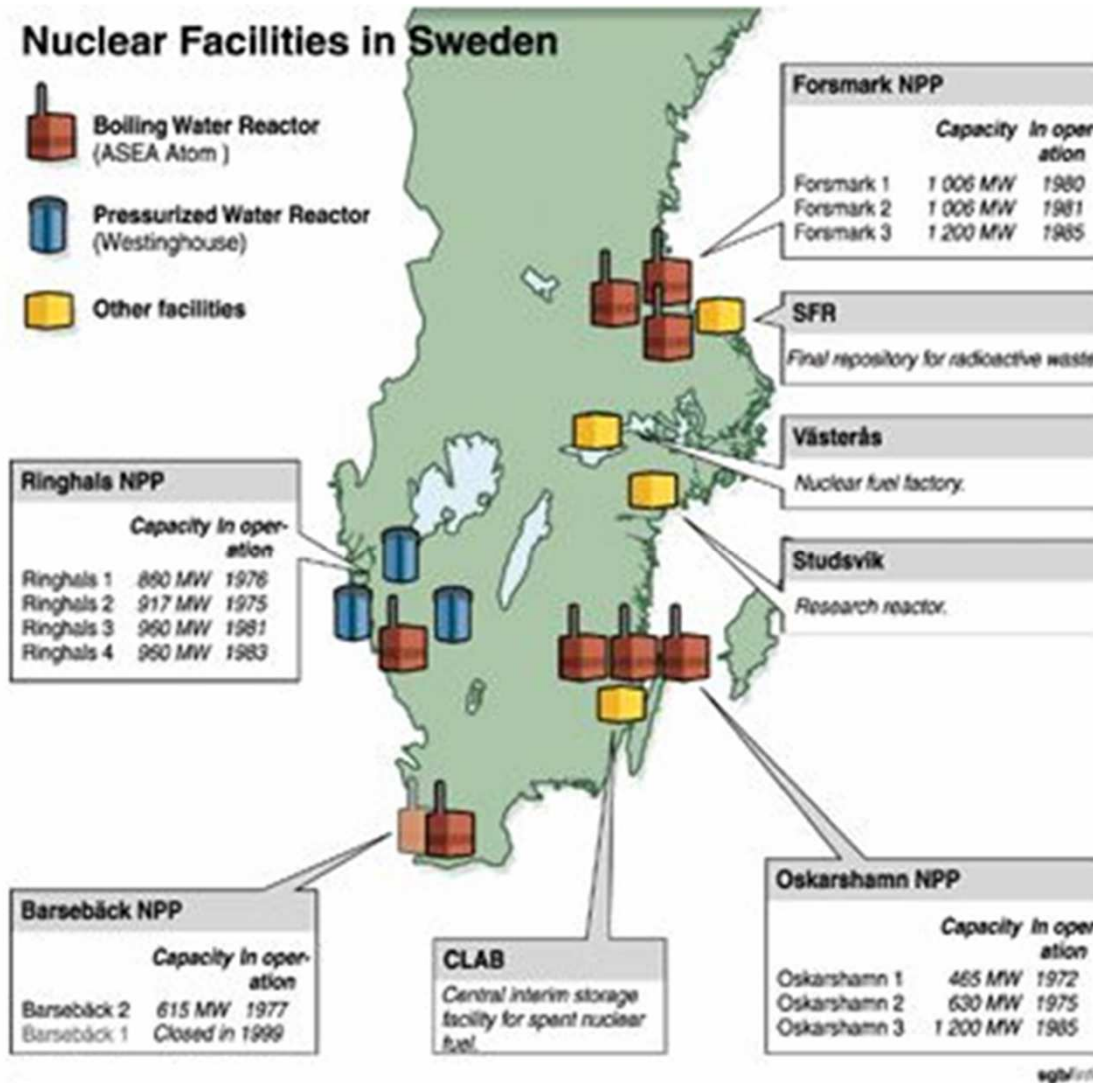


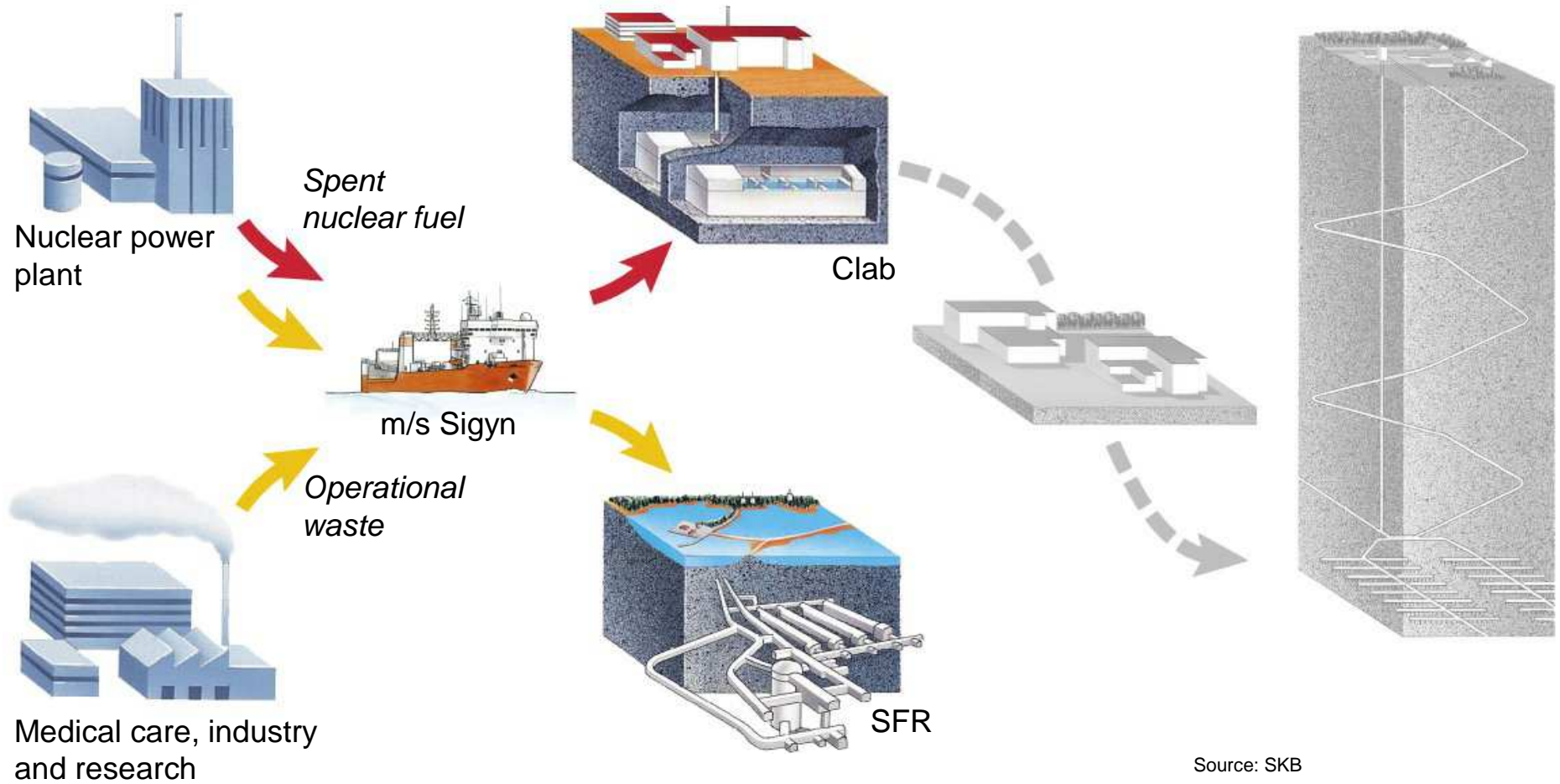
Deep Repository Progress in Sweden

Carl Reinhold Bråkenhielm
Professor, Uppsala university
Vice Chair, Swedish National Council for Nuclear Waste

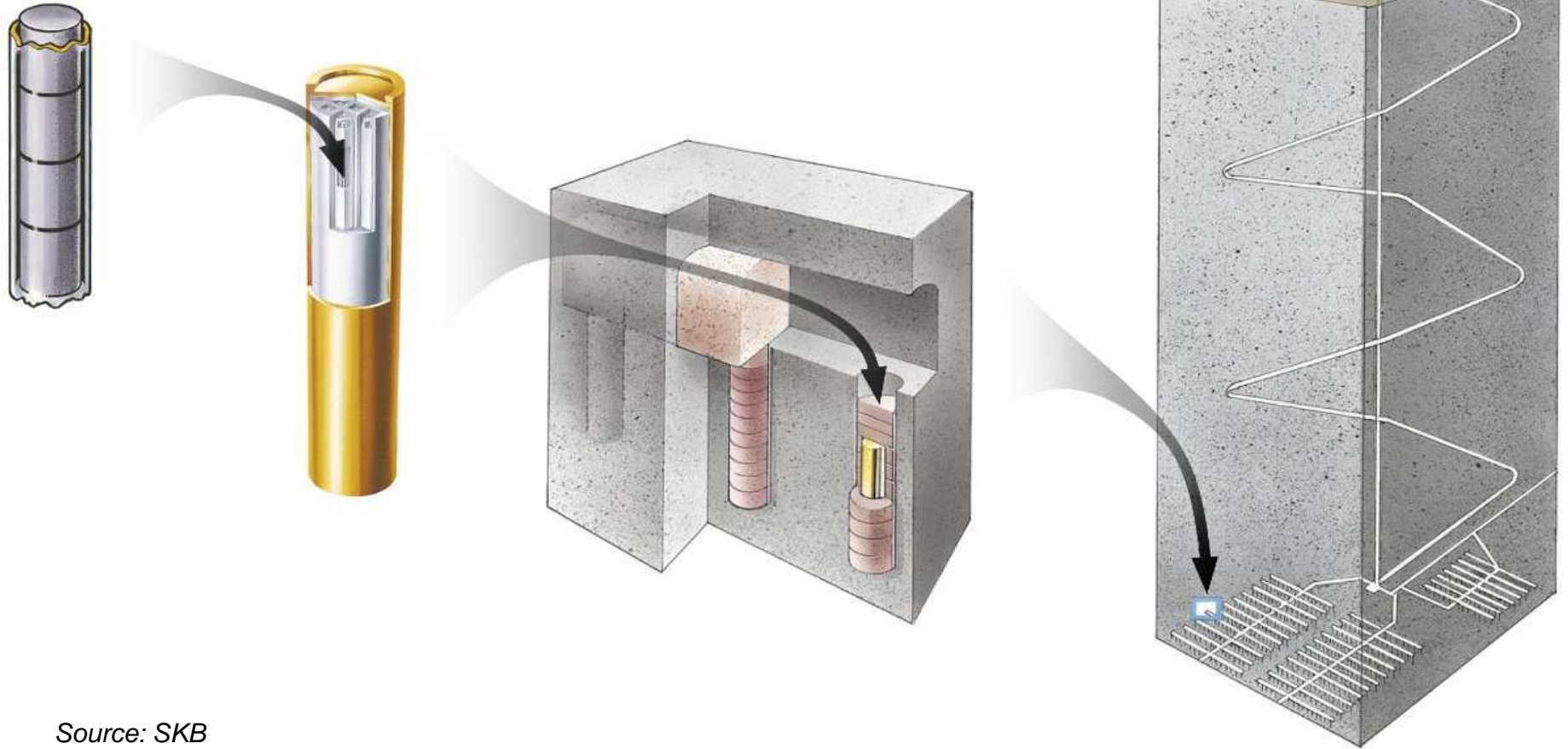
Nuclear Facilities in Sweden



Swedish Waste Management System



The KBS-3-system



Source: SKB

Nuclear Waste Management Events in Sweden since 2000

2002 - 2007	Site investigations in 2 municipalities (Oskarshamn & Östhammar)
2006	SKB application - encapsulation plan
2009	Östhammar (Forsmark) chosen by SKB
2011	Full licensing application submitted by SKB to SSM and the Environmental Court
2012 (May)	International Peer Review organized by NEA
2012 (Oct)	Suggestions of supplementations to the court
2015(?)	Governmental decision on the application
2020	Beginning of construction
2070 (??)	Final sealing of repository

Key Agents

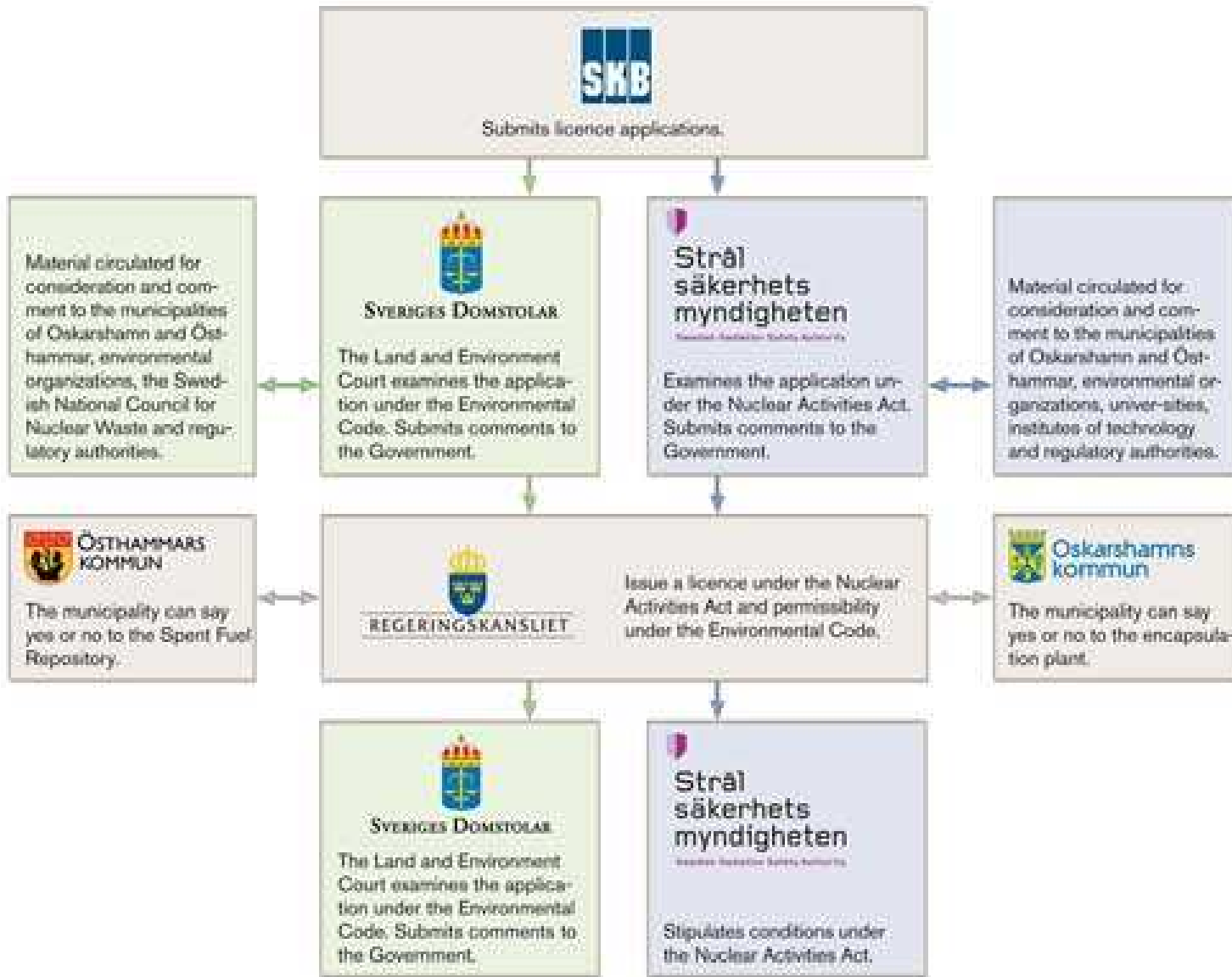
- **Government / Ministry of Environment**
- **Swedish Radiation Safety Authority (SSM, prev. SKI, SSI)**
- **Swedish National Council for Nuclear Waste**
- **Board of the Nuclear Waste Fund**
- **Environmental Court**
- **Swedish Nuclear Fuel and Waste Management Co (SKB)**
- **Municipalities of Östhammar and Oskarshamn**
- **County Administrative Boards**

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- **NGOs**

Legal Framework

- **Nuclear Activities Act (SSM)**
- **Radiation Protection Act (SSM)**
- **Environmental Code (Environmental Court)**



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Suggested supplementations

- Improved readability of the application
- More knowledge about geological tensions at the depth of the repository
- More knowledge about copper canister, bentonite buffer and backfill
- More knowledge about how security measures implemented in the construction phase
- More knowledge about alternative methods (for example, deep boreholes, transmutation, closed fuel cycle)
- Plans for transference of knowledge to future generations