

Pioneers of Smart Energy



I am an entrepreneur, industrial inventor and managing director at HögforsGST. We develop and manufacture energy saving solutions, district heating distribution centers, heat pump systems for residential and commercial properties and the energy company. Typically, we offer 40-60% energy savings to our customers.

We work in the Nordic countries.

I will talk about #DistrictHeating
#HeatPumps # 4GDH, #HybridHeat,
#CarbonNeutral #Lowtemperature



Antti Hartman

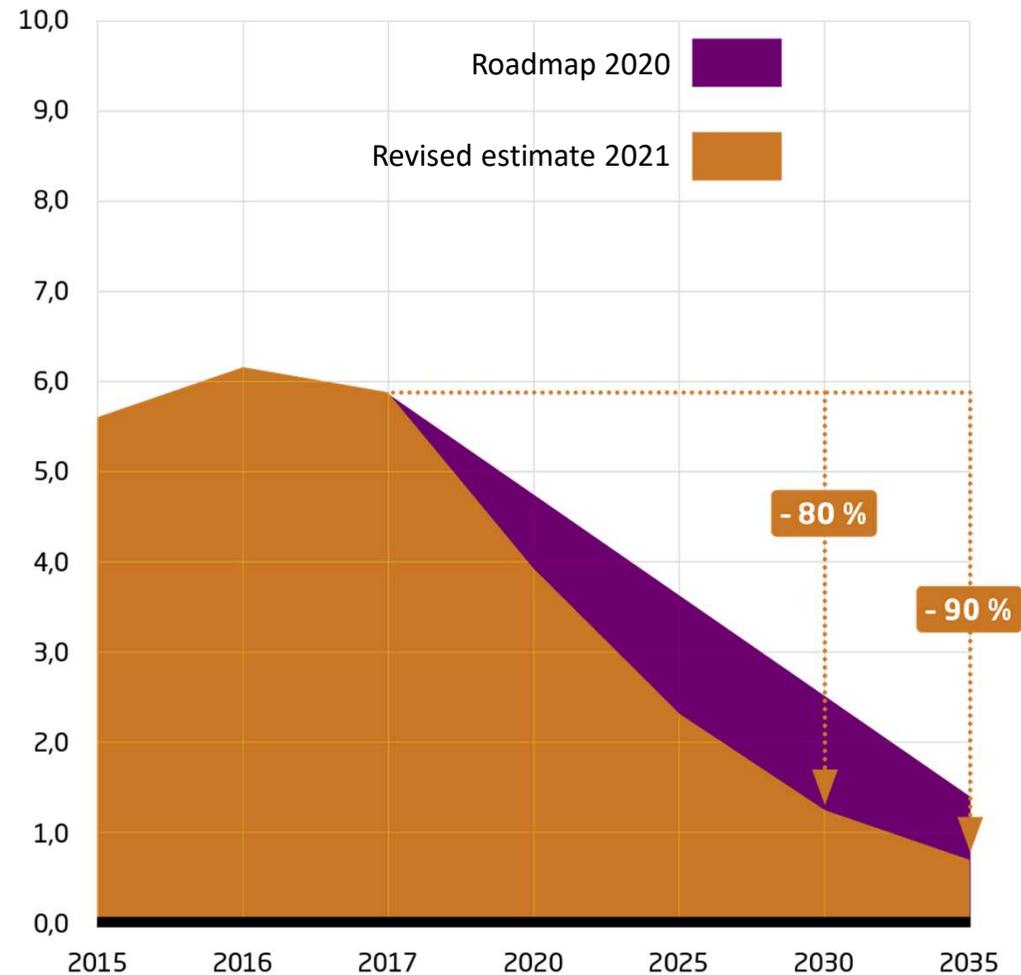
District heat emissions are decreasing significantly faster than predicted

District heat emissions have halved in ten years, and they are continuing to fall to a third of the current levels over the next 10 years.

Companies in the industry have a strong shared vision of the necessity of zero emissions, and in many places district heat is already emission-free.

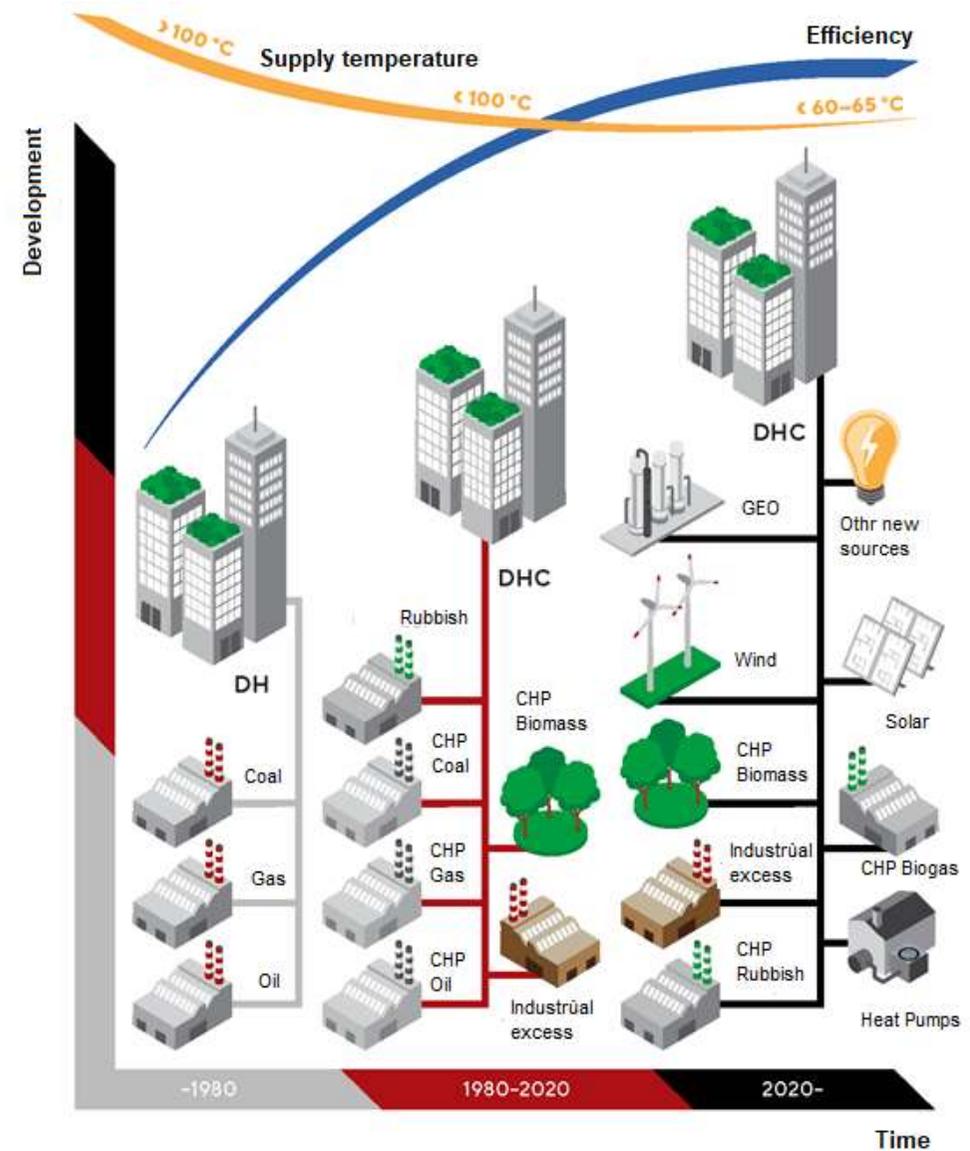
Energy companies strongly believe that the district heating system offers the most efficient and flexible way of meeting society's many expectations.

Updated CO₂ emission trajectory of district heat

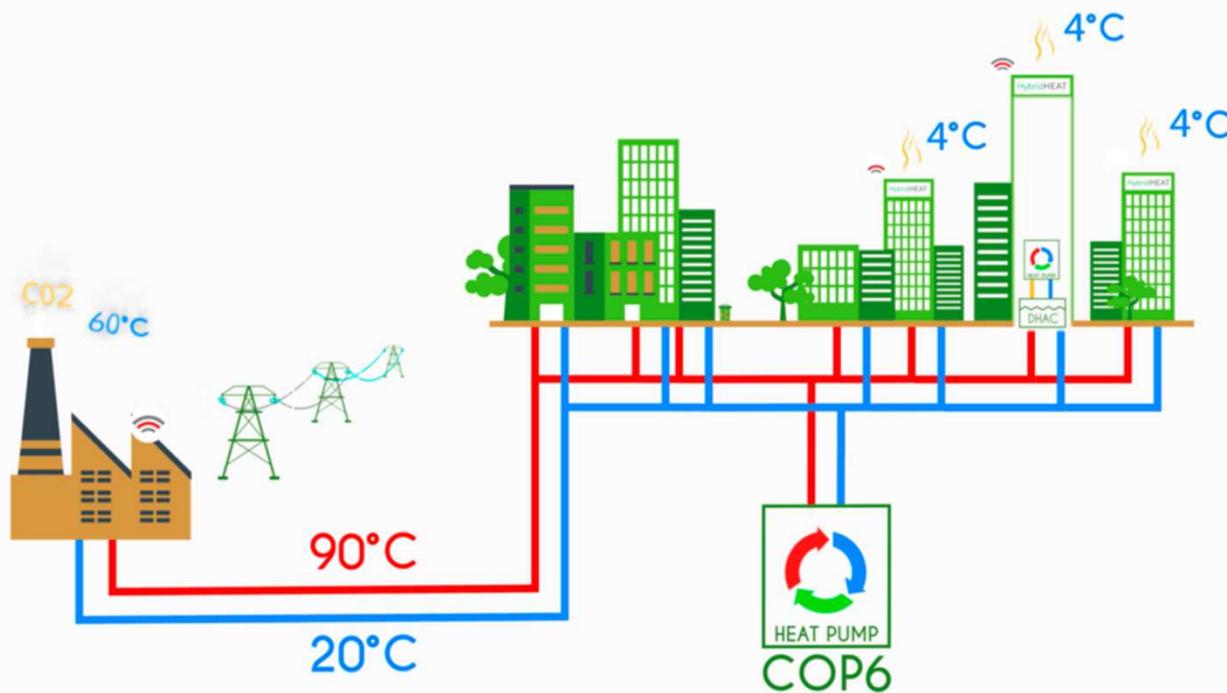


The next generation of district heating 2025→2030→

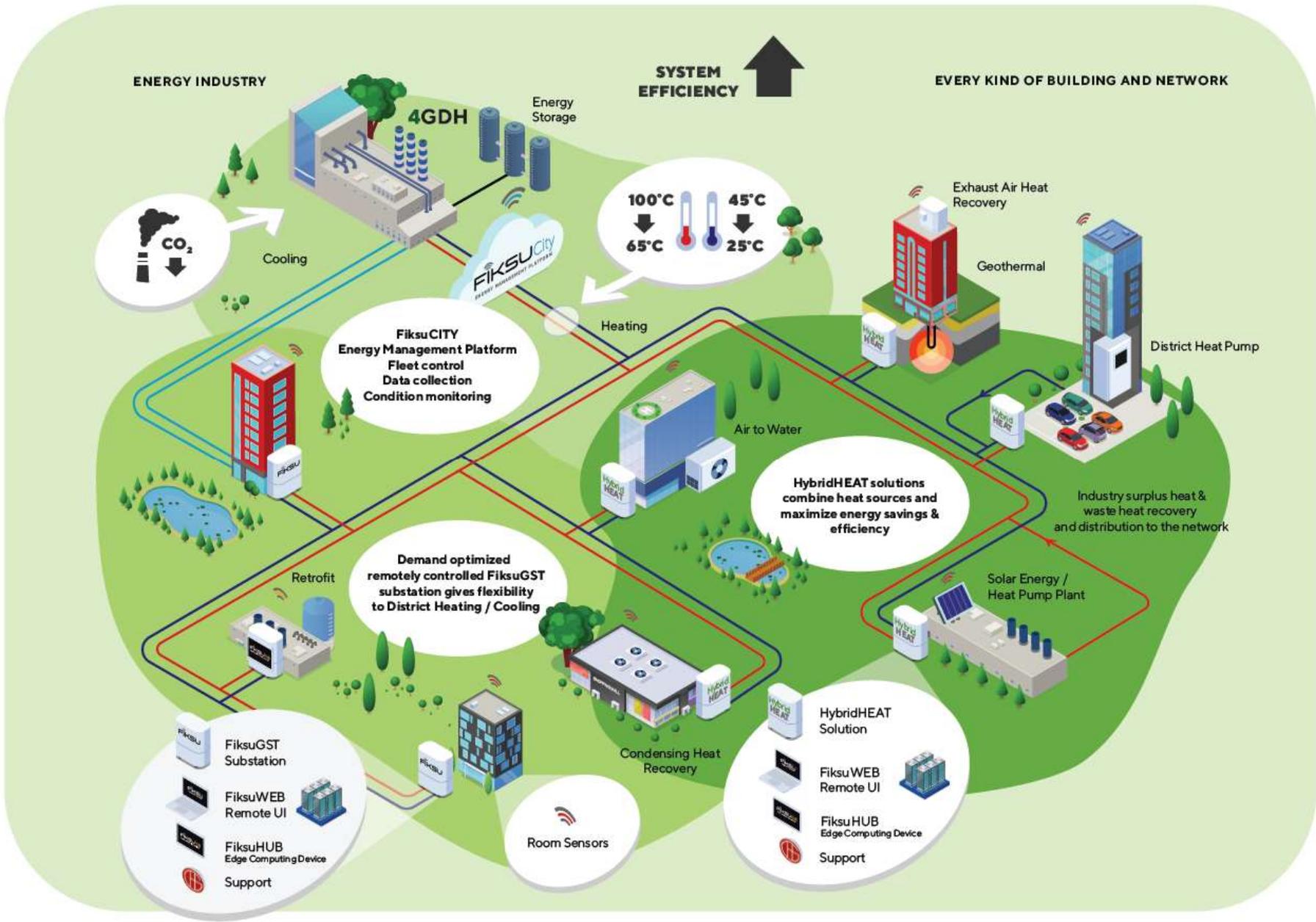
- We are leaving fossil fuels
- We smoke less at all
- We are increasingly moving to waste heat and heat generated by heat pumps
- Improving energy efficiency is a key factor!
- Burn more efficiently
- Less is wasted
- We take advantage of the waste of others
- We lower the temperature level
- The production, distribution and use of district heating will be integrated into a single digital process that will further increase efficiency



Next generation district heating is more flexible, cleaner and more rapidly evolving than its predecessors.



1. Ability to supply low-temperature district heating for space heating and domestic hot water (DHW) to existing buildings, energy-renovated existing buildings and new low-energy buildings.
2. Ability to distribute heat in networks with low grid losses.
3. Ability to recycle heat from low-temperature sources and integrate renewable heat sources such as solar and geothermal heat.
4. Ability to be an integrated part of smart energy systems (i.e. integrated smart electricity, gas, fluid and thermal grids) including being an integrated part of 4th Generation District Cooling systems.
5. Ability to ensure suitable planning, cost and motivation structures in relation to the operation as well as to strategic investments related to the transformation into future sustainable energy systems.



Examples





Thank You!