

# Towards 100% green District Heating in Høje-Taastrup Municipality

Astrid Birnbaum, Director

Høje Taastrup District Heating Company Amba



The project has received funding from the European Union's Horizon 2020 research and innovation programme under the grant agreement n° 767799 - COOL DH - H2020-EE-2016-2017/H2020-EE-2017-RIA-IA

# About us

**1963: District heating started  
(70 consumers and a coal plant)**

**1984: VEKS established**

**2011: Only one district heating company  
in the Municipality**



*Det nye fjernvarmeværk grundlægges på Gasværksvej.*



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# About us

## Our vision:

**We provide sustainable, secure and cheap district heating and cooling**

- **Heat sale: 1,100 TJ/year**
- **Revenues: 200 million DKK/year**
- **Consumers (heated buildings): 7,700**
- **Employees: 20**
  
- **70% of the heat demand in our Municipality is district heating (2021)**  
+ **Plans to include all present gas and oil consumers**
  
- **Our district heating is 85% CO2-neutral**



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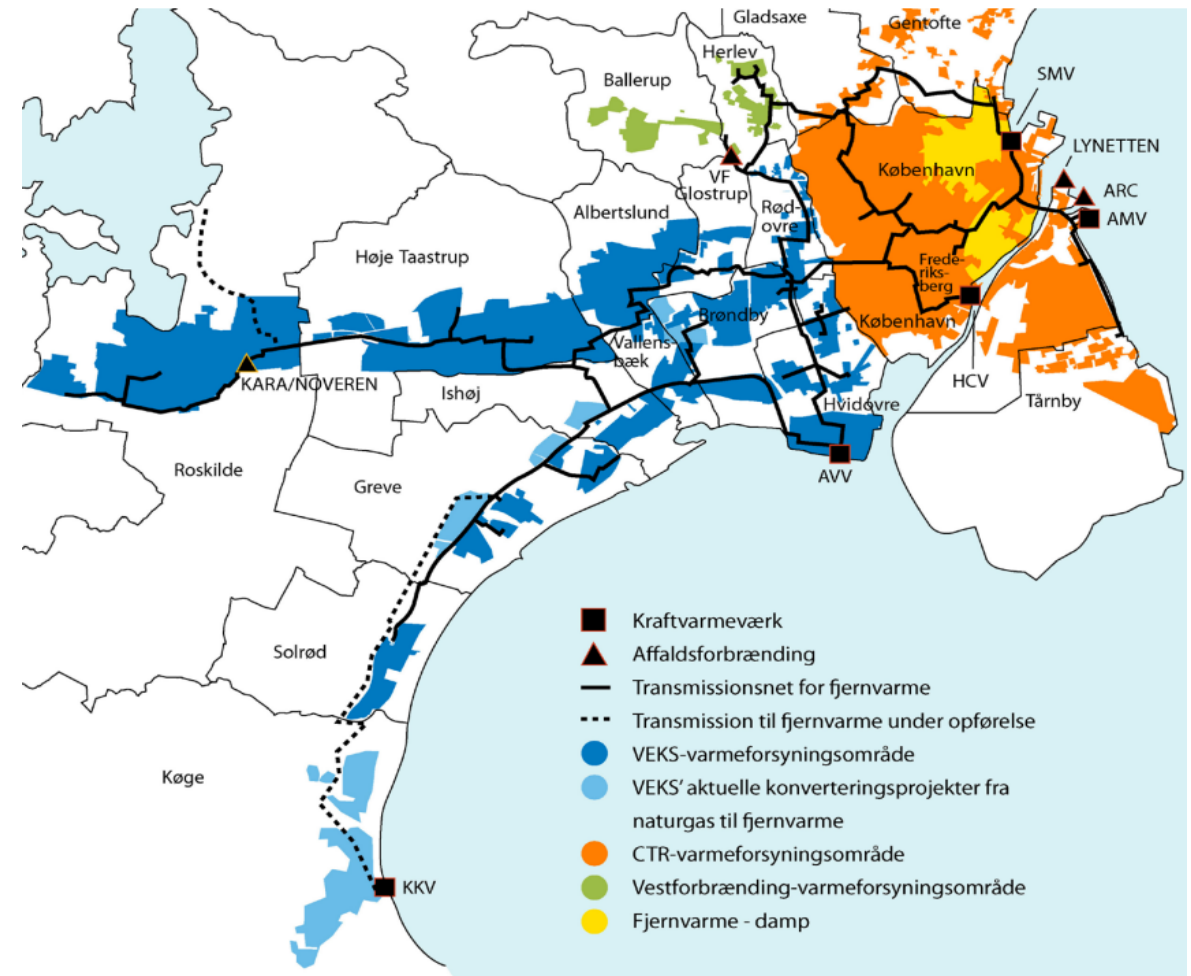
# We are a part of the large district heating system in Greater Copenhagen

## We buy heat from VEKS (the transmission company):

- Combined heat and power from sustainable biomass (60%)
- Waste incineration (30%)

## We own local production:

- Local large heat pumps and solar (10%)





# District heating important for the green transition

- Utilize central production from the transmission system
- Utilize local heat sources
- Sector coupling
- Heat storage
- Lower temperature => 55/30°C

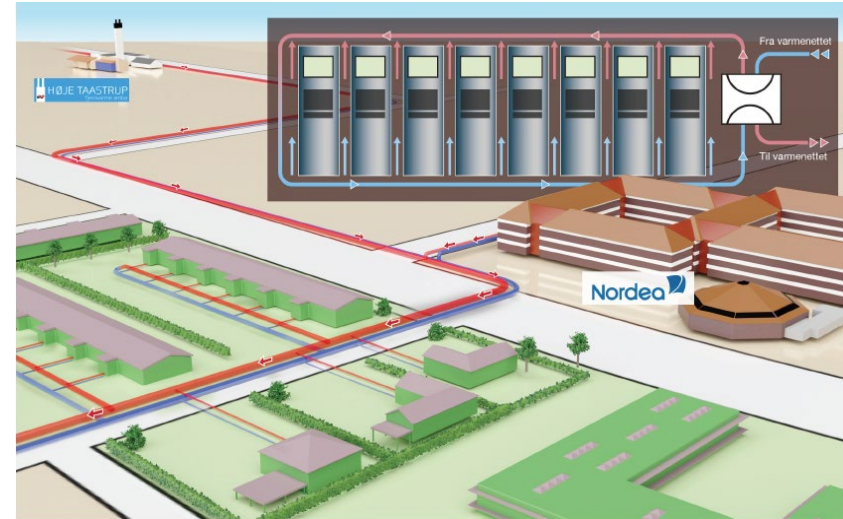


***Høje Taastrup District Heating and VEKS  
establish 70.000 m<sup>3</sup> heat storage***

# Surplus heat from datacenters

## Large heat pumps using surplus heat:

- from Nordea's data center from 2020
- from Global Connect data center from 2023
- more large data centers will come in Høje Taastrup (50 MW)



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# Combined heating and cooling

## District cooling to business – Cph. Markets

4 large heat pumps in operation -  
combined production of district  
heating and cooling

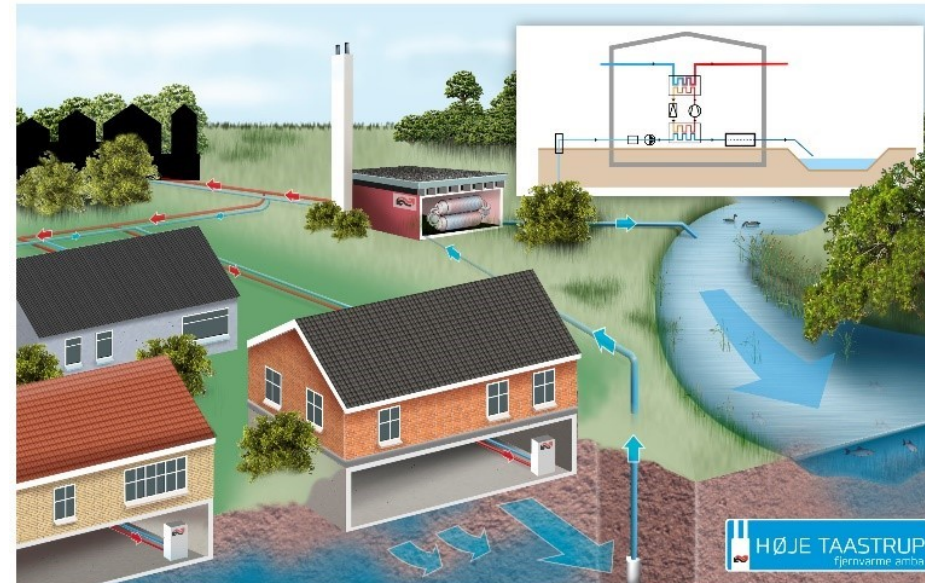


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# Local heat sources groundwater

Large heat pump use the rising groundwater in the area

- produce 1.5 MW heat
- the residents get less water in their basements
- colder water back in the creek



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# Solar heating system

**Size:** 3000 m<sup>2</sup>

**Capacity:** 1200-1500 MWh

**No storage but directly into the district heating system**



The project  
research and  
COOL DH - H