



Pilot Energy Strategy (PES) Gulbene Latvia



- District Heating system of 12,1 km, driven by boiler and CHP plant
- Mainfuel: woodchips
- Network is operated by two companies: LTd. Vidzemes energija and Bioeninvest Ltd.
- 81% of DH grid owned by Gulbene Municipality, 19% owned by private companies

AIMAND SCOPE OF PES

- Strategy for Low Temperature District Heating System implementation in Gulbene Region, jointly elaborated by Gulbene administration, stakeholders, energy enterprises, building owners and local politicians in cooperation with Riga Technical University
- Contribution to an efficient and sustainable energy supply system in order achieve cost- and supply certainty and to fulfil EU's climate and energy goals.
- Overarching concept to develop the main DH grid in Gulbene city and heating supply systems in parishes into 4th gen. DH
- The PES refers to different regional and local development strategies or action plans
- The PES aims to raise awareness for both citizens and neighbour municipalities

PILOTTESTING MEASURE IMPLEMENTATION BELAVA PARISH

- Installation of the first 4th generation district heating system with a full replacement of the former 3rd generation type DH system
- Aim: increase the efficiency of the DH system by the implementation of a 4th generation DH by increasing heat density and system efficiency and lowering grid temperature in turn reducing the overall environmental impact
- Key action proposed by Gulbene Municipality in cooperation with Riga Technical University (RTU)

OUTCOMES

- Gulbene moves consequently towards renewable energy-efficient heat supply
- Main strategic directions for LTDH in Gulbene are:
 - A) lowering grid temperatures in order to reduce transmission losses
 - B) efficient use and sustainable integration of renewable energy sources
 - C) integration of local surplus heat
- Information campaigns on main aspects, costs and development opportunities of DH are needed to attract new consumers and new external sources
- Lowering grid temperatures in Gulbene in a long-term process is needed for gradually identifying small districts where LTDH divisions can be created

OUTLOOK: WHAT'S NEXT?

- Approval of the proposed long-term goals within the Pilot Energy Strategy from the Municipality Council
- Detailed techno-economic assessment for identified technological alternatives
- Definition of the investment and budget plan
- Procurements definition
- Installation
- Monitoring and comparison with base line scenario

FURTHER INFORMATION

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Riga Technical University: www.rtu.lv/en; www.videszinatne.rtu.lv/en

LowTEMP project: www.lowtemp.eu



Gulbene Municipality Gulbenes Novads



ABOUT

- located in the North–East of Latvia in the Vidzeme Region
- area of 1.876 km² with 13 villages and Gulbene City, ~ 11,7 inh./km²
- Gulbene Municipality has about 22.000 inhabitants

GMC

Gulbene Municipality Council (GMC) is responsible for legal operation of the municipal institutions, usage of finances and coordination of strategically planning.

VPR

Vidzeme Planning Region (VPR) ensure regional planning and coordination, as well as cooperation between municipalities and different governmental institutions.

The Pilot Energy Strategy Gulbene 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 INSTRUMENTEUR 0.17 million