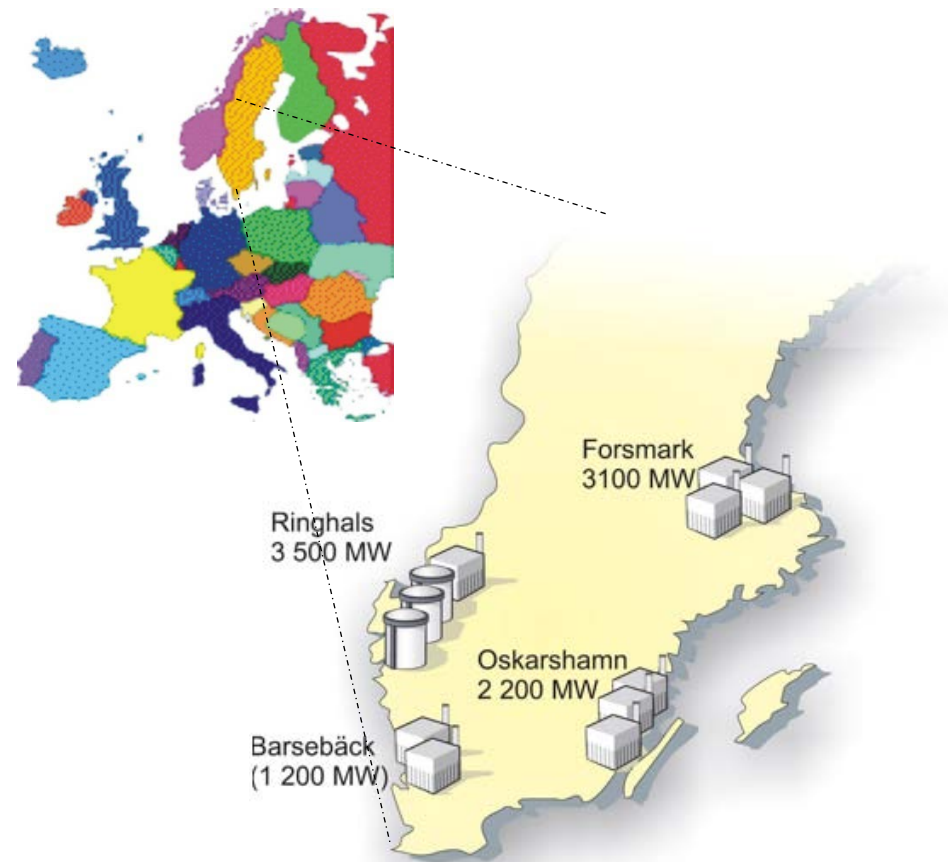


The background of the slide is an aerial photograph of a vast, dense forest. A large, calm lake is visible in the middle ground, reflecting the surrounding trees and the sky. The forest is a mix of green and yellow-green, suggesting an autumn setting. The sky is filled with soft, white clouds. A blue, rounded hexagonal shape is overlaid on the left side of the image, containing the text.

**The Swedish Nuclear  
Waste Management  
Programme  
Stakeholder dialogue**  
Saida Laârouchi Engström  
Vice President

# Sweden

- 10 reactors at 3 sites (after June 1st 2005)
- ~50% electricity
- 12,000 tonnes of spent fuel





# Clear roles, responsibilities and financing of great importance



## The Swedish Radioactive Waste Management Programme

- The nuclear power industry is responsible for taking care of its own waste.
- *The Swedish Nuclear Fuel and Waste Management Co (SKB) was founded, and is owned by, reactor owners to fulfil the mission.*
- Financing secured through The Nuclear Waste Fund.
- Control and review from society (Government, regulator, authorities and municipalities).
- Participation and influence for other stakeholders.



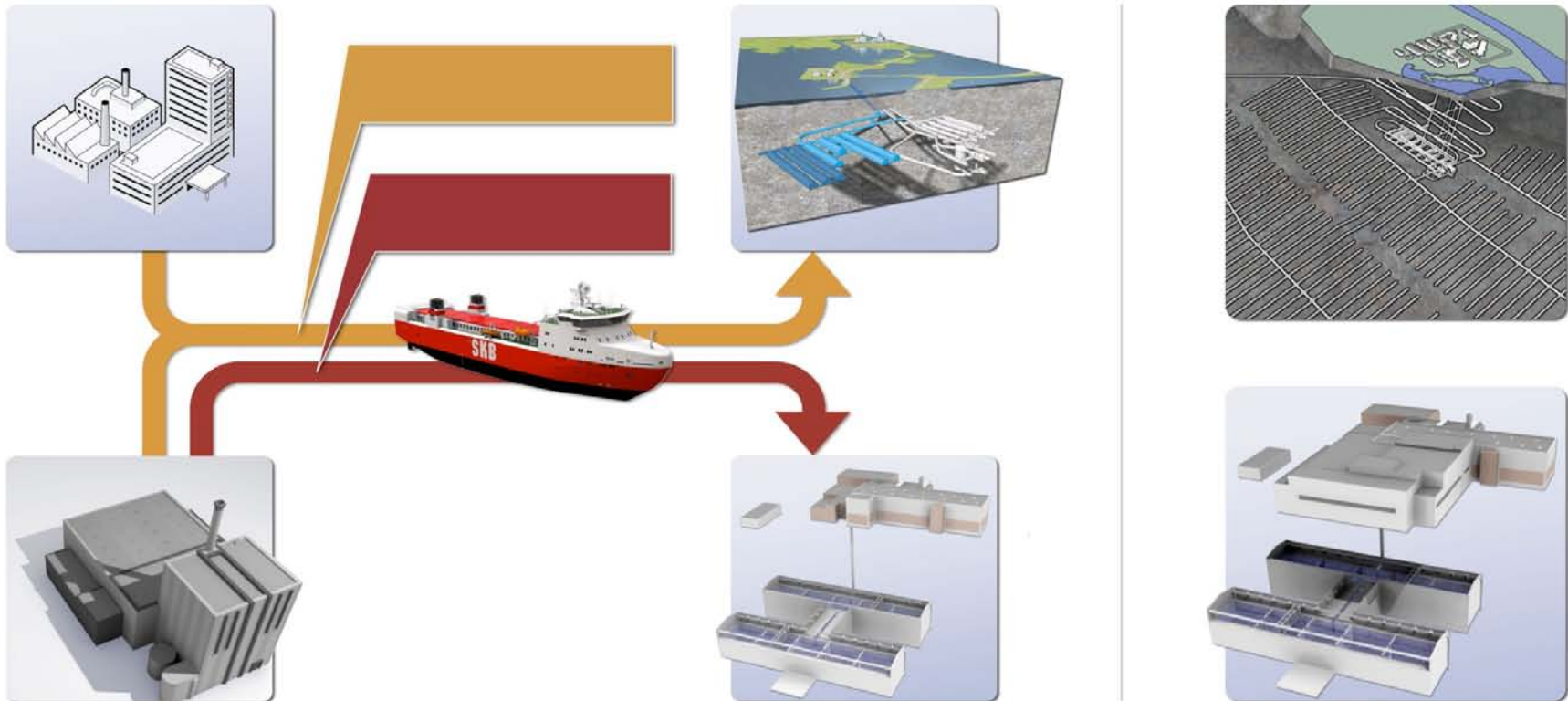
# SKB's system



Medical care, industry and research

Final repository for short-lived radioactive waste

Final repository for spent nuclear fuel in Forsmark



# Research, technology and review



Research cooperation

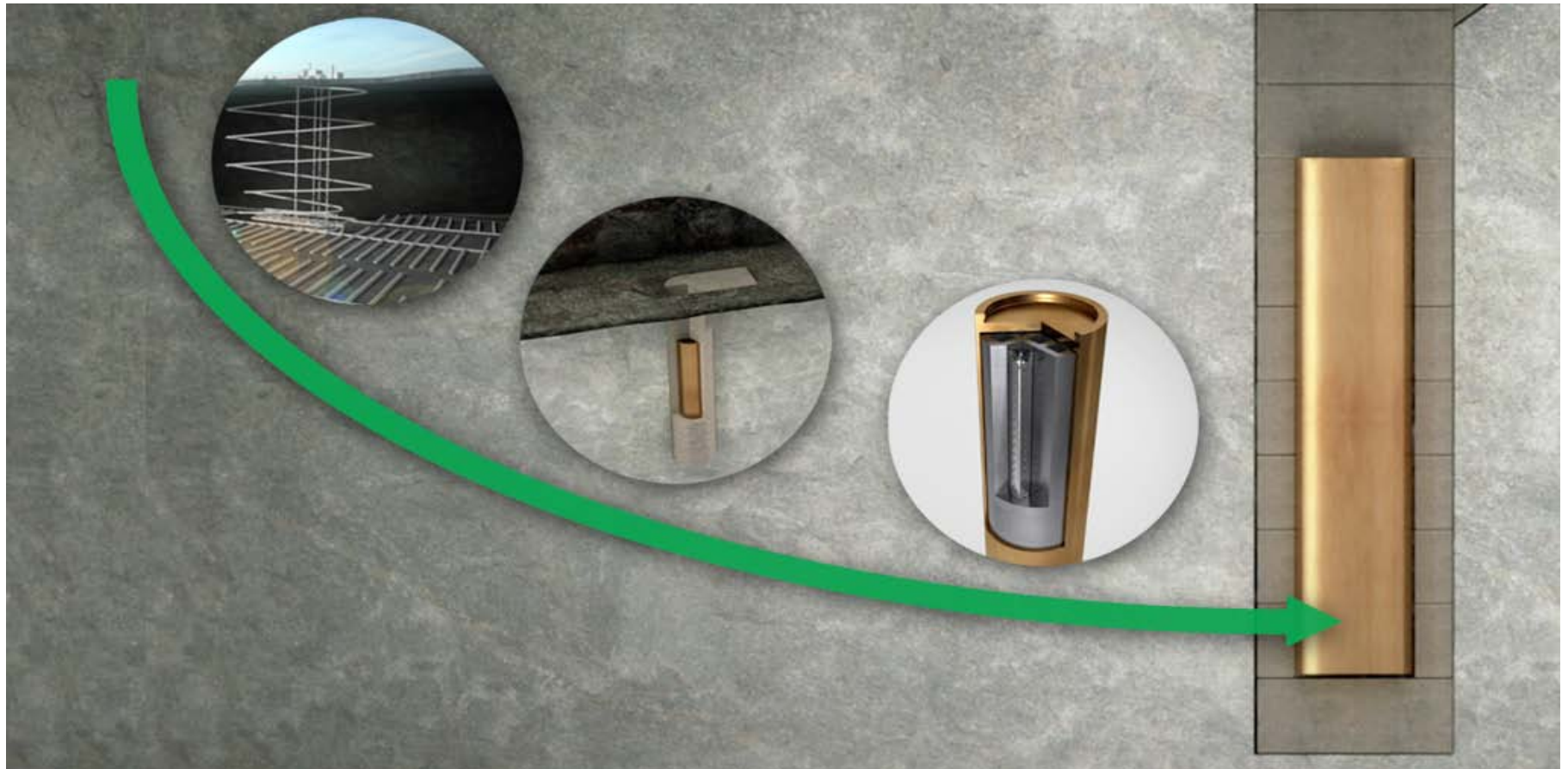


Technology development and full scale tests



Regularly review

# SKB's method





# Framing the challenge!



- Nuclear waste exists and needs to be taken care of - regardless of what we think about future of nuclear power.
- There is a technology and a system to take care of all nuclear waste in Sweden today in a safe way.
- In order to protect the environment and humans in the long term, SKB intends to build a deep geological repository for spent nuclear fuel.
- Safety and transparency are the prerequisites to our mission.





**Research and technology**



**Selection of a site**



# Consent based site selection?



- Consent to what?
  - With whom?
  - For how long?
  - How does the commitment look like? Which administrative and political levels should be involved?
- 
- Better answer all these questions before you start your dialog!

# The journey in view of a selected site



# Aspects that complicate the site selection process for a nuclear installation



- North – South
- City – Countryside
- Establishment – Individual
- Facts – Emotions
- Women – Men
- POLITICS!

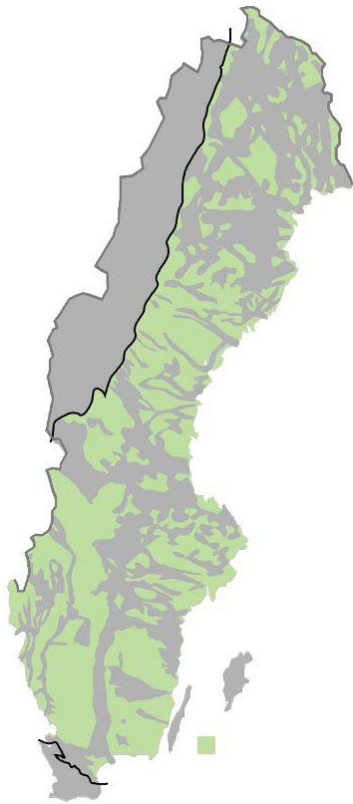




# Finding a site is also learning to know your hosting community!



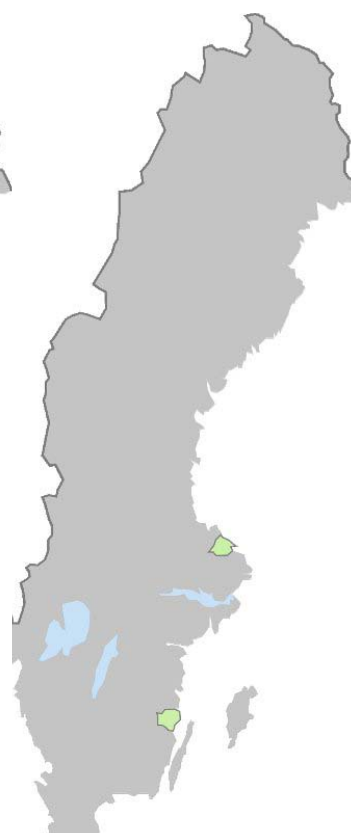
Type areas  
1977–1985



Regional studies  
1990s



Feasibility studies  
1993–2002



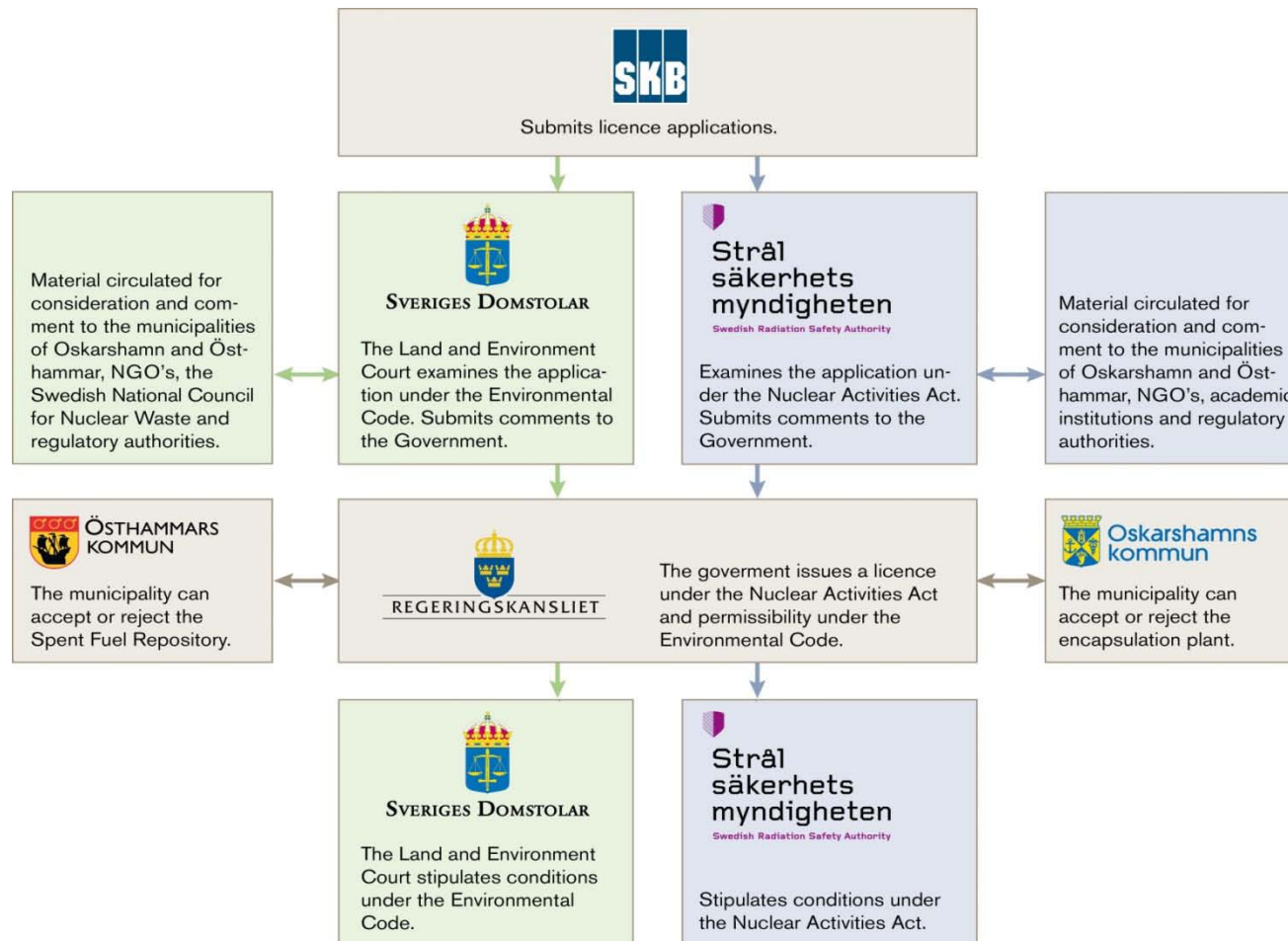
Site investigations  
2002–2008



Building a repository  
Trial operation 2030

# Clink and Spent fuel repository

## Two parallel licensing processes – SKB needs five approvals



# SKB has selected Forsmark



- The rock in Forsmark offers much better prerequisites for long-term, safe disposal and facilitates implementation.
- The rock is homogenous and only has sparsely fractured water-carrying rock at repository depth.
- Good thermal conductivity allows the repository to take up less space.
- Less rock mass and material for backfill.
- Buildings above ground can be built within the existing industrial area.
- Access to infrastructure.
- Limits impact on the environment.





# Consultations with various stakeholders



## *National/international*

### **Authorities**

Swedish Radiation Safety Authority  
The Swedish EPA, etc.

### **Baltic sea countries**

(The Espoo Convention)

### **NGOs**

Nature and environmental  
conservation organisations, etc.

## *Local/regional*

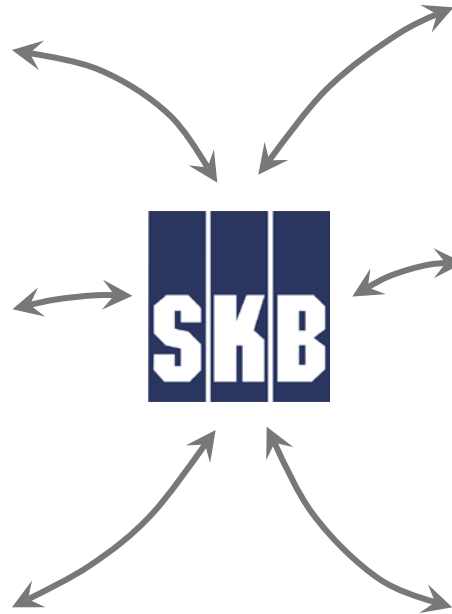
**Municipality, county  
administrative board**

**Members  
of the public**

**Particularly affected  
members of the public**

### **NGOs**

Nature and environmental  
conservation organisations, etc.



# Fundamentals in the site selection process

- Transparent process based on voluntary participation and respect for local democracy.
- Step-wise implementation.
- Constant dialogue, knowledge building and stakeholder involvement.
- Clear role division between state and industry.
- Ability and political will, on national as well as on local level, to go forward and make necessary decisions.
- Intergenerational equity.



# Lessons learned



- Focus your project and define the challenge properly
- Empower your candidate communities
- Be authentic and use your best experts not PR- people
- Be prepared to have your project questioned
- Carry out your dialogue on the receiver's terms and pace
- Prioritise individuals and small groups
- Respect other opinions, anxieties and fears
- Demand respect in return
- Encourage knowledge-sharing as a value in itself even with your opponents
- Be patient and acquire good endurance

