FORTUM & NUCORE ENERGI - NEW NUCLEAR IN OSKARSHAMN

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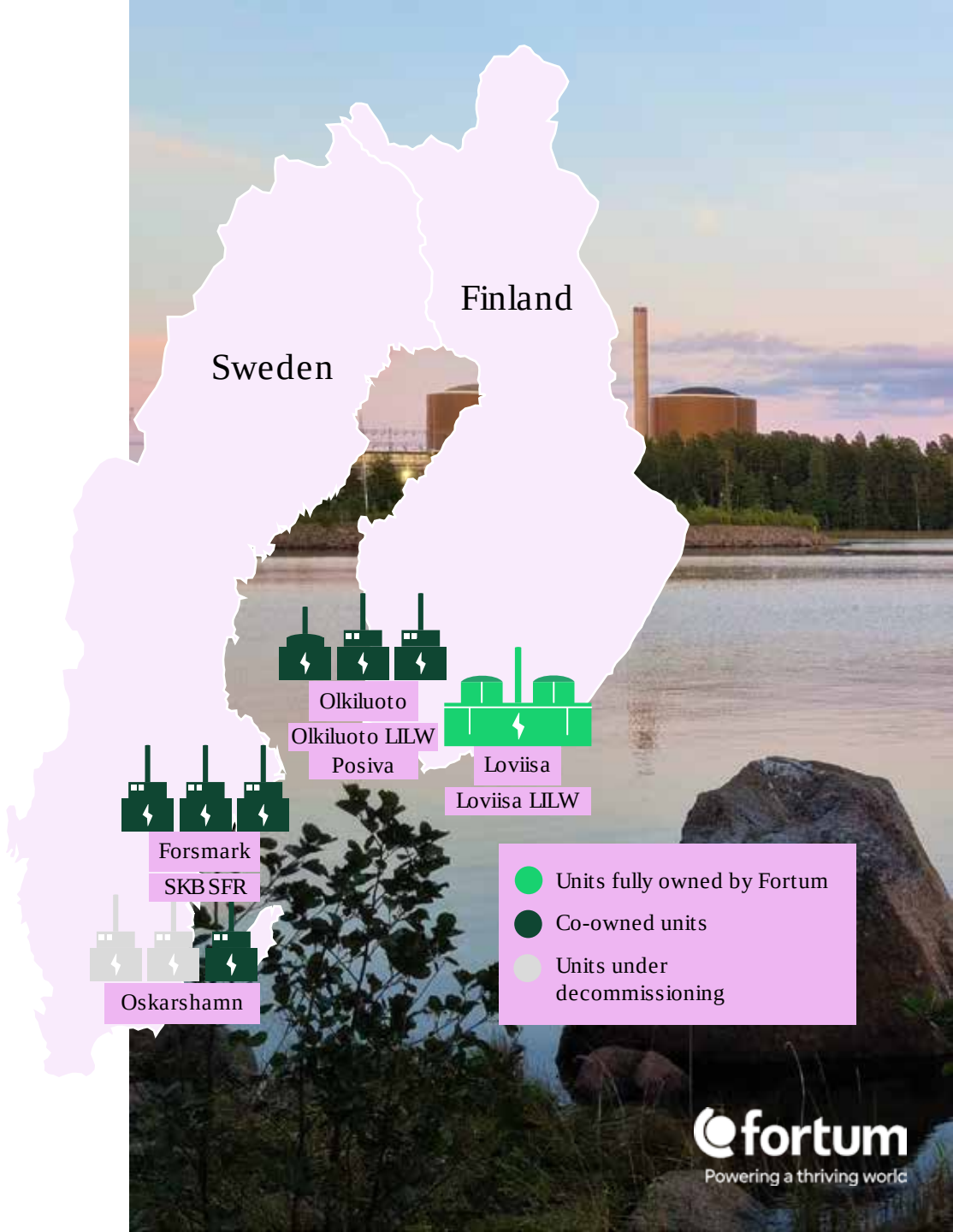
Fortum is a strong Nordic nuclear operator

Over 45 years of reliable production

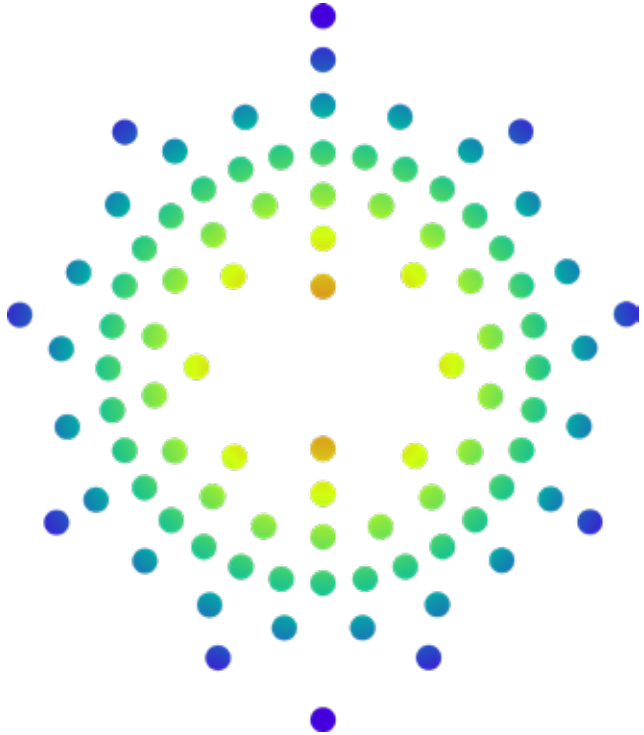
- We have two own nuclear reactors in Loviisa and seven co-owned nuclear reactors in Finland and Sweden
- New Nuclear project after extensive feasibility study in Finland and Sweden
- Our expertise covers the entire lifecycle of nuclear power plants, from new build to decommissioning and final disposal of nuclear waste

22.1 TWh	3.3 GW	52%	+800
Nuclear generation	Nuclear capacity	Share of Fortum's total power generation	Nuclear professionals



NuCore Energi state aid application in Sweden

- **NuCore Energi**, wholly owned by Fortum, submitted a state aid application for a nuclear project in **Ävrö, Oskarshamn**
- The application is followed by negotiations on support through **state loans, a two-way CfD and risk sharing** subject to EU approval.
- Project viability depends on demand, customer commitments, technology, financing, political support and access to the **Ävrö site, currently owned by OKG.**
- Fortum has been a significant minority owner in OKG since the 1990s
- Fortum expects additional co-investors and plans eventually to become a **minority shareholder**.
- The project builds on Fortum's two-year feasibility study and **45+ years of nuclear expertise**



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The Ävrö site

Map

Aerial

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Key conditions for the project success

1. **Political stability**
   Stable framework and policy support for new nuclear and nuclear generation
2. **Site access and control**
   Access to Ävrö through relevant setup with OKG and its stakeholders
3. **Customer offtake commitment**
   Credible industrial demand growth. Flexibility between CfD and PPAs.
4. **Ownership structure**
   Additional investors and risk sharing. Fortum to become a minority owner.
5. **Business parameters**
   CfD level, loan parameters, expected returns and back-end arrangements.
6. **Competitive technology**
   Safe, proven and suitable technology for Fortum's business case

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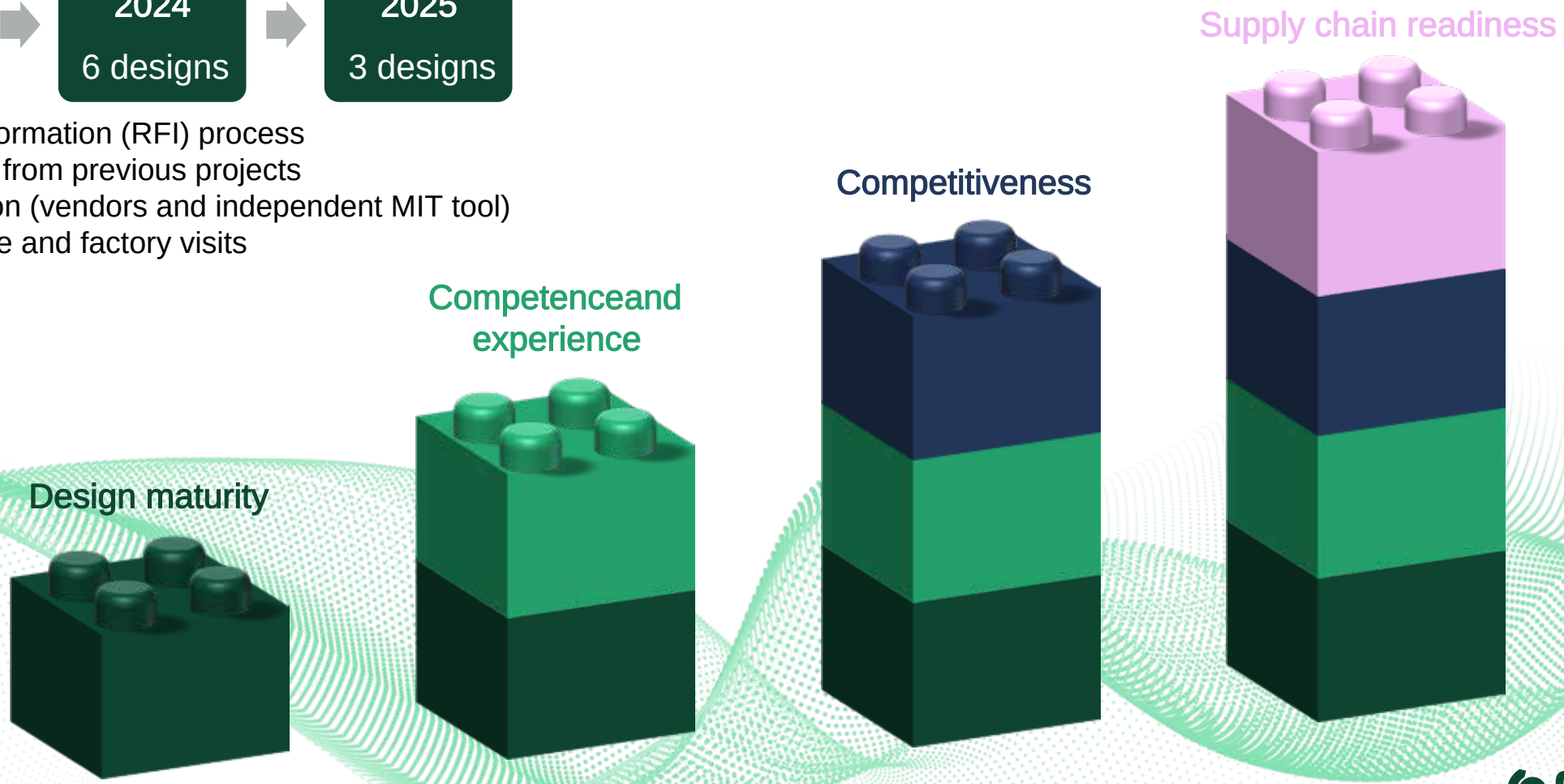
Process and main criteria for our technology selection

November 2022 — 11 designs → **January 2024** — 6 designs → **March 2025** — 3 designs

Request for information (RFI) process
Lessons learnt from previous projects
Costs estimation (vendors and independent MIT tool)
Workshops, site and factory visits



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De-Risking the Technologies - Our shortlist

WESTINGHOUSE & HYUNDAI
AP1000

Six units in commercial operation in US and China

Twelve units under construction in China

Several projects in planning phase, including three units in Poland and two units in Bulgaria

Courtesy: Westinghouse

Large (1125MW) Reactor

Compact design based on passive safety features and modularity

EDF
EPR

Three units in commercial operation in Finland and China, one in France expected in 2026.

Two units under construction in the UK

Several projects in planning phase, including two units in the UK

Courtesy: EDF

Large (1680MW) Reactor

Design already built in Europe according to European codes and standards

GE VERNOVA HITACHI
BWRX-300

First of 4 units in Darlington, Canada granted Construction License in 2025, commercial operations planned in 2029.

Several projects in planning phase

Courtesy: GE Hitachi

Small (300MW) Modular Reactor

Design based on existing BWR experience, closest to actual deployment of all western SMRs

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Key next activities for Fortum and NuCore Energi

- ü Negotiations on state aid parameters
- ü Municipality and zoning process
- ü NuCore Energi organisation development
- ü Grid connection process
- ü Co-investor discussions

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THANK YOU!

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