



Northern Lights JV DA

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CO₂ transport & storage at scale



NORTHERN LIGHTS SCOPE

CO₂ capture

Capture from industrial plants.
Liquefaction and temporary storage.



Transport

Liquid CO₂
transported by ship.



Receiving terminal

Intermediate onshore storage.
Pipeline transport to offshore
storage location.

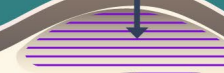


Permanent storage

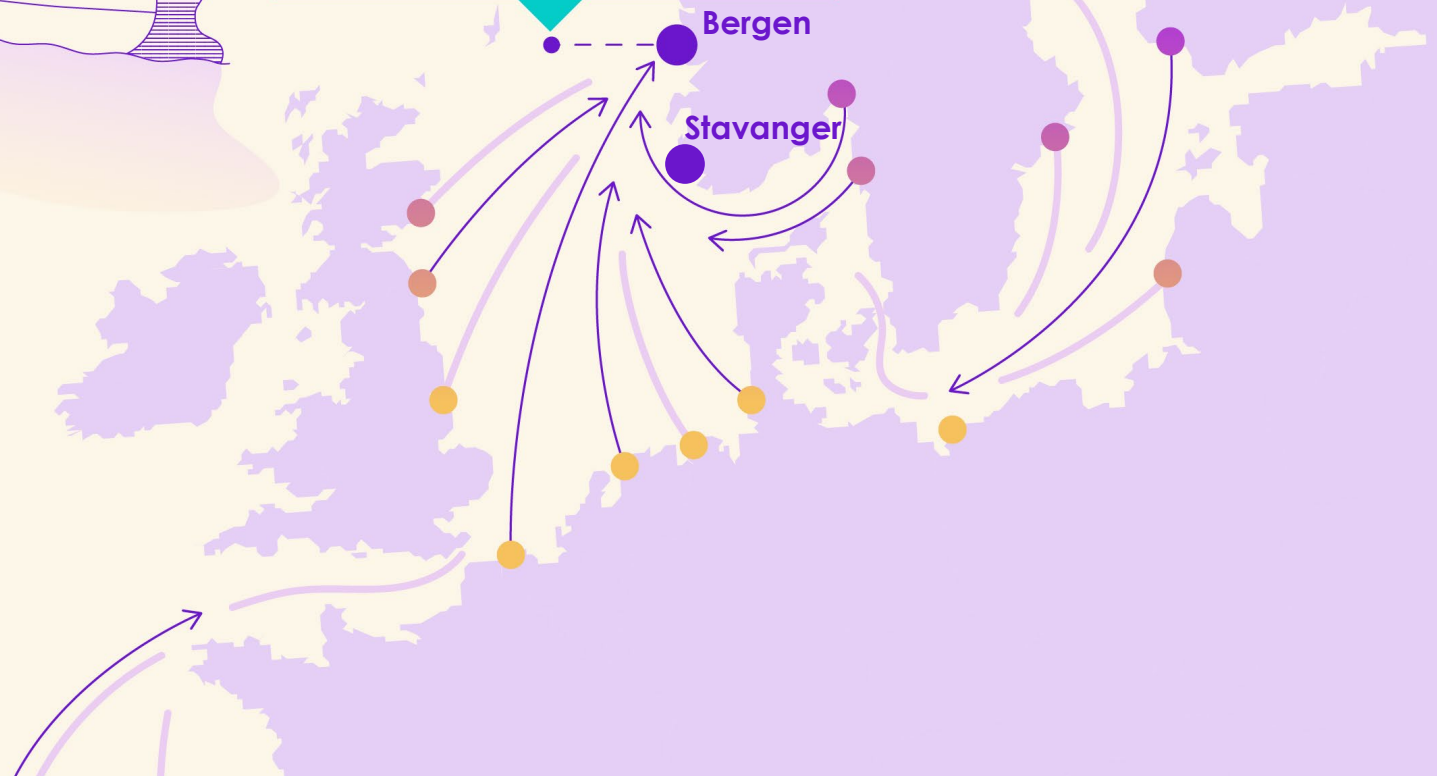
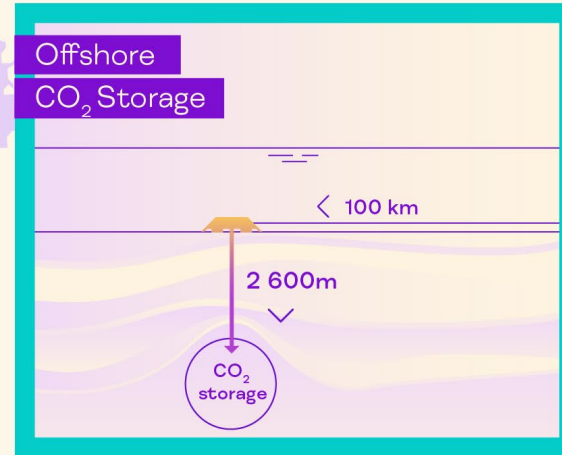
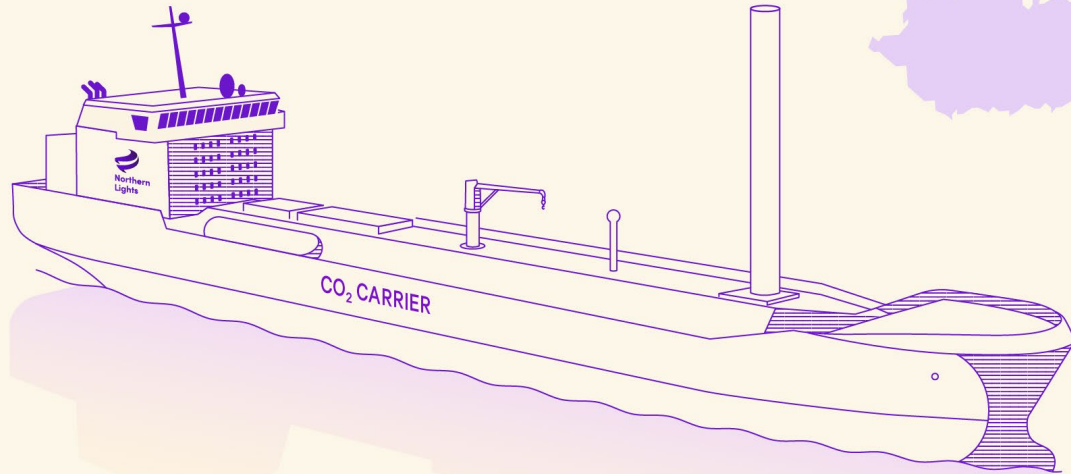
CO₂ is injected into a saline aquifer.

100 km

2 600m

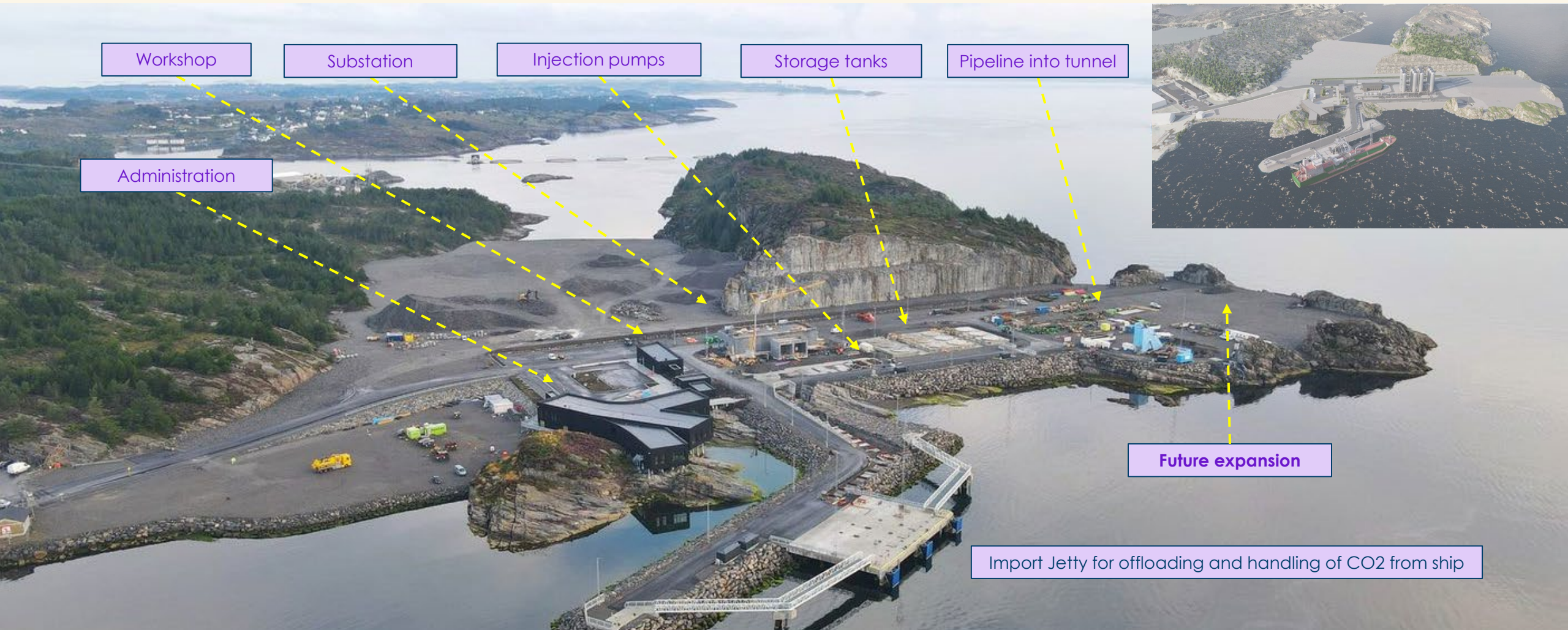


Northern European infrastructure

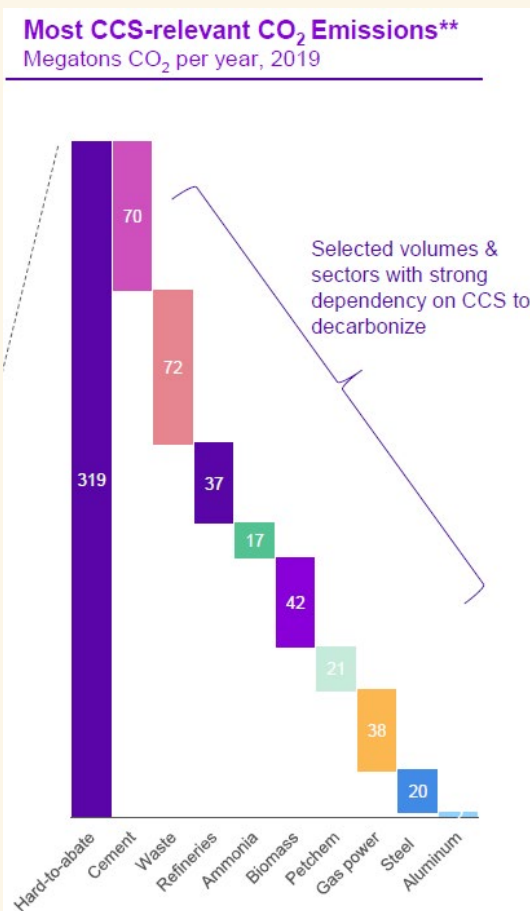


Becoming a reality

Receiving terminal at Øygarden



Building a market for CO₂ storage



→ **Significant interest and demand for our services**

→ **Focus:**

- deliver Phase 1, operational in 2024
- building a commercial business

→ **Secure commercial contracts**

→ **Investment decision for capacity expansion**

→ **Hard to abate emissions from industry in Northern Europe**

- Process industry
- Cement
- Steel
- Waste incineration
- Negative emissions

→ **Market potential: 319 MTPA**

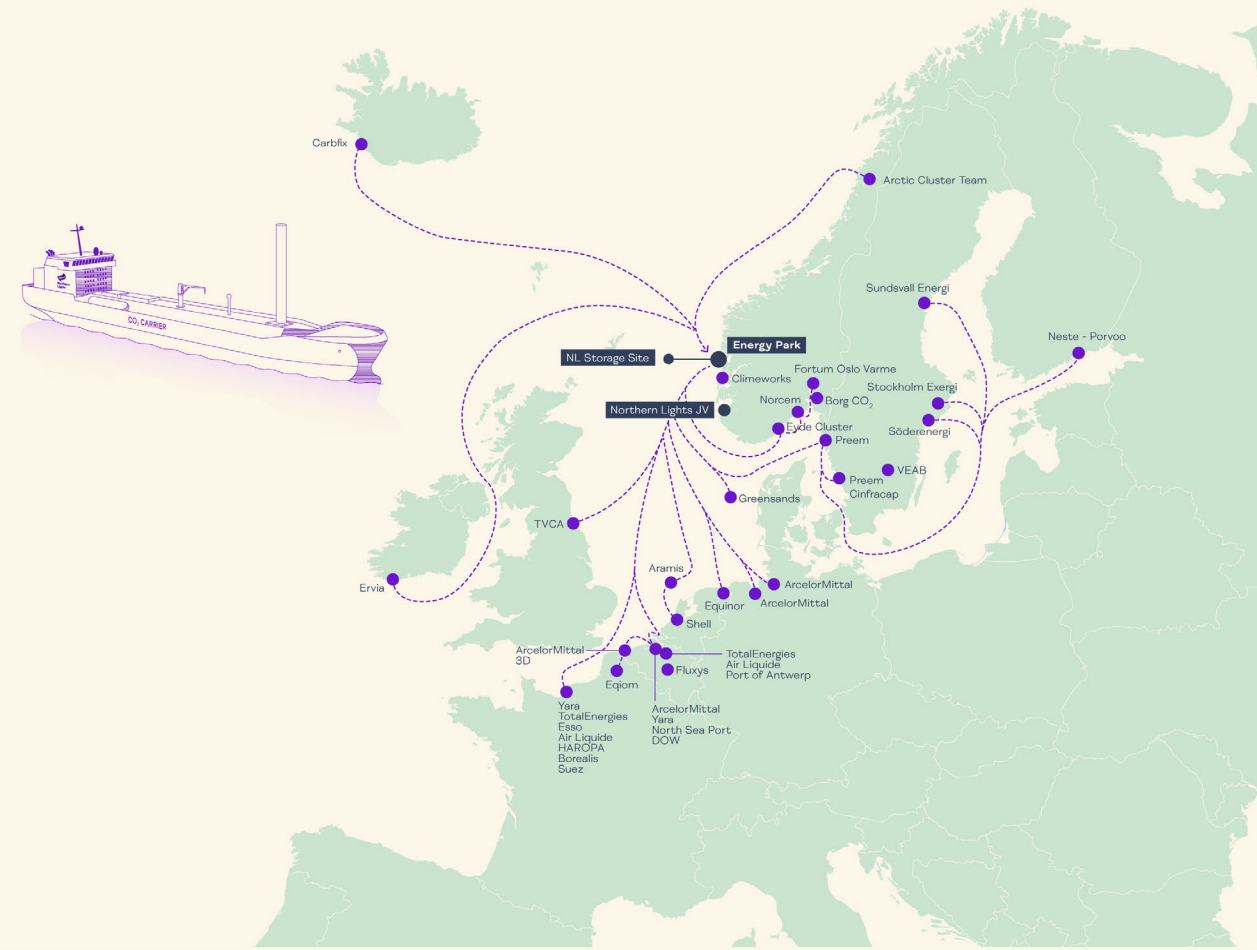
EU Project of Common Interest (PCI)

Infrastructure projects that link the energy systems of EU countries



Northern Lights is on the 5th PCI list with 18 promoters and 22 affiliates

- Capture potential of ~19 Mtpa in 2030 by promoters only (~32 Mtpa including affiliates)
- Promoters in Norway, France, Belgium, Netherlands, Germany, Sweden, and Finland
- Capture sites and promotion on standardisation



Overcoming challenges

→ Currently no market for CO₂ handling and storage

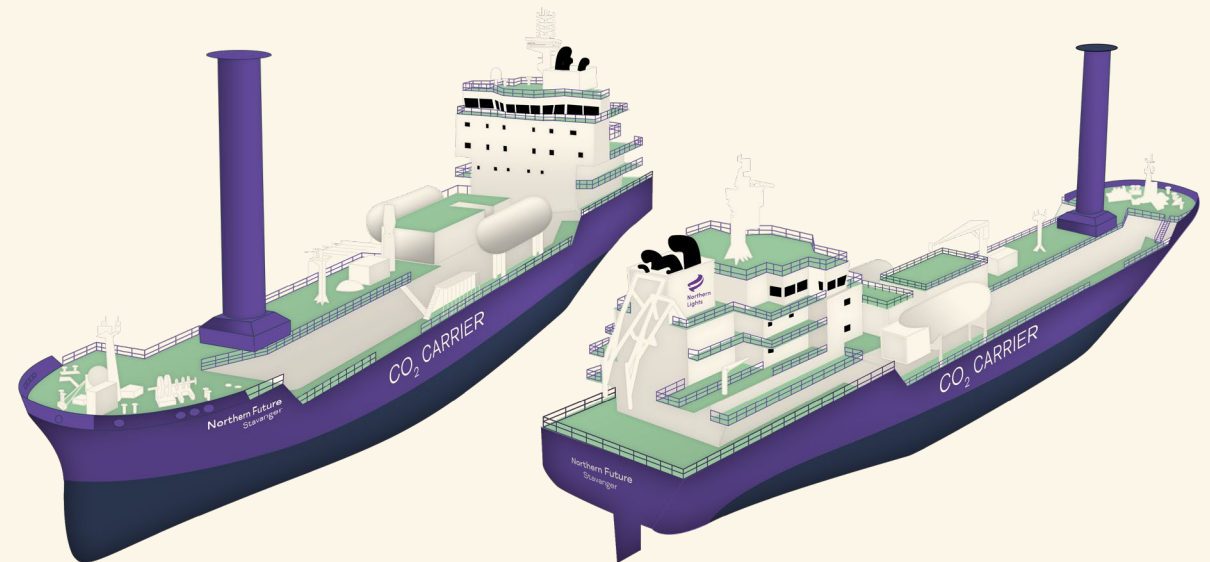
- Technology is known
- Increasing cost of emission

→ Establishing long term contracts

→ Risk/reward allocation

→ Significant need for infrastructure

→ Adaption of regulatory frameworks

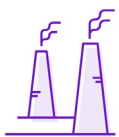


Accelerating CCS

Doing what the O&G industry has perfected over 50+ years on NCS in ~10 years?



Temporary government support can overcome the chicken-and-egg challenge



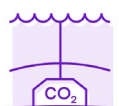
Large-scale development paves way for others



Shipping provides the necessary deployment flexibility



CO₂ storage enabler for a net zero ecosystem



CCS value chain is cost-effective decarbonisation solution



Northern Lights

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