

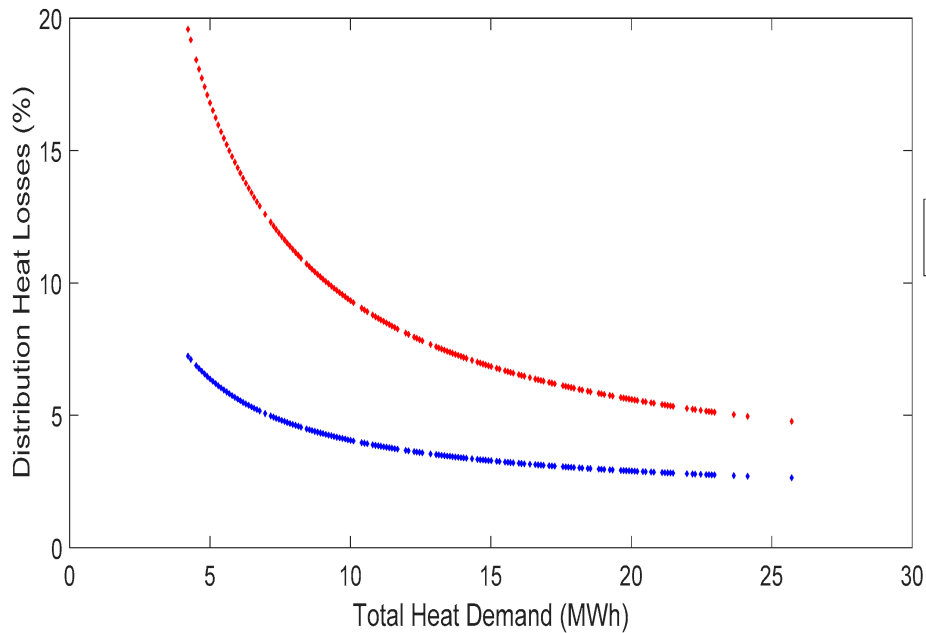
# Low Temperature District Heating for the Baltic Sea Region

Martin Kikas, Member of Board, Tartu Regional Energy Agency (TREA). BEA-APP Final Conference, Riga, 29.01.2019

## Project idea and main aim

- Make district heating (DH) supply in municipalities in BSR regions, more sustainable by integrating low temperature district heating (LTDH) solutions

# Key issues



(a)

Medium temperature  
DH  
90/70 deg C

Low temperature DH  
60-65/40-30 deg C

# Challenges

- The demand for heating energy has changed remarkably in the past years and the effects on the connected DH systems are noticeable and significant:
  - escalating heat energy losses
  - economic disadvantages
- Possibility to use others sources (with lower temperature) of heat
  - generated by heat pumps
  - waste heat form industry
  - possible use of return flow

## Challenge to be tackled by the pilot measures in Tartu

- The challenge is to develop DH in Karlova district
  - Mainly wooden houses over 70 years old
  - Popular region is being renovated actively
  - Presently heated locally – wood, electricity, heat pumps, direct electricity
- Possibility to use leftover heat from returning pipe
- Heating to be developed by apartments



# Outcomes

- The knowledge platform and tools for the target groups.
  - Web based knowledge platform
  - Development of simulation model on environmental benefits of LTDH
  - Study on business models and innovative funding structures for LTDH
- The finalised pilot energy strategies and testing measures will be assessed by the whole partnership regarding effects and innovativeness as well as disseminated to the LowTEMP target groups all over the BSR.
  - 6-8 pilot LTDH strategies
- The joint testing and evaluation of the training programme and the subsequent transfer to a broader BSR target group presents the learning experience.

# Thank you!

## Tartu Regional Energy Agency TREA

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From side of LowTemp:

21 partners and 30 associated  
organizations from 9 countries