

# Finland's approach to final disposal of spent nuclear fuel

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# Posiva Oy

We have a solution  
for the final disposal  
of spent nuclear fuel

We have a significant  
role in climate  
protection  
as a part of the  
lifecycle of  
sustainable  
nuclear energy

Posiva

- Owners: Teollisuuden Voima Oyj (60 %) and Fortum Power and heat (40 %)
- Mission: safe and cost efficient final disposal of spent nuclear fuel of its owners
- Subsidiary Posiva Solutions (est. 2016) sells expertise on the final disposal of spent nuclear fuel



# Complete Nuclear Waste Management on one island – Olkiluoto, Finland

Interim storage for spent fuel

Teollisuuden Voima Oy

Olkiluoto OL-1, OL-2 and OL-3 nuclear reactors

Teollisuuden Voima Oy

Repository for operational waste (LILW repository)

Posiva Oy

**ONKALO® Disposal facility for spent nuclear fuel.** The construction is ongoing and the application for operating license has been submitted 30.12.2021



# Phases of Posiva's final disposal programme

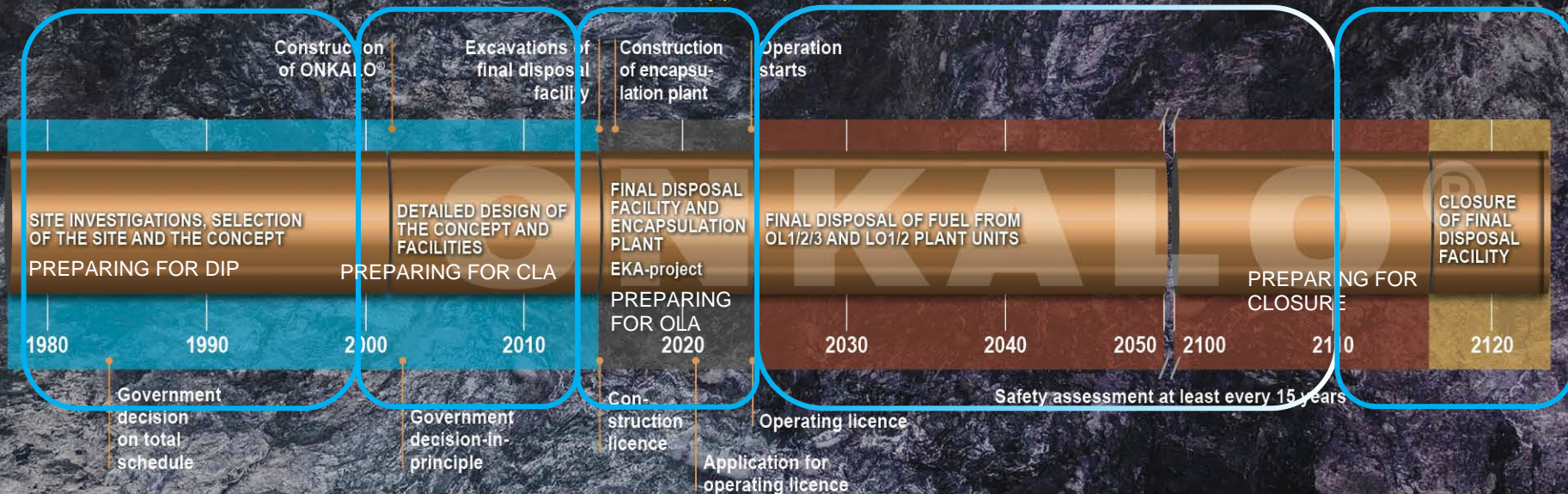
**Phase 1. Focus:**  
Site investigation and selection, disposal concept; preparing first license application

**Phase 2. Focus:**  
ONKALO® and preparing Construction License Application

**Phase 3. Focus:**  
Constructing the final disposal facility and preparing Operating License Application

**Phase 4. Focus:**  
Operation of the facility and further development of the concept

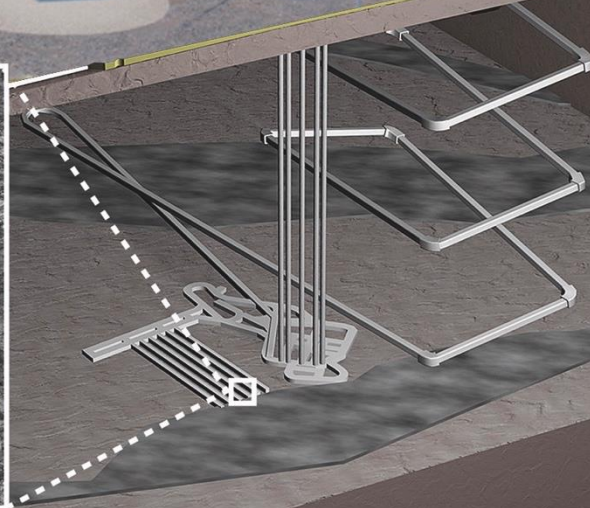
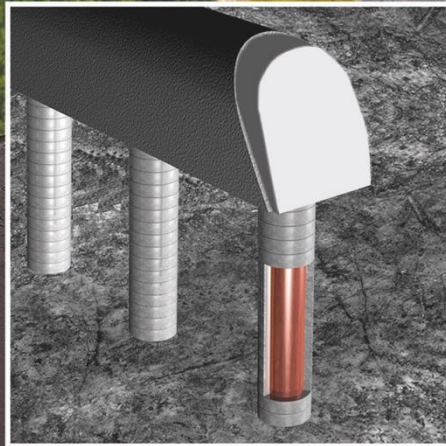
**Phase 5. Focus:**  
Preparing and closure of the facility





# Only safe final disposal is possible

Multi-barrier principle of final disposal:  
Several engineered barriers and host rock backing up each other ensure long-term safety





# Three shafts of success

1

Trust and  
transparency

- it takes years  
to earn the trust, and  
only minutes  
to lose it
- we do not risk this  
under any  
circumstances

2

Independent and  
trusted authorities

Clear processes,  
responsibilities and  
roles

3

Long experience of  
reliable, employing,  
tax-paying and  
transparent  
nuclear industry



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Posiva's  
ONKALO® is a  
game changer.



# Thank you!

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Posiva's personnel and network are making history with the work that they do.



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Posiva's solution for the final disposal of spent nuclear fuel enables the sustainable production of nuclear electricity. A link to IAEA video [in here](#)

IAEA Director General Grossi, in November 2020

