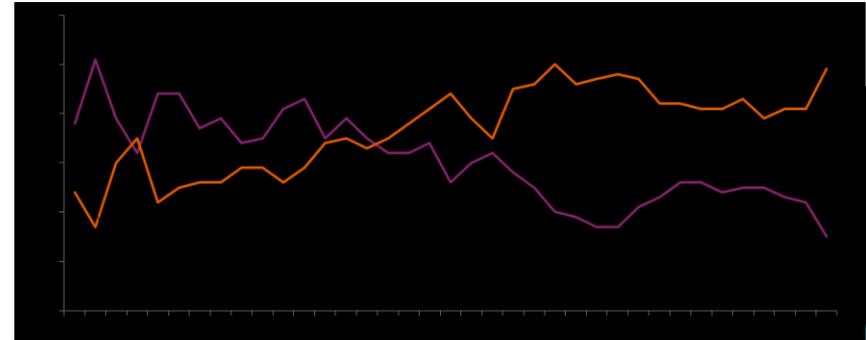
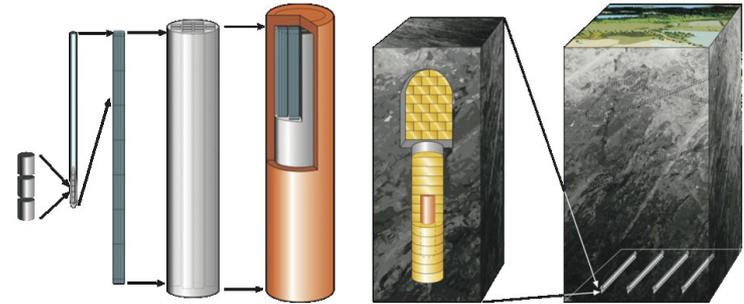




RELIABLE GREEN ENERGY

Nuclear Science and Technology Symposium
30.10.2019

TVO - a nuclear power operator acting for the climate



Highlights in Olkiluoto

- Finnish Government grants operating license for OL3 EPR
 - OL3 fuel loading in January and commercial operation in July, 2020
- Finnish Government approves extension of operating licenses for OL1 and OL2 plant units
 - 500-terawatt hour milestone in electricity production reached in Olkiluoto
 - Annual outage for OL1/OL2 done successfully
- Posiva has started the construction of the Encapsulation plant and Final disposal facility





OLKILUOTO 3 IS GOOD FOR FINNISH SOCIETY

“OL3 is good for market, good for electricity users and good for the environment”

“OL3 is like a flywheel that keeps the system running and stabilizes it”

”OL3 encourages investment in energy-intensive production”

Quotes from interviews, see www.tvo.fi



OL3 EPR -status

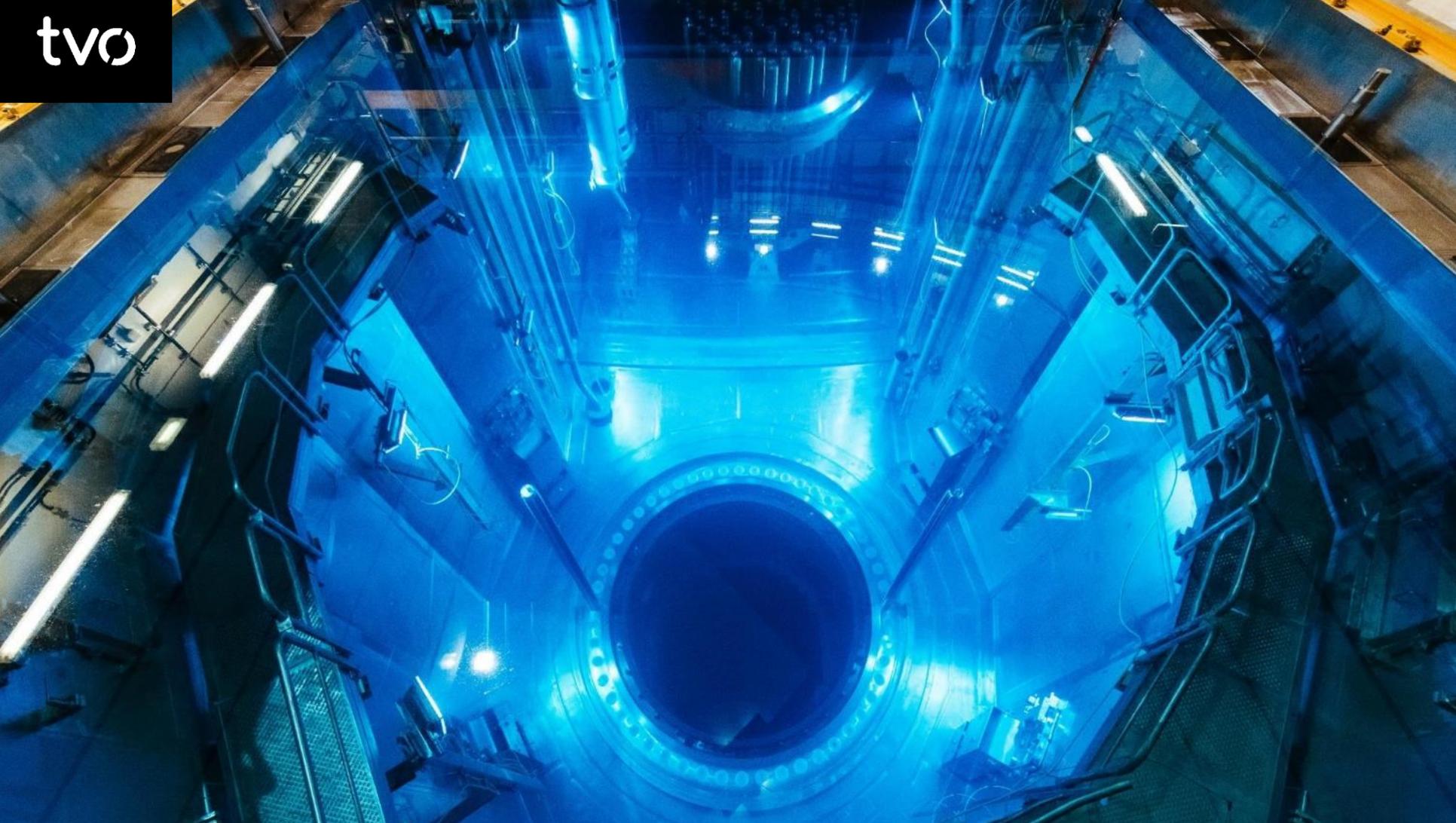
- Workforce currently about 1700 persons
- Hot Functional Tests and fuel delivery completed
- Safety at works < 2 accidents per million hrs
- All OL3 operators have passed the licensing exams.
- Operating license granted March 2019
- Over 95 % of system tests completed (of those which are needed before fuel loading)
- Preparation for Fuel Loading in Jan 2020 ongoing



OL3 EPR – REACTOR HALL



tvo











tvo

#FinlandsGreatestClimateAct

Posiva



Safe and cost-effective final disposal



”Go-ahead” investment decision in June 2019

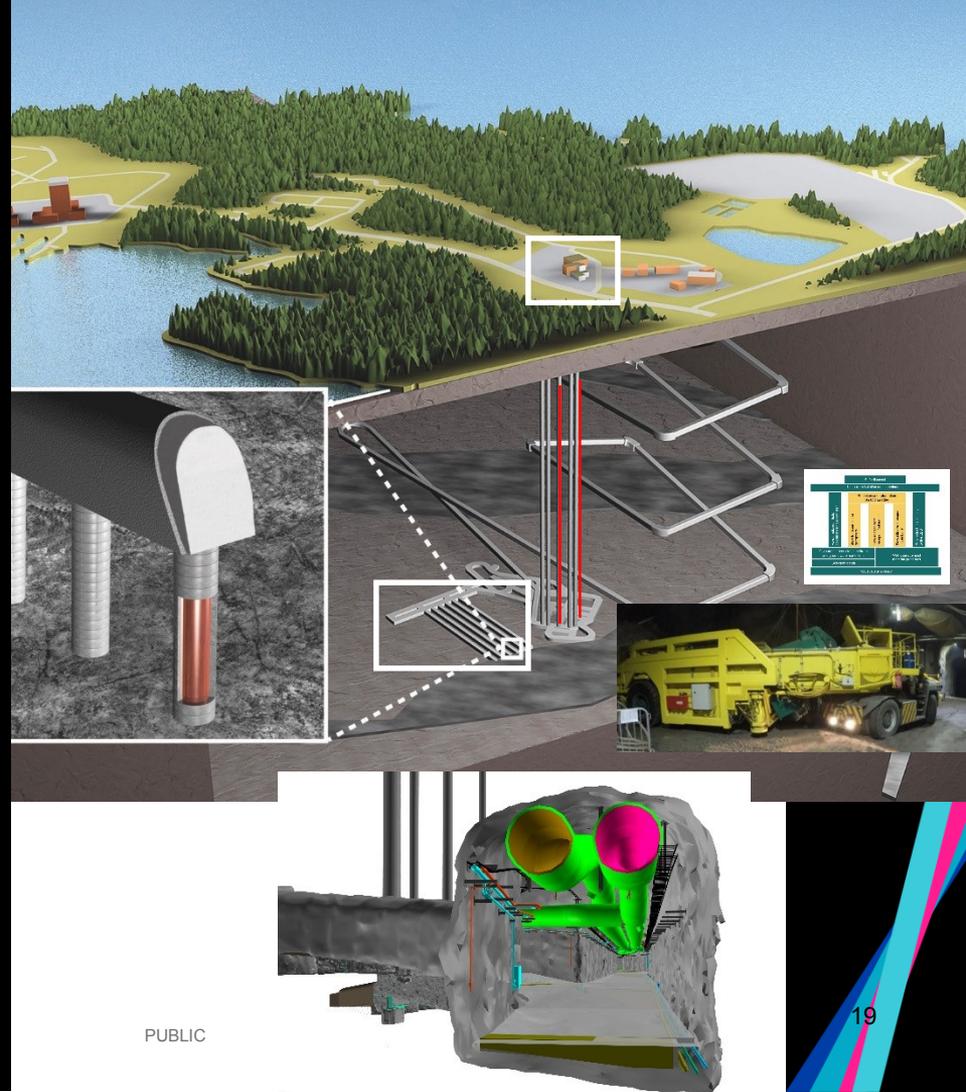
Construction, equipping and commissioning of the encapsulation plant

Excavation of the central tunnels and the first deposition tunnels

Underground disposal machinery

Canisters and clay components

Start of the disposal operation for the first deposition tunnel



Posiva

Maailman johtava
loppusjättäjä

PUBLIC

Construction of encapsulation plant has started

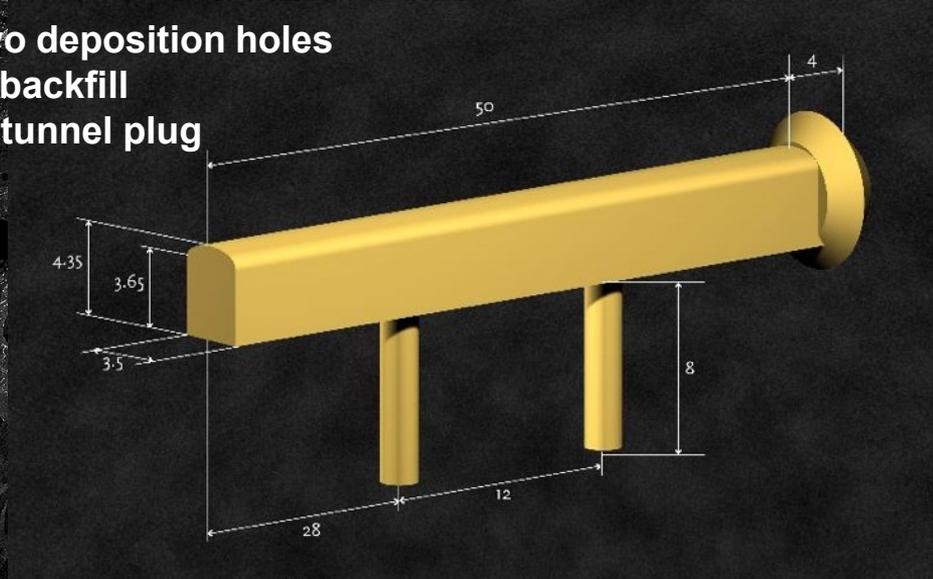
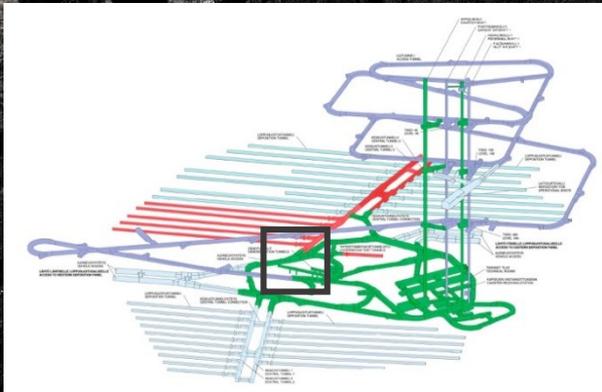
- Consists of the encapsulation plant and systems needed for starting the final disposal
- The cost estimate is ca. 500 million EUR and it has an employment impact of ca. 2500 person years





Testing of the concept: Full Scale In-Situ System Test

- Design, installation and comprehensive monitoring of EBS components:
 - 2 copper canisters with heating equivalent to the fuel decay heat
 - buffer in two deposition holes
 - about 50m backfill
 - deposition tunnel plug



#wehaveasolution



