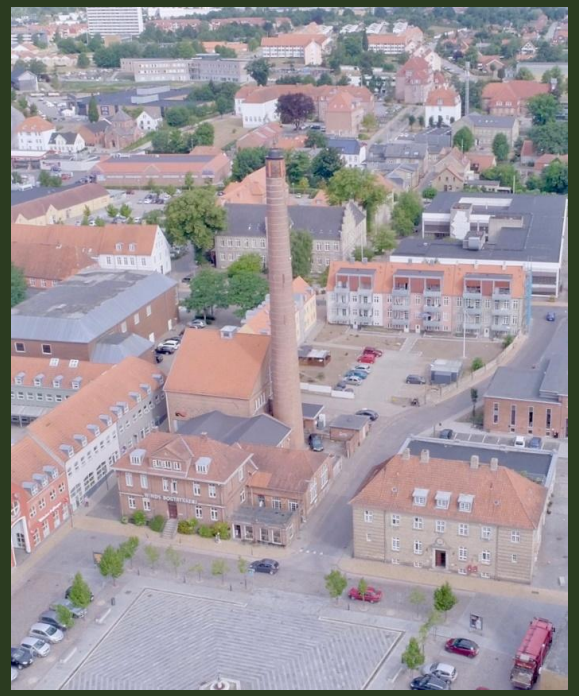
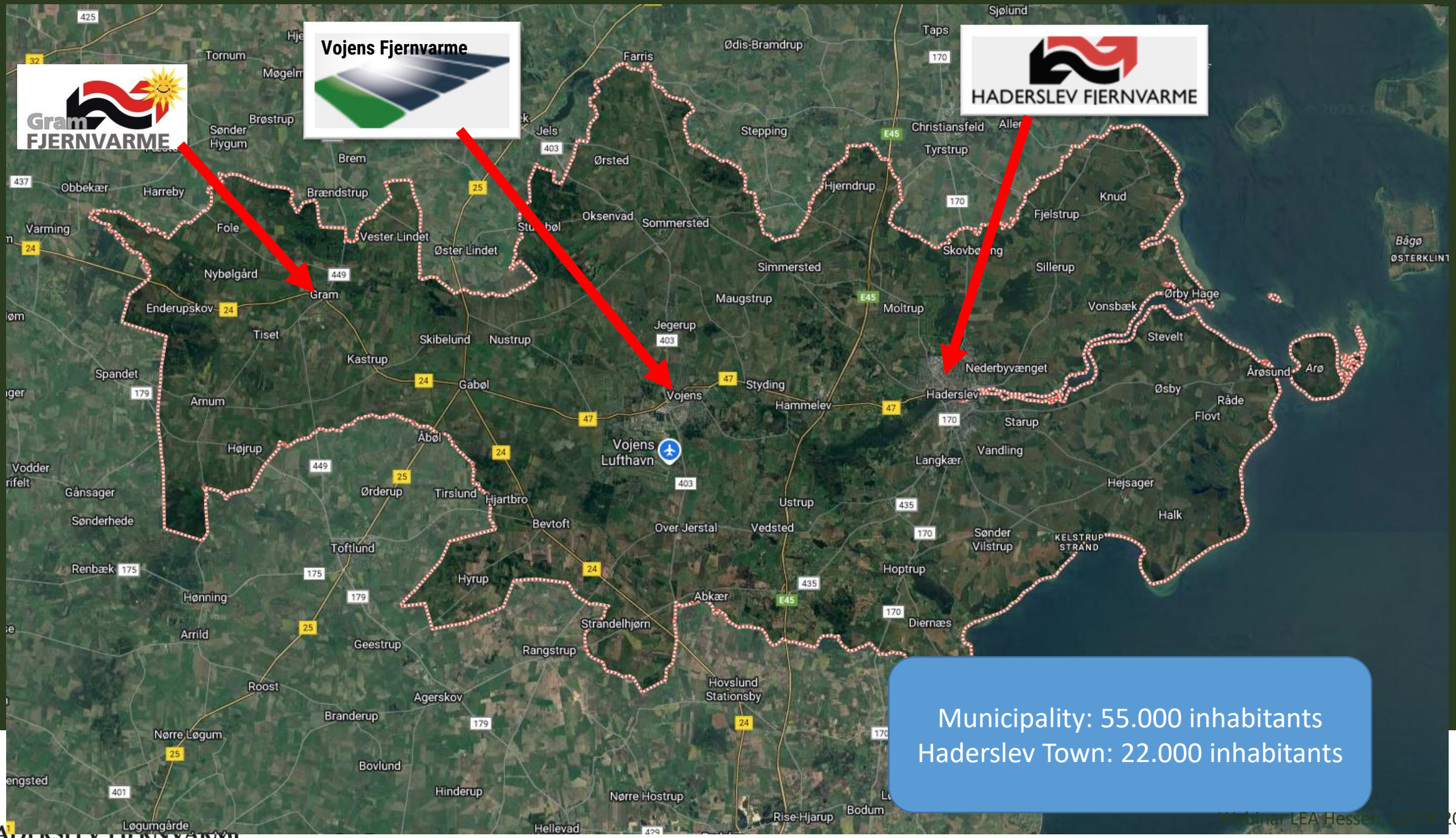
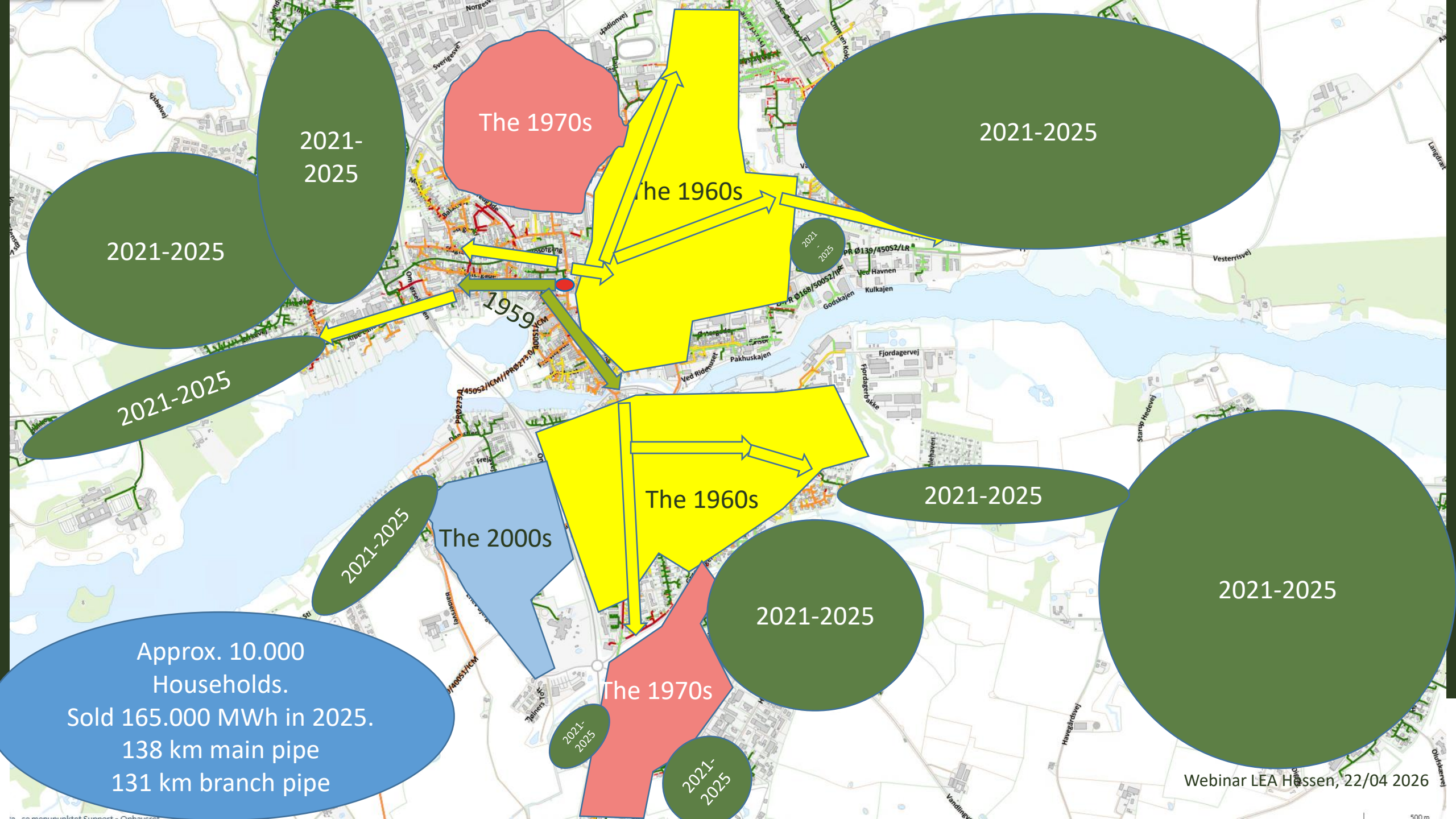


District heating in Haderslev

Peter Skovsgaard, Haderslev Fjernvarme

HADERSLEV FJERNVARME


Gram FJERNVARME
Vojens Fjernvarme
HADERSLEV FJERNVARME
Municipality: 55.000 inhabitants
Haderslev Town: 22.000 inhabitants



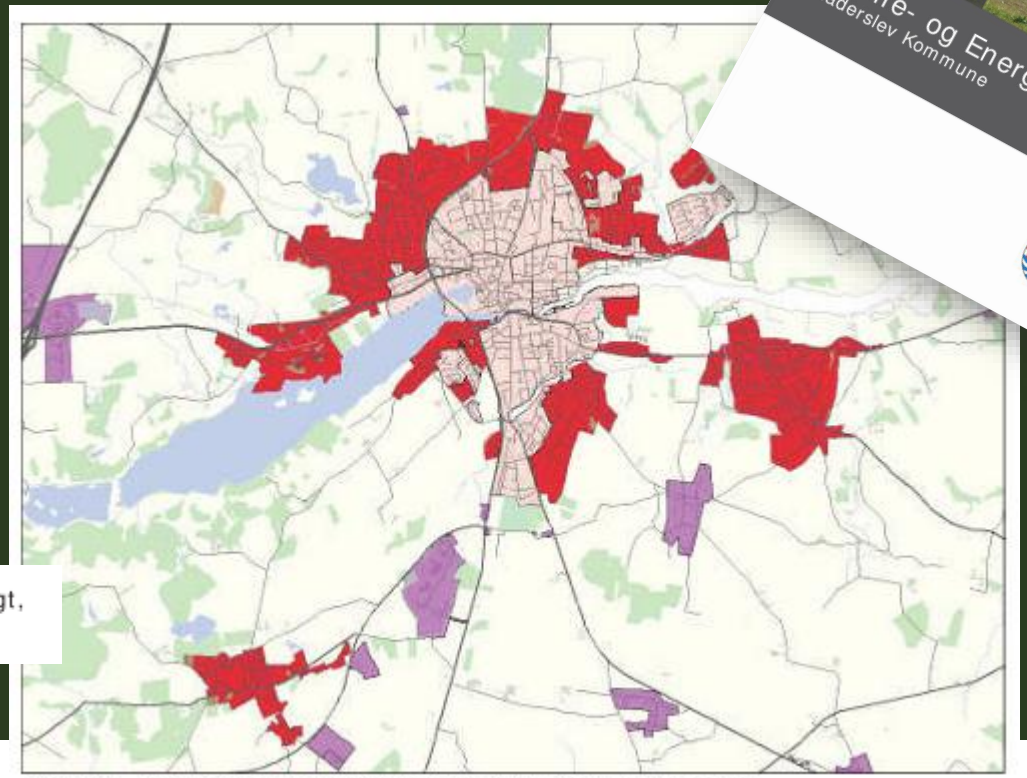
Webinar LEA Hæssen, 22/04 2026

Heatplan 2014

Conclusion:

“Haderslev Municipality recommends that Haderslev District Heating, as far as possible, prepare project proposals for the conversion of these areas.”

Haderslev Kommune anbefaler, at Haderslev Fjernvarme, så vidt det er muligt, udarbejder projektforslag for konvertering af disse områder.

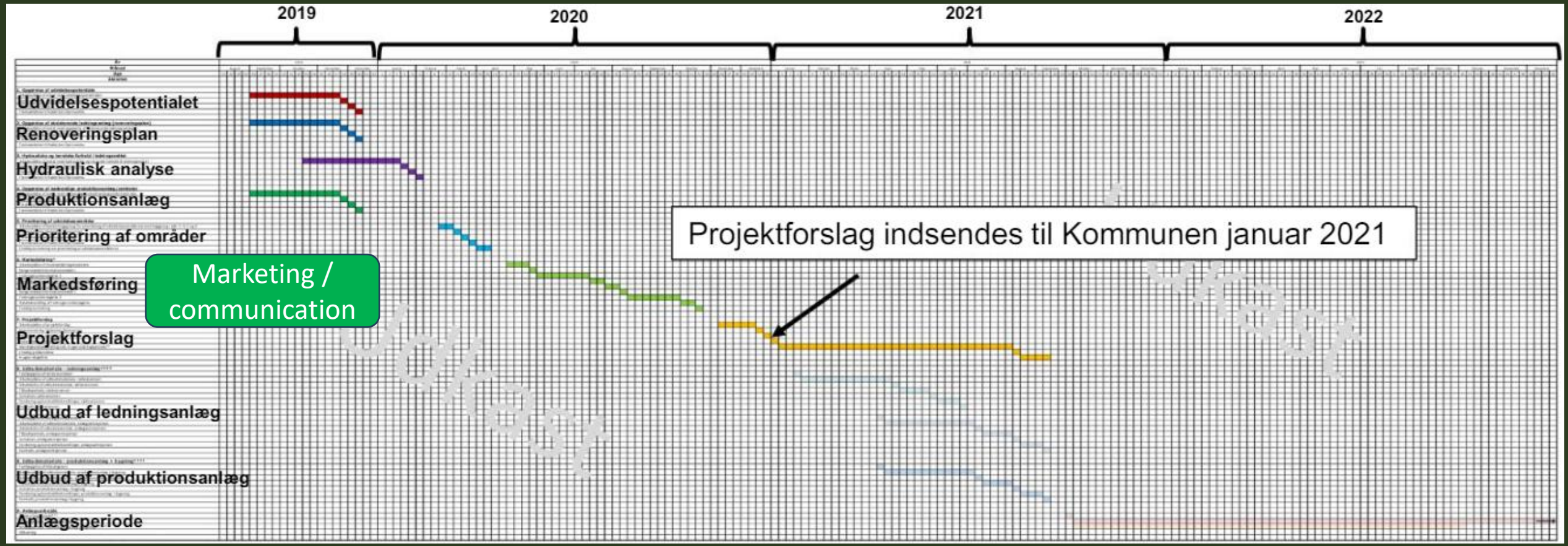


Figur 27. Potentielle konverteringsområder (rød) i Haderslev.

Other political initiatives (2018-2020)

- Political decision: from 1/1 2021 we don’t have to pay compensation to the gascompany
- Subsidy for District Heating or individual heatpumps. (Depending on which area the house is in)
- Still taxes on oil and gas
- Climate debate played a major role in the 2019 election campaign for Parlament

Timetable – calculated backwards

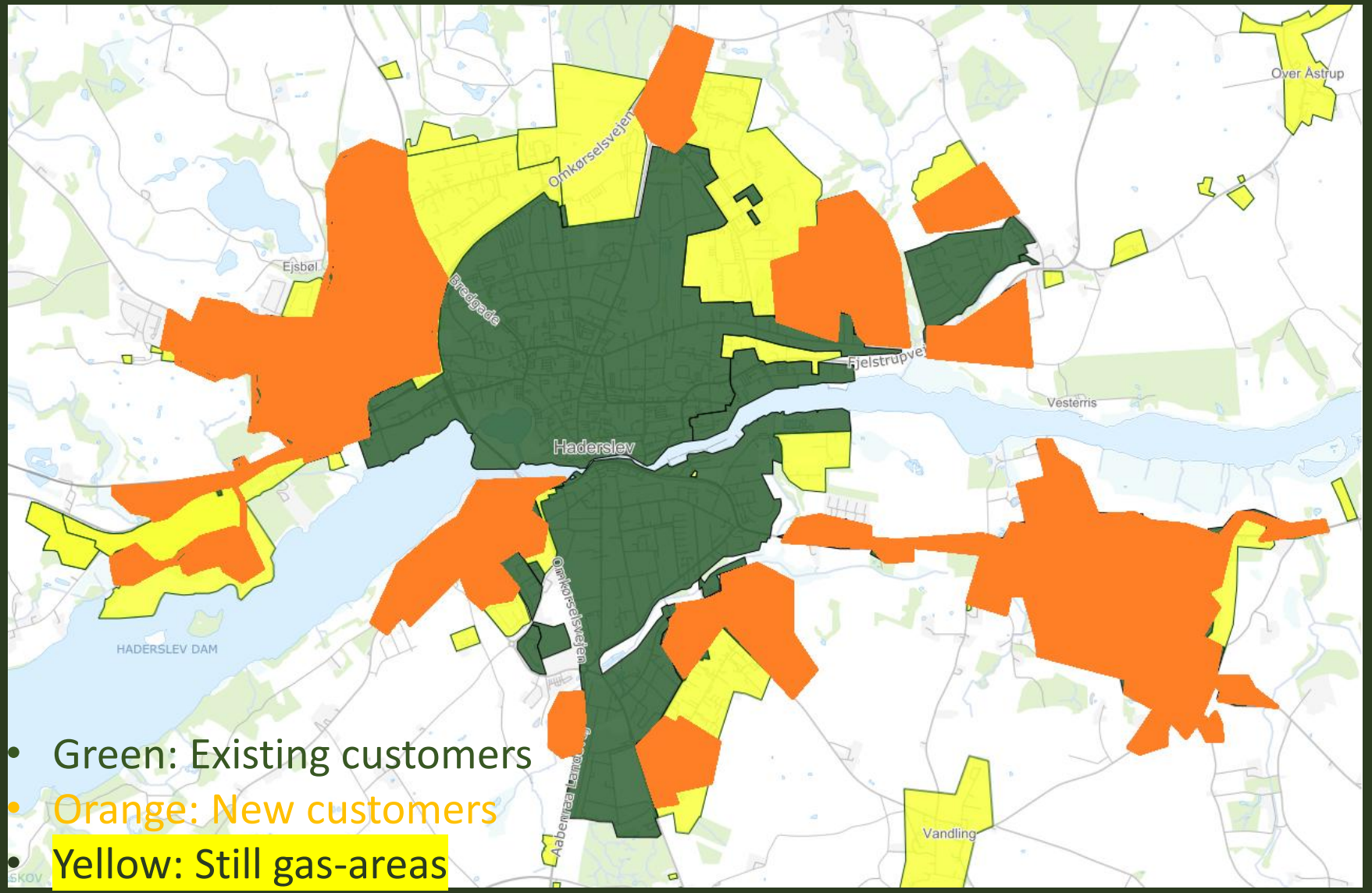


Phases (planed august 2019)

- 1. Calculate the potential of new custormers converted from gas
- 2. Looking at our existing heatingnetwork – age, breaks (renovation plan)
- 3. Hydraulic and thermal conditions in the heatingnetwork
- 4. Calculate necessary productionfacilities
- 5. Prioritization of which areas to go to first
- 6. Marketing
- 7. Projectproposal to the municipality
- 8. Tender material – pipes
- 8. Tender material – production and buildings
- 9. Constructing period

- 3.300 new customers
- 5 years (2021-2025)

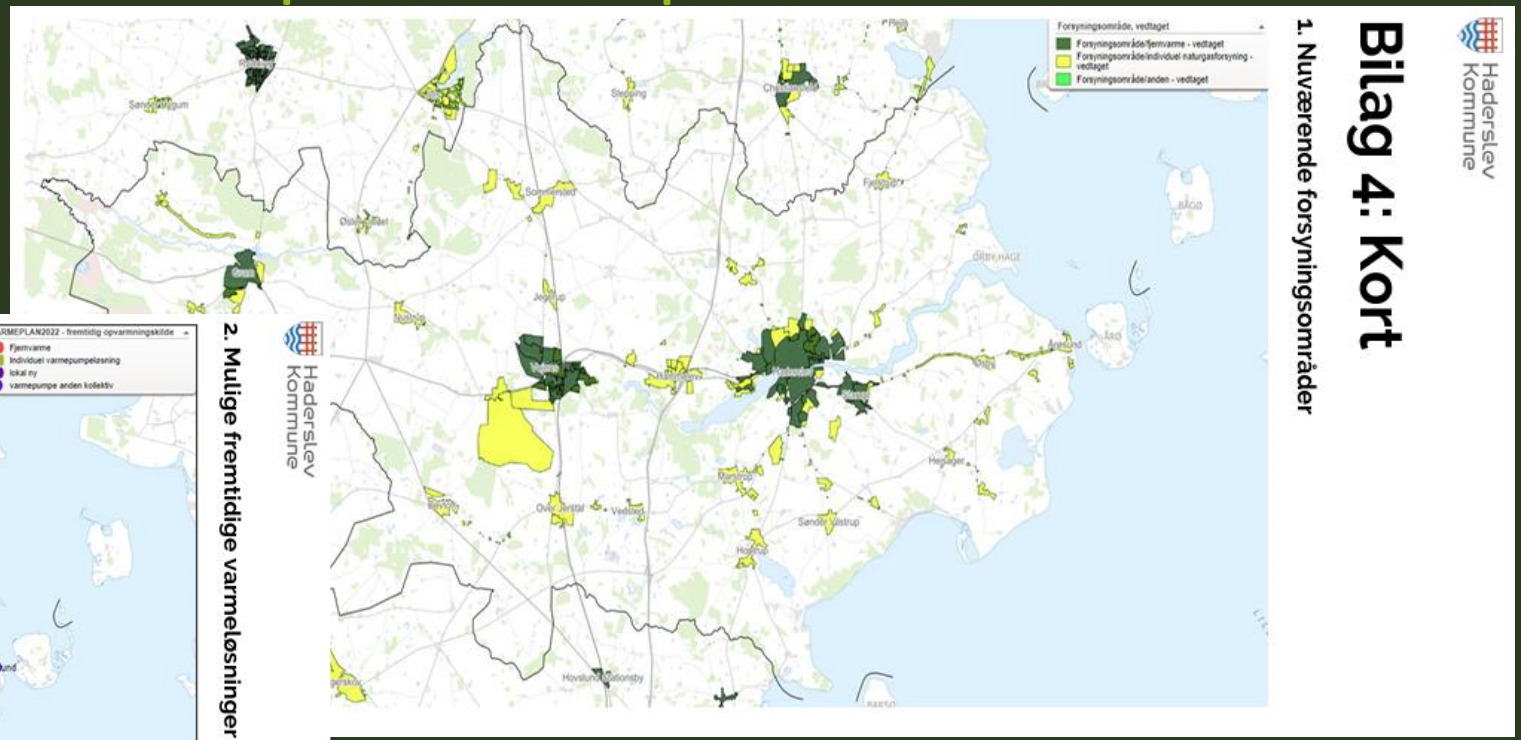
- 680 mio. DKK. (91.000.000 EUR) including production (11 MW heatpump and 15 MW electrical boiler)



- Green: Existing customers
- Orange: New customers
- Yellow: Still gas-areas

HADERSLEV FJERNVARME

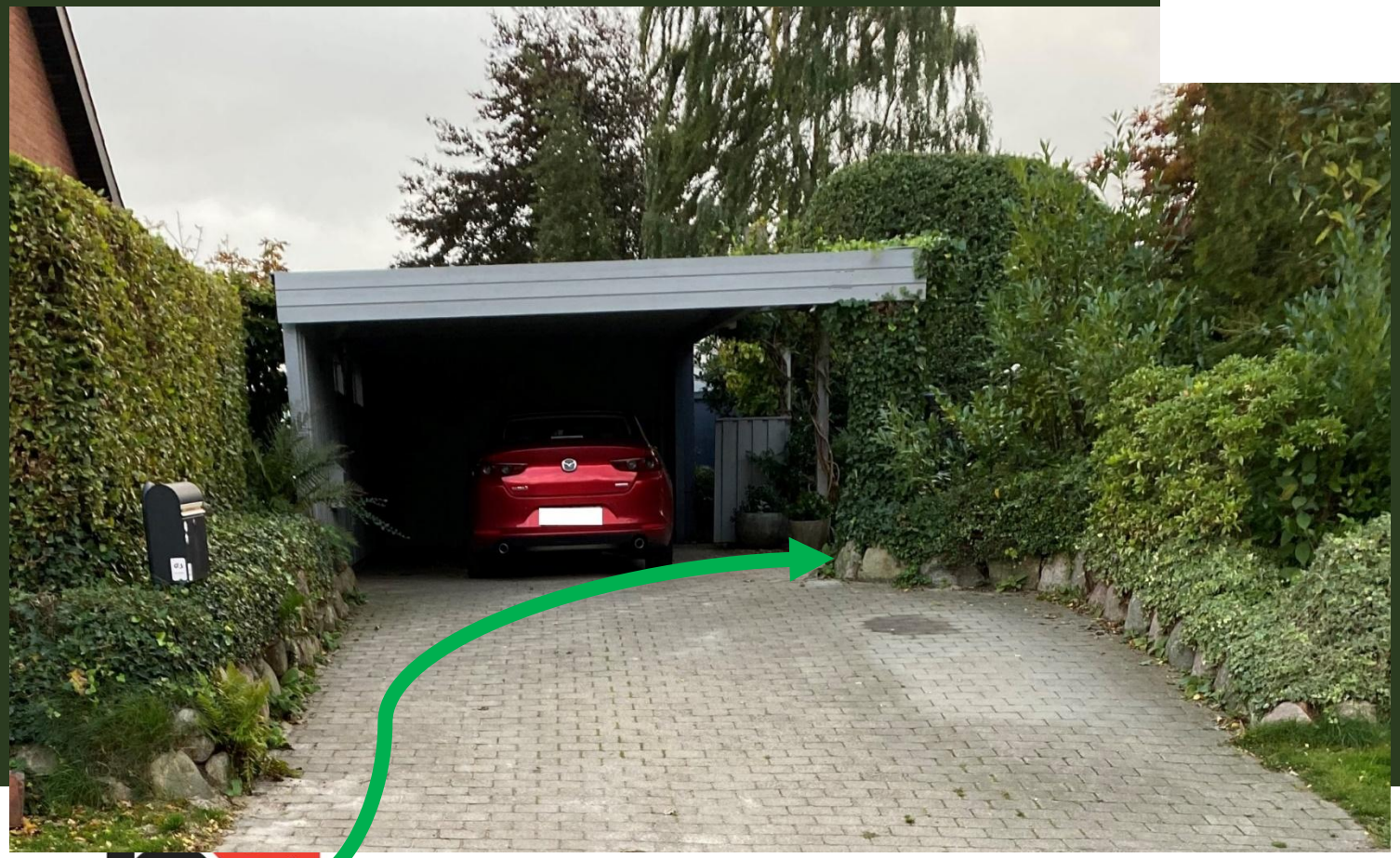
Latest update of municipal heatplan - 2022



HADERSLEV FJERNVARME

Communications

- Customer expresses interest on our webpage
- Sending informationpackage
- Signing contract
- Visit from Haderslev Fjernvarme (where to dig and install DH-unit)
- Customer contacts Plumber (list of 7 plumbers)
- Digging starts in an area – good communication from contracter
- Digging in the road finishes
- When pipes are ready – communication to customers (mail/paper)
- Plumber installes DH-unit (In the morning You have gas – in the evening DH)
- Welcomeletter and invoice
- Visit from Haderslev Fjernvarme (is everything all rigth)



We leave your ground nice!!

HADERSLEV FJERNVARME

Heatprices in Haderslev (2026)

- Normal house: 13,4 MWh – 125 Square meters – 1 meter
- Haderslev Fjernvarme: 665,75 kr/MWh, 16,5 kr/Squ.M, 992,50 kr/house

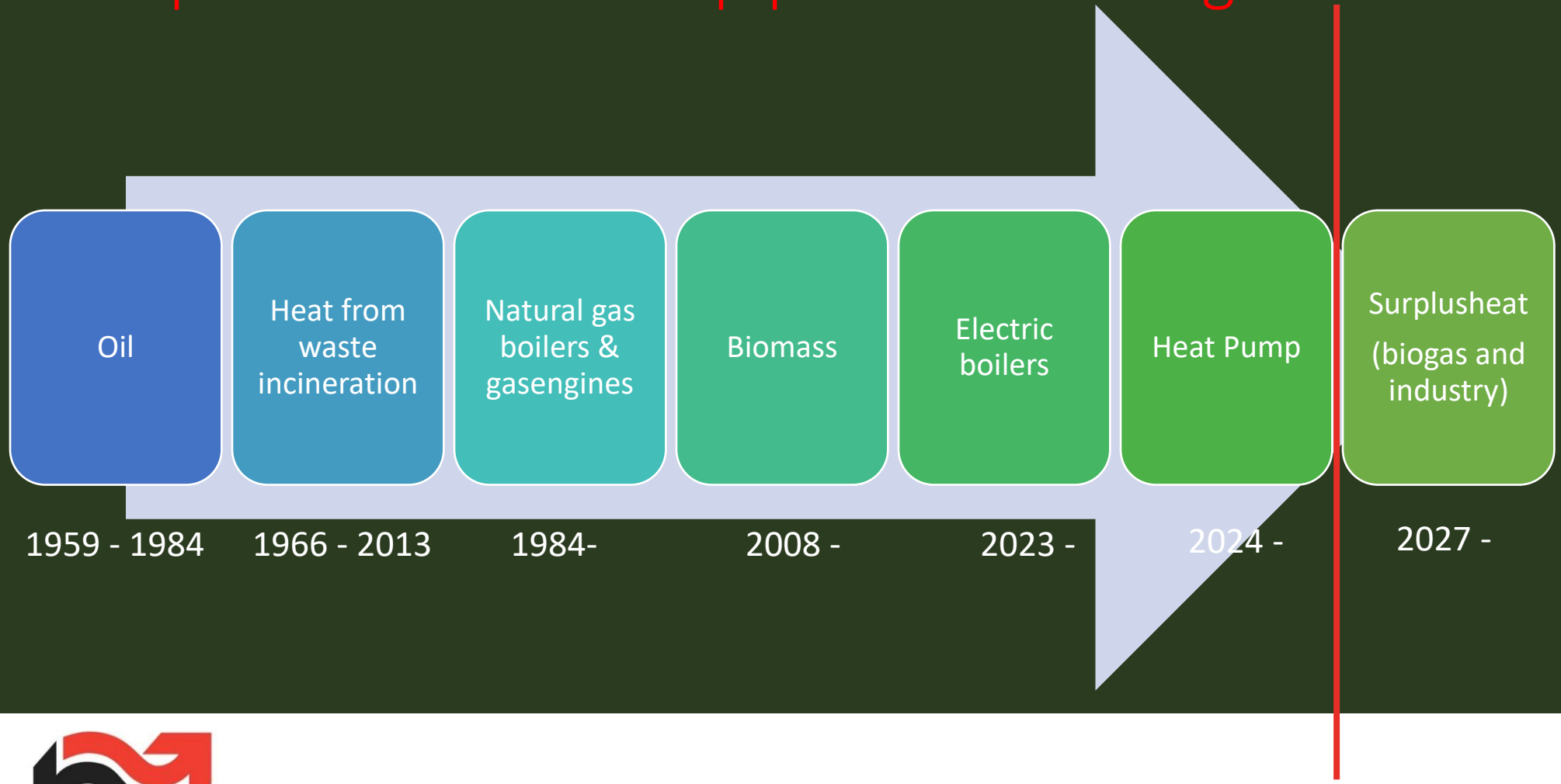
Variable	665,75 kr	13,4 MWh	8.921,05 kr
Fixed	16,5 kr	125 SqM	2.062,50 kr
Fixed	992,50 kr	1 M	992,50 kr
Total			11.976,05 kr (1.608 EUR)

1608 EUR / 13,4 MWh
120 EUR / MWh
12 cents / Kwh

HADERSLEV FJERNVARME

Change in technology

-its possible when the pipes are ind tre ground!

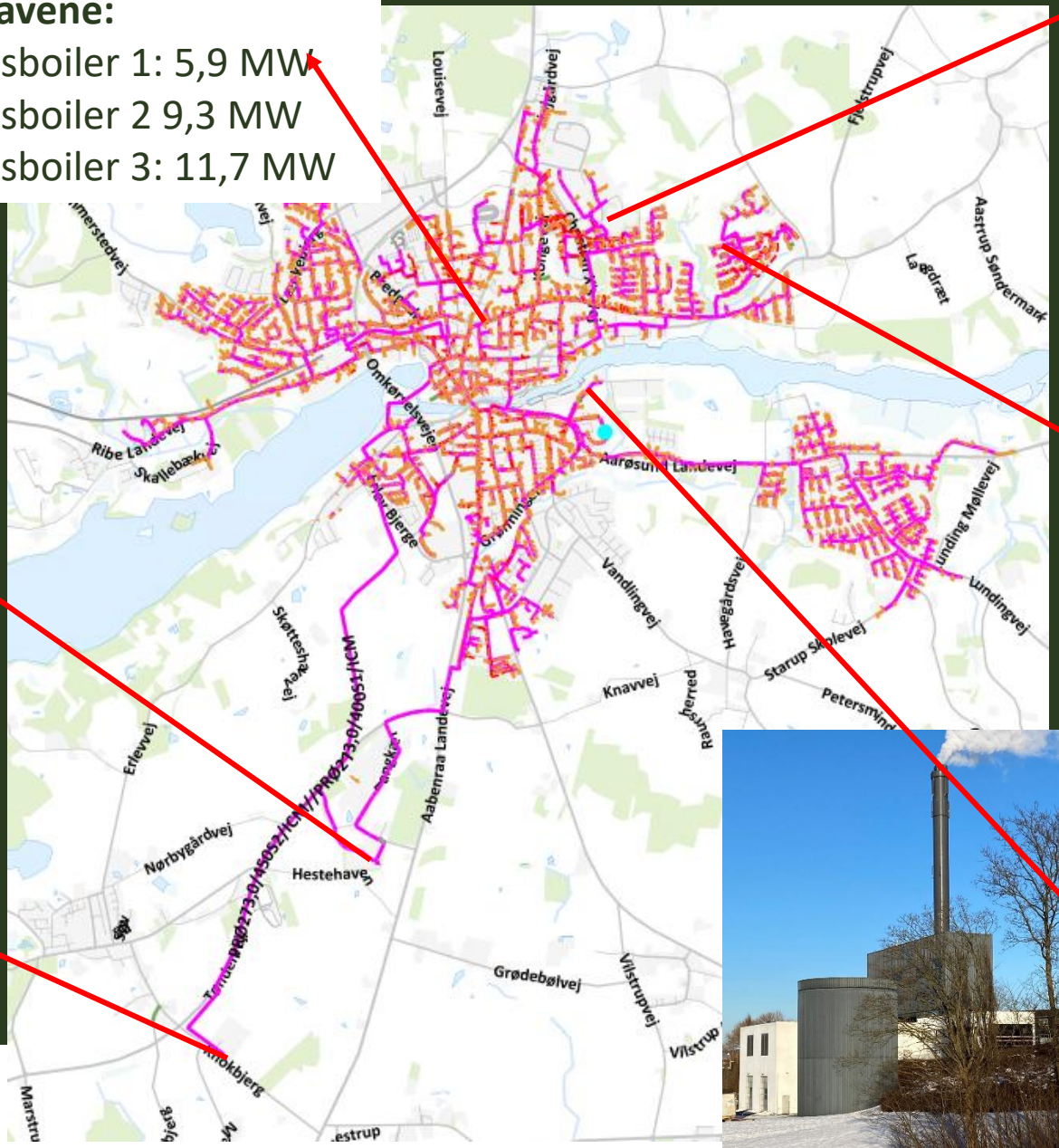


HADERSLEV FJERNVARME

Gravene:
Gasboiler 1: 5,9 MW
Gasboiler 2 9,3 MW
Gasboiler 3: 11,7 MW

Niels Finsens Vej:
Woodchipboiler: 5,5 MW
Gasboiler: 5,1 MW

Langkær:
Heatpump: 10,6 MW
Electric boiler: 15 MW



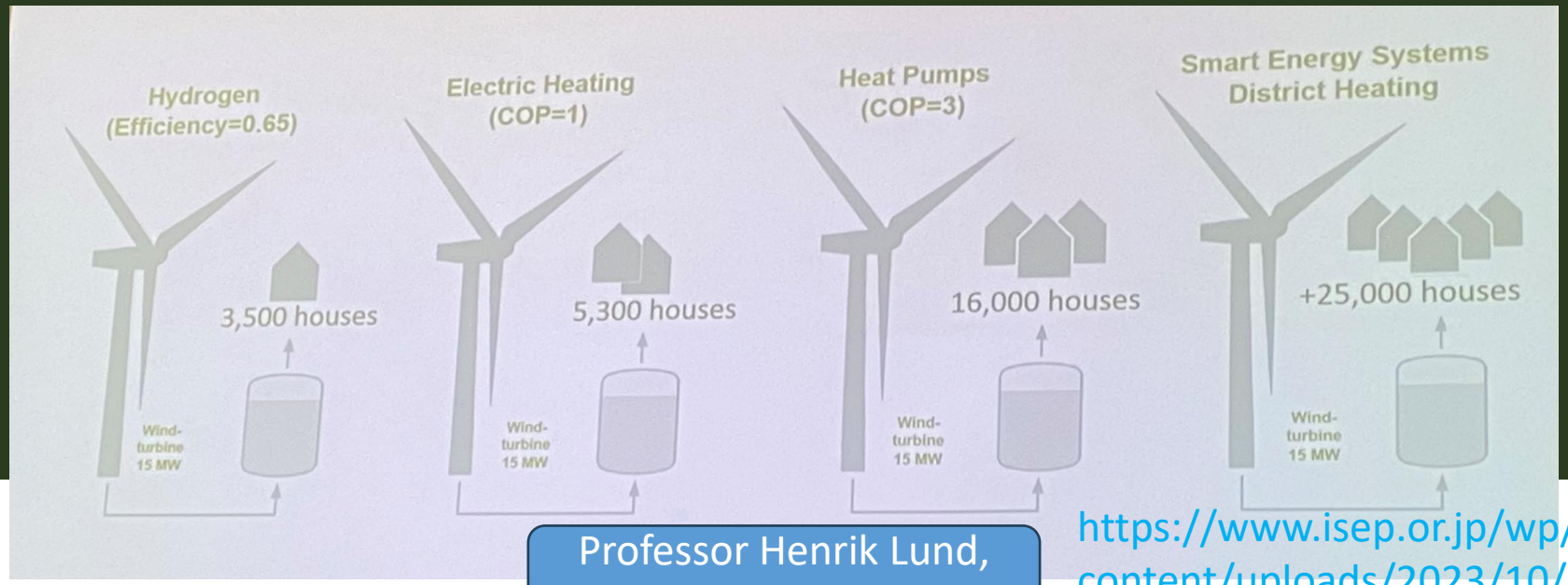
Nederbyvænget:
Gasboiler 1: 1,0 MW
Gasboiler 2: 1,6 MW

Knokbjerg:
Woodchipboiler 1: 11,5 MW
Woodchipboiler 2: 11,5 MW

Fjordagervej:
Gasboiler 1: 4,7 MW
Gasboiler 2: 7,4 MW
Gasengine 1: 4 MW
Gasengien 2: 4 MW
Electric boiler: 8 MW

Production strategy

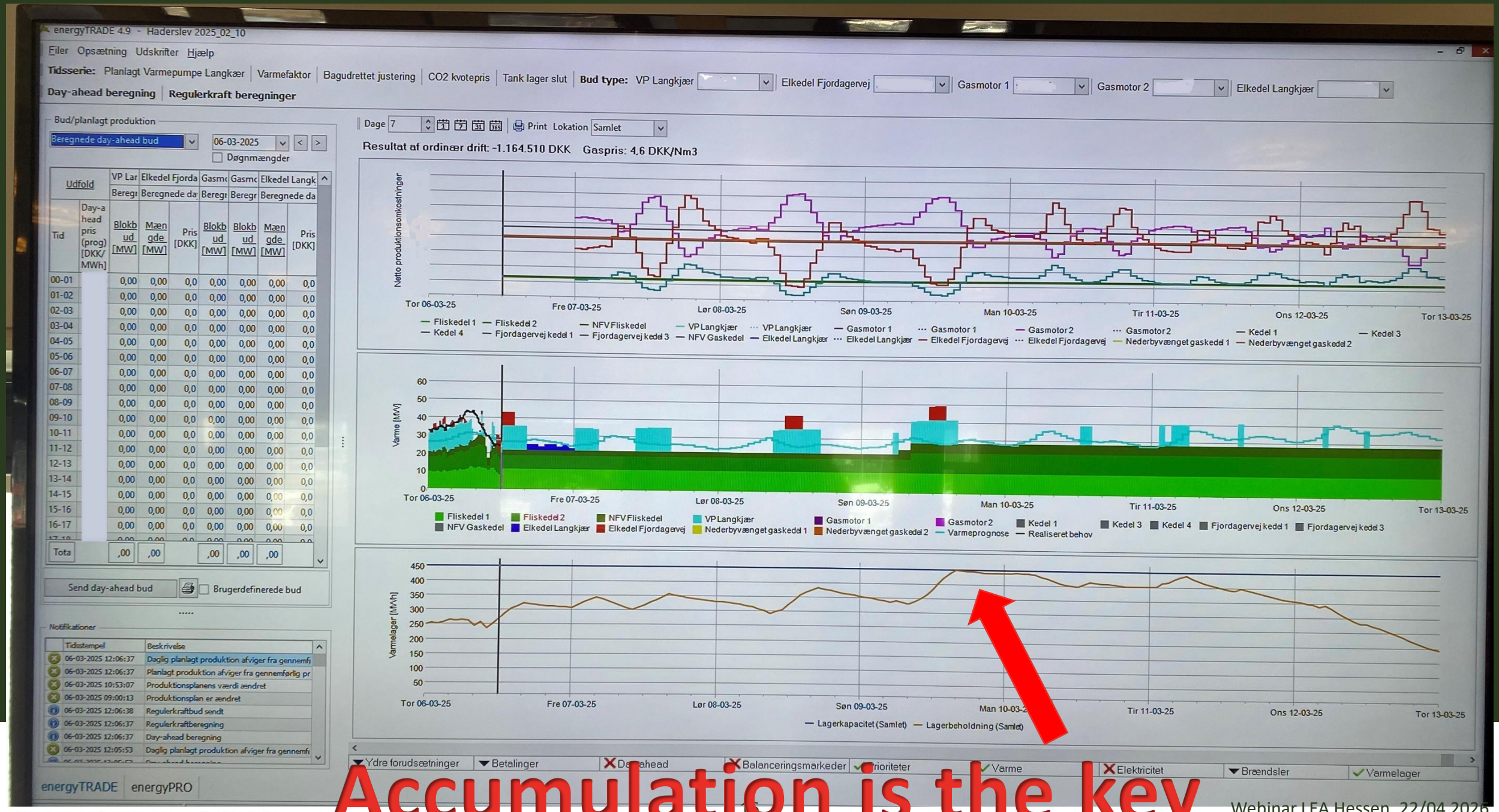
- Many technologies can heat water – find the best way and also the small potentiels (surplus heat). Then DH is more efficient than individuel heatpumps or other technologies.



Professor Henrik Lund, Aalborg University

https://www.isep.or.jp/wp/wp-content/uploads/2023/10/HenrikLund_4DH Conference_Tokyo_October2023_New.pdf

HADERSLEV FJERNVARME



Accumulation is the key