

Elegantly simple,  
remarkably invisible



**We're making  
nuclear simple.**

**Simple means  
cost-effective.**

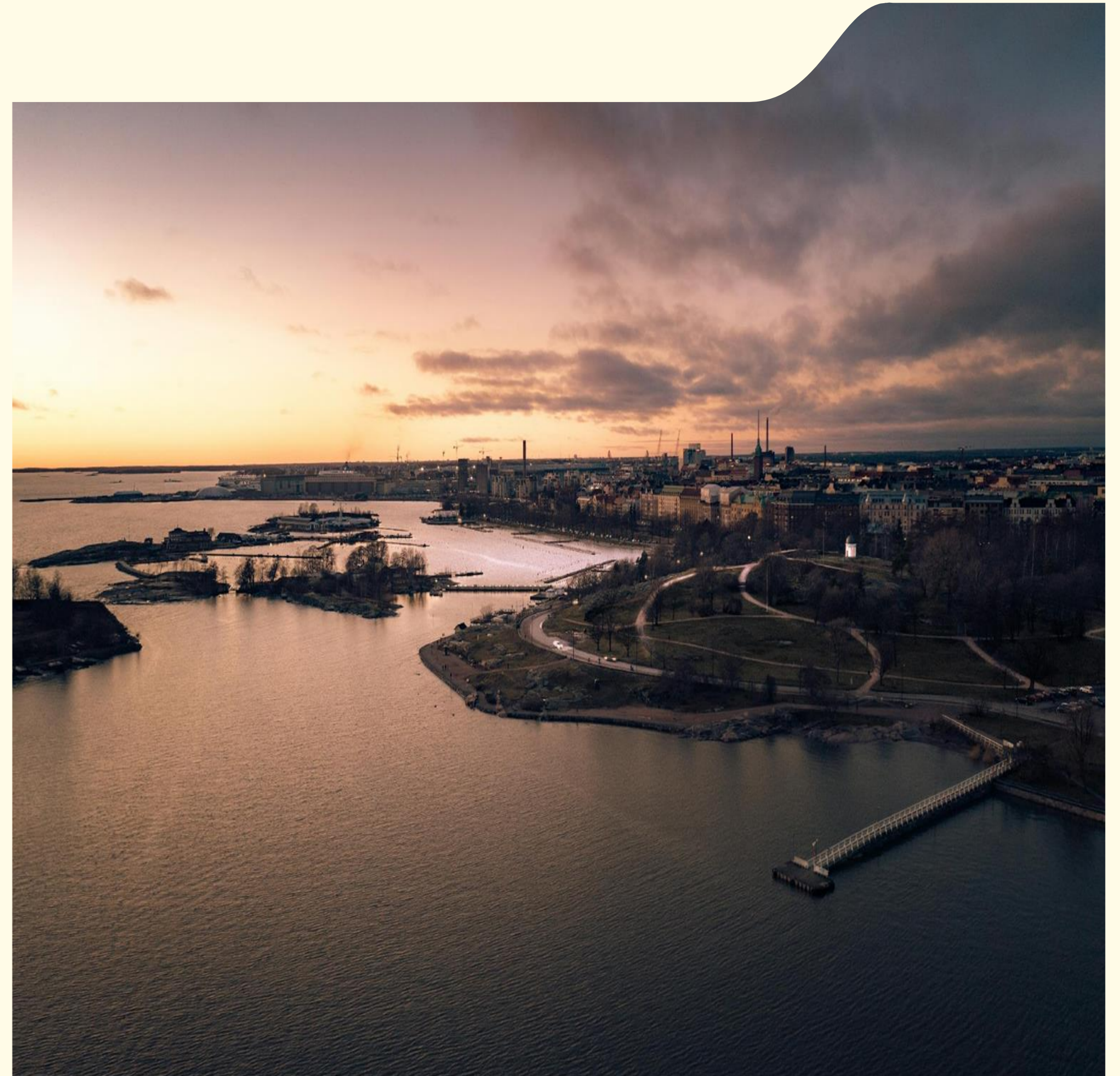


**Conventional nuclear has  
become too expensive  
and too complex.**

**Cost of nuclear heat  
is 1/3 compared to  
new nuclear electricity**

# Turning possibility into progress

- A Finnish nuclear technology company  
– founded in May 2023
- Spinoff from Technical Research Centre of Finland (VTT) – with VC backing  
(Yes VC and Lifeline Ventures)
- Staff: 25 professionals from industry, business, research and regulator
- 200 professionals working on the development of the design (VTT, Tractebel, Sweco...)



# Our product

01

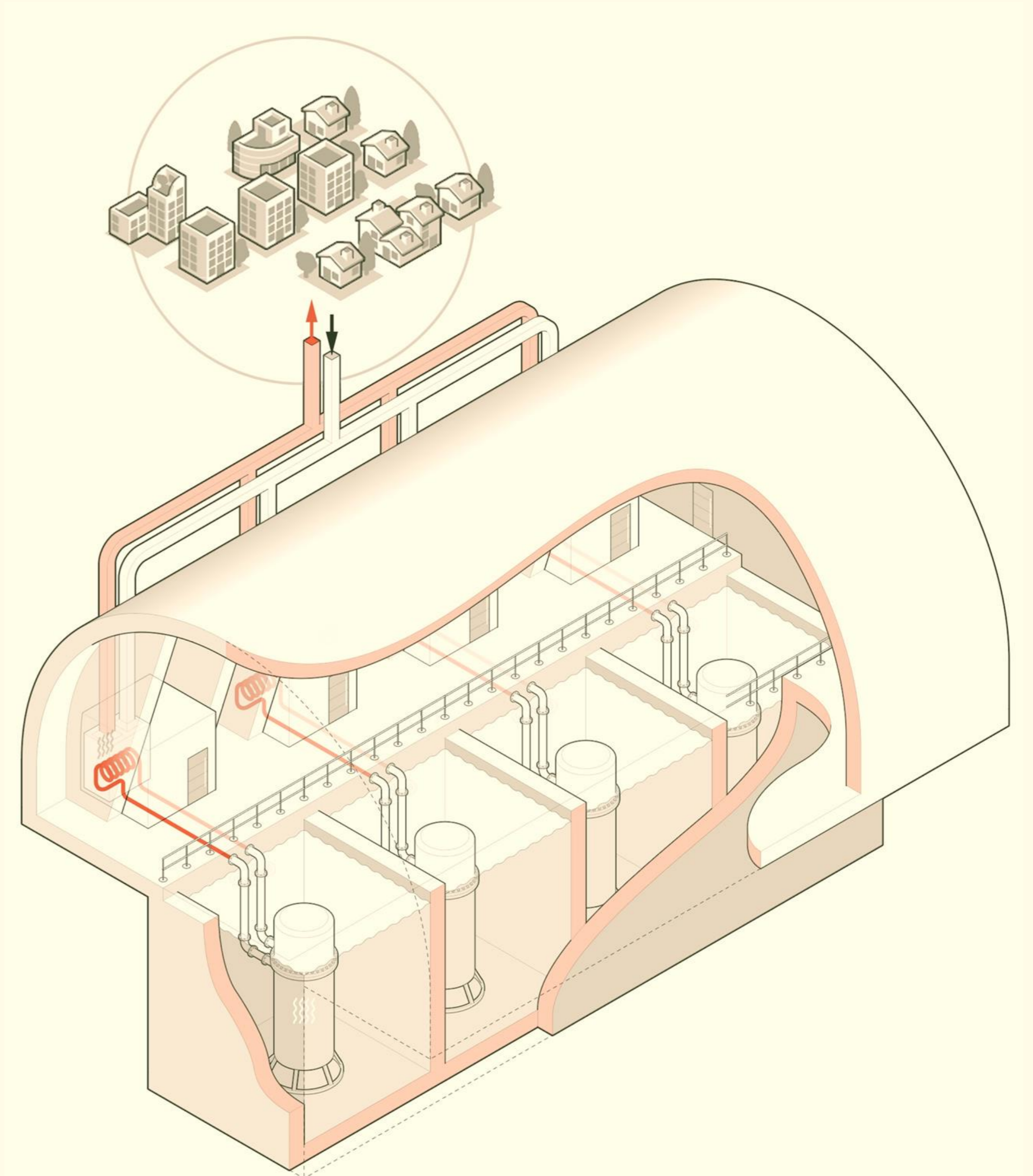
## Nuclear heating units

Consists of one or more  
50 MW units

02

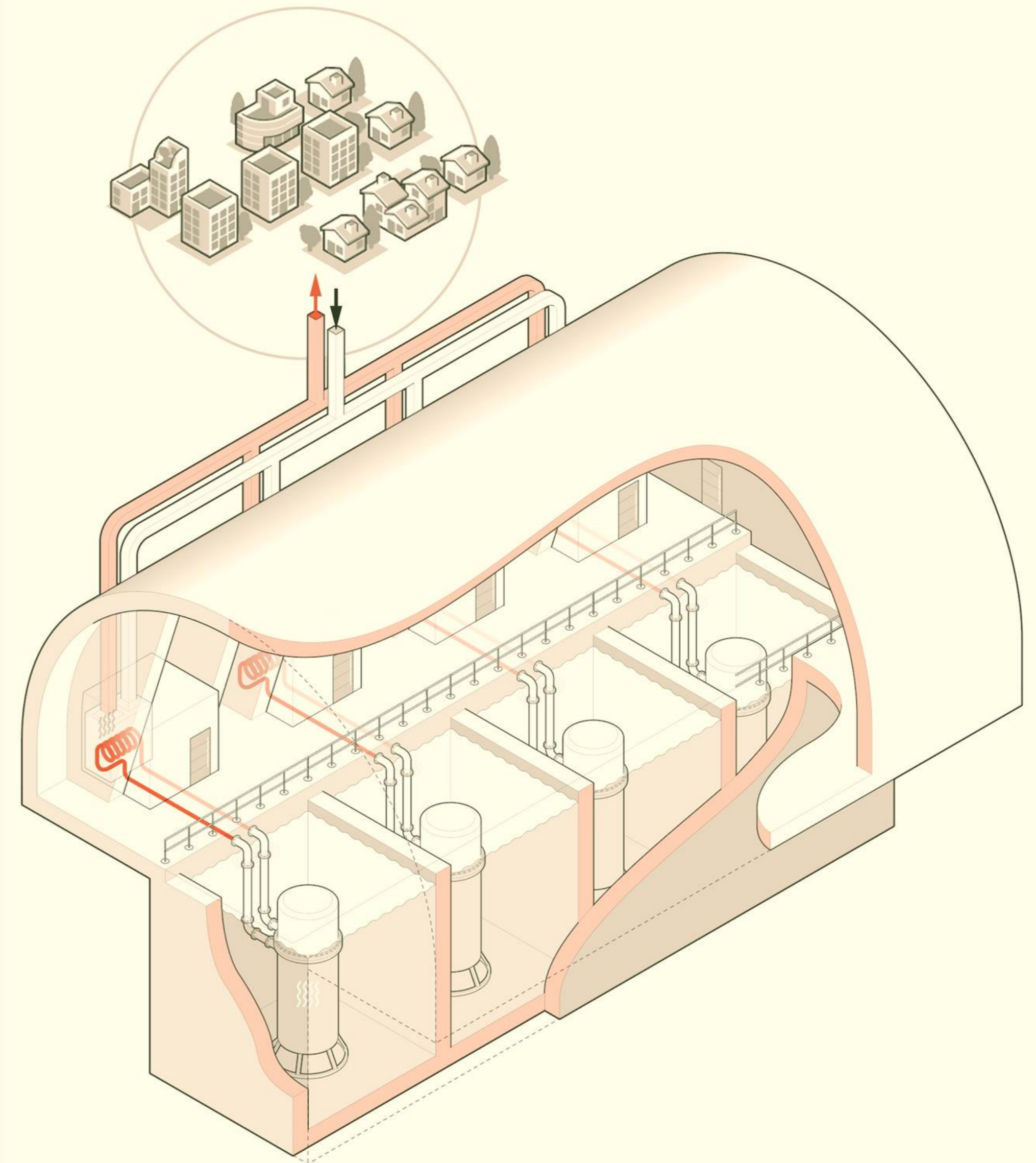
## Business model – construction, operation and maintenance

We offer our clients turnkey solutions for their heat  
production without the need for them to build  
extensive nuclear organizations



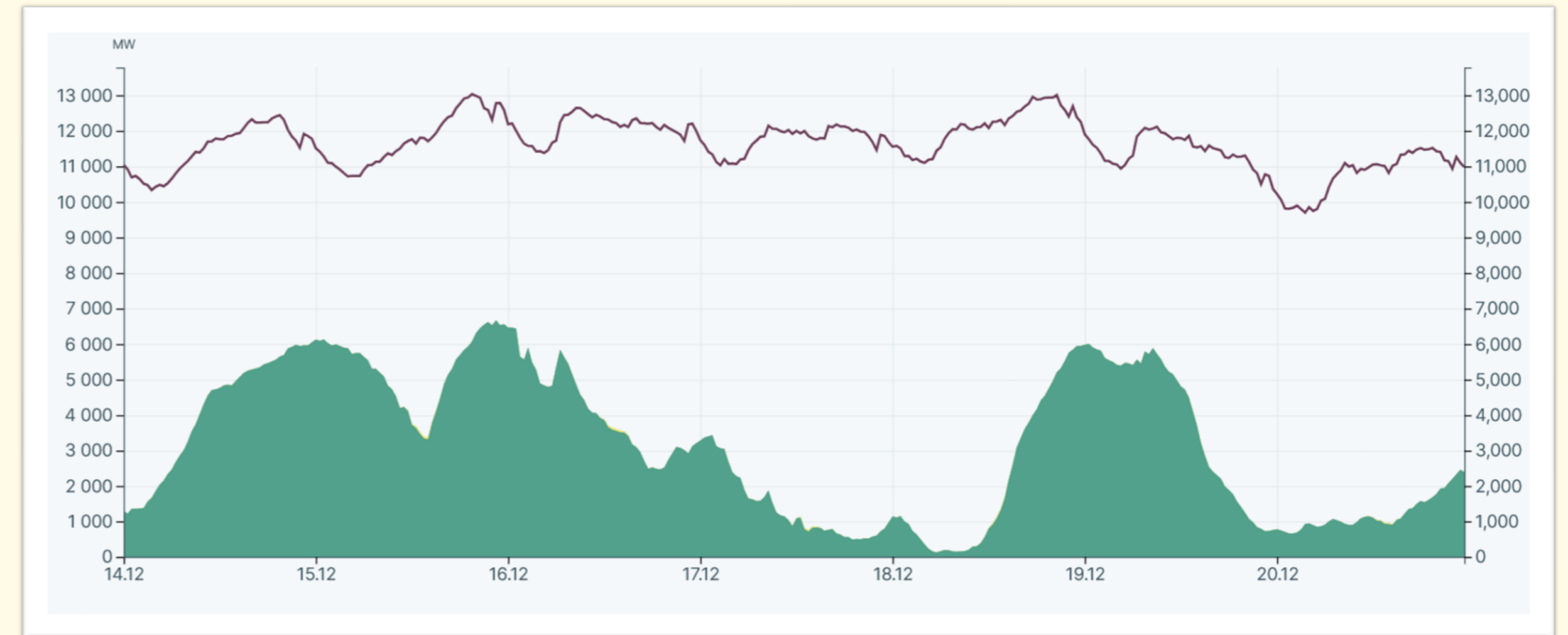
# Nuclear heat is cost competitive from day one

- Nuclear heat is simple, scalable and highly competitive. **LCOE = <40€/MWh**
- Lower operating temperatures and pressures, no need for a turbine -> lower building costs
- Cost of producing nuclear heat is 1/3 compared to **new nuclear** electricity
- Competitive compared to competing energy sources (biomass and fossil fuels)
- R&D-investment support for FOAK – Support mechanisms should be technology neutral



# Nuclear heat supports electrification efforts

- Nuclear energy and wind power are the only truly scalable sources of energy in the Nordics
- Wind power is a great asset but intermittent. Heat demand is often highest during cold snaps when wind production is low
- Electricity demand is expected to rise significantly and is needed to decarbonize industry and transport
- SMR heat = less need for electricity in heating



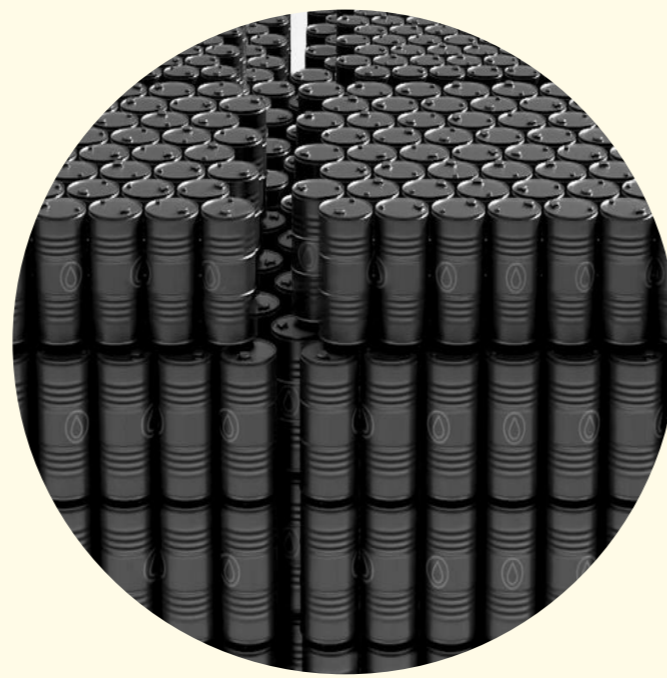
Wind power production in Finland 14.12.2024 - 21.12.2024. Source: Fingrid



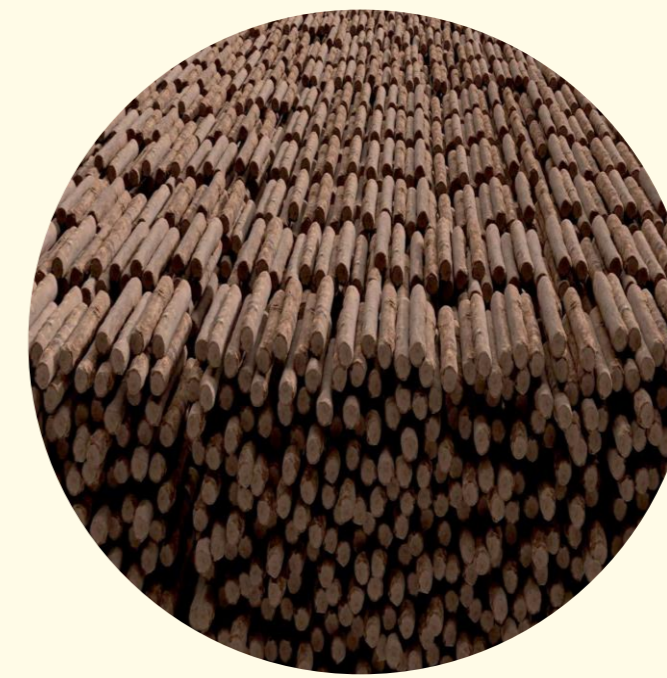
# Nuclear energy can help decouple energy production from the use of natural resources



**1.** Fuel consumed by a single reactor over its entire lifetime would sit inside two parking spaces.



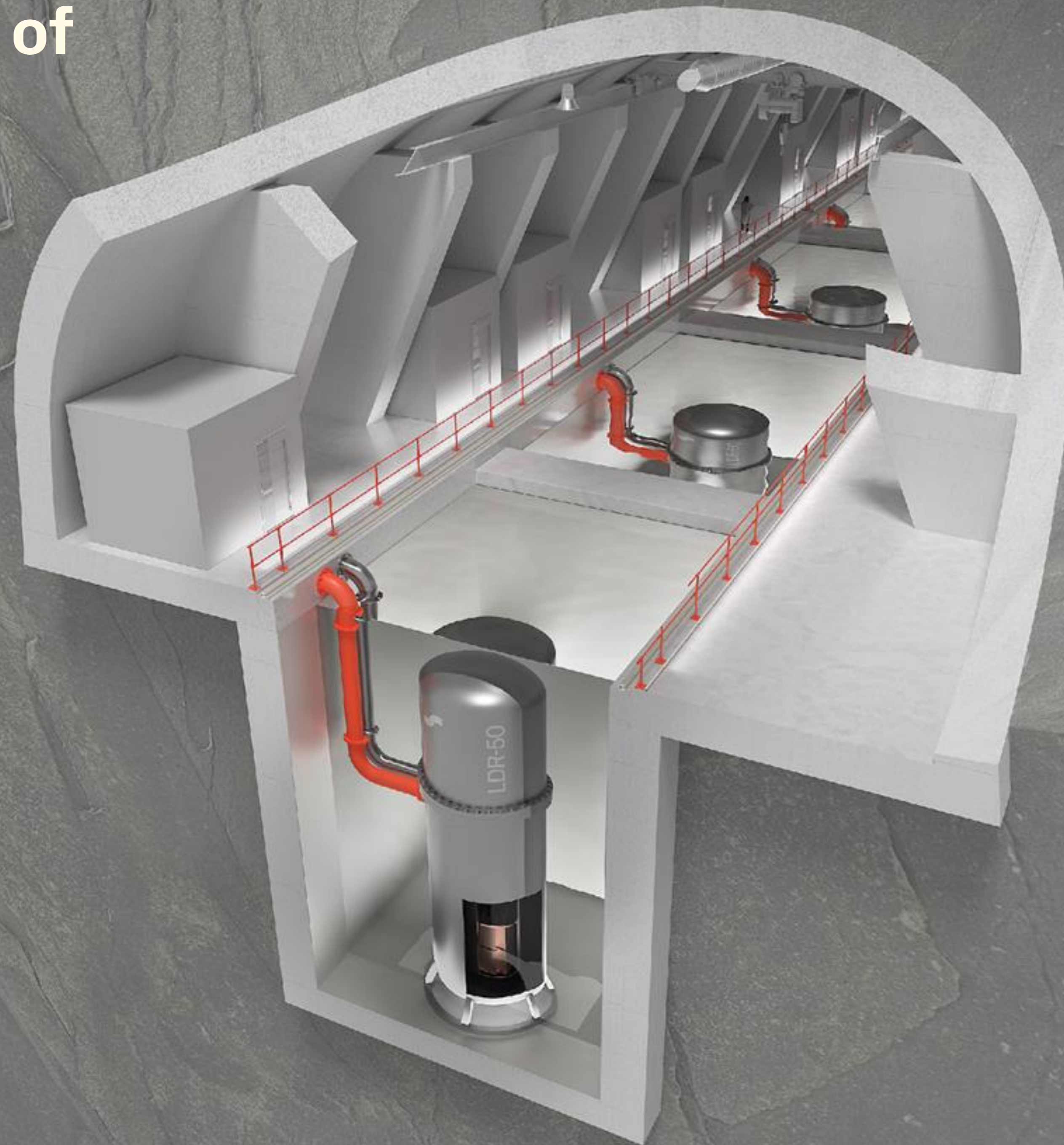
**2.** It would take 12.5 million barrels of oil to produce the same amount of energy that a single LDR-50 produces during its lifetime.



**3.** One individual LDR-50 unit reduces consumption of biomass by ~200 000 m<sup>3</sup> annually



# Unmatched level of energy security

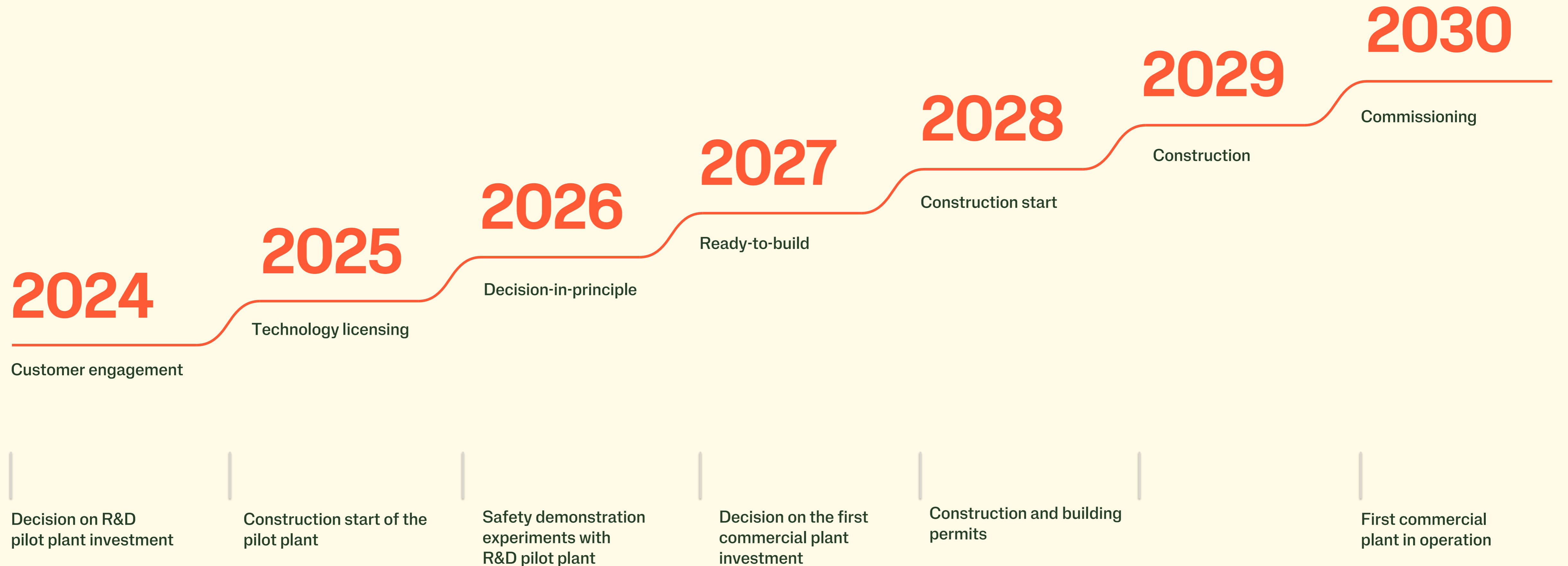


## Projects are going ahead

- Environmental impact assessment and zoning processes to start in winter 2025 in Kuopio
- Steady Energy is looking to offer Helen up to 10 units in the forthcoming tendering process
- Potential sites being explored with Keravan Energia
- Activities in Poland, Sweden and the Baltics

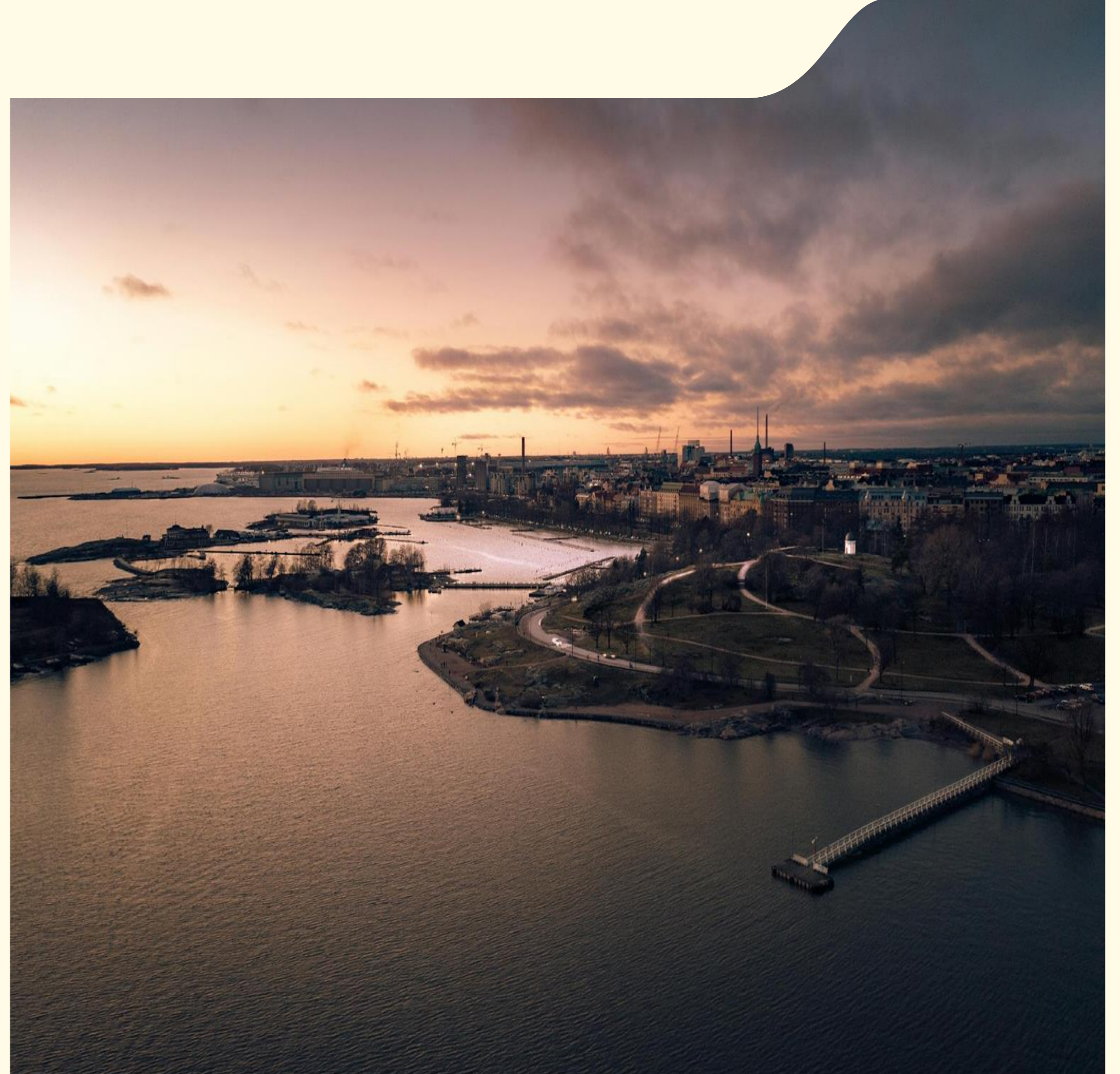


# Towards first commercial plant



# The potential of SMR heating is enormous

- Finland is becoming a global pioneer in SMR development
- SMR heat is cost competitive from day one
- Reduces need for fossil fuels and biomass
- Supports electrification efforts



**Thank you!**

