Claes Thegerström
Independent Non-Executive Director
Common challenges

• The radioactive waste exists and it is dangerous

• Its management has ethical, scientific, social and political aspects

• Safe final disposal is a multigenerational project
Internationally shared principles

• Deep geological disposal

• Necessity of social dialogue

• Step-wise decision processes

• Host community must be actively involved and should get national recognition
USA

• Yucca Mountain, Nevada. 1987 – 2009, 15 Billion $ 

• 2010 Obama Blue Ribbon Commission.

• Responsibility with US Dept. of Energy

• ??
Germany

- Gorleben 1980 – 2000
- Phase out of nuclear
- New siting process
- ??
Finland

- Finnish Government has granted Posiva construction licence 2015

- First spent fuel disposal facility project (KBS3)

- Final disposal due to start in 2020s
France

- Site selected near Bure in north east France
- Underground research ongoing
- Licence application planned for 2018
- Initial operating phase 2025
SKB’s mission

• Regardless of the future of nuclear power, nuclear waste exists today from the Swedish nuclear power plants.

• This waste must be taken care of to protect people and the environment.

• This task is so extensive that we regard it as one of Sweden’s most important environmental protection projects.
Our operations

The Swedish system

- Nuclear power plants
- Health care, industry and research
- Transportation by m/s Sigrid
- Interim Storage Facility for Spent Nuclear Fuel with planned encapsulation facility
- Final Repository for Spent Nuclear Fuel
- Final Repository for Short-lived Radioactive Waste

Low- and intermediate-level waste

High-level waste
Our operations

Central Interim Storage Facility for Spent Nuclear Fuel, Clab
Our operations

Central Interim Storage Facility for Spent Nuclear Fuel, Clab
Future projects

SKB’s method

- Fuel pellet of uranium dioxide
- Spent nuclear fuel (kärnbränsle)
- Nodular iron insert
- Bentonite clay
- Cladding tube
- Fuel assembly of BWR type
- Copper canister
- Crystalline bedrock
- Ovanmarksdel av slutförvar
- Undermarksdel av slutförvar

approx. 500 m
Future projects

Planned facilities

Canister factory and canisters
Investment and operation: SEK 8 billion

Encapsulation plant
Investment and operation: SEK 5 billion

Spent Fuel Repository
Investment and operation: SEK 24 billion
Our mission

Finding a site

Type areas 1977-1985

General siting studies 1990s

Feasibility studies 1993-2002

Site investigations 2002-2008

Siting 2009
Future projects

Encapsulation plant
Future projects
Future projects

The Spent Fuel Repository at Forsmark
Dialogue and openness

Facility visits
Dialogue and openness
## Dialogue and openness

**Östhammar: What degree of confidence do you have in the company Svensk Kärnbränslehantering AB, SKB?**

<table>
<thead>
<tr>
<th>Year</th>
<th>Don't know/No answer</th>
<th>Very low confidence</th>
<th>Quite low confidence</th>
<th>Quite high confidence</th>
<th>Very high confidence</th>
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<tbody>
<tr>
<td>2015</td>
<td>10%</td>
<td>2%</td>
<td>11%</td>
<td>54%</td>
<td>23%</td>
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<tr>
<td>2016</td>
<td>9%</td>
<td>3%</td>
<td>10%</td>
<td>53%</td>
<td>26%</td>
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</tbody>
</table>
Local activities

SKB’s work continues – both in Östhammar and in Oskarshamn

**Municipality of Östhammar**

- **SFR**
  - Extension SFR (planned)
    - Investment: SEK 1 billion
    - Operation and maintenance: SEK 2.3 billion
  - Spent Fuel Repository (planned)
    - Investment: SEK 12 billion
    - Operation and maintenance: SEK 12 billion
  - Added value investments
    - The ambition is for added value in the municipality of SEK 500 million.

- **Municipality of Oskarshamn**
  - Åspö Hard Rock Laboratory and the Canister Laboratory
  - Clab
  - Encapsulation plant (planned)
    - Investment: SEK 2.3 billion
    - Operation and maintenance SEK 2.8 billion
  - Added value investments
    - Added value in the municipality of SEK 1.5 billion
    - SEK 150 million year 2010-2015 infrastructure investments
  - Canister factory (planned)
    - Investment: SEK 200-300 million
    - Operation and maintenance: SEK 8 billion
Local activities

Added value areas

• Education
• Spin-off/support for innovation systems
• Infrastructure
• Visitor’s facility
• Labour market expansion
• Special investments in the energy field
• Head office functions
• Further development of SKB’s laboratories in Oskarshamn
• Canister factory
Local activities

Priorities – SKB Nu AB

• Small and medium-sized companies
• Knowledge-intensive companies
• Women as entrepreneurs
• Businesses with limited requirements for investments in plant
• Entrepreneurs with local roots
• Businesses offering new employment opportunities with a long-term perspective
• Businesses which strengthen SKB’s provision of resources in the long term