



NCCS Kick-off, Trondheim 4th November

Great expectations

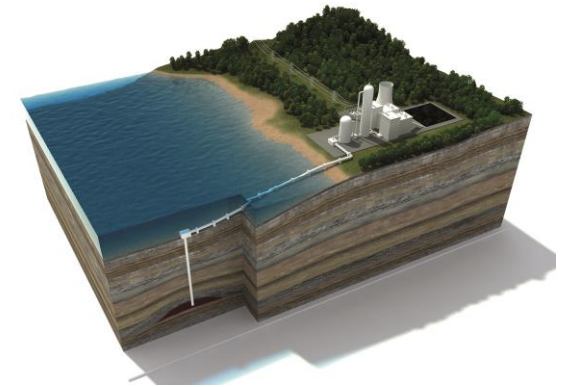
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The Research Council of Norway



RCN's targeted instruments for energy R&D

- **ENERGIX** (€ 50 M annually)
Renewable energy and energy efficiency
- **CLIMIT** (€ 12 M annually)
CO₂ Capture and Storage
- **Centres for Environmental-friendly Energy Research - FME**
(€ 24 M annually)



Centres for Environment-friendly Energy Research (FME)

- a strong initiative in the energy sector

- Concentration of the best Norwegian competence in a long-term and concentrated effort of high international standards
- Increase the efforts in areas where Norway can make a difference due to resources, industry, competence and potential for innovation
- Stimulate cooperation between education, research and industry
- Bridgehead for international cooperation



New FME - centres (2017 – 2024)

Centre for intelligent electricity distribution – CINELDI



The Research Centre on Zero Energy Neighbourhoods in Smart Cities – ZEN Centre

Centre for an Energy Efficient and Competitive Industry for the Future – HighEFF

Norwegian CCS Research Centre – NCCS

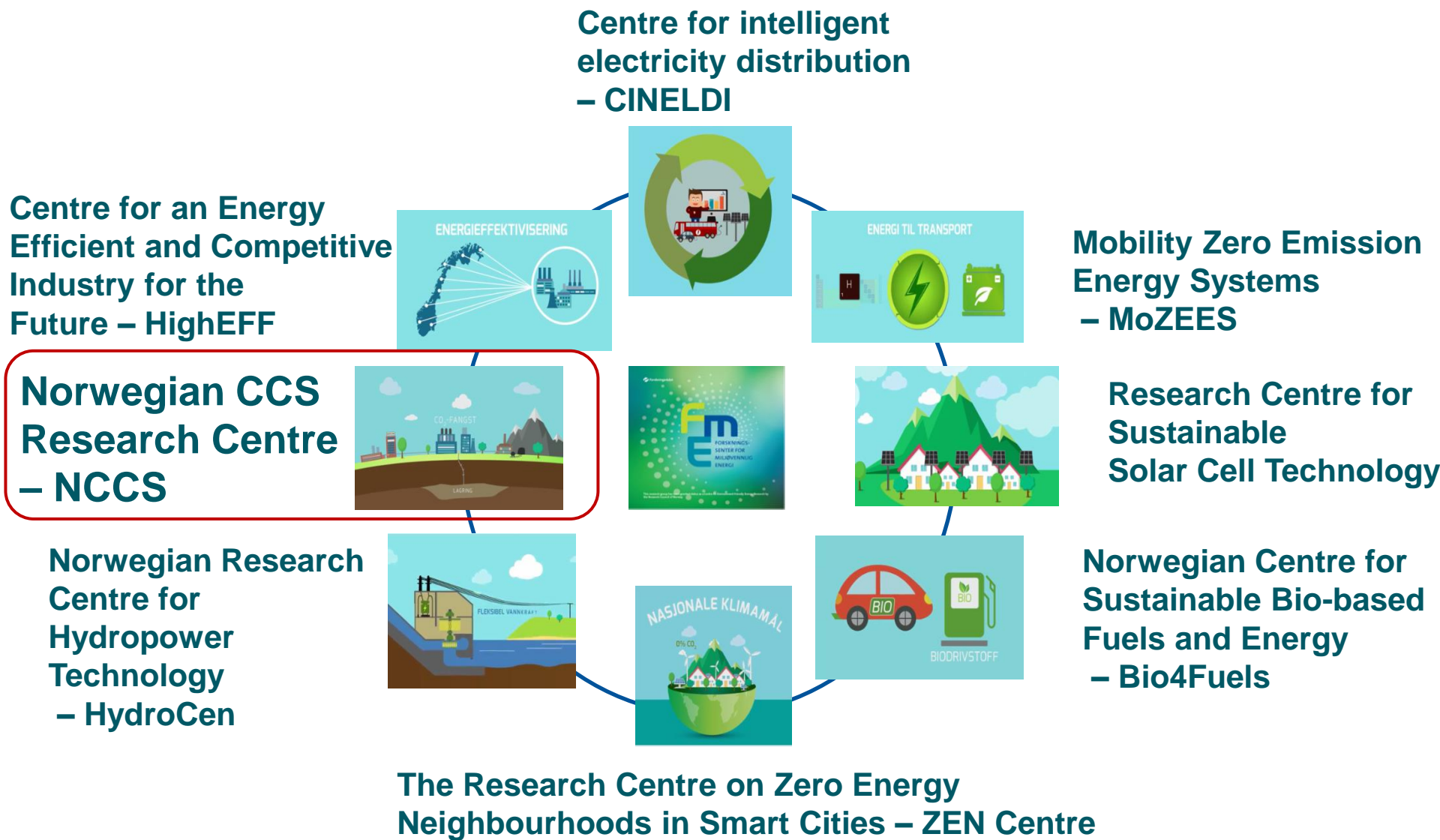
Norwegian Research Centre for Hydropower Technology – HydroGen

Mobility Zero Emission Energy Systems – MoZEES

Research Centre for Sustainable Solar Cell Technology

Norwegian Centre for Sustainable Bio-based Fuels and Energy – Bio4Fuels

New FME - centres (2017 – 2024)



RCN's expectations to NCCS

- A significant contribution to **realization of full scale CCS** in Norway and Europe
- Contribute to the realization of European **large scale CO2 storage in the North Sea**
- Establish NCCS as a **world class research** center
- Establish NCCS as a **preferred international partner** within CCS
- Act as a **national competence center**
- Deliver **innovations** that are needed to make CCS cost effective and reliable



Norcem Cement Plant



Yara Ammonia Plant

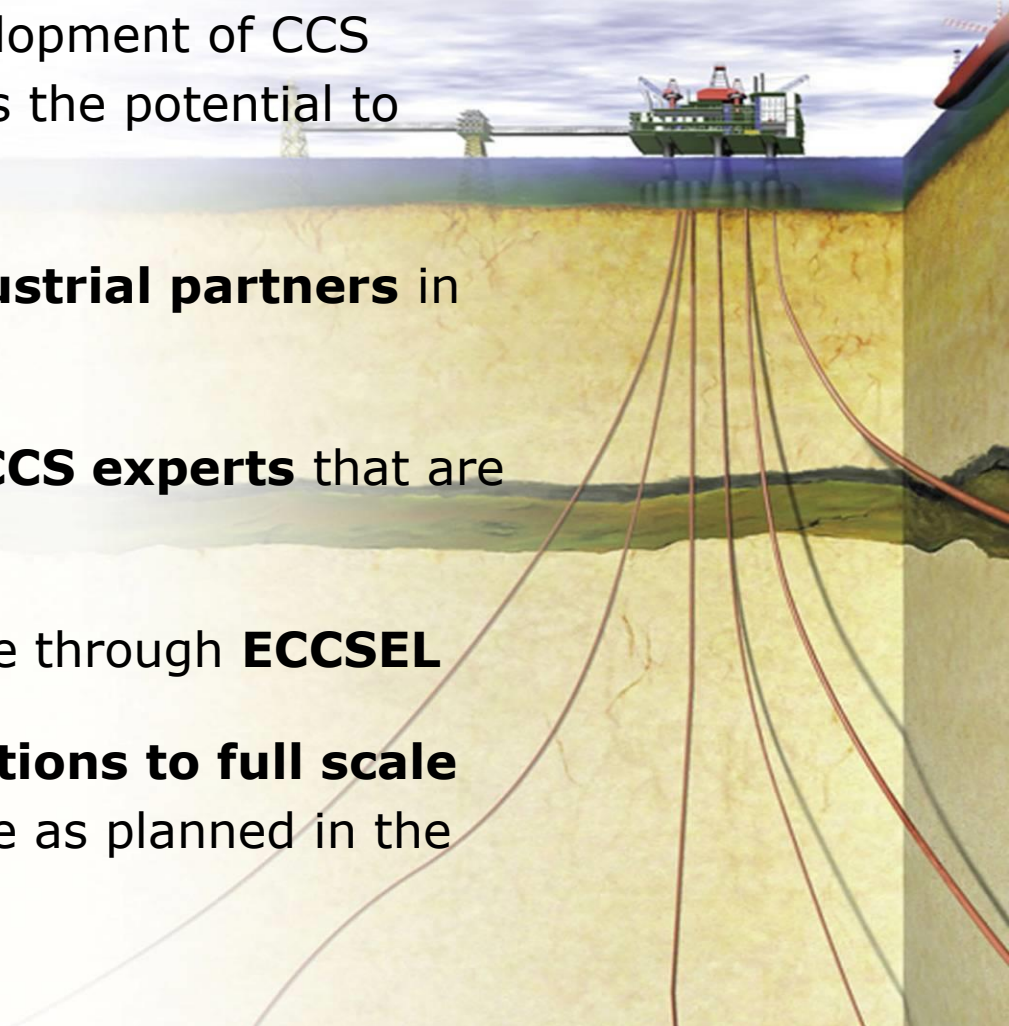


Klemetsrud Waste Handling

NCCS should build on BIGCCS

BIGCCS delivered top level innovations and made a significant contribution to the development of CCS between 2008 and 2016. NCCS has the potential to make a stronger impact by:

- **Stronger involvement of industrial partners** in the research activities
- **Collaboration with national CCS experts** that are not partners in NCCS
- **Utilizing** infrastructure available through **ECCSEL**
- **Linking activities and innovations to full scale activities** in Norway and Europe as planned in the NCCS Deployment Cases



When we meet for the NCCS final conference 2024:

- Full scale CCS has been deployed in Norway and Europe
- The North Sea as the CO₂ storage location is established
- CCS is a widely accepted as a necessary tool to mitigate global warming. This is reflected in the cost of CO₂-emissions

Everyone knows that NCCS has played an important role in this by:

- filling knowledge gaps with world class research
- innovations that have created new jobs and industries
- excellent candidates that are ready to take industry and research into the CCS-future

All partners of NCCS can proudly enjoy that they have been part of this

