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# Heat Entrepreneurship - A Finnish Success Story and community-based tool against energy poverty

EXPRESS Study Tour in Joensuu 27.-28.6.2023

Background information – Courtesy of Jim Antturi / Työteho-seura - TTS

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27.06.2023 | EXPRESS Study Tour

## **Business concept:**

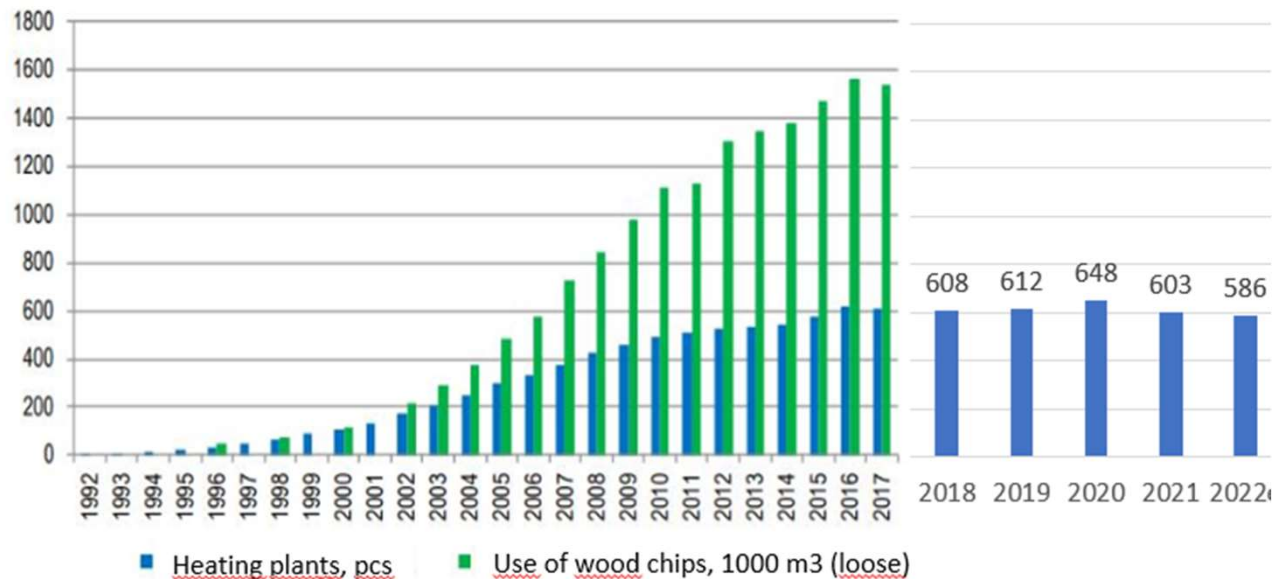
Heat Entrepreneur sells and delivers heat as a service.

Manages the whole process: fuel supply, heat production and heat delivery.

Typically investor and owner of heating plant and district heat network.

# Number of heat entrepreneurship is stabilizing

Number of heating plants operated by heat entrepreneurs and the use of wood chips 1992-2017 (1000 m<sup>3</sup>-l)



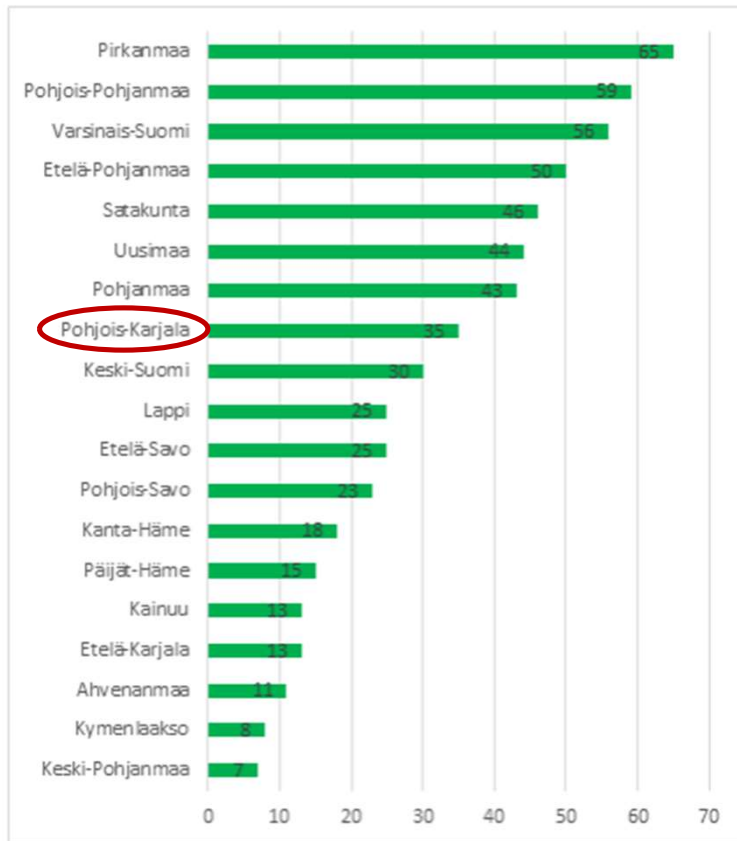
## About 600 heating plants and 250 entrepreneurs

- Quitted: usually smallest units, retirement, no more need for heating, eg. closures of (public) buildings - especially in country side
- New plants & entrepreneurs: outsourcing, new buildings – businesses – residential areas

SOURCE: Työteho-seura, Lämpörittäjyys Suomessa -hanke, 2017

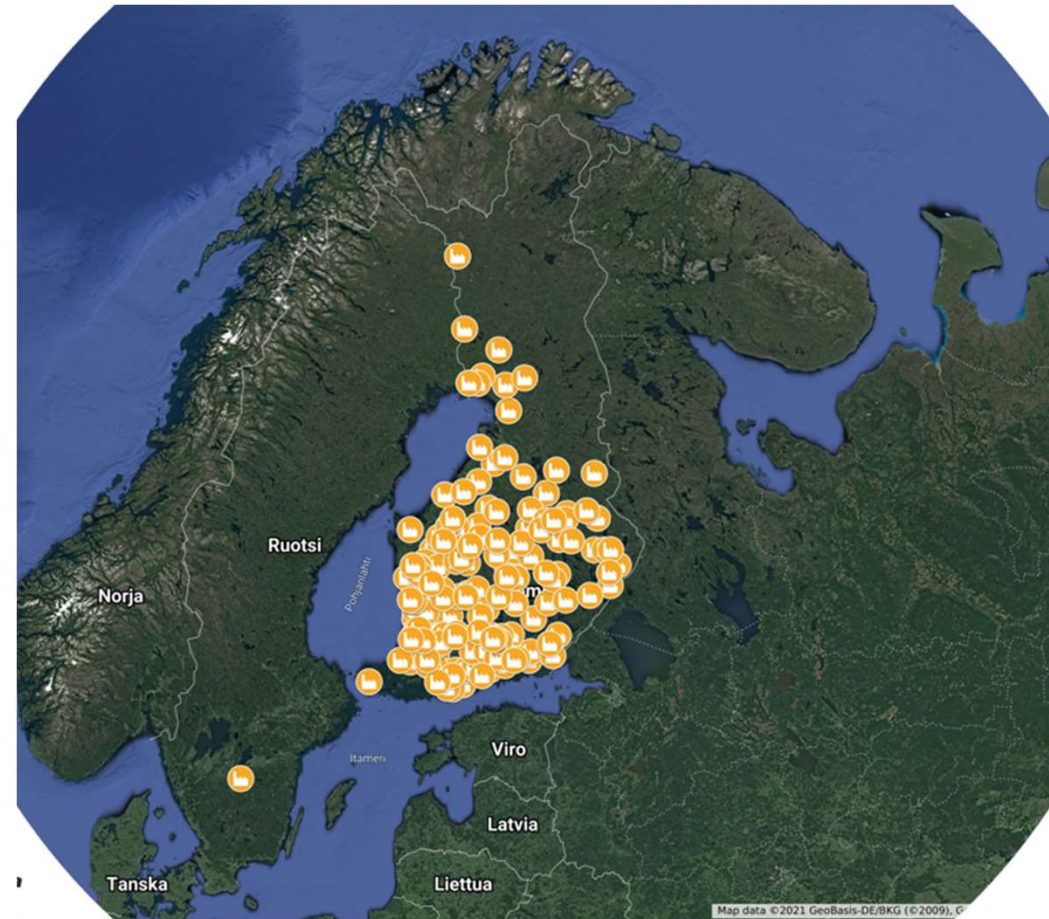
# Plants located around Finland

## - West Coast & North Karelia hotspots

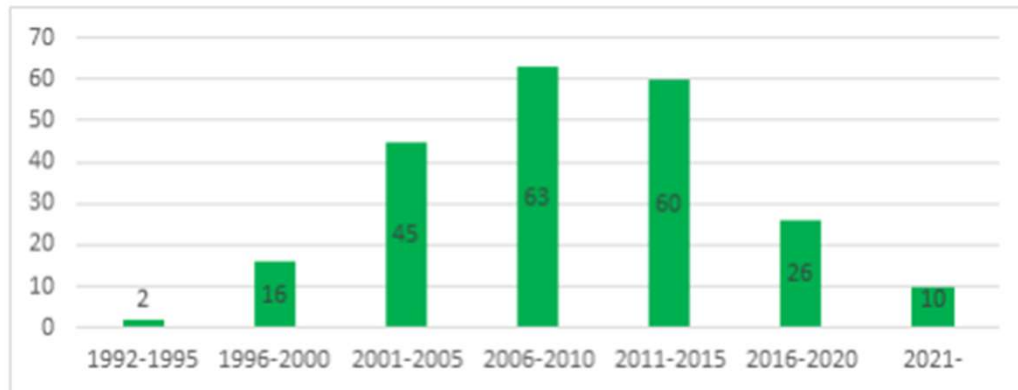


Plants by Regions (in 2022)

Source: TTS

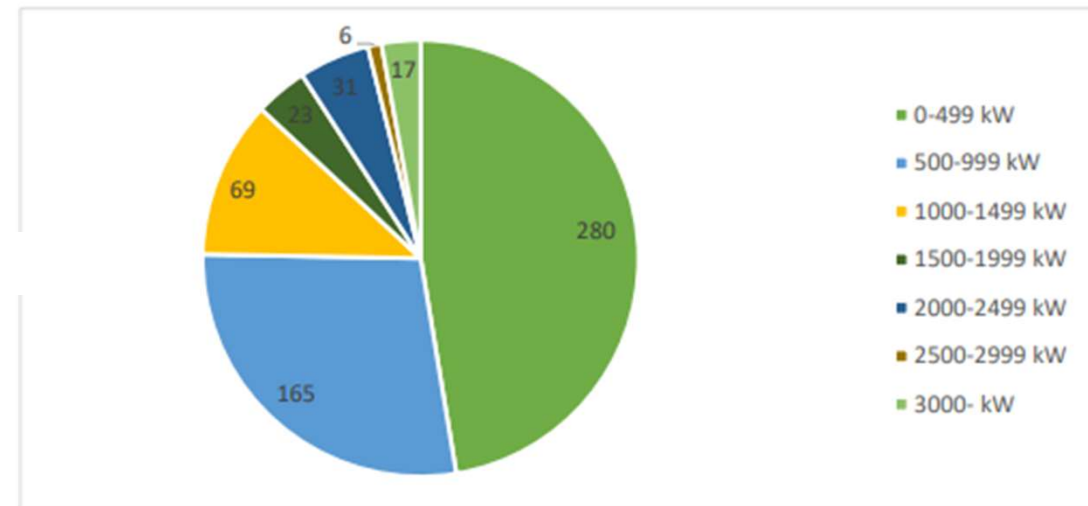


# Boilers



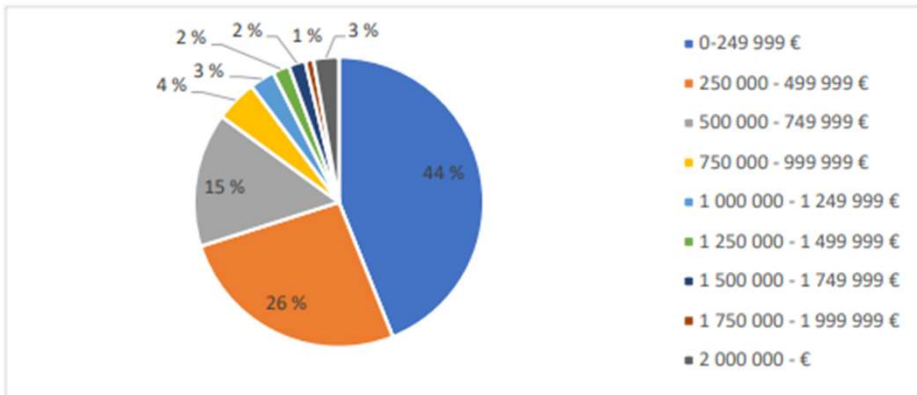
Distribution by boiler age

Half of the boilers < 0,5 MW

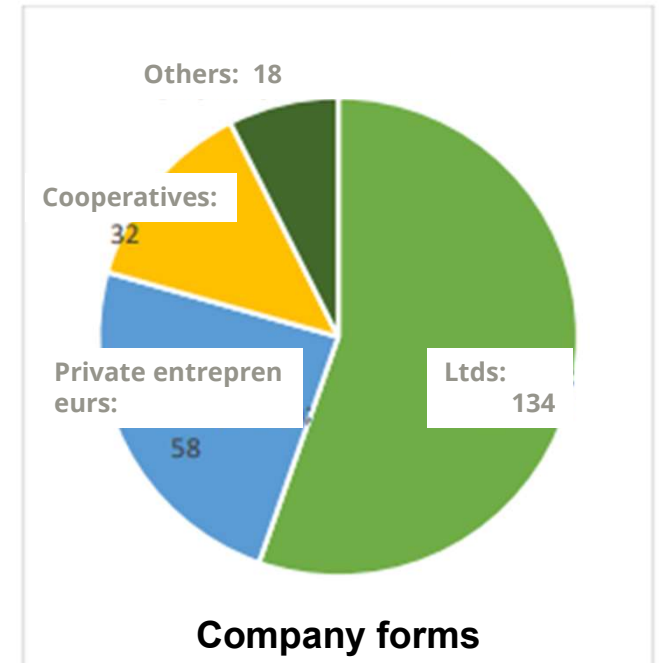


Distribution by capacity, solid fuel boilers (kW)

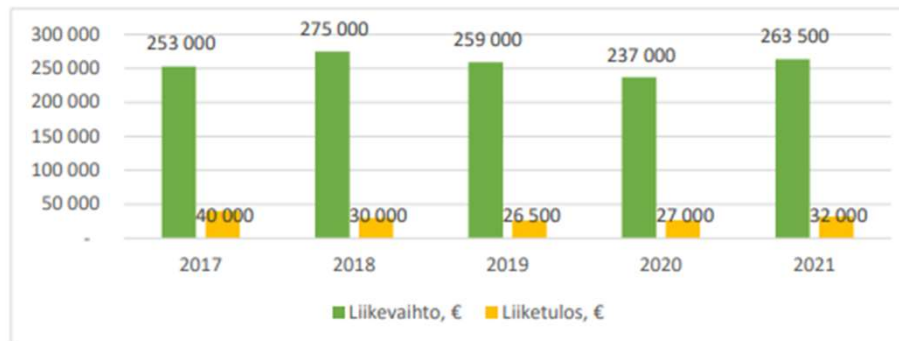
# Business in nutshell (n = 106)



Distribution by annual turnover, €



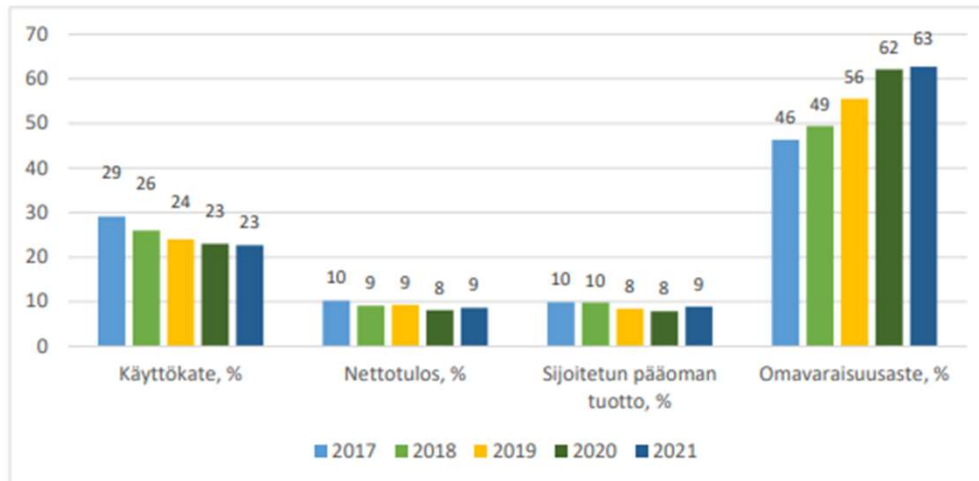
Company forms



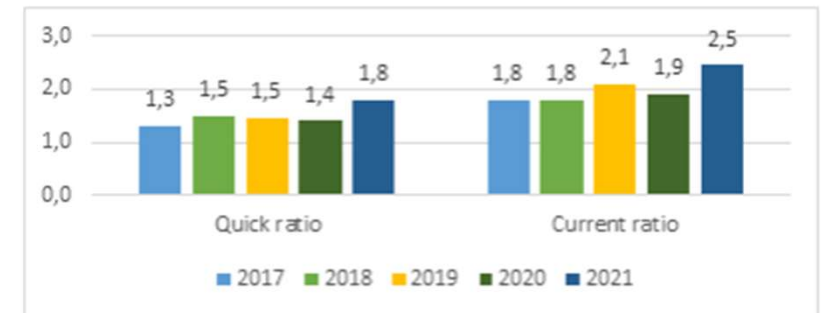
Average (median) turnover and EBIT, €

Source: TTS

# Nice solid business (n = 106)



Operating profit, net profit, ROI and equity ratio (medians, by order)



Quick ratio & current ratio (medians)

# Survey by TTS (Työteho-seura) in 2022 (preliminary results)

- **42 entrepreneurs interviewed**

- Average history as heat entrepreneur 13 years
- Mean age: 53 years
- *"Do You suspect acting as heat entrepreneur during next 3-5 years?"*
  - 81% "YES", 19% "NO"
- *"How do You forecast Your business to develop during next 3-5 years?"*
  - 47% "GROW", 50% "STAY", 3% "DIMINISH"
- *"How do You suspect the Heat Entrepreneur Business to develop in general?"*
  - Diverse answers regarding to the growth of business: operational environment has changed rapidly, hard to predict, big differences between regions...
  - Reductions to combustion, increased use of heat pumps / geothermal heating?
  - Hybrid systems and new options: biogas, solar heat & electricity and biocoal