

# Nuclear Waste Management from Public Perception to Industrial Reality

## Deep Geological Disposal of Nuclear Waste in the Swedish Crystalline Bedrock

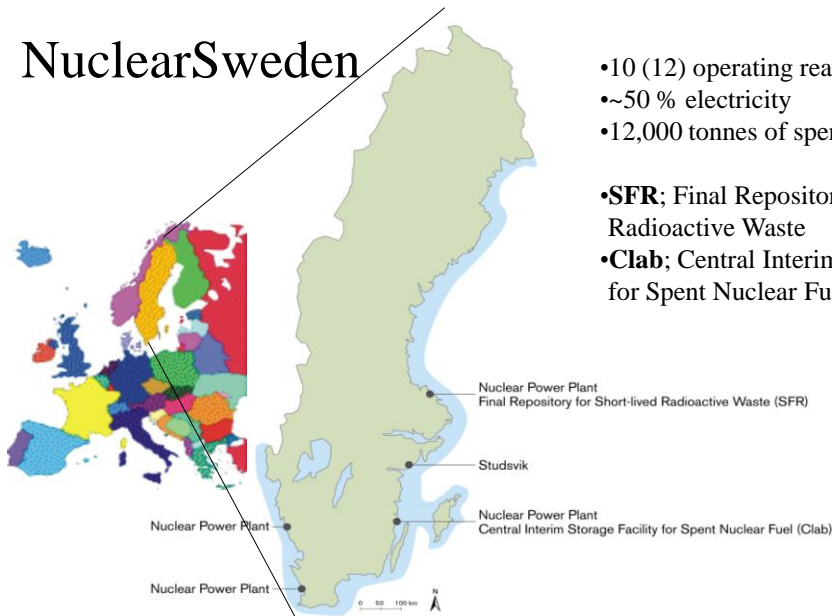
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Svensk Kärnbränslehantering AB

*Swedish Nuclear Fuel and Waste Management Company*



### NuclearSweden



- 10 (12) operating reactor units at 3 sites
- ~50 % electricity
- 12,000 tonnes of spent fuel

- SFR**; Final Repository for Short-lived Radioactive Waste
- Clab**; Central Interim Storage Facility for Spent Nuclear Fuel



**Clab –  
Central  
Interim  
Storage  
Facility  
for Spent  
Nuclear  
Fuel**

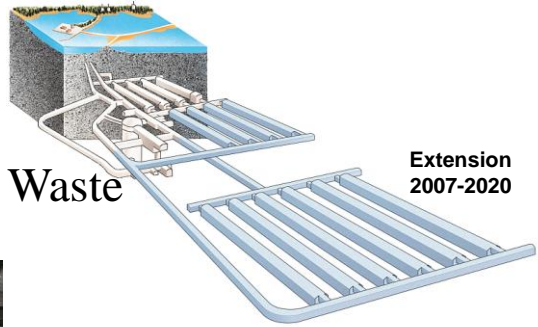


**Clab**



# SFR

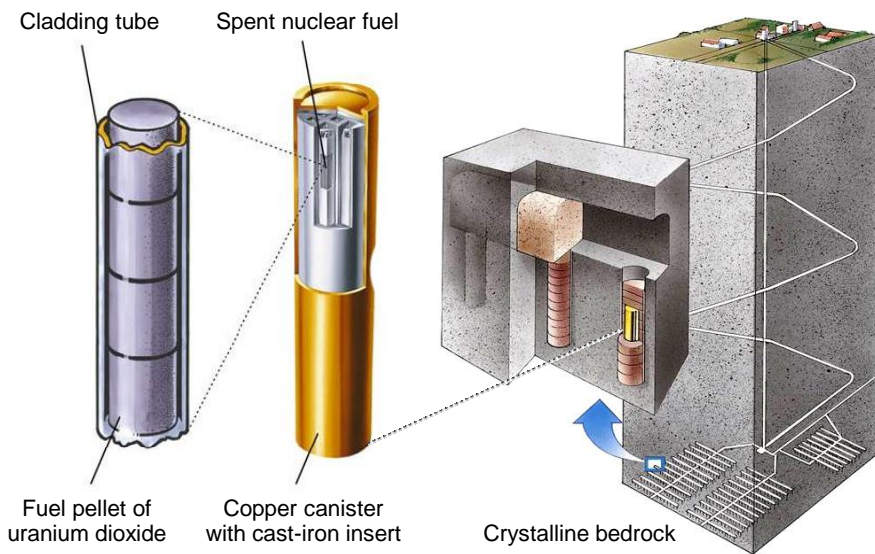
## Final Repository for Short-lived Radioactive Waste



# SFR



# The KBS-concept



# The Encapsulation Laboratory



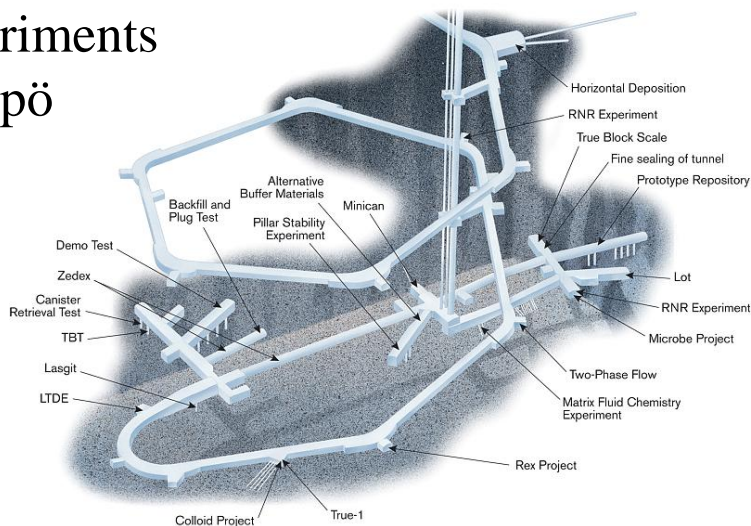
# The Encapsulation Laboratory



# Äspö Hard Rock Laboratory



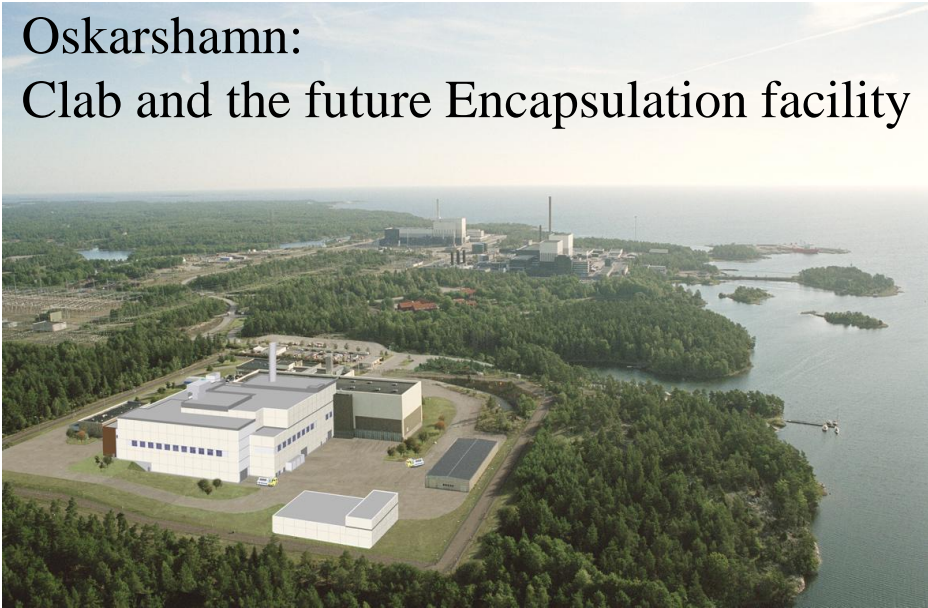
# Experiments at Äspö



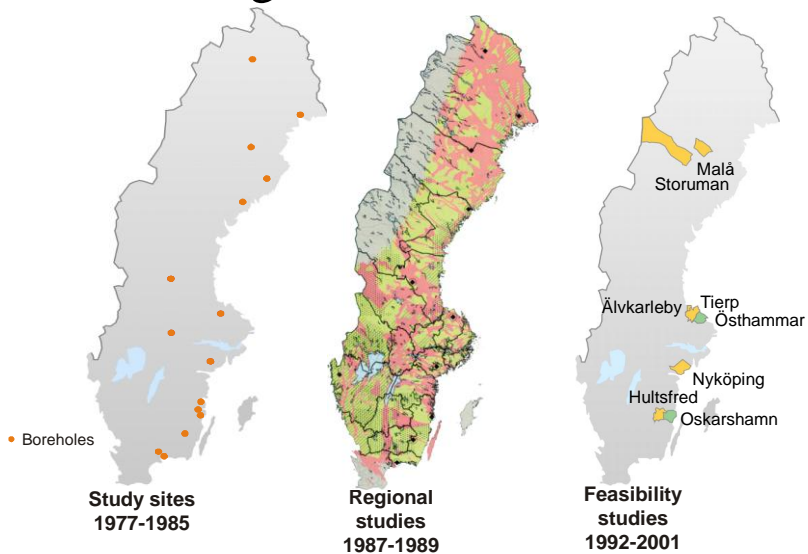
## Äspö Hard Rock Laboratory



# Oskarshamn: Clab and the future Encapsulation facility



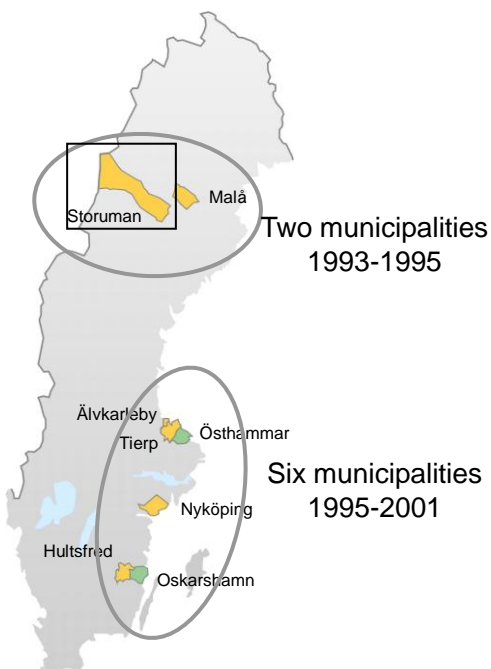
## Siting studies 1977–2001



## Protests against drilling was common at the study sites



Two municipalities  
without nuclear  
facilities



Six municipalities  
close to nuclear  
facilities

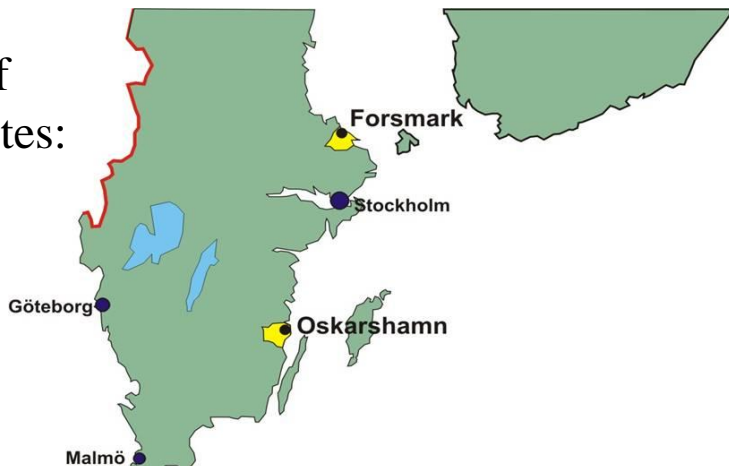


## Feasibility study comprised

- Geological overview
- Identification of potentially suitable areas
- Studies of transportation
- Socio-economic studies
- Interaction with stakeholders
- Communication
- Local office with SKB-staff



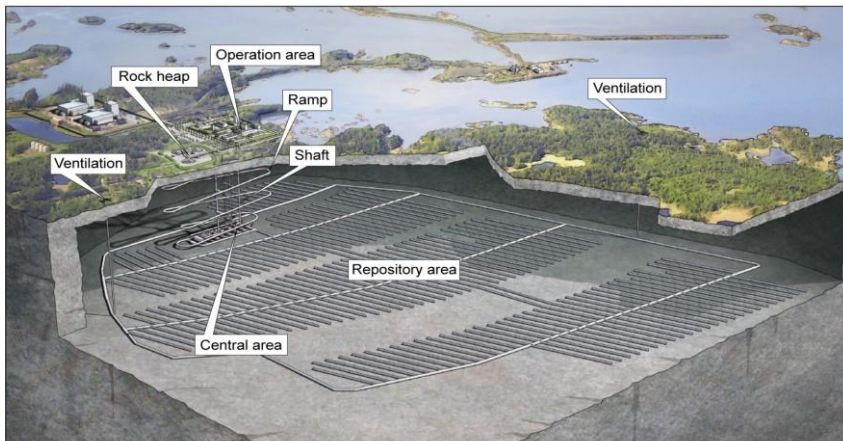
2002-2007  
Investigations of  
two candidate sites:  
Forsmark  
and  
Oskarshamn



## SKB has selected Forsmark



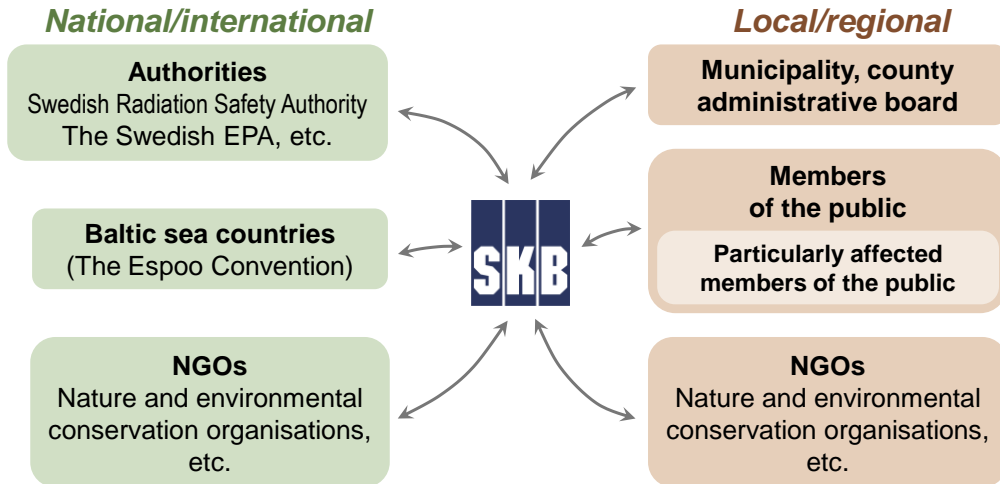
## Deep repository at Forsmark



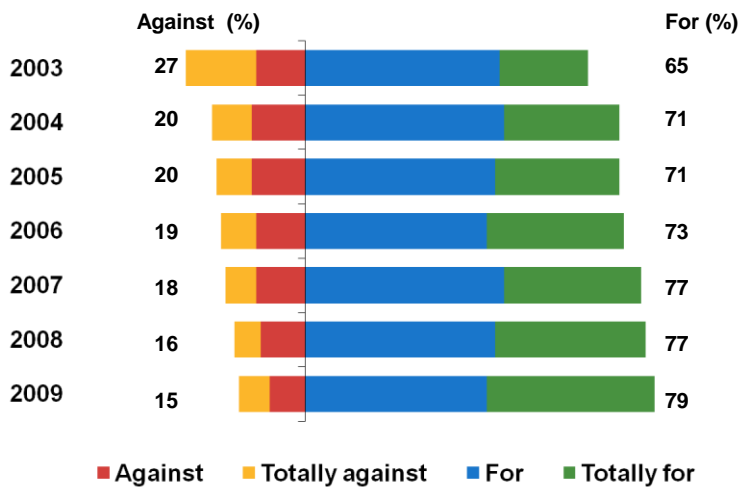
- Dry bedrock
- Close to existing industrial area
- 



## Consultations with various stakeholders



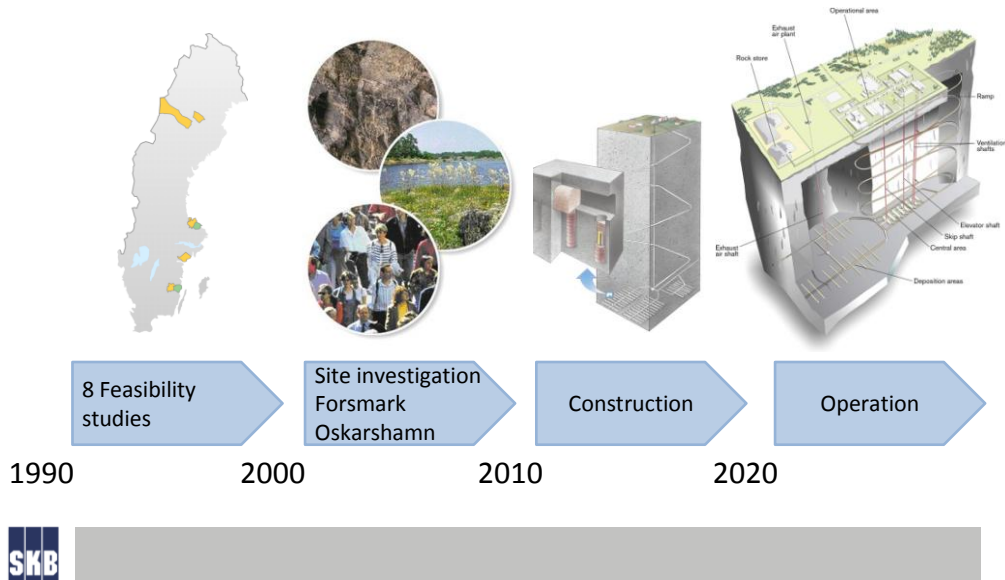
## Strong local support for the final repository in Östhammar municipality



The poll 2009 was taken in April and May, i.e. before SKB announced its site selection on June 3



## Time frame



## Challenges

- To move from RD&D to industrialization
- To further strengthen the scientific base for the safety case
- To keep and develop the public confidence

