

Public / Private leadership  
> EU's largest geothermal  
district heating plant in  
Aarhus

# Geothermal energy for district heating in Aarhus

## Key project facts

### Facts

Aarhus municipality has 330.000 citizens and 180.000 households. 95% of the households are connected to the district heating system.

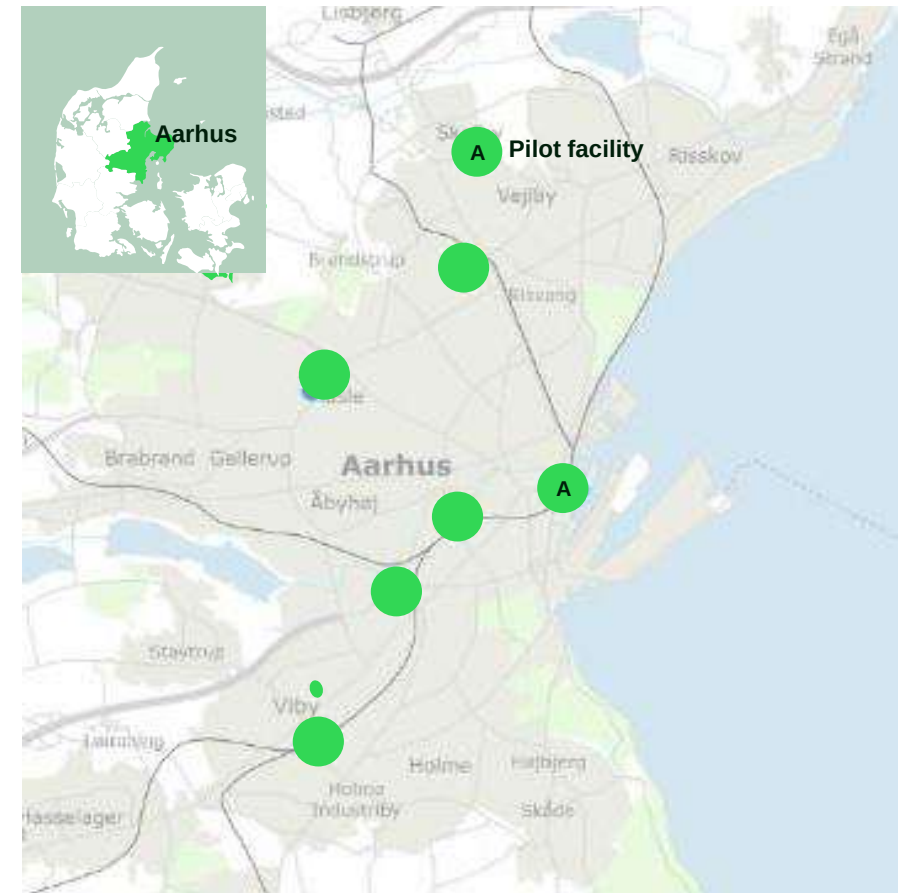
- Contract signed Aarhus Kommune in January 2022:
- Expected production capacity: 111 MW thermal
- 7 production facilities – each ca. 300 m2
- 17 wells: 7 production wells & 10 injection wells
- The appraisal phase consists of 3 wells and a pilot facility
- First heat: Q1 2025
- COD: Q1 2029

### Environmental considerations

- Special well design across drinking water intervals
- Well cutting disposal according Danish environmental regulations
- No hydraulic fracking of the subsurface
- Production facilities are emission free and noise level max. 35 dB

### Map

- Geothermal facility and producer and injector well locations



# Public and political ambitions

## National climate targets

- 70% reduction target 2030
- 100% reduction target 2050
- More recycling

## + Local climate ambitions in Aarhus

- CO2 neutrality by 2030
- 2030: Local Energy sector = neg. CO2 balance (590.000 tonnes)

## + Utility ambitions

- Phasing out imported biomass (wood pellets) by 2030

**= Need for change at scale!**



# A.P. Moller – Denmark's largest company

## Driving change at scale

*In 2016, we announced a radical change and renewal of our Group:*

*Transforming the listed conglomerate A.P. Moller - Maersk into a focused transport and logistics company.*

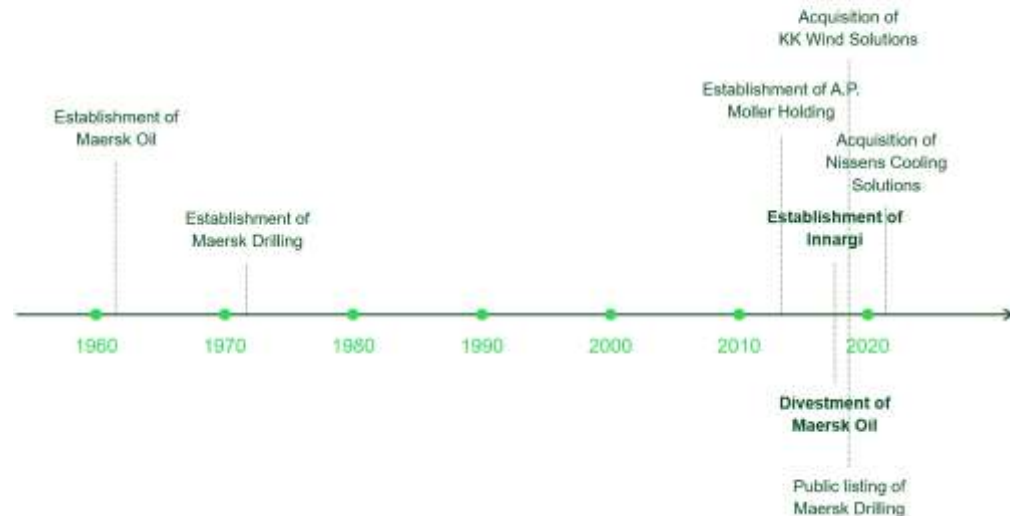
*This meant finding **structural solutions** for the hydrocarbon related activities and an intention to **redeploy capital** proceeds into new activities through A.P. Moller Holding.*

*In the last five years, our hydrocarbon related exposure has dropped from close to 40% to **less than 10%** of the portfolio value.”*

Robert M. Ugglä

### The energy transition

Utilizing subsurface competences in green energy

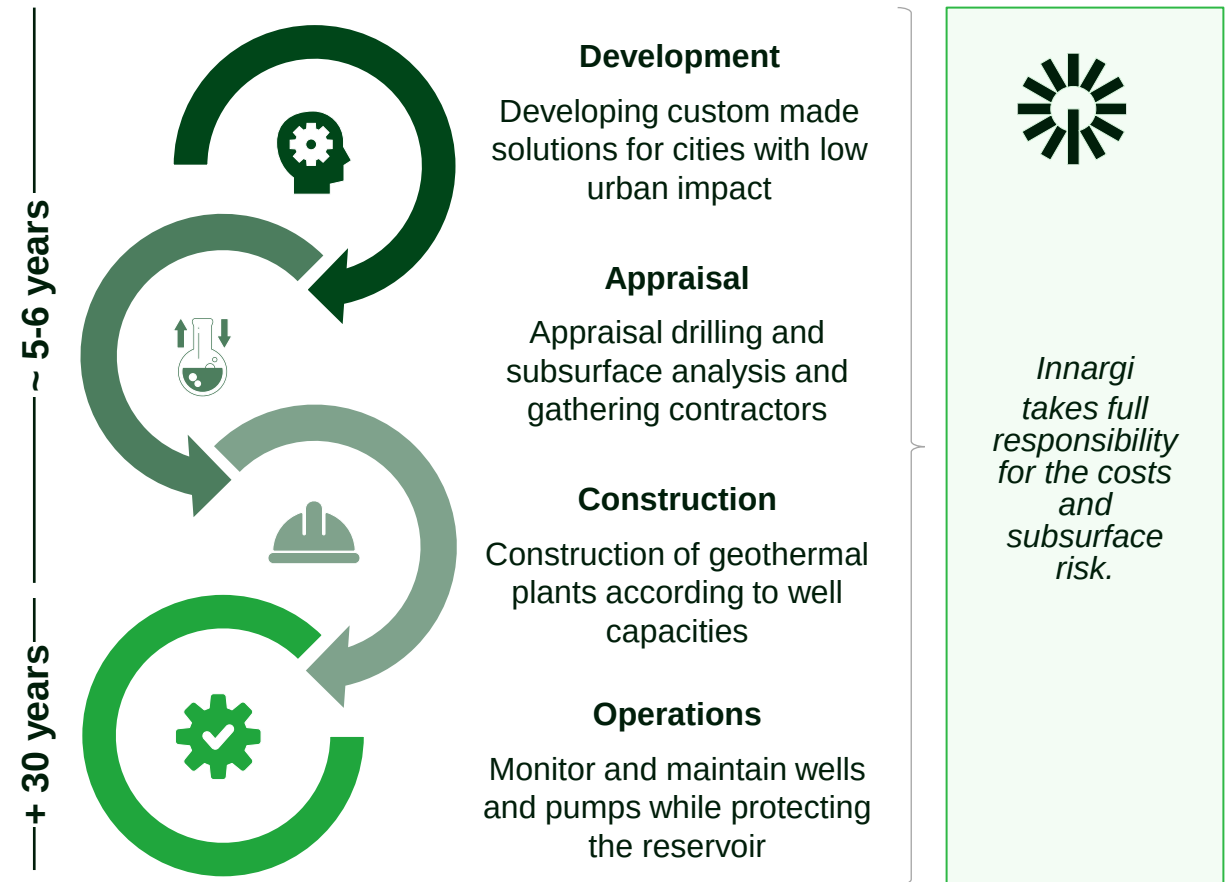


# Unique end-to-end geothermal heat solution

Innargi effectively provides district heating companies, with an end-to-end heat supply solution



## Project life cycle of a geothermal-to-heat plant



# Urban Drilling



# Flexible and modularised geothermal system...

...allowing for tailormade city solutions that easily integrate with surroundings and leave a small footprint

## Key advantages of Innargi's modularised geothermal system

|                                     |                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Highly scalable                     |    |    |    |
| Cost competitive                    |    |    |    |
| Tailormade for each city            |    |    |    |
| Easily integrated into surroundings |    |    |    |
| Low noise                           |   |   |   |
| Minimal disturbance                 |  |  |  |





Let's rethink heating

