

CLIMIT Programme overview

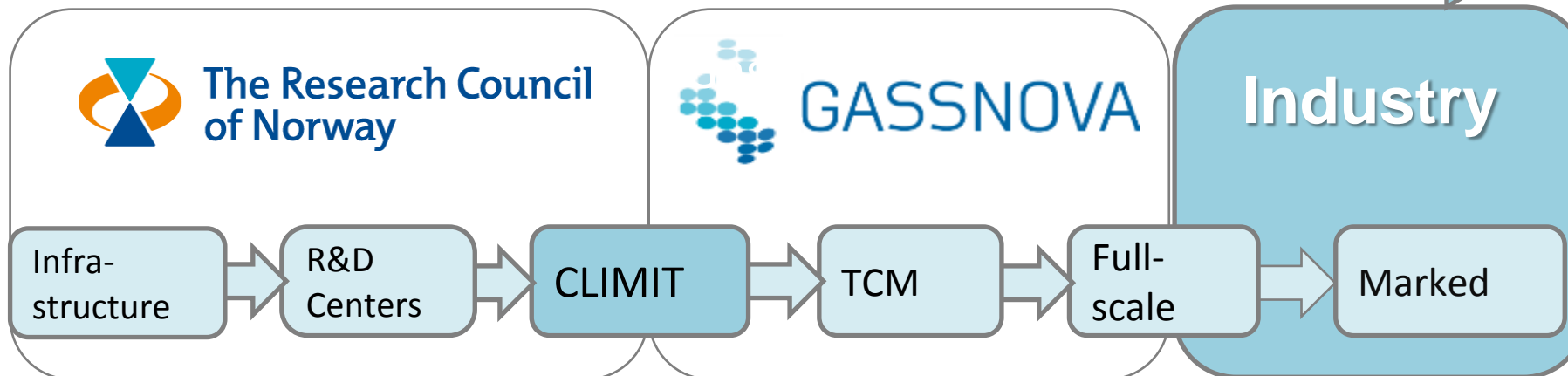
Arvid Nøttvedt – CLIMIT Summit 2019 Storage Side Event

CLIMIT

Policy instruments for CCS in Norway

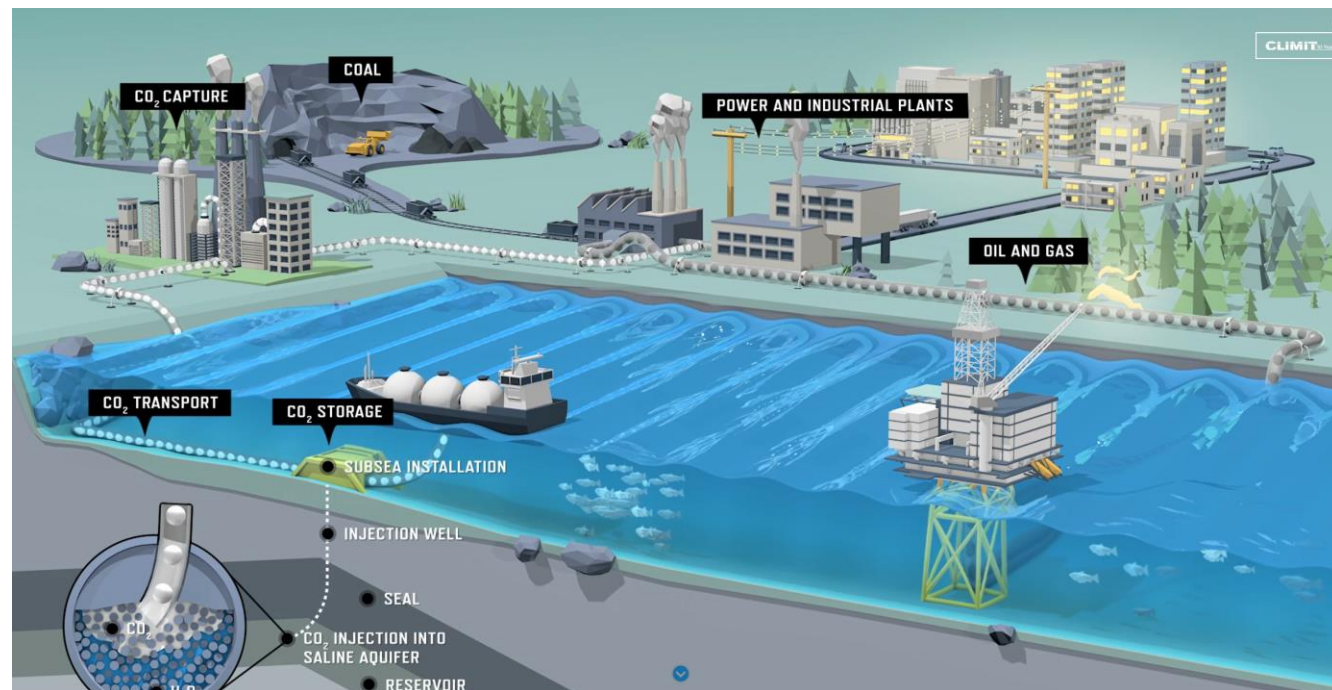


Accelerated development of CCS technology



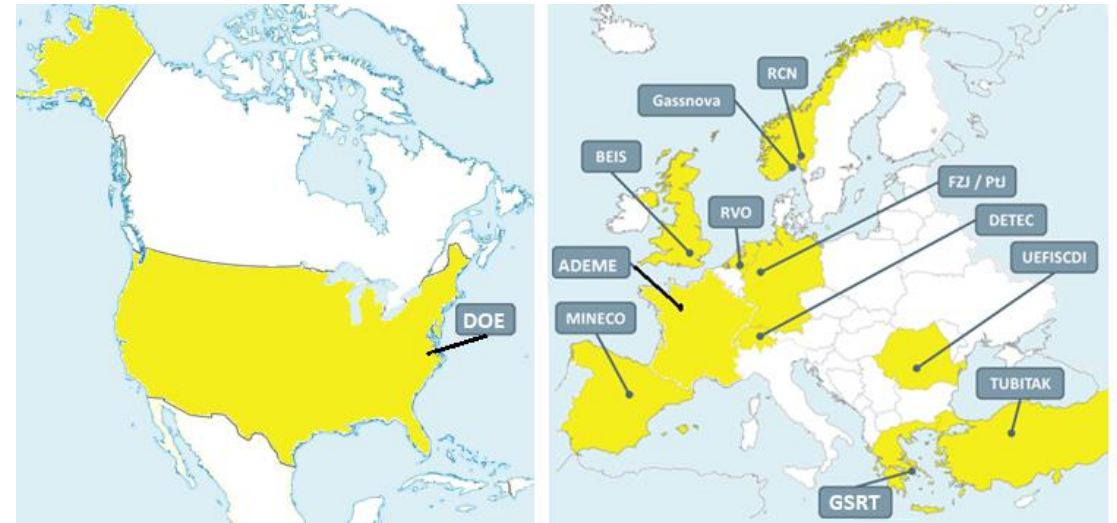
CLIMIT is the national programme for research, development, piloting and demonstration of CO₂ capture and storage (CCS) technologies for power generation and other industrial sources.

-**14 YEARS**
 - Annual budget approx. 23 M€
 - 300 + projects have received support
-**last 5 YEARS US – Norway**
 - 7 projects covering > 11 million USD
 - 50-70% CLIMIT Demo funding
 - Many US partners in CLIMIT R&D projects



International collaboration

- **ACT**
11 countries cooperates on a 30 mill. Euro new call with 6 mill Euro from CLIMIT. USA is also a part of this call
- **MoU Norge – USA**
Network, knowledgesharing, project collaboration
- **ECCSEL**
European collaboration on R&D infrastructure. 5 countries, 54 research infrastructures
- **EU**
Synergies with Horizon 2020 and EUs implementing plan for CCS (SET-plan)
- **CSLF**
Minister-based organization with mission to accelerate development, demonstration and commercial deployment CCS



ACT – Acceleration CCS technologies. 11 land samarbeider om kunnskapsdeling og fellesutlysninger

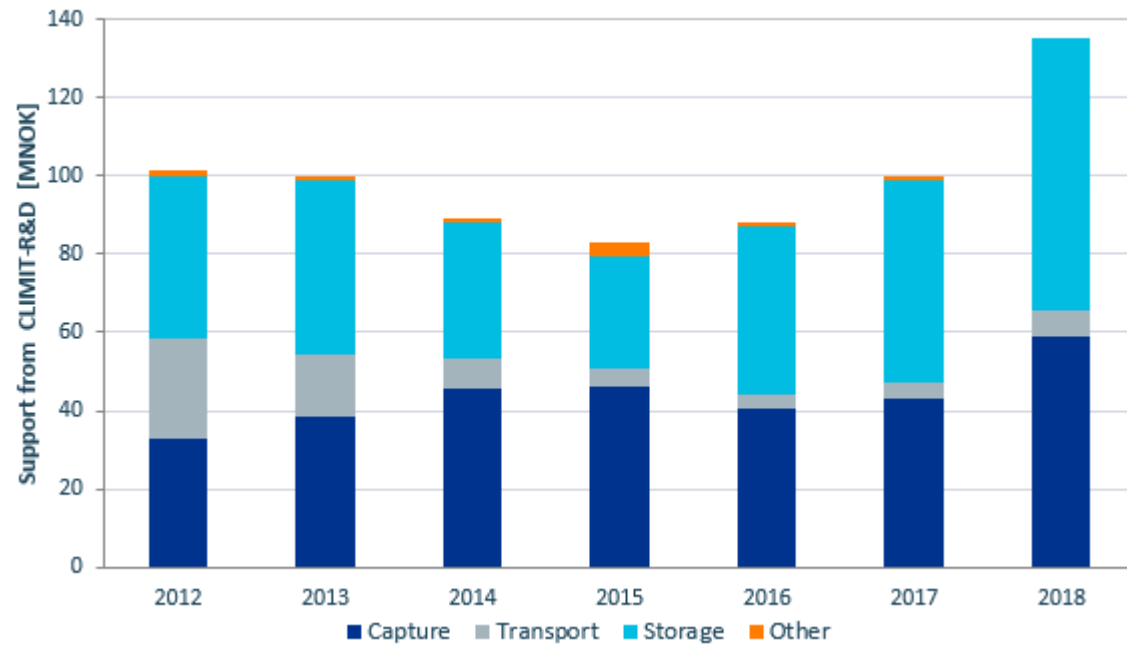


Co-funded by the
European
Commission within
the Horizon 2020

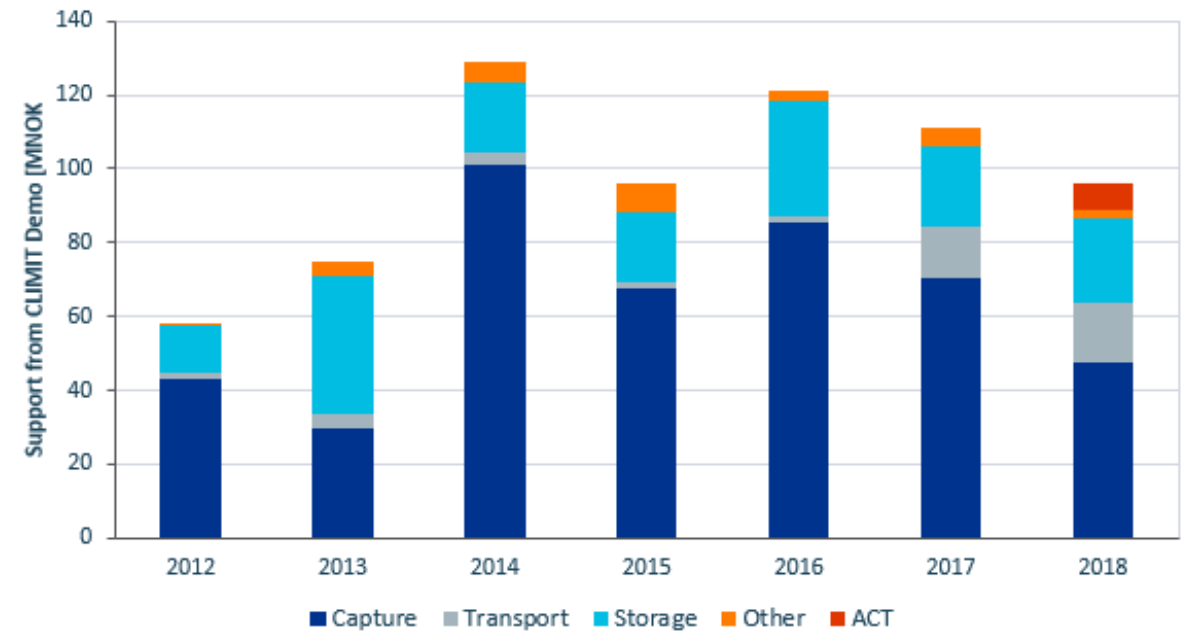


Portefolio: CLIMIT R&D and CLIMIT Demo

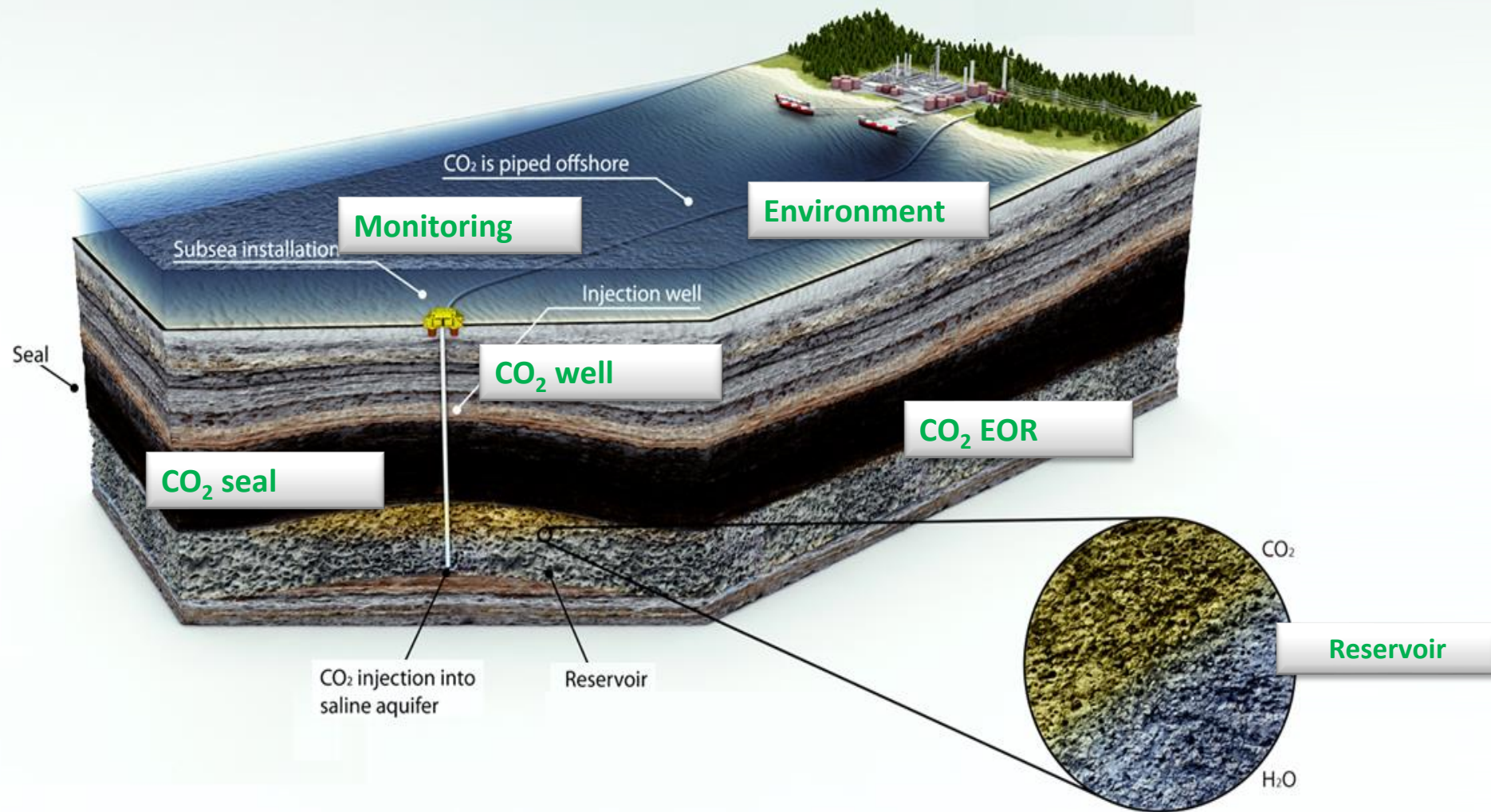
CLIMIT R&D



CLIMIT Demo



Portfolio CO₂ storage



Portfolio CO₂ Capture

- Post-, pre- and oxy combustion
- Technologies:
 - Polymer membranes
 - Ceramic membranes
 - Pd-membranes
 - Solvents
 - Sorbents
 - Combustion
- Process and system development and analysis
- Environmental aspects

One step closer to bringing CO₂ capture technology to the marketplace

January 11, 2017



May Britt Hägg, a professor in the Department of Chemical Engineering at the Norwegian University of Science and Technology holds the CO₂ membrane separator she and her research group have developed. Credit: Per Henning, NTNU

Air Products has signed an exclusive license agreement with the Norwegian University of Science and Technology (NTNU) for membrane technology for CO₂ capture.

NTNU, through its commercialization arm NTNU Technology Transfer, announced on 10 January that it has entered into an exclusive license agreement with Air Product. The agreement allows Air Products the rights to use NTNU's proprietary fixed site carrier (FSC) membrane technology in conjunction with Air Products' proprietary PRISM membrane technology for carbon dioxide (CO₂) capture applications.

