

Multiple Stakeholders in DH

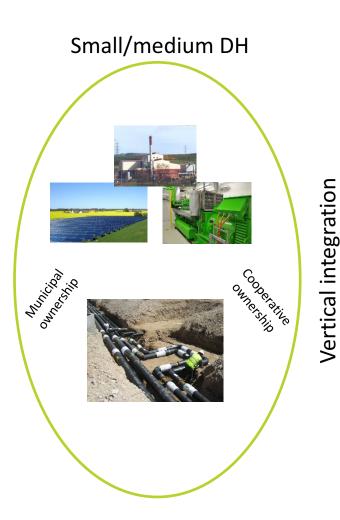
Birger Lauersen

Danish District Heating Association









DH in DK

Producer Producer Producer

"Unbundeld"

This structure seems to have been conductive for development & initiative

Heat TSO

Output

Outp

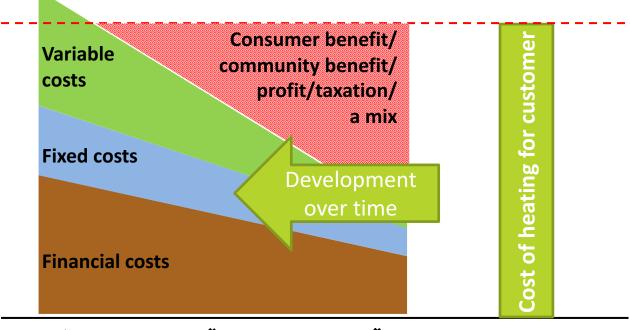
Heat Municipal distributors of the distributor





Business idea of DH

"Greening" over time



RE'heat

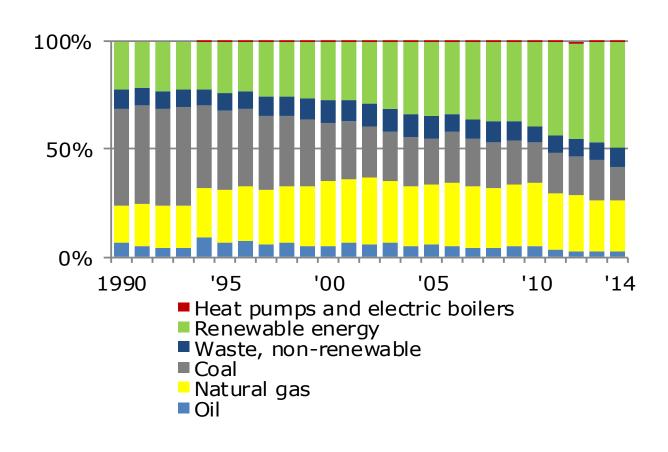
CHP heat ties

Excess heat





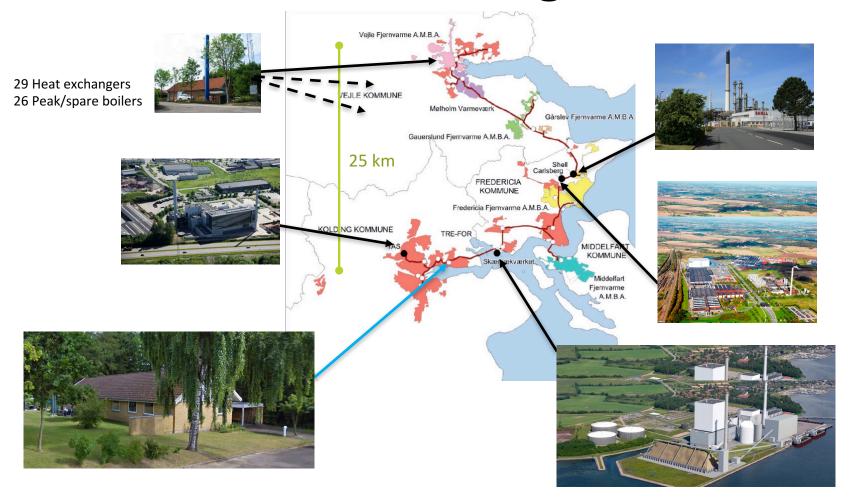
Fuel shares for DH production







A district heating customer







Empowered?

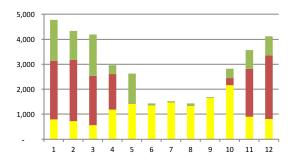


Højstup School in Odense 2009

- The school was already connected to DH
- Odense 92 % DH
- Surplus heat (CHP: RES, coal, waste)
- Peak solar thermal production during summer holidays and abundance of surplus heat...











Stakeholders in Danish DH

- Consumers/building owners
 - Cost of heating, service, reliability
- Heat planning authority
 - Heat supply
- Public authorities (local & central government)
 - Social, environmental, community, service
- Owners (consumers & municipalities)
 - Risks & benefits,
- Developers
 - Costs, planning benefits/constraints
- Financial institutions
- Supporting sectors (manufacturers, consultancies etc.)
 - Sales, export, technological development
- Excess heat suppliers
- Other energy sectors (fuel/energy providers)
 - Sales, competition
- Other organizations (NGOs etc.)
 - Environmental





Summing-up

- Stakeholder challenges in DH
 - Cooperatives in smaller towns and villages can be basis for initiative in heating
 - Large municipal utilities a bit more like supertankers..
 - WtE and fossil fuel origin so far accepted by most
 - Some "Supergreens" for whom WtE & fossil origin totally unacceptable
 - "Everybody his own bonfire"!
 - NZEB....





Final remark

"The directive on Energy Efficiency (2012/27/EU) promotes an integrated approach to assess the costs and benefits of the various efficient heating and cooling supply options. This approach takes into account all relevant supply resources in geographical boundaries selected so as to avoid sub-optimised solutions on a project-by-project basis, and covering socioeconomic and environmental factors when accounting for the economic effects."

European Commission, Written answer to question in European Parliament (E-008901-2014)