

# Envafors – on behalf of SK Varme



**Study trip to Denmark, September 2023**

**Energy Manager**

**Carsten Lunde: (+45) 24 24 39 93**



**Envafors A/S**

# SK Forsyning in numbers

- SEAS-NVE
- SK Forsyning / SEAS-NVE



**Owner:** The municipality of Slagelse

**Founded in 2008:** A fusion between Korsør- and Slagelse Forsyninger

**Employees:** 131

**Revenue 2021:** 523 mm. d.kr.

**Yearly investments:** +500 mm. d.kr.

**We supply:**

- 55.000 inhab. with electricity
- 46.000 inhab. with water
- 30.000 inhab. with heating
- Streetlight in the municipality of Slagelse – about 14.000 masts. 2000 private and 120 contracts
- 7000 customers with gas

We transport and treat wastewater from all citizens in the municipality of Slagelse:  
Roughly 80.000 inhabitants

**Monopolized:**

- Water supply network
- Electricity network
- District heating network
- Wastewater cables

All heavily regulated by the state

**Competitive conditions:**

- The heat supply is partly competing with other heat-sources such as oil and gas.
- Electricity and gas: competitive market



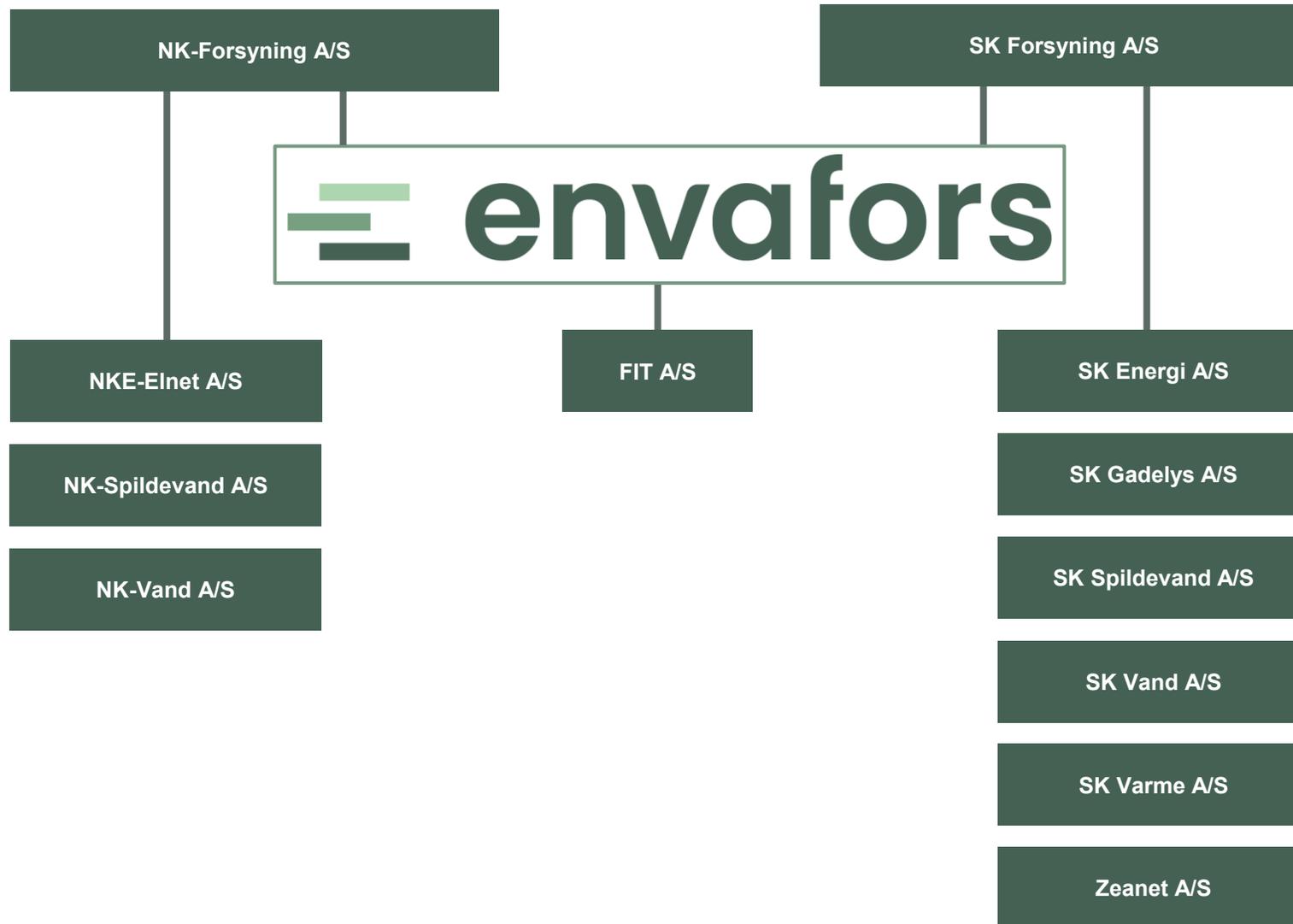
# About Envafors

Envafors is a new joint service company established on May 25th, 2022 in a collaboration between NK-Forsyning and SK Forsyning.

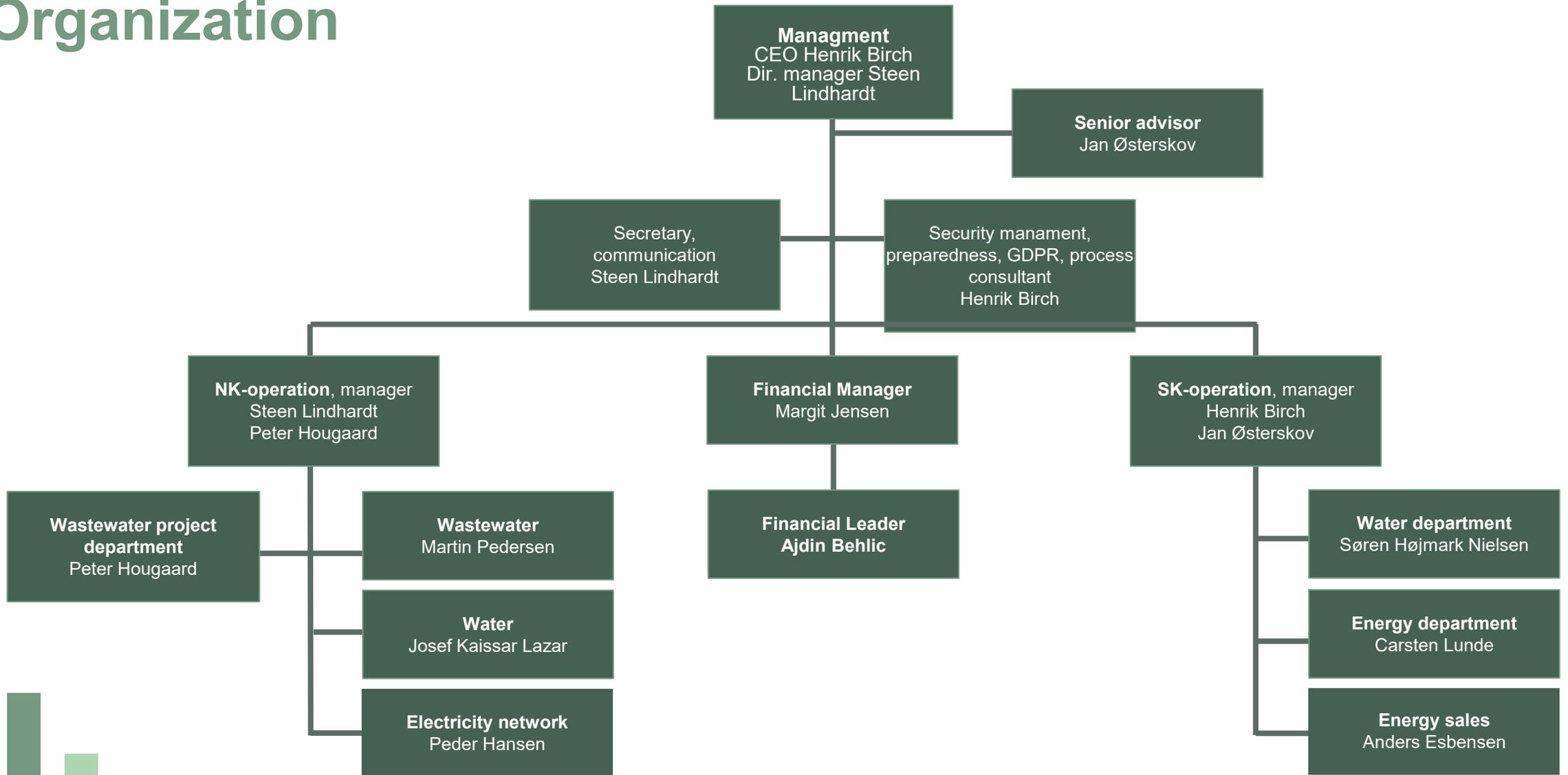
We provide energy and water services to the citizens of Næstved- and Slagelse municipalities.

We got around 200 employees and are located at Nordvej 6 in Slagelse, as well as Ærøvej 2 and Ved Fjorden 18 in Næstved.

# Organizational structure



# Organization





## SK Forsynings 2025-strategy: United for sustainability

Expanding on the vision, "united" covers the following six perspectives:

1. United across the organization – from board to individual employees
2. United across the supply areas in the core of SK Forsynings multifacted supply services
3. United with local stakeholders – customers, businesses, municipalities, educational institutions, housing associations and others
4. United with suppliers, industry organizations and others
5. United with other supply services – both within and outside the municipality of Slagelse
6. United for the UN's Sustainable Development Goals

Similarly, "sustainability" covers the following three perspectives:

1. Economical sustainability
2. Climate and enviromental sustainability
3. Social sustainability



## Increased market share

- District heating in Slagelse and Korsør
- Sale of electricity and gas

## District heating in Skælskør

- Streetlights in the former municipality of Hashøj
- Consumer-owned water plants
- Wastewater: Takeover of private facilities
- Barmarks-project (District heating)



## Sustainable Development Goal nr. 7: **Sustainable energy**

**During the strategy period, we aim to support Sustainable Development Goal 7 on sustainable energy through:**

- Establishing of a net CO<sub>2</sub>-neutral self-production for the entire group during 2020
- Increasing the production of biogas and thus sustainable energy at Slagelse Wastewater Treatment Plant, among other things, through the utilization of byproducts from industry
- Strengthening the sales efforts for CO<sub>2</sub>-neutral electricity and gas
- Expanding the distribution of CO<sub>2</sub>-neutral district heating to new areas to ensure that a large number of customers have access to sustainable energy.

# District heating – No fossile fuels



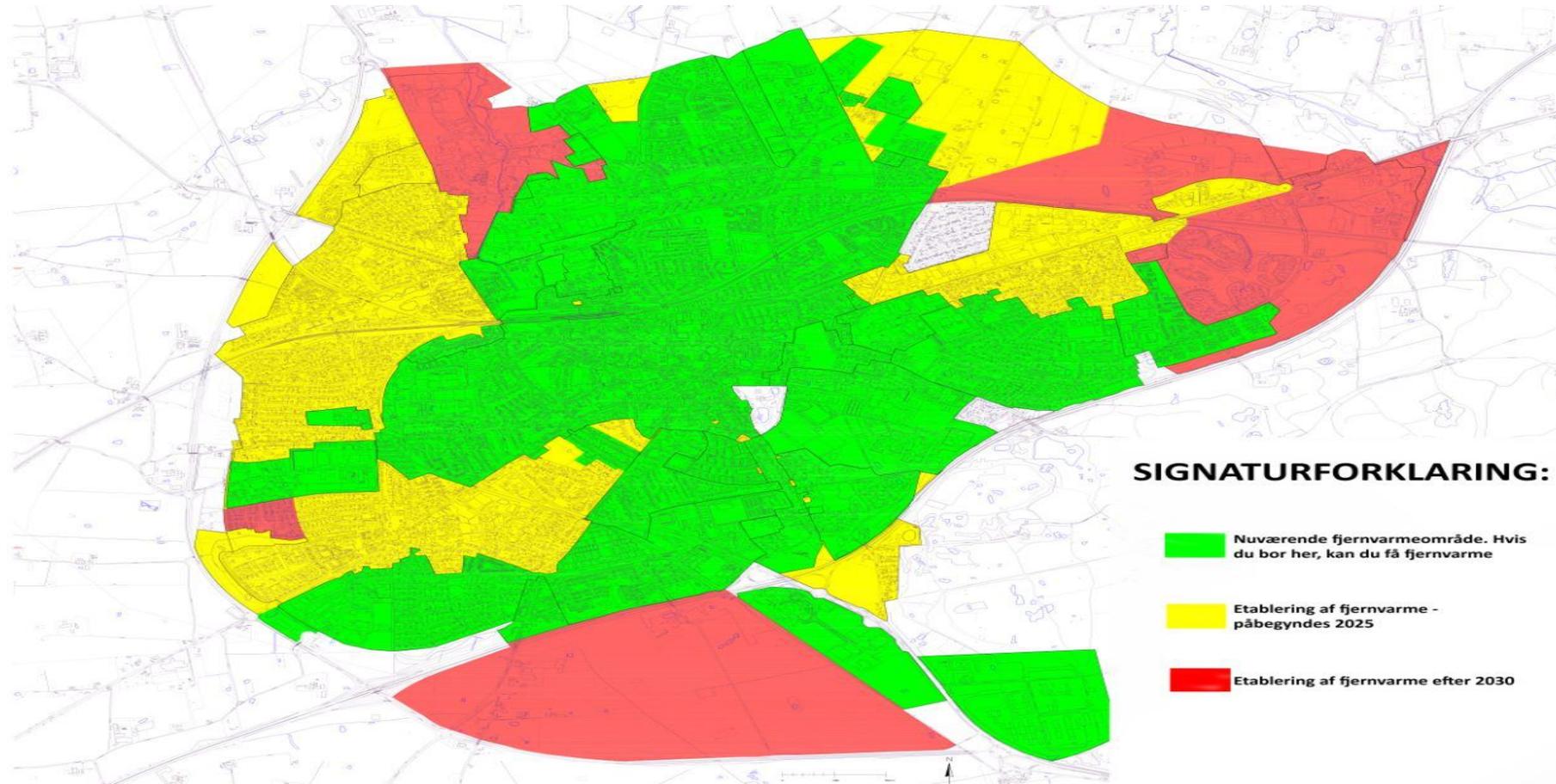
# District heating

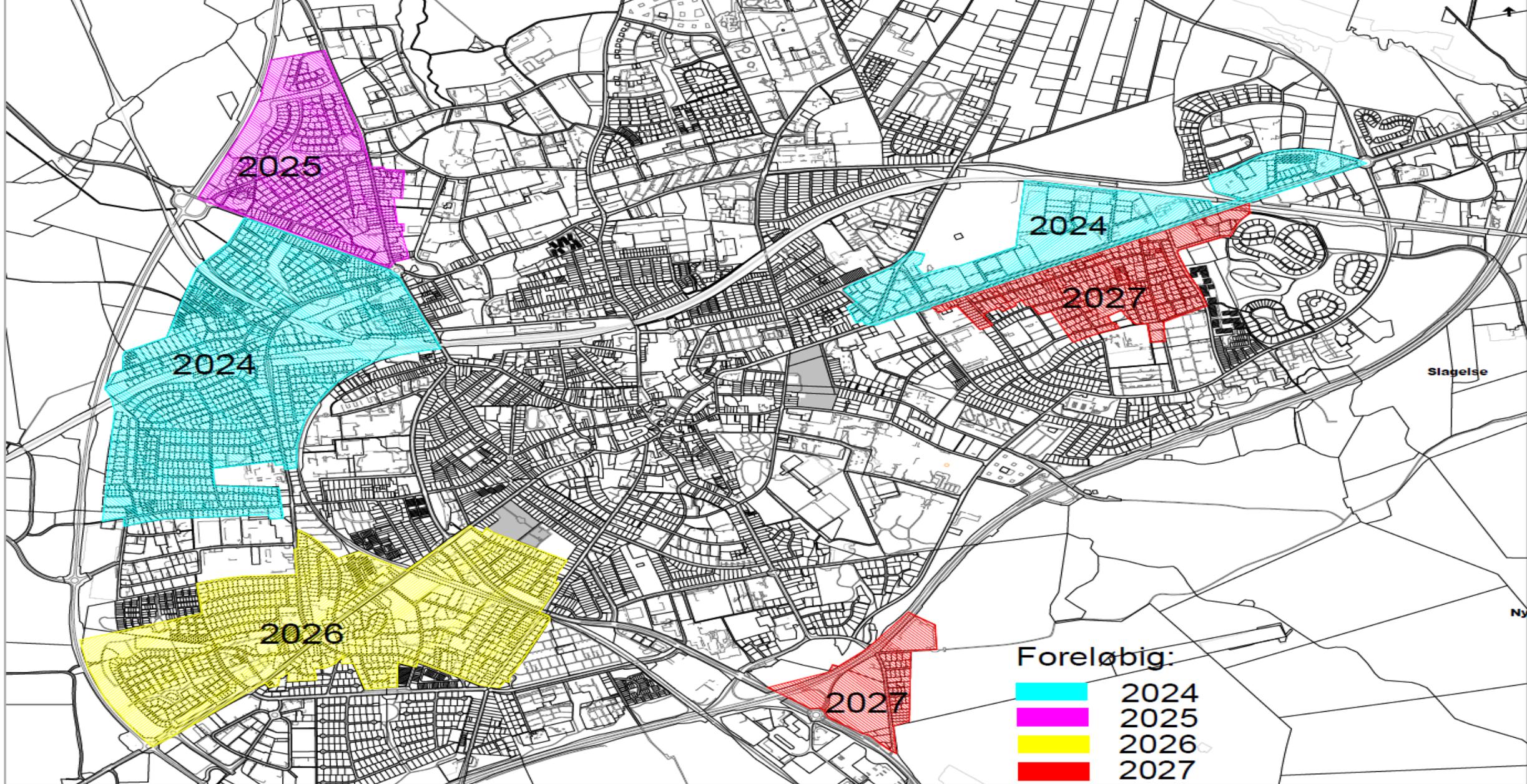
- 6,500 supply points
- 325,000 MWh/year (own production 75%, 85.6% renewable)
- 4 main stations, 6 peak/intermediate load stations, 185 MW
- 30 employees
- Revenue of 205 million, profit of 34 million D&V: 25 million. Self-financing of 60 million. CHP production plant in Slagelse: 40 MW straw-fired, 12 MWe (steam), 14 MW wood chip, 12.5 MW straw.
- CHP production plant in Korsør: 3 MW wood chip-fired, 13.5 MW 6 MWe (6 gas turbines, 15 MW gas and biodiesel-fired boilers), 11.5 MW straw-fired boiler.
- 8,000 MWh of solar heating.
- 6 peak-load production plants, 120 MW (gas and biodiesel boilers).

2014

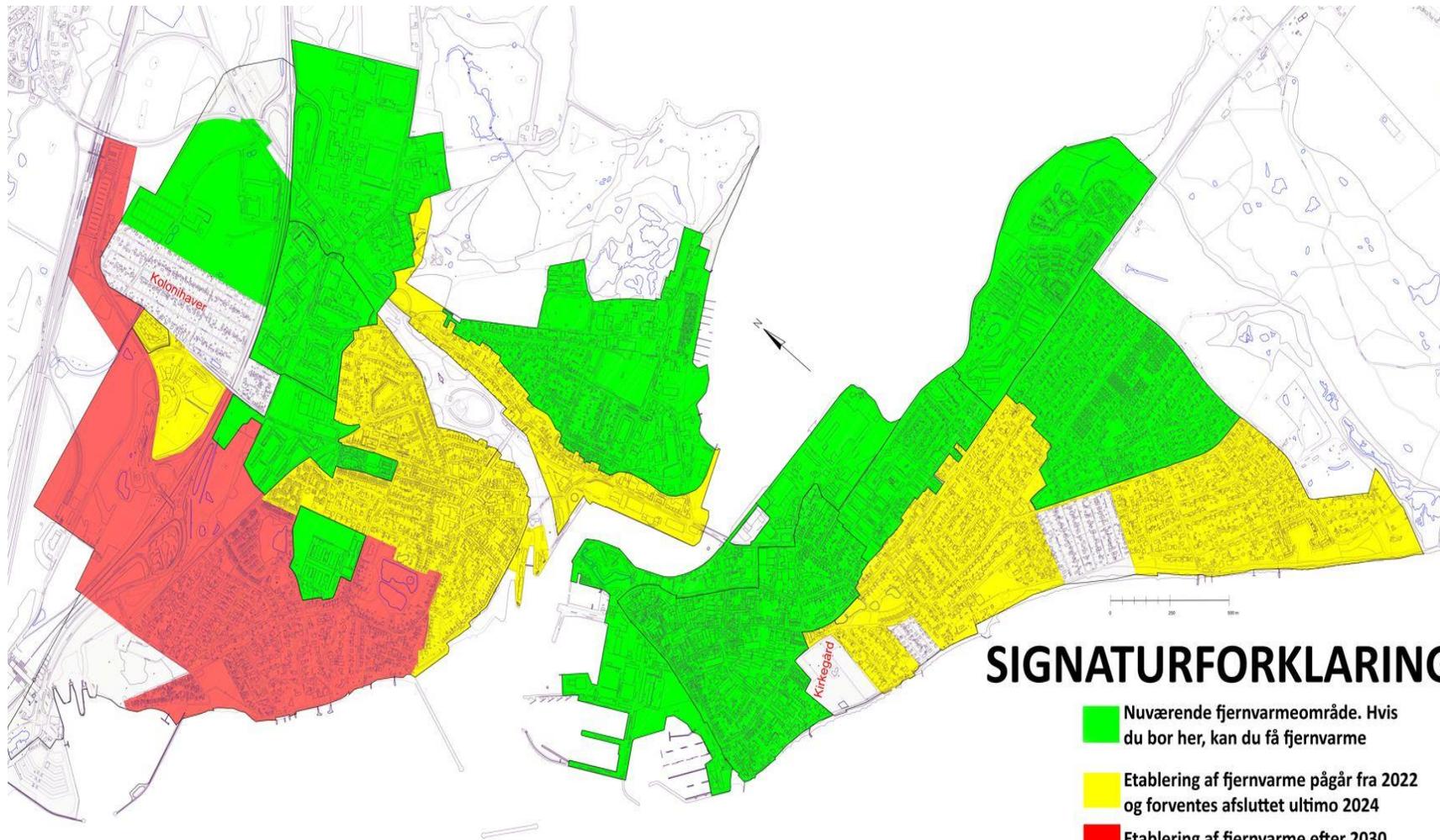


# Overview- Slagelse





# Overview - Korsør



## SIGNATURFORKLARING

- Nuværende fjernvarmeområde. Hvis du bor her, kan du få fjernvarme
- Etablering af fjernvarme pågår fra 2022 og forventes afsluttet ultimo 2024
- Etablering af fjernvarme efter 2030



# Skælskør



# District heating Skælskør

2,700 supply points with 100% connection.

6 MW straw-fired boiler.

6 MW heat pump.

Possible surplus heat from Harebos Brewery, approximately 1 MW.

From approved project proposal to fully built out in 5 years.

2024 – (...)

# District heating

## Heat production

- Before about 200.000 MWh
- Now about 325.000 MWh
- In a few years 375.000 MWh + Skælskør 435.000 MWh
  
- Netto CO2-neutral supply (own-production)
- 85,6 % renewable energy
  
- Connection voluntary
- Connection percentage: Industrial customers close to 100 % - private customers about 80 %

# Straw furnace Halskov - 2019



# Extension of district heating areas



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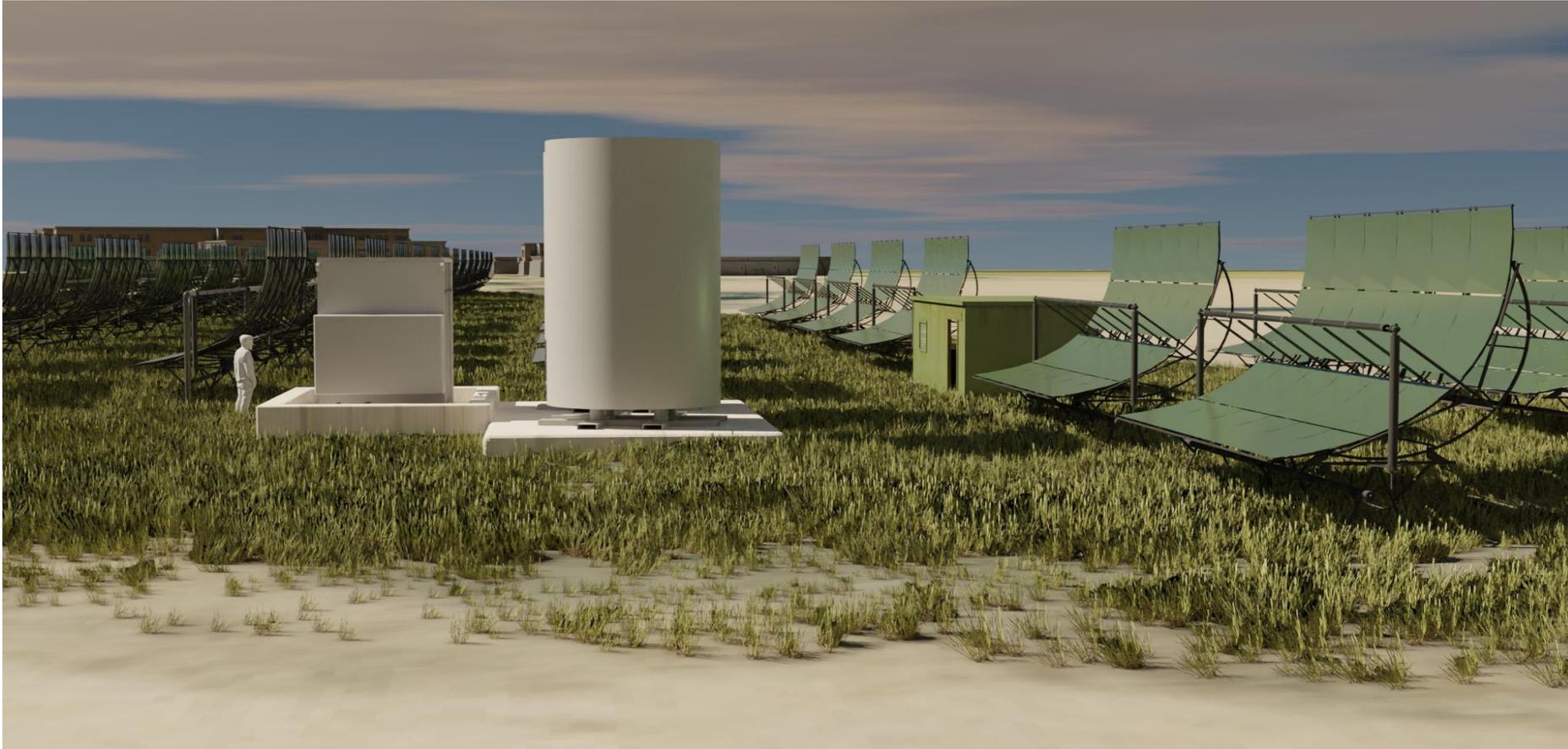
*Altid i nærheden*

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# FHA straw furnace, sun og heat pumps

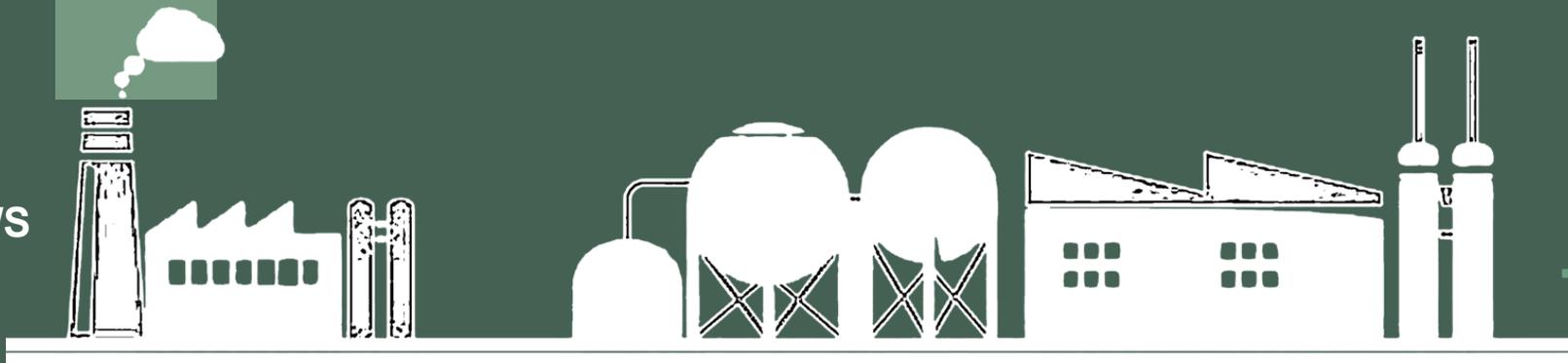


# FHA EUDP Project Malten salt -ORC



Thank you for your  
attention!

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