Radioactive Waste Management in Austria an Czech Republic

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Prague and Vienna, 2014

Co-operating Universities

Financial Support by

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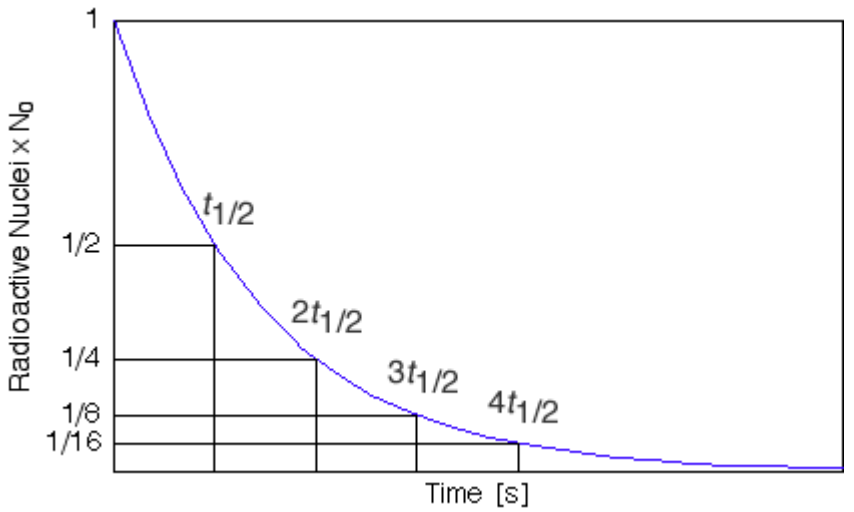
Principle of radioactive waste disposal

- Radioactive decay – radioactivity naturally decreases in time



- Other problematic substances in waste
  - Heavy metals, poisons

Radioactive waste classification

- Low Level Waste (LLW)
  - Few hundred years
- Intermediate Level Waste (ILW)
  - Thousands to tens of thousands of years
- High Level Waste (HLW)
  - Hundreds of thousands of years

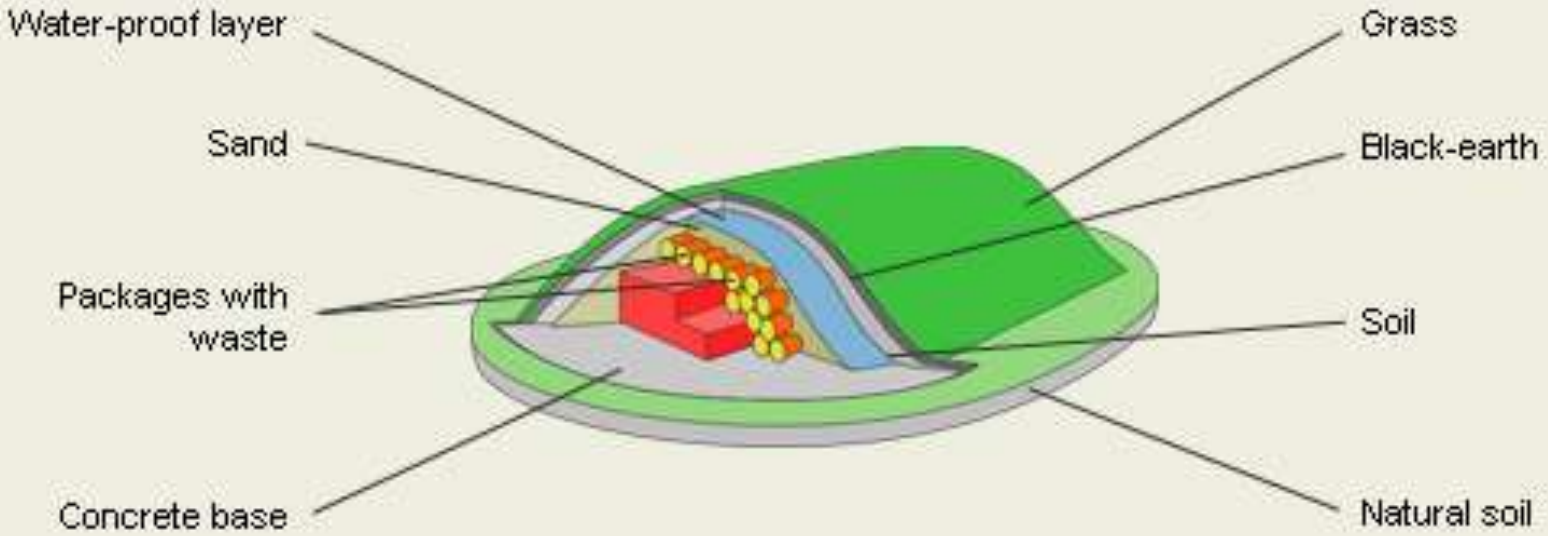
Austria

- Constitutional law for a nuclear free Austria
- One central treatment and storage facility
- Special fond for a final repository
- Member of ERDO

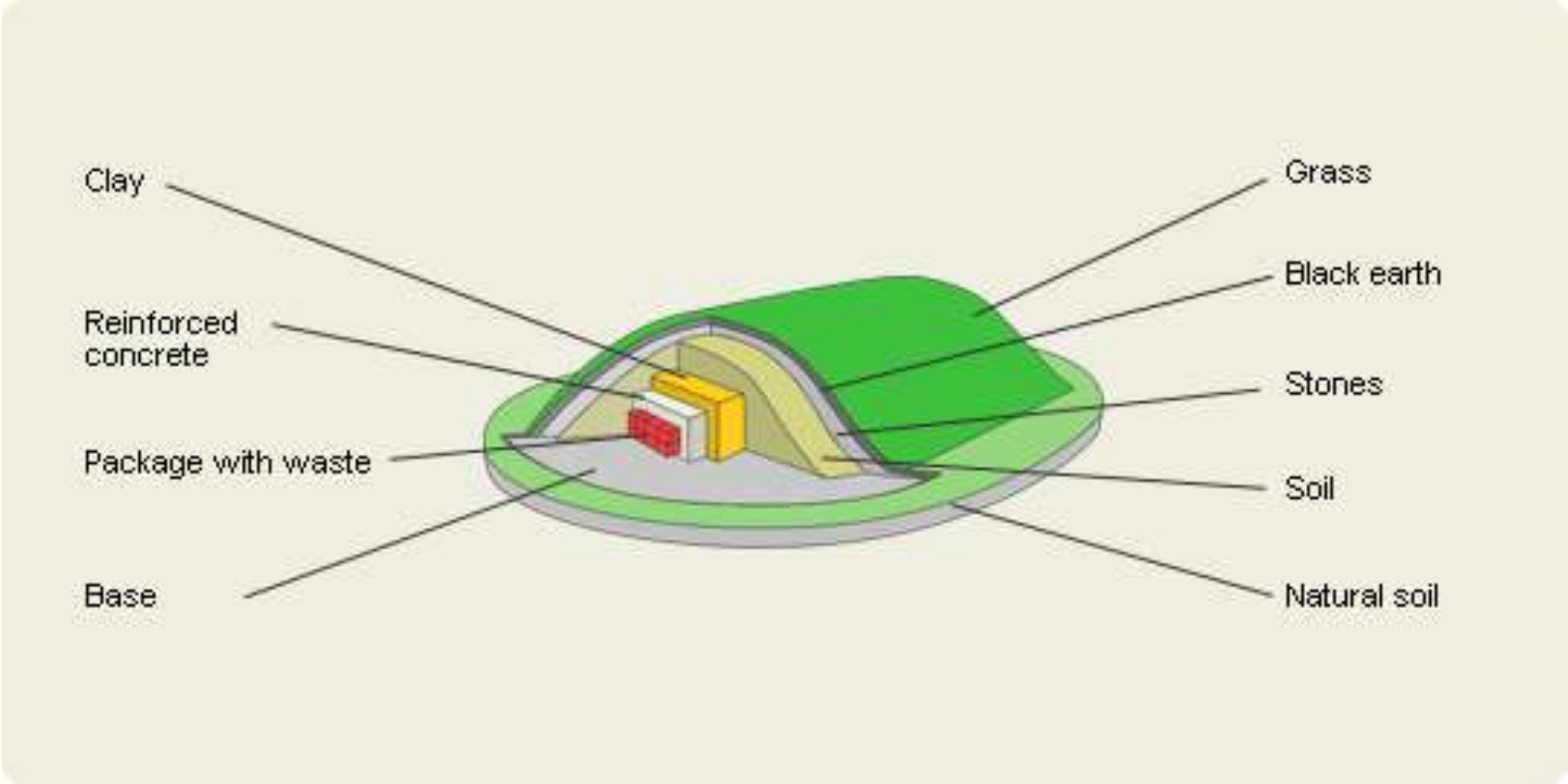
Czech Republic

- Act No. 18/1997 (Atomic Act)
- 3 disposal facilities in operation
- 2 storage facilities for spent fuel
- Funding via state‘s Nuclear Account

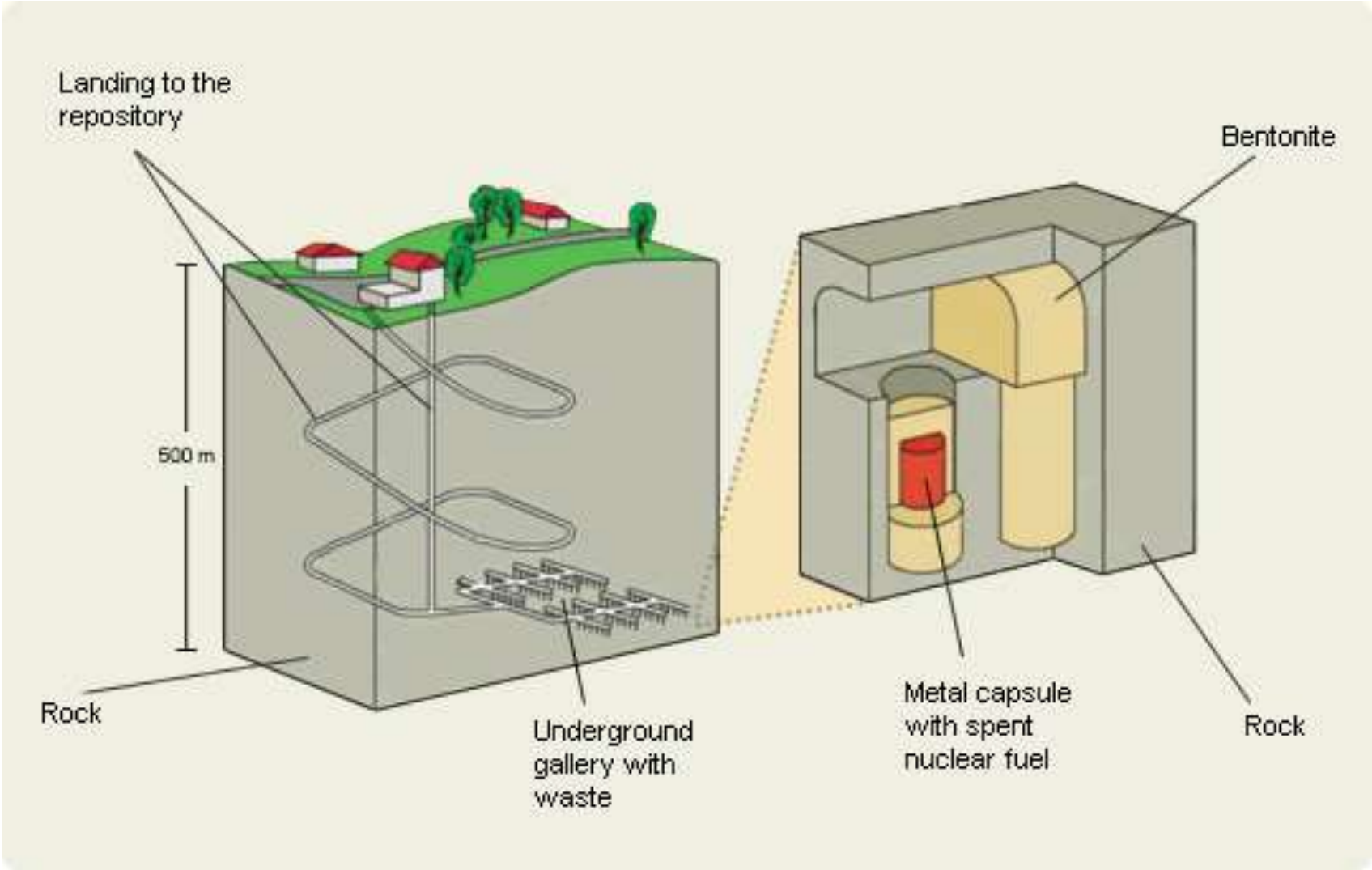
Shallow repository



Near-surface repository



Deep geological repository



Nice figures…

But how does it look like in reality?

Let‘s go for an excursion… :-)

Near surface repository Richard

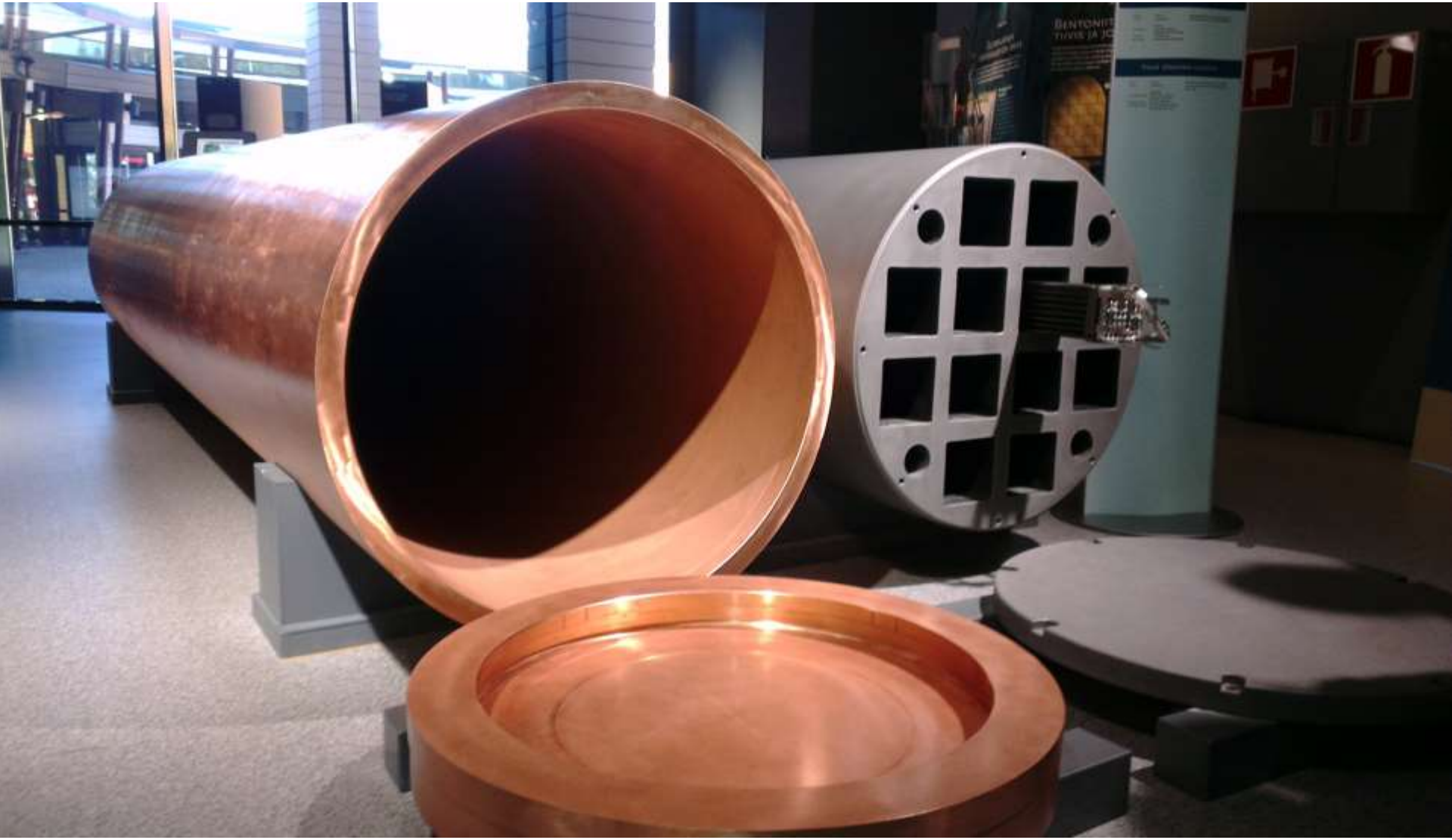
Near surface repository Richard

Barrel for radioactive waste disposal

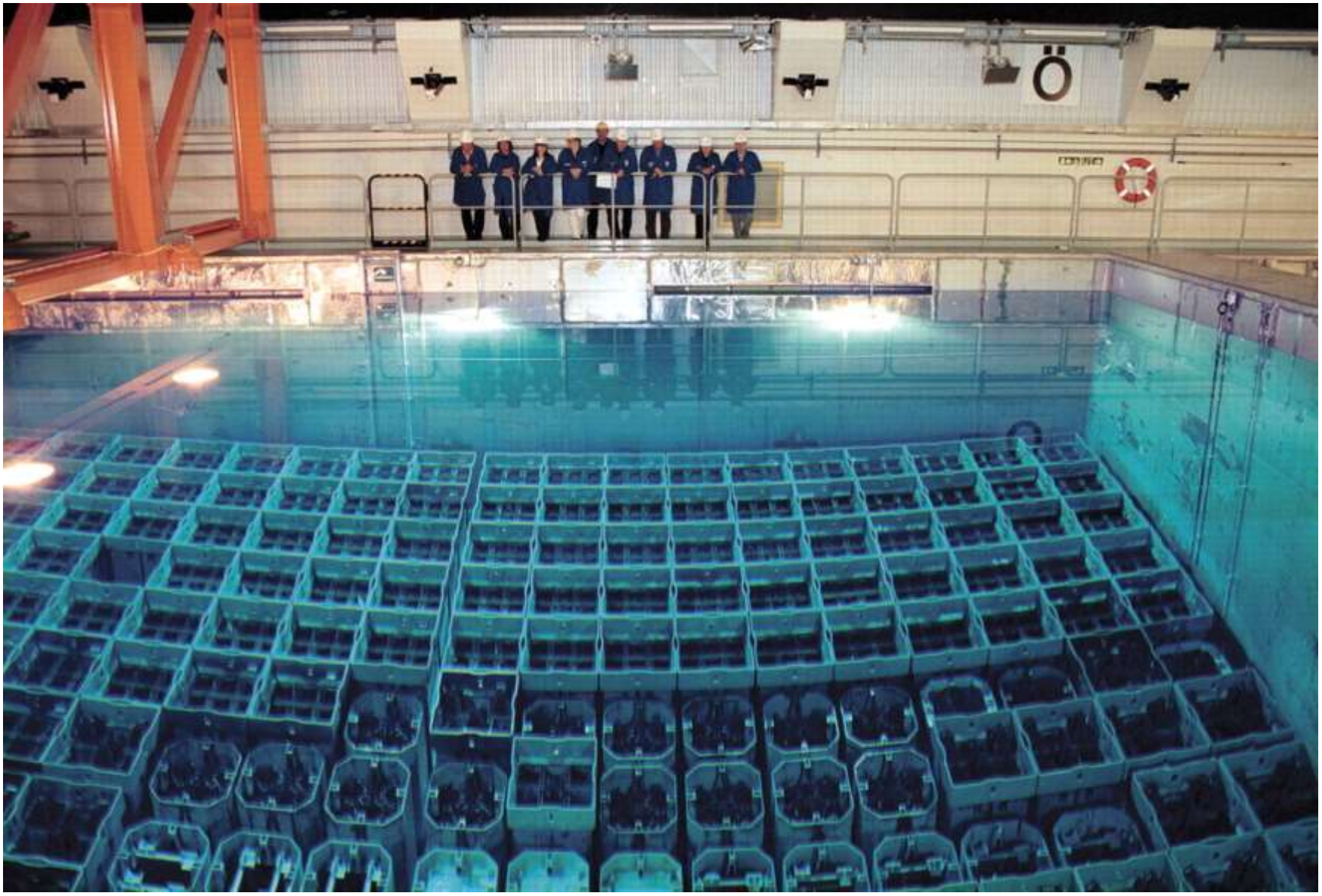
Storage of radioactive waste

Deep geological repository laboratory

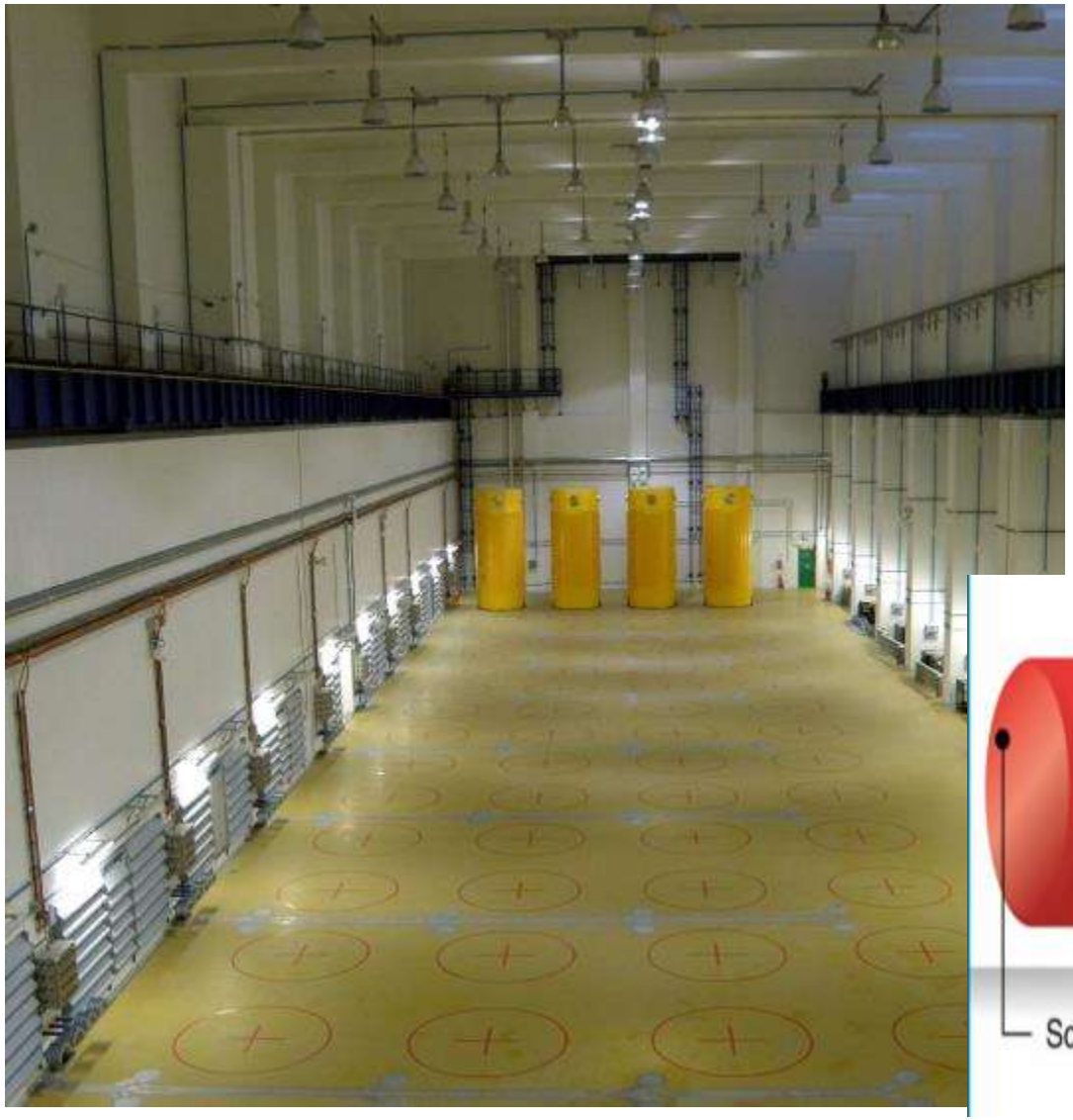
Spent nuclear fuel disposal canister

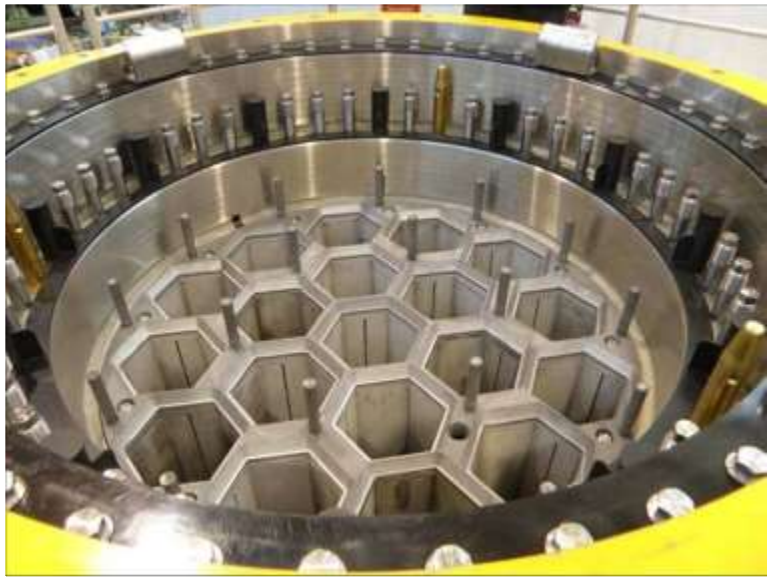


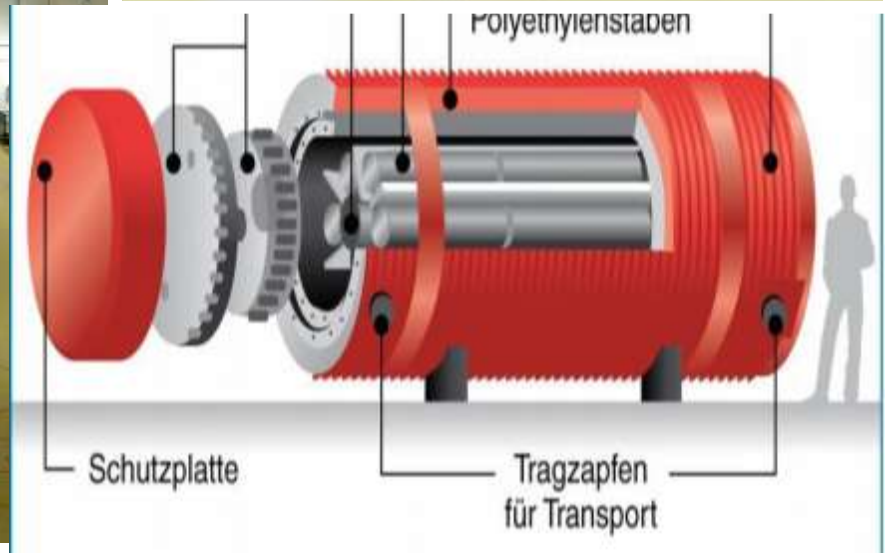
Spent nuclear fuel storage – SF pool



Spent nuclear fuel storage – dry storage







Results of our work

- Safe radioactive waste management is a liability for both nuclear and non-nuclear country
- Volumes of produced waste are different
- Difference in fee for disposal
  - Higher volume means lower fee – high share of fixed costs

Thank you for your attention.