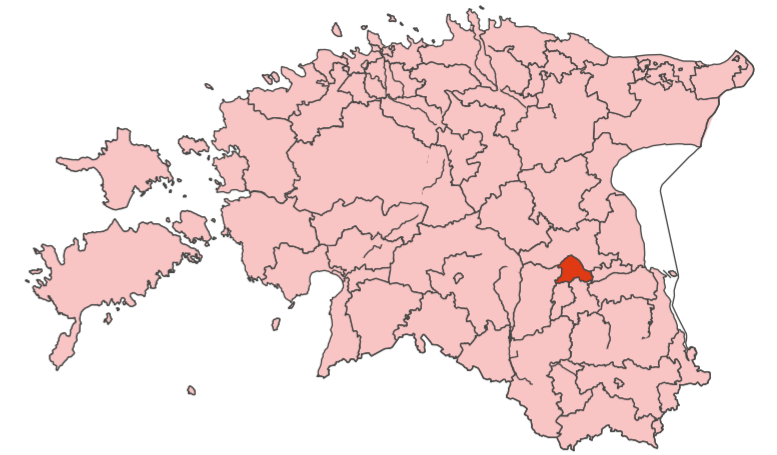


Pilot Energy Strategy (PES) Karlova / Tartu Estonia



CURRENT SITUATION

- District Heating System of 177.7 km, driven by CHP plant and six boiler houses
- Main fuel: woodchips
- Network is operated by Fortum Tartu: AS Fortum Tartu, AS Tartu Keskkatlamaja, AS Anne Soojus and AS Tartu Jõujaam
- 100 % of DH grid owned by Tartu Keskkatlamaja, which owned 100% by Fortum Tartu

AIM AND SCOPE OF PES

- Strategy for Low Temperature District Heating System implementation in Karlova district of Tartu, Estonia. Jointly elaborated by Tartu Regional Energy Agency, stakeholders, energy enterprises, building owners and local politicians.
- Contribution to an efficient and sustainable energy supply system in order to achieve cost- and supply certainty and to fulfil EU's climate and energy goals.
- Overarching concept to connect already existing buildings, historically wooden buildings from the 1910's and 1920's, to existing DH grid and its return flow.
- The PES refers to different national and local development strategies or action plans.
- The PES aims to raise awareness for neighbouring districts but especially citizens living in Karlova district.

PILOT TESTING MEASURE IMPLEMENTATION

- Focus of most costumers in Karlova District on analyzing house energy disregarding any possibilities to improve overall efficiency of the entire DH system
- Aim: Feasibility study for energy efficient renovation of buildings and connecting them to the DH grid of Karlova in order to improve environmental situation of whole district

OUTCOMES

- Karlova achieves consequently a higher connection rate of buildings to DH grid while lowering grid temperature
- Main strategic directions for LTDH in Karlova are:
 - Strategic development 1: pilot case on using LTDH in Karlova
 - Strategic development 2: attract more consumers to connect with DH grid
- Citizens and future costumers need information campaigns on responsibilities, costs and development opportunities of DH are needed to attract new customer
- Fortum Tartu is main player for organizing campaigns and clarifying citizens' reservations

OUTLOOK: WHAT'S NEXT?

- Experience from realised pilot case will be used at other parishes and municipalities for DH system modernisation from consumer side and transformation to LTDH.
- Information will be disseminated to different stakeholders: citizens as heat consumers, building owners, heat suppliers, DH grid owners and providers, urban planners, DH engineers and municipalities etc.

FURTHER INFORMATION

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Fortum Tartu: www.fortumtartu.ee
 TREA: www.trea.ee
 LowTEMP project: www.lowtemp.eu



Karlova District Tartu, Estonia



ABOUT

- District in the middle of Tartu, Eastern-Estonia
- Area of 2.3 km² with approx. 3.850 inh./km²
- Total inhabitants approx. 9.000 in Karlova District

FORTUM TARTU

Fortum Tartu is the local District Heating and Cooling provider in Karlova District and in the City of Tartu. Fortum Tartu is the first company in the Baltics to offer a district cooling service.

The Pilot Energy Strategy Karlova 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