

Bergen 28th June, 2022

WELCOME TO CARBON DIOXIDE REMOVAL (CDR) WORKSHOP

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Norwegian focus

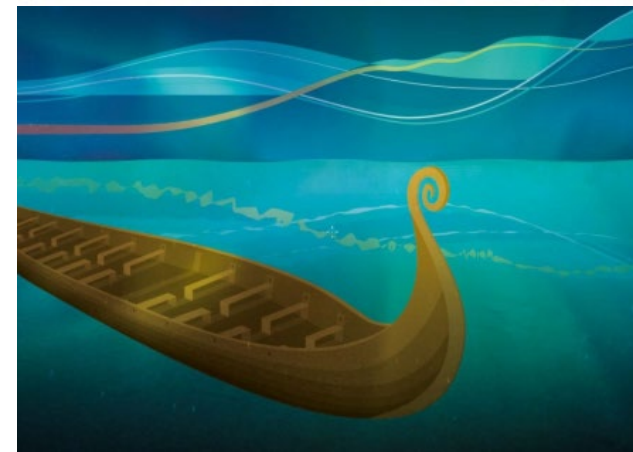
R&D



Demo



Full scale



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Accelerating
CCS
Technologies



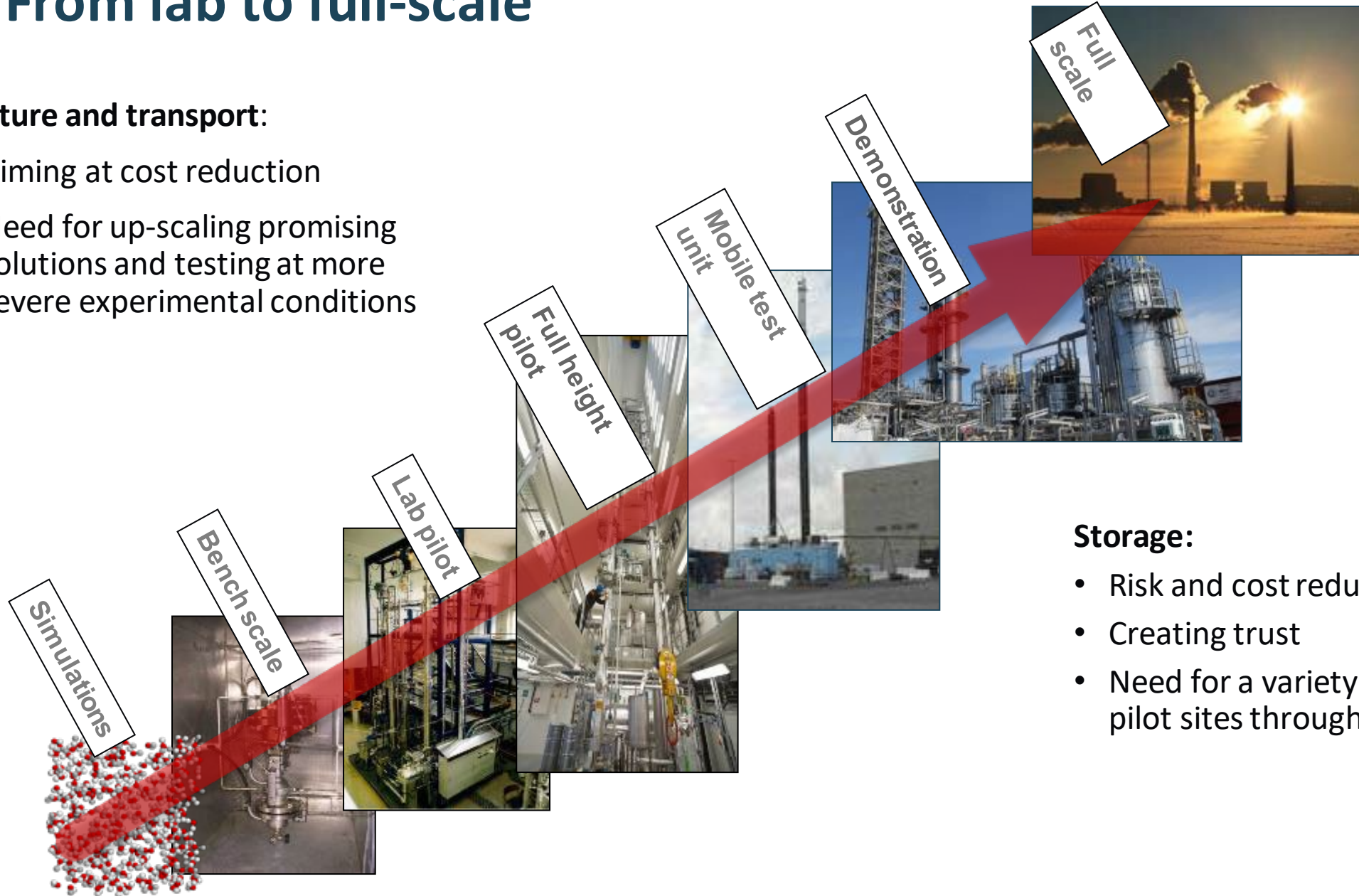
The Research Council of Norway



From lab to full-scale

Capture and transport:

- Aiming at cost reduction
- Need for up-scaling promising solutions and testing at more severe experimental conditions

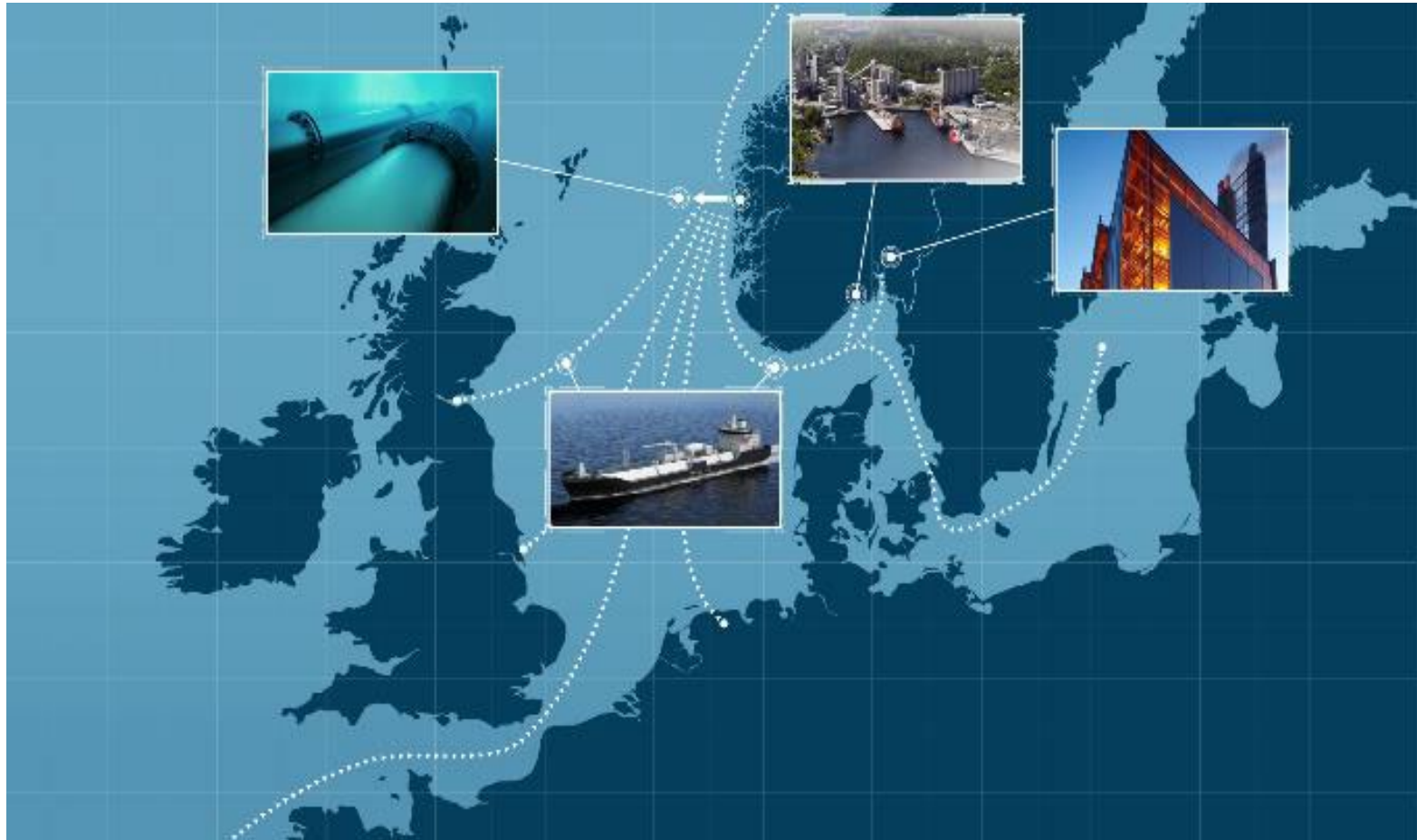


Storage:

- Risk and cost reduction
- Creating trust
- Need for a variety of test and pilot sites throughout Europe



Longship – one step closer to CCS commercialization

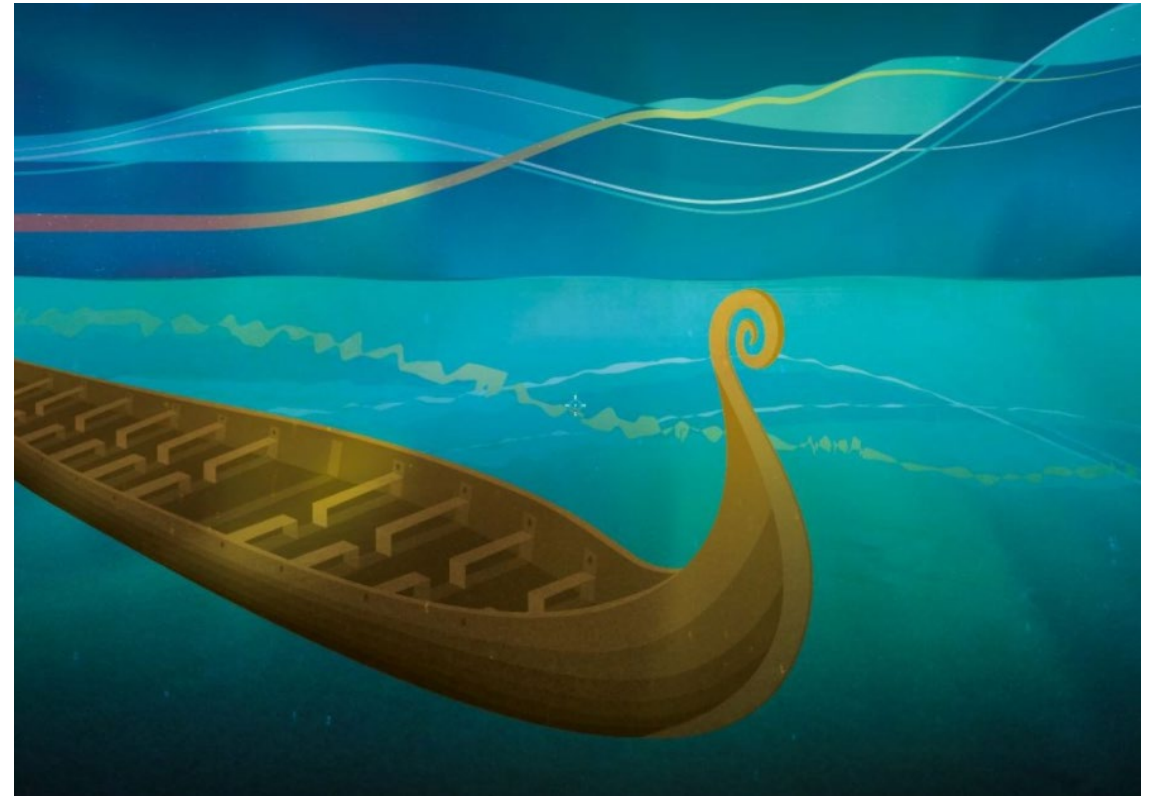


- **Phase 1:** CO₂ capture at Norcem and Klemetsrud, ship transport, and offshore CO₂ storage.
- **Phase 2:** New CO₂ volumes from Norway and abroad.



International collaboration and activities

- CSLF
- Mission Innovation
- Clean Energy Ministerial CCUS Initiative
- IEAGHG
- ECCSEL Research Infrastructure
- ACT – Accelerating CCS Technologies
- Horizon Europe
 - CETP – Clean Energy Transition Partnership



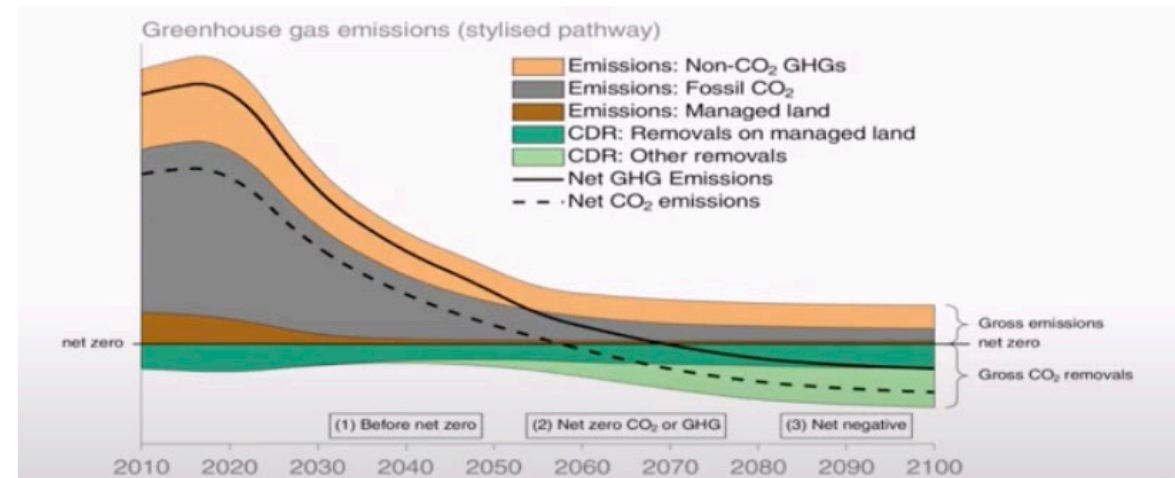


Carbon Dioxide Removal (CDR)

From IPCC Assessment Report 6, WG III Report April 2022

From Summary for Policymakers, C.11:

- *CDR refers to anthropogenic activities that remove CO₂ from the atmosphere and store it durably in geological, terrestrial, or ocean reservoirs, or in products.*
- *Deployment of CDR to counterbalance hard-to-abate residual emissions is unavoidable if net zero CO₂ or GHG emissions are to be achieved.*
- *The scale and timing of deployment will depend on the trajectories of gross emission reductions in different sectors.*
- *Upscaling the deployment of CDR depends on developing effective approaches to address feasibility and sustainability constraints especially at large scales*



From From IPCC Assessment Report 6, WG III
Report, Ch. 12, Cross-box 8