

Options to store CO₂ in the North Sea

Kari Aa. Espegren and Audun Fidje
Institute for Energy Technology (IFE), Kjeller, Norway

ETSAP workshop
Venice, 16.June 2009

16.06.2009



Partners

- IFE, Norway (Lead)
- RISØ DTU, Denmark
- University of Stuttgart, IER, Germany
- King's College London, UK
- Utrecht University, the Netherlands

- The project is financed through FENCO ERA-NET

16.06.2009



Utsira formation

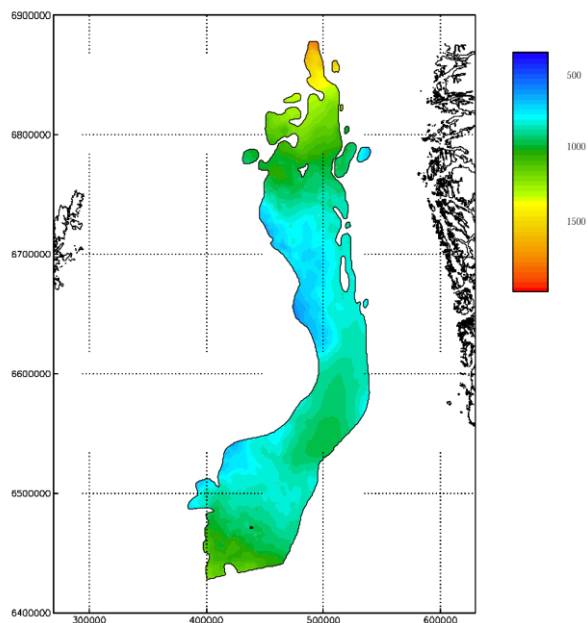
- The storage capacity of CO₂ is large
 - 2 billions tonnes CO₂ annually
 - total cumulative storage capacity of 600 billions tonnes of CO₂
- Could be used as a CO₂ reservoir for at least 20-30 years for several European countries.
- Utsira as European reservoir will depend on the cost effectiveness of this option within national portfolios of mitigation measures.
- The possibility of storing CO₂ at Utsira will be assessed by taking into account:
 - national CO₂ reduction targets
 - temporal aspects (e.g. development of the energy system and new CO₂ sources in each country)
 - spatial aspects (e.g. availability and location of local sinks and CO₂ sources).

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The Utsira formation

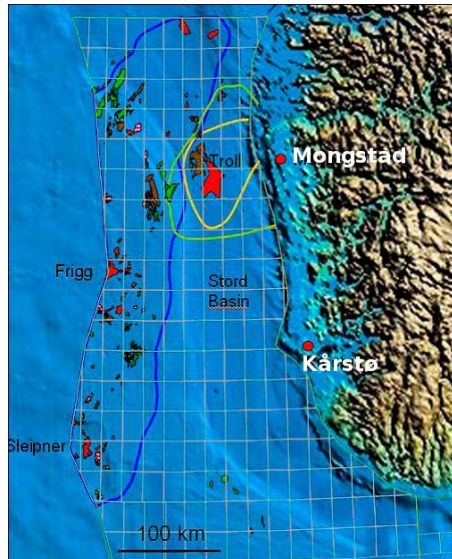
- Extending more than 400 km from north to south
- 50 km to 100 km from east to west
- The top of the formation varies quite smoothly in the depth range from 550 m to 1500 m



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The Johansen formation

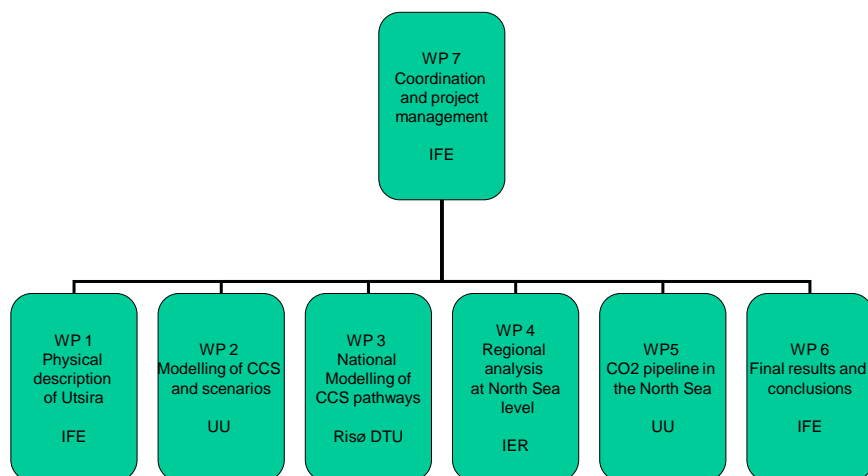
- The Johansen formation is roughly 500 m below the Troll gas field
- Situated close to Mongstad (gas power plant)
- Deep saline aquifer



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Project structure



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Further information about the project

- http://www.fenco-era.net/Storage_Utsira
- Contact Audun Fidje audun.fidje@ife.no