

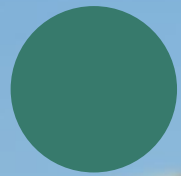


Fortum – Strong in Nuclear

Simon-Erik Ollus, EVP, Generation Division, Fortum

1 November, 2022

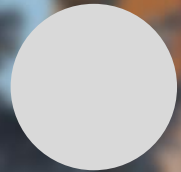
Fortum is a strong Nordic nuclear operator



Units fully owned by Fortum



Co-owned units

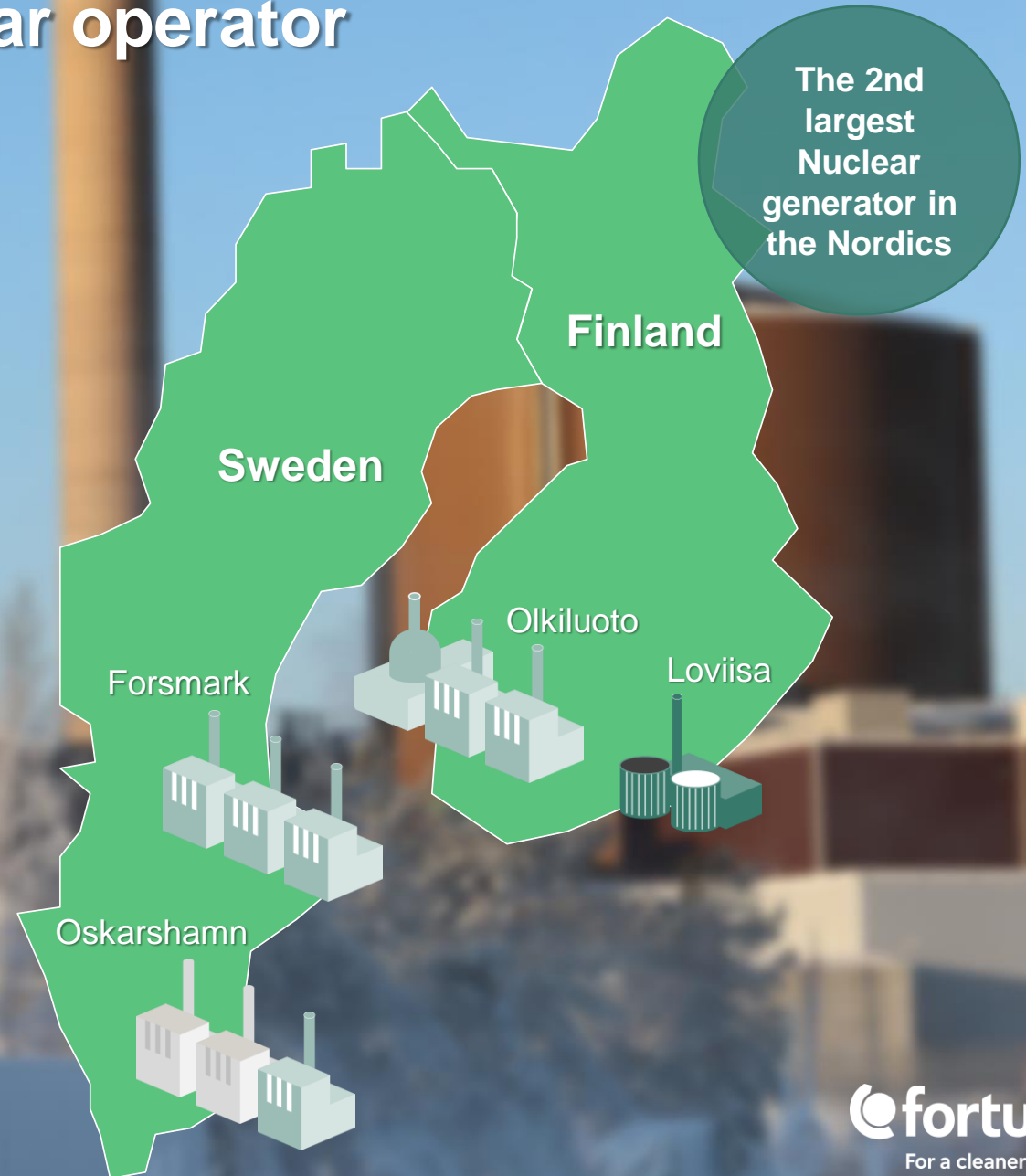


Units under decommissioning

Final Disposal:

Fortum is a shareholder of spent fuel and waste management companies Posiva (FIN) and SKB (SWE)

Nuclear represents nearly half of energy generated by Fortum*



Fortum's nuclear competences



Newbuild and
Operating Services



Decommissioning
and Waste
Treatment

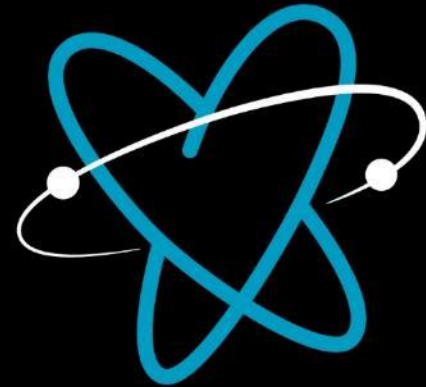


Process Simulation
and Safety Analysis

~700
nuclear
professionals

Nordic Nuclear Trainee Program

- NNTP is organised in collaboration with Fortum TVO, Uniper and Vattenfall
- Program's purpose is to give young nuclear professionals opportunities to create professional networks and learn from each other by visiting NPPs in Finland and Sweden
- 2nd program was started this autumn



NUCLEARHEROES

#nuclearheroes #besmartnotfossil

Lifetime extension of Loviisa nuclear power plant Strengthen and grow in CO₂-free power generation

Fortum's fully-owned Loviisa nuclear power plant lifetime extension

Reliable backbone of the energy transition

- Extension potential of operations until 2050 offering up to 170 TWh of additional CO₂ free power

Competitive economics

- Very reasonable addition of nuclear supply with limited capital expenditure of estimated approx. EUR 1bn

Taxonomy aligned

- Upgrade project in line with taxonomy powering the energy transition

Solution for waste

- Finland has a solution for nuclear waste

Public backing

- Fortum is the local reliable operator for decades

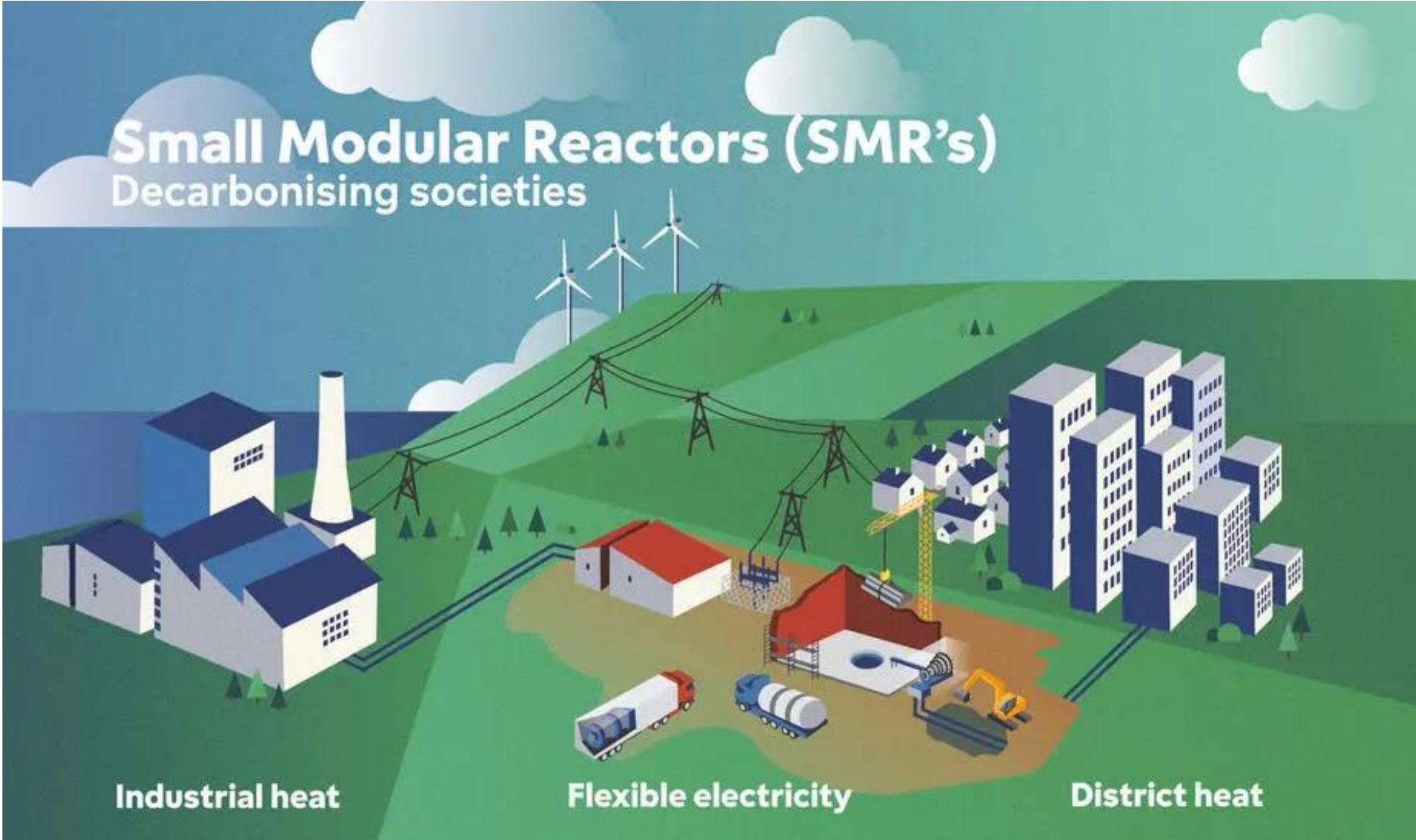
2021: 10% of Finland's electricity generation

2021: 92.9% load factor

2017-21: EUR 325 million invested

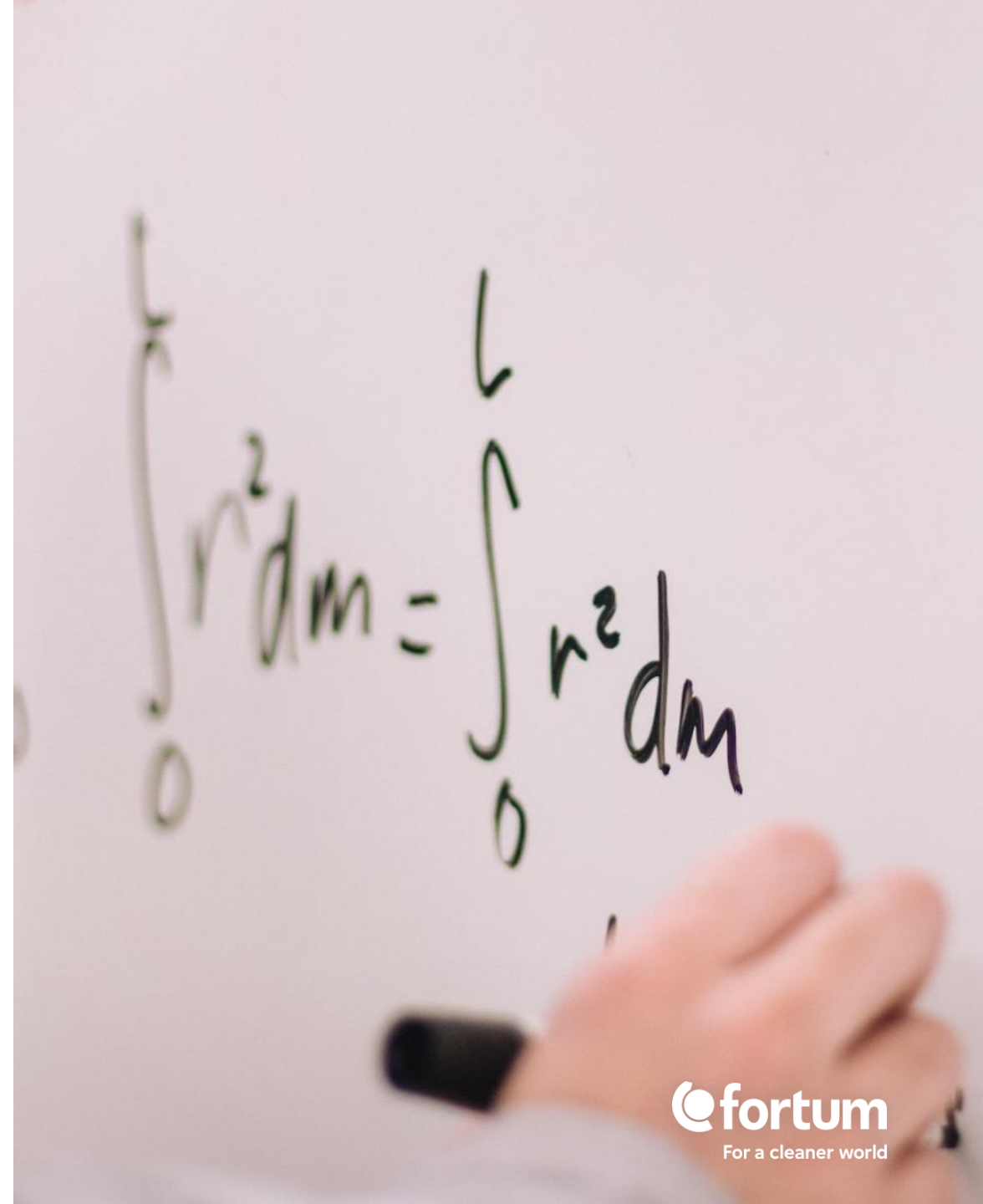
315 TWh CO₂ free power generated so far

Small Modular Reactors



MIT cooperation

- Fortum and MIT (Massachusetts Institute of Technology) started a 3-year cooperation project to create an open-source tool for techno-economic modelling of new nuclear projects, including SMRs in October 2020.
- The first version of [open-source tool](#) is now available online.



Fortum has launched a feasibility study on new nuclear

- Fortum will examine conditions both for small modular reactors (SMRs) and conventional large reactors.
- Conditions under scrutiny:
 - Commercial
 - Technological
 - Societal (including political, legal and regulatory)
 - Different possible partnership combinations
- Active dialogue with industry, decision makers and officials is a must!



Thank you!

Simon-Erik Ollus | Executive Vice President | Fortum Oyj



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