

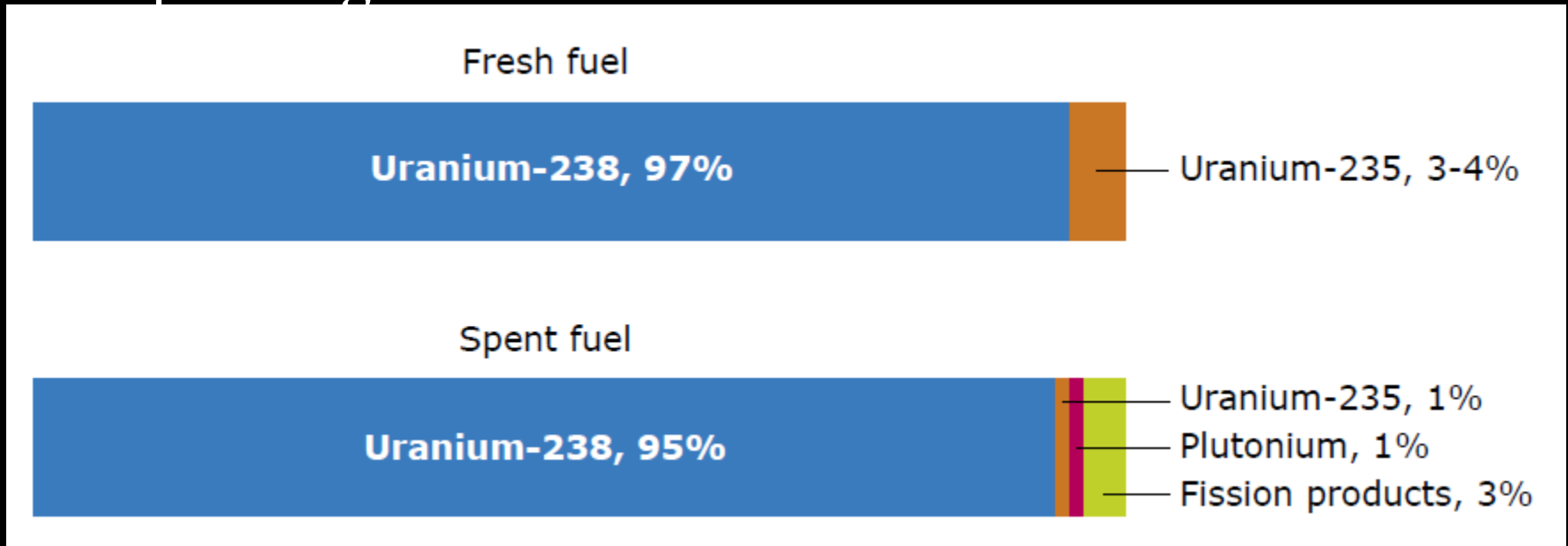


NUCLEAR WASTE MANAGEMENT IN FINLAND

- 4 nuclear power plant in Finland, 5th under construction
- In 2001, the Parliament ratified a decision about the final disposal of spent nuclear fuel
- In 2000, Olkiluoto has been chosen
- The handling, storing and permanent disposal of nuclear waste, originating from other countries is strictly forbidden
- The power companies that produced nuclear energy are responsible for all the costs related to nuclear waste management (the fund amounted to 1900 millions € (at the end of 2011) of estimated 3000 in total)

NUCLEAR WASTE

- Operating waste:



- Decommissioning waste:

- Reactor pressure vessel

- Is planned to take place on the nuclear power plant sites

SPENT NUCLEAR FUEL

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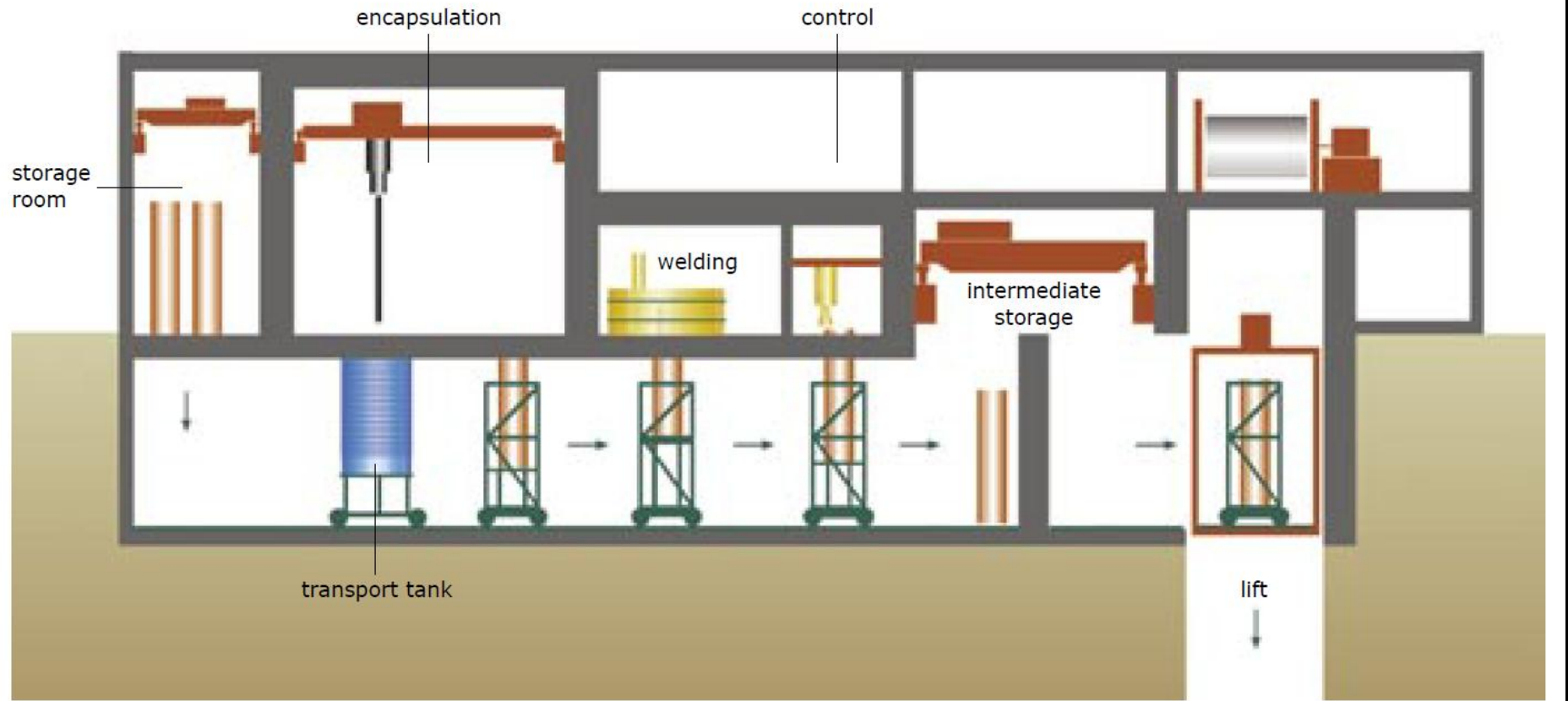
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FINAL DISPOSAL

- Problem: no experience
- aboveground encapsulation plant
- repository (about 500m underground)
- Enter: 6,5 × 5 m
- 5 km spiralling track
- All spent fuel till 2120

Encapsulation plant

Encapsulation plant for spent nuclear fuel



Loviisa 1 and 2

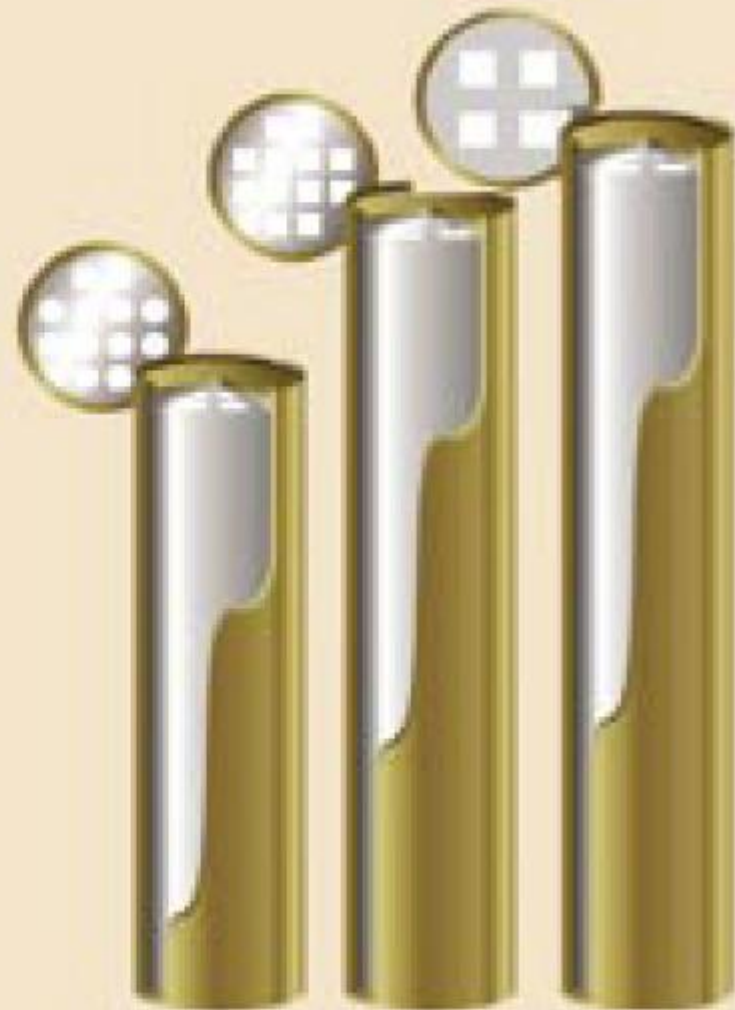
- Height 3.6 m
- Mass 16.1 t (empty)
- 12 spent fuel assemblies per canister

Olkiluoto 1 and 2

- Height 4.8 m
- Mass 20.7 t (empty)
- 12 spent fuel assemblies per canister

Olkiluoto 3

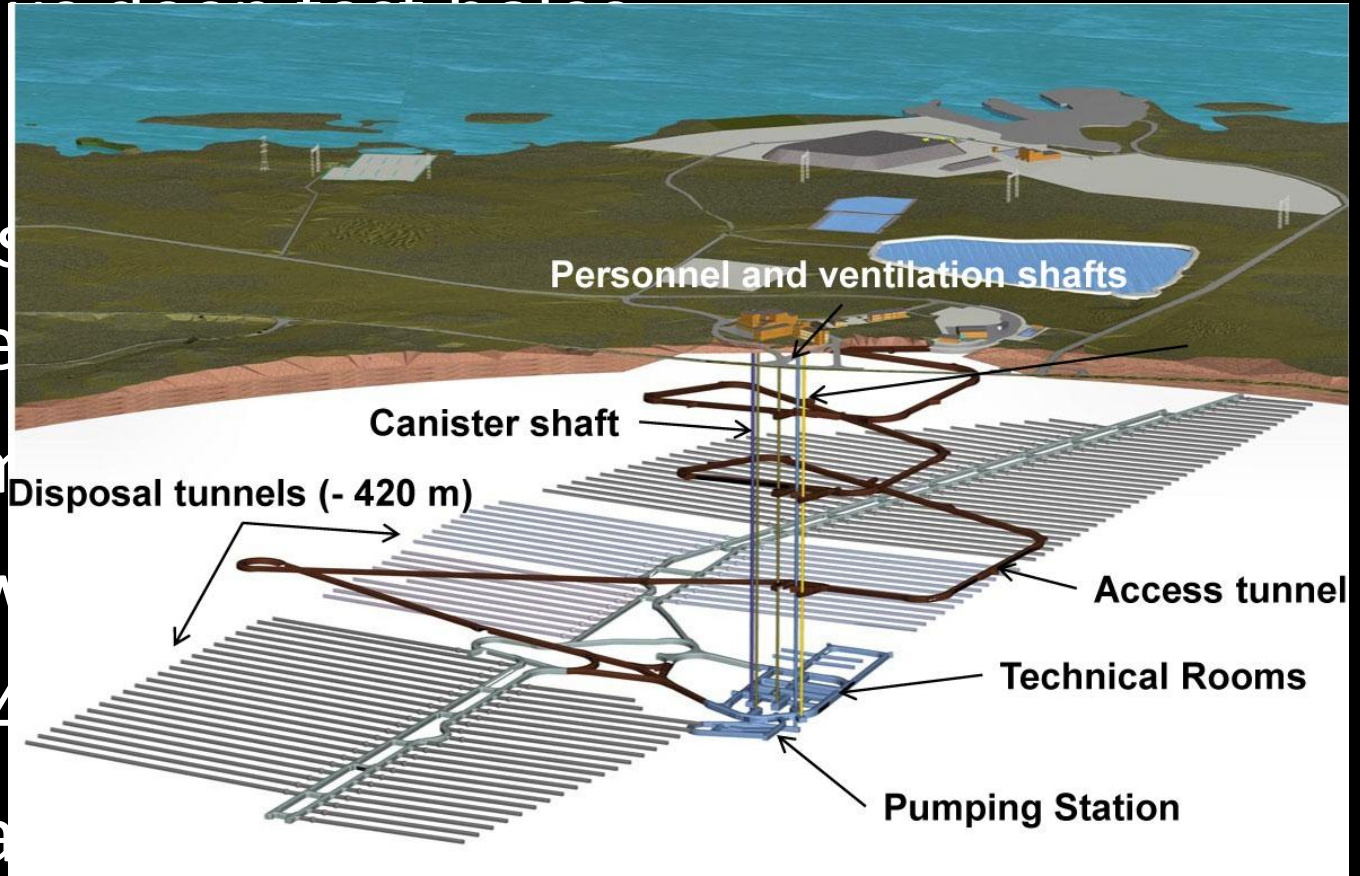
- Height 5.2 m
- Mass 26.0 t (empty)
- 4 spent fuel assemblies per canister



LO1 -2 OL1 -2 OL3

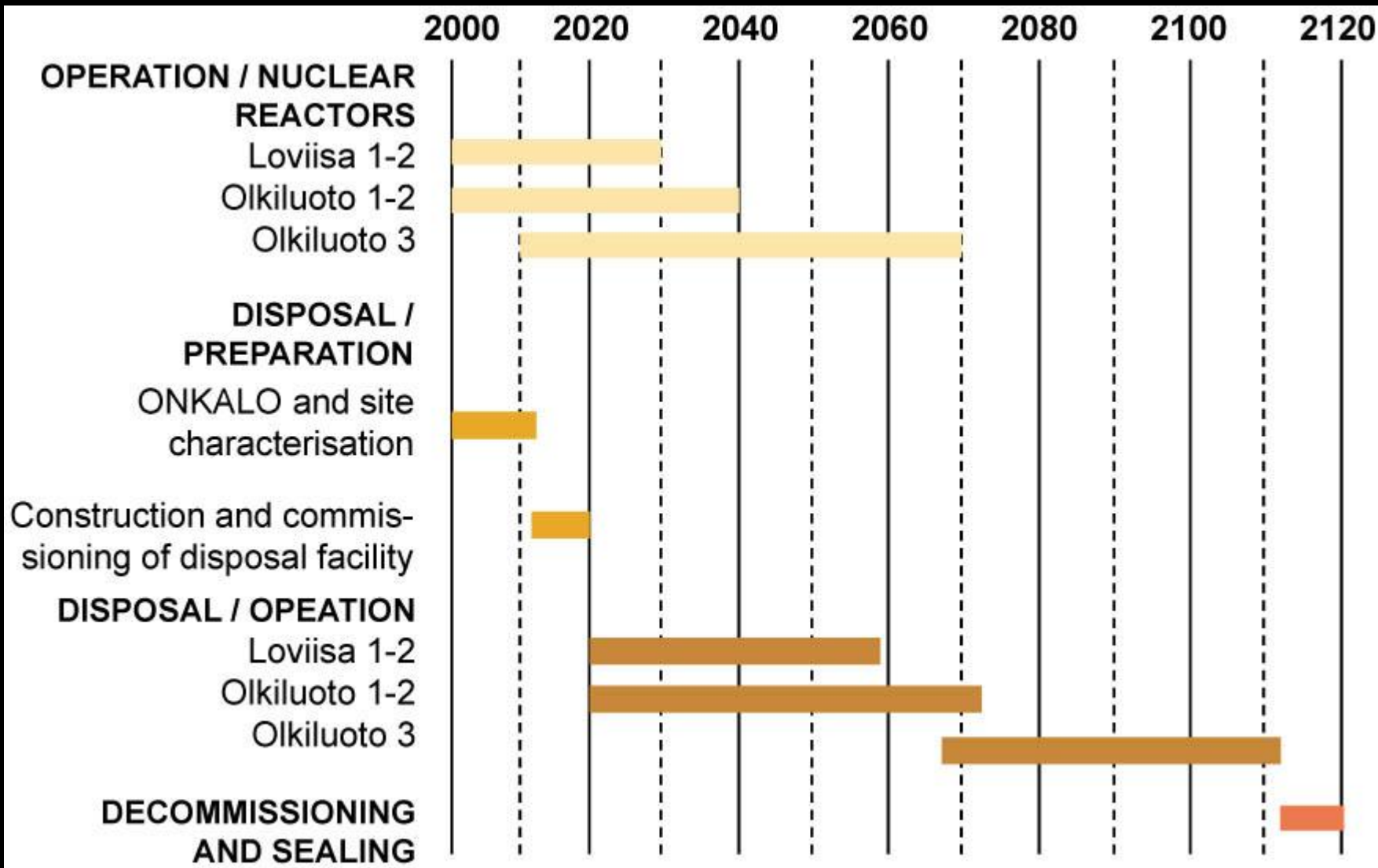
Underground facility

- Numerous test holes
- Bedrock fractures excavated
- To 520 m
- Tunnel width
- In total 4
- 5 vertical



- Deposition tunnels
- 2800 canisters
- 6-8m deep holes
- Sealed with bentonite clay
- Alternatively, canisters also horizontal
- http://www.posiva.fi/en/final_disposal/final_disposal_facility/encapsulation_and_final_disposal_animation

schedule





SOURCES

- [Življenje in tehnika \(03/2011, str.: 43 - 48\)](#)
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