22.05.2024

# Sokkeldirektoratet

Hilde Braut- Underdirektør Nye Næringer

High interest for storage on Norwegian Continental Shelf (NCS)



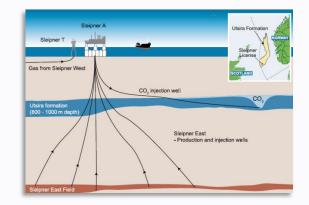
# CCS projects on the NCS

1996: CO2 re-injection Sleipner

2008: CO2 re-injection Snøhvit LNG

2012: Technology Centre Mongstad (TCM)

2019: Northern Lights



Source: Equino





Source: Northern Lights



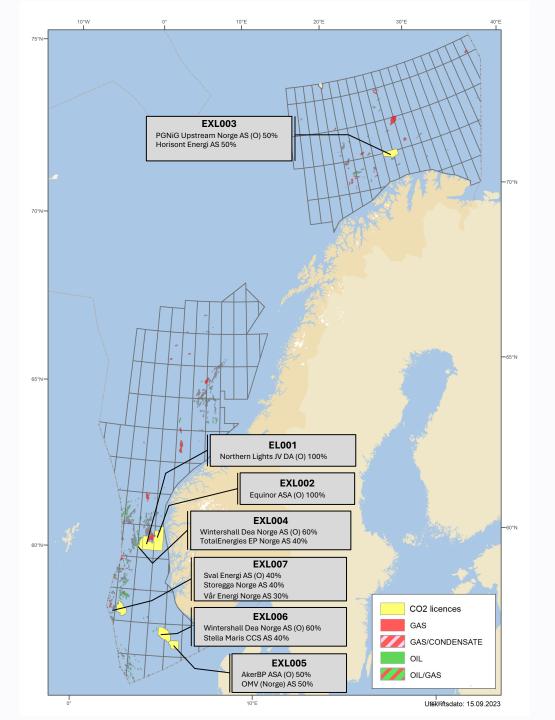
# Active licenses May 2024

 A steadily increasing number of CO<sub>2</sub> storage licenses have been awarded since 2019

2019: EL001 (Northern Lights, Longship)

2022: EXL002
2022: EXL003
2022: EXL004
2023: EXL005
2023: EXL006
2023: EXL007

- Total ~ 8 550 km<sup>2</sup>
- Exploration licenses
  - First FIDs expected in 2026
  - First CO<sub>2</sub> injection in 2028 from the EXL-licenses



# On the agenda

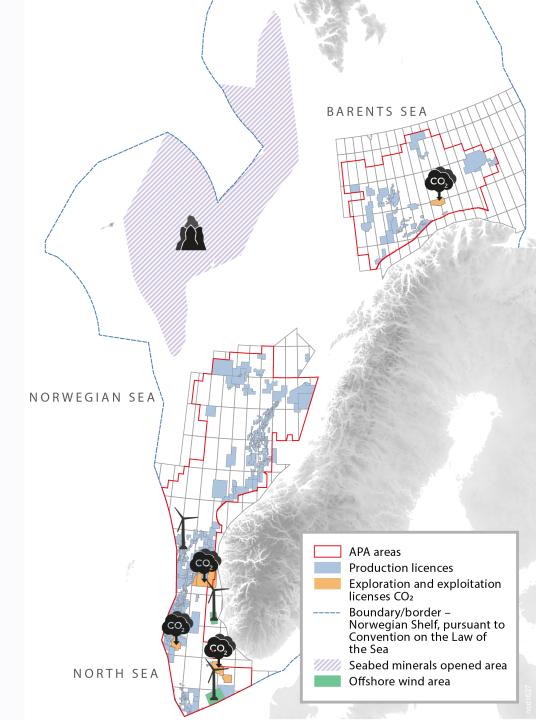
High activity level in maturation of projects by the industry



### Coexistense!

Management areas are expanding





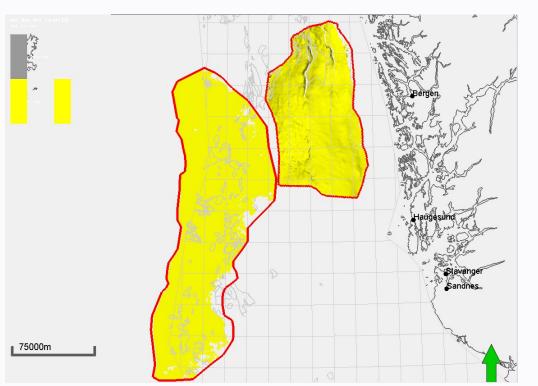
## Aquifer capacity management

§ 5-3 in the Storage regulation:

Any mutual **pressure influences** between storage locations in the **same hydraulic unit** are of such a nature that the requirements in these Regulations can be fulfilled **for both locations at the same time.** 

How and who to manage?

- Modelling
- Monitoring access to data
- Sharing of data



- NOD have developed large scale regional models, in the Frigg/ Heimdal and Troll area in the North sea.
- For CCS purposes these models can be used for better prediction of CO<sub>2</sub> migration and pressure development. The models are public.

# And a lot more information on sodir.no

NORWEGIAN OFFSHORE



### FACTS >

Production licences Licensing rounds Pre-qualification

### Geology Geobank

Plays Simplified time scale The 2014 NPD lithostratigraphic charts Structure elements Svalbard – a unique area for geology

### Technology

Subsurface data acquisition Challenging barrels Next generation production systems

Offshore wind Subsurface surveys Data acquisition Regulations WHAT'S NEW - FACTS - REGULATIONS - ABOUT US -

Production Improved oil recovery (IOR) Shutdown and removal

**Resource accounts and analysis** Archive resource accounts

Carbon storage Licences for carbon storage CO<sub>2</sub> atlases Interactive CO<sub>2</sub> atlases CO<sub>2</sub> storage models Articles, publications and posters Research programs Wells Well classification Well definitions Forecasts and results for wildcat wells

Geophysical surveys Ongoing surveys Sale of data Survey licences Fishery experts

### Seabed minerals

Licensing rounds Environmental impact assessment Data acquisition and analyses Sulphides Manganese crusts Reports, publications and presentations Professionals Photos of seabed minerals



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