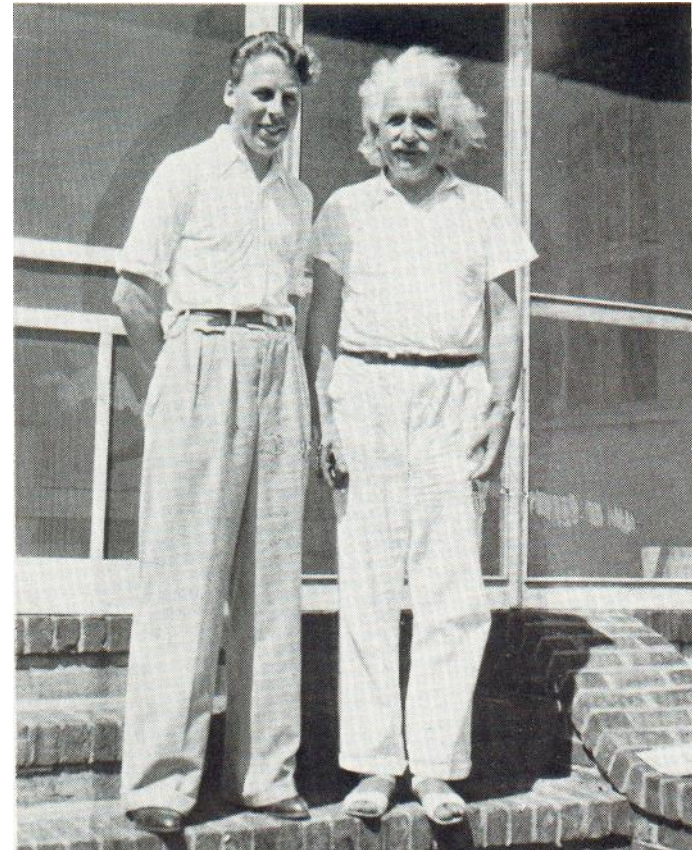


Research for a Better Future

Vision

IFE's Vision:

An internationally leading energy research institute.



Gunnar Randers, IFE's founder

Institute for Energy Technology

- Independent foundation established in 1948
- R&D in a broad scope of energy technology
- 600 employees (Kjeller and Halden)
- Turnover: NOK 1 billion
- Contract research
- Internationally oriented



JEEP II reactor, Kjeller

IFE, big laboratories for small things- advanced experimental capacity at hand



IFE has been at the forefront of energy technology development for almost 70 years



Nuclear



Energy intensive industry



Energy saving



Subsea



Batteries



Hydrogen



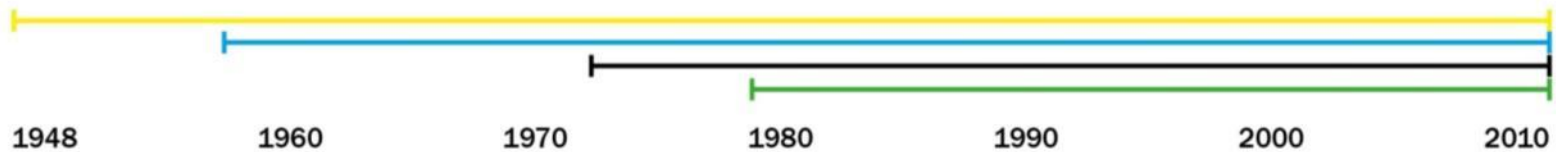
Offshore



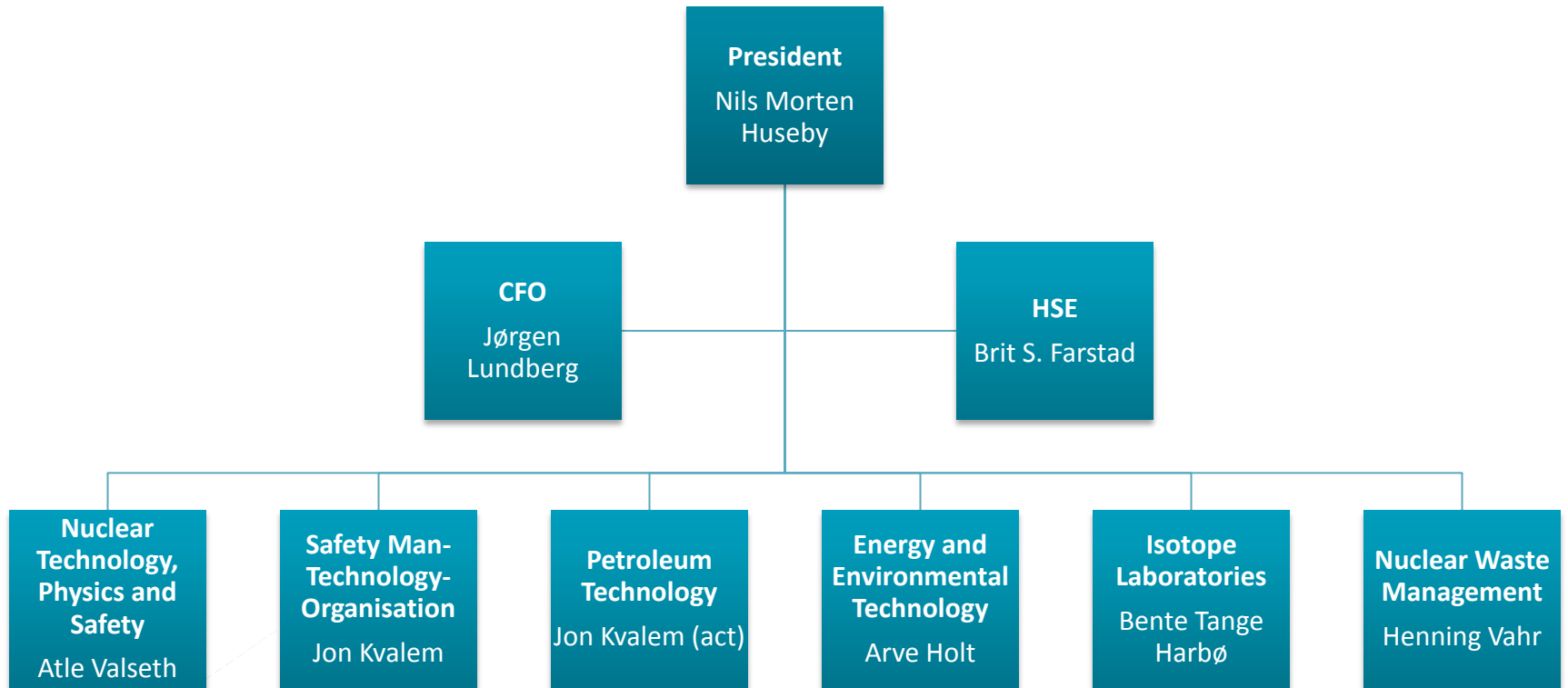
Wind



Solar



Business Areas and Organisation



Nuclear Technology, Physics & Safety

- Main areas
 - Operation of the Kjeller- and Halden research reactors
 - Fuel and material technology
 - Safety at reactor plants
 - Basic scientific research in physics



Halden Project 2014-2017

- International research on safety under OECD/NEA administration
- 19 member countries
- More than 100 participating organisations
- Three-year programme periods
- 70% international financing
- Norway's largest international R&D project



Safety Man-Technology-Organisation

- Main areas
 - Man-Technology-Organisation
 - Control room technology
 - VR-technology
- Hammlab & VR-center:
Halden MTO-center



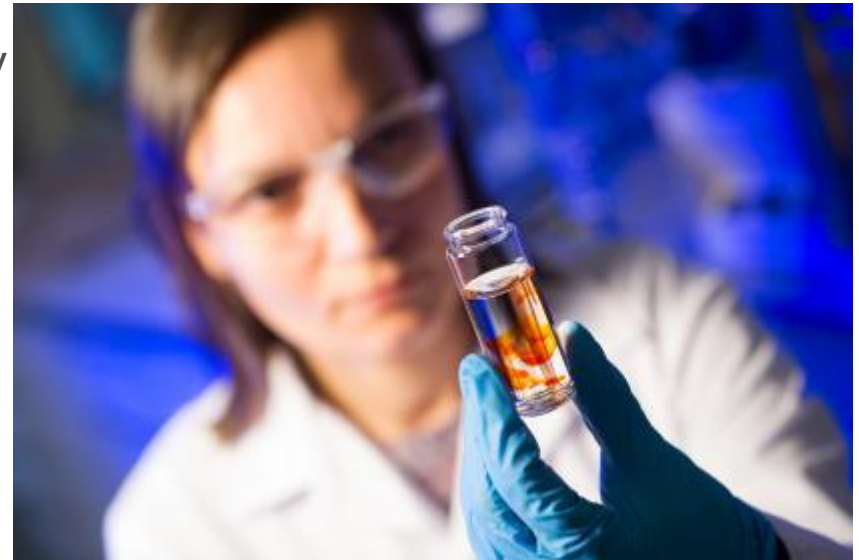
The Isotope Laboratories

- Main areas
 - Production and quality control of radiopharmaceuticals
 - Control and distribution of radiopharmaceuticals to Norwegian hospitals
 - Research and development
 - Quality assurance



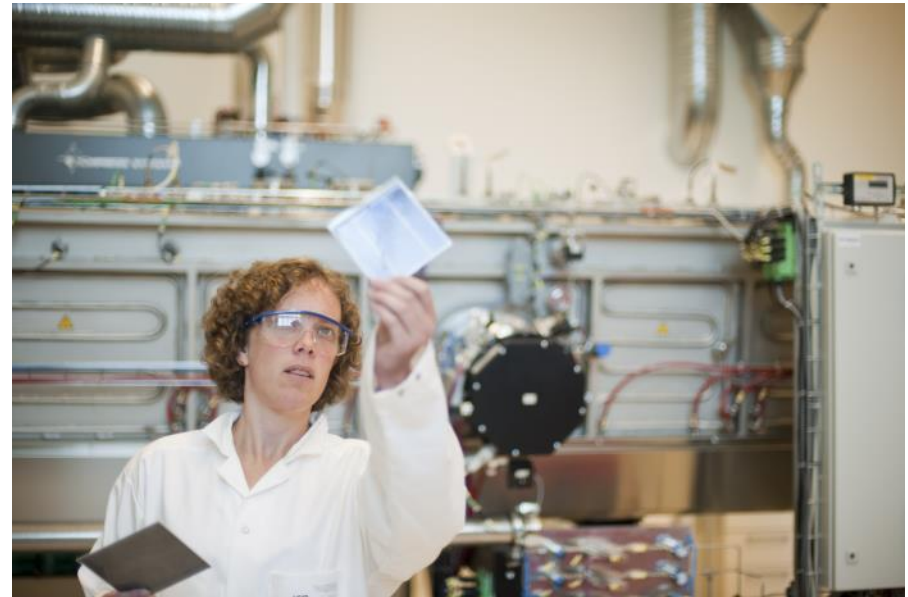
Petroleum Technology

- Main areas
 - Reservoir and exploration technology
 - Process and fluid flow technology
 - Corrosion technology



Energy and Environmental Technology

- Main areas
 - Renewable energy; solar cell technology, wind energy, hydrogen as energy carrier
 - Energy systems analysis
 - Carbon capture and storage (CCS)
 - Battery technology



IFE a proud host of 3 FMEs (Research Centres for Renewable Energy)

- Norwegian Research Centre for Solar Cell Technology (2009 – 2017)
- **Research Center for Sustainable Solar Cell Technology (2017 – 2025)**
- Mobility Zero Emission Energy Systems (2017 – 2025)



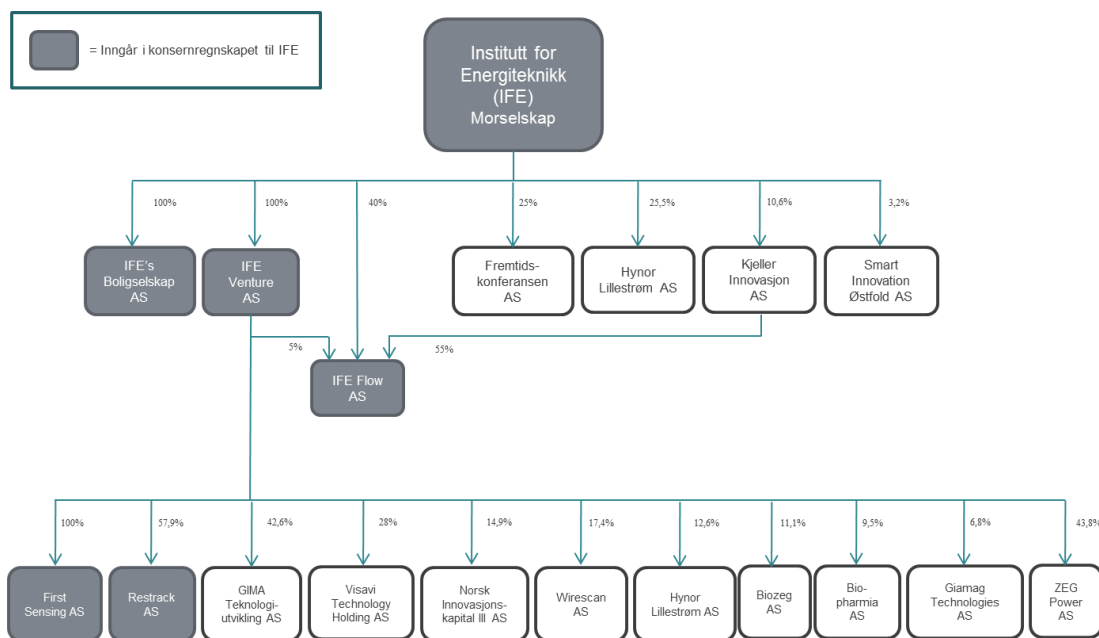
Nuclear Waste Management

- Main areas
 - Reception and handling of nuclear waste from IFE and others
 - Operation of KLDRA (national repository for low- and intermittent nuclear waste)



IFE Invest

- IFE Invest AS is a fully owned subsidiary of IFE, set up to commercialise and invest in innovative ideas, products and services derived from IFEs research
- On average two companies established per year
- Partners with Kjeller Innovasjon, Akershus Teknologifond, NILU, Norsk Innovasjonskapital III in several of the companies



IFE, research for a better future





Thank you for your attention