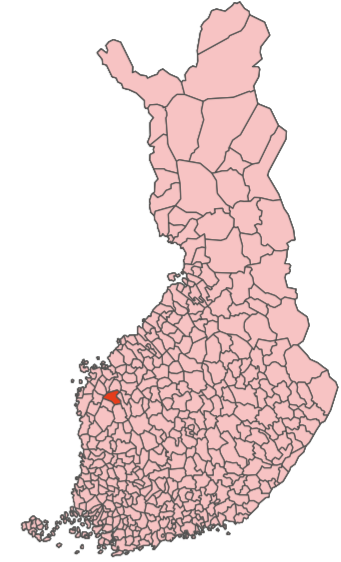


Pilot Energy Strategy (PES) Ilmajoki Finland



CURRENT SITUATION

- District Heating (DH) System in Ilmajoki consists of three DH networks: one main DH grid and two other smaller grids which are not connected to the main DH grid
- Main DH grid in Ilmajoki is owned by District Heating Kurikka (Kurikan Kaukolämpö Oy), which is owned by the municipality of Kurikka
- Main fuel: woodchips and peat

AIM AND SCOPE OF PES

- Strategy for Low Temperature District Heating System implementation in Ilmajoki municipality, Finland. Jointly elaborated by Thermopolis Oy, stakeholders, energy enterprises, building owners and local politicians.
- Overarching concept to improve DH and find possibilities to use waste heat resources in city-owned District heating Kurikka network in the Ilmajoki region.
- The PES refers to different national and local development strategies or action plans
- The PES defines three main directions for future DH developments in the region

PILOT TESTING MEASURE IMPLEMENTATION ILMAJOKI

- Investigation of utilization of 4.5-6.2 MW waste heat site with temperature level of approx. 30 °C and connection to existing grid, incl. heat pump
- Analysis of investment is still going on due to other needed investments, e.g. long pipe systems

OUTCOMES

- Industrial low-temperature surplus heat from Koskenkorva is main alternative energy source in Ilmajoki municipality (in connection with a heat pump unit). Biomass is still another alternative due to its extent.
- Investments in LTDH networks must take into account integrability with existing DH-networks that are still in use.
- Main strategic directions for LTDH in Ilmajoki are:
 - Strategic development 1: Improving the energy performance of buildings
 - Strategic development 2: Integration of alternative energy sources
 - Strategic development 3: Lowering the temperature of the heat carrier
- Improving energy efficiency of existing buildings goes hand in hand with Finland's housing policy

OUTLOOK: WHAT'S NEXT?

- Analysis of pilot testing measure investment will be done District Heating Kurikka together with Altia factory on an annual basis
- Reducing grid temperature is possible by eliminating deficiencies in generation and distribution but also by integrating new technical solutions, e.g. IoT-technology.



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Ilmajoki Municipality Finland



ABOUT

- One of 18 municipalities in the region of South Ostrobothnia, South-Western Finland
- Area of 579.70 km² with approx. 21.38 inh./km²
- Total inhabitants approx. 12,334 in Ilmajoki municipality

DISTRICT HEATING KURIKKA

District Heating Kurikka (Kurikan Kaukolämpö Oy) produces, distributes and sells district heat in Kurikka, Jalasjärvi, Jurva and Ilmajoki. In Ilmajoki, the responsible company for district heating selling and distribution is Ilmajoen Lämpö Oy, which is a subsidiary of District Heating Kurikka.

The Pilot Energy Strategy Ilmajoki has been jointly developed by partners within the INTERREG BSR Project

LowTEMP

DURATION

October 2017 - December 2020

TOTAL BUDGET

EUR 3.77 million

EUROPEAN REGIONAL DEVELOPMENT FUND

EUR 2.84 million

EUROPEAN NEIGHBOURHOOD INSTRUMENT

EUR 0.17 million

FURTHER INFORMATION

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LowTEMP project: www.lowtemp.eu