



Source: Wikipedia

# Horisont Energi and Arctic CCUS Cluster

Barentshavskonferansen April 2024



# A Norwegian company developing clean energy and CO<sub>2</sub> transport and storage

## ABOUT US:

- Committed to accelerating the energy transition
- Head office in Stavanger
- Experienced and dedicated team of 40 people
- Pure play carbon storage & clean ammonia company leading industrial partners
- Industrial ownership - E.ON as largest shareholder with 25% stake

## CO<sub>2</sub> TRANSPORT AND STORAGE

## CLEAN AMMONIA



# Establishing large scale industrial projects in Norway

To accelerate the energy transition and to meet the high European demand



Polaris  
CO<sub>2</sub> storage

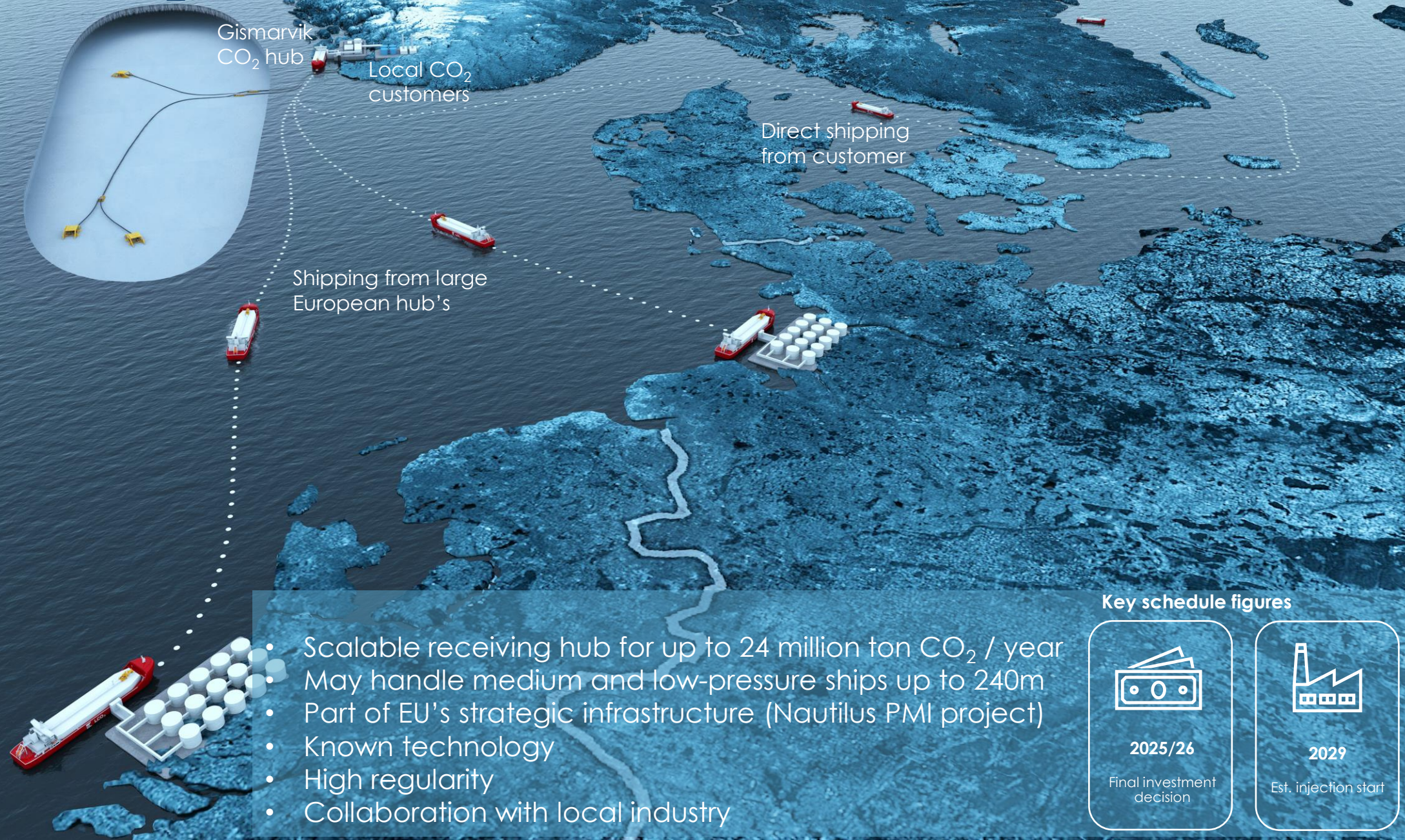
Barents Blue  
Ammonia plant

CO<sub>2</sub> storage  
Norwegian  
continental Shelf

Rogaland  
Gisemsarvik CO<sub>2</sub> terminal



# Gismarvik CO<sub>2</sub> injection hub



- Scalable receiving hub for up to 24 million ton CO<sub>2</sub> / year
- May handle medium and low-pressure ships up to 240m
- Part of EU's strategic infrastructure (Nautilus PMI project)
- Known technology
- High regularity
- Collaboration with local industry

## Key schedule figures



2025/26

Final investment  
decision



2029

Est. injection start



# Barents Blue Ammonia

## Key facts

**Hydrogen technology:** Oxyfuel Auto Thermal Reforming (ATR) (SynCOR Ammonia™)  
**CO<sub>2</sub> capture rate:** > 99 %  
**Gas feed:** ~2.8 million Sm<sup>3</sup>/day  
**Ammonia production:** 1 million ton /year  
**Renewable electricity:** 45 MW  
**Total Module Weight:** ~60 000 tons

## Key schedule figures



2025

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2029

Est. production  
start

  
**Fertiberia**

  
**Horisont energi**



# Barents Blue Ammonia

What does the Barents Blue project do for Finnmark?

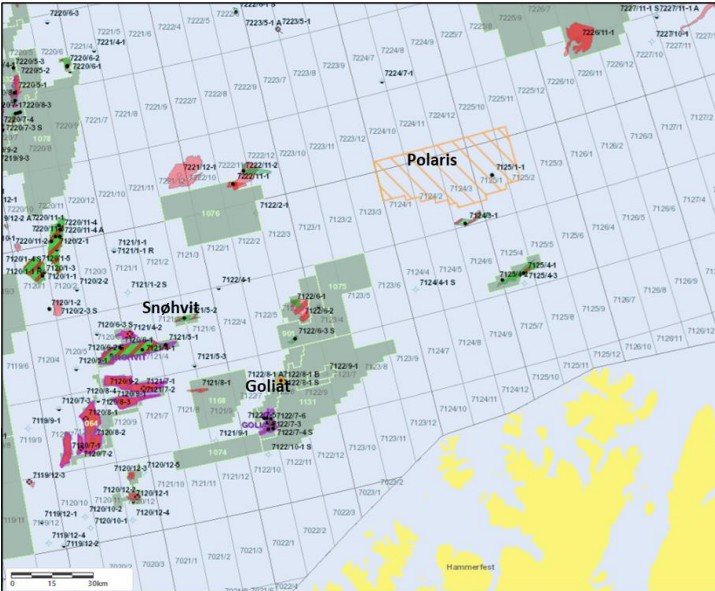


- Barents Blue provides infrastructure that builds Finnmark for the future
- Creates above 500 future oriented jobs in Northern Norway
- Transforms Finnmark into a global production region for clean ammonia
- Places Finnmark in a leading role in the energy transition of Norway

  
**Fertiberia**

  
**Horisont energi**

# Polaris CO<sub>2</sub> exploration licence



- Licence EXL003 awarded in 2022
- Operated by PGNiG Upstream Norway
- 160 km north of Hammerfest
- Barents Blue anchor customer
  - 1<sup>st</sup> train 2 million ton CO<sub>2</sub>/year
- Planned with robust operations and mature technology
- Project lifetime 25+
- The first CO<sub>2</sub> value chain in Northern Norway for third parties



# Arctic CCUS Cluster

## - Aim of the initiative

Collaboration  
to develop  
decarbonisation solutions

for Northern Finland,  
Sweden and Norway

**Working across borders for efficient solutions**

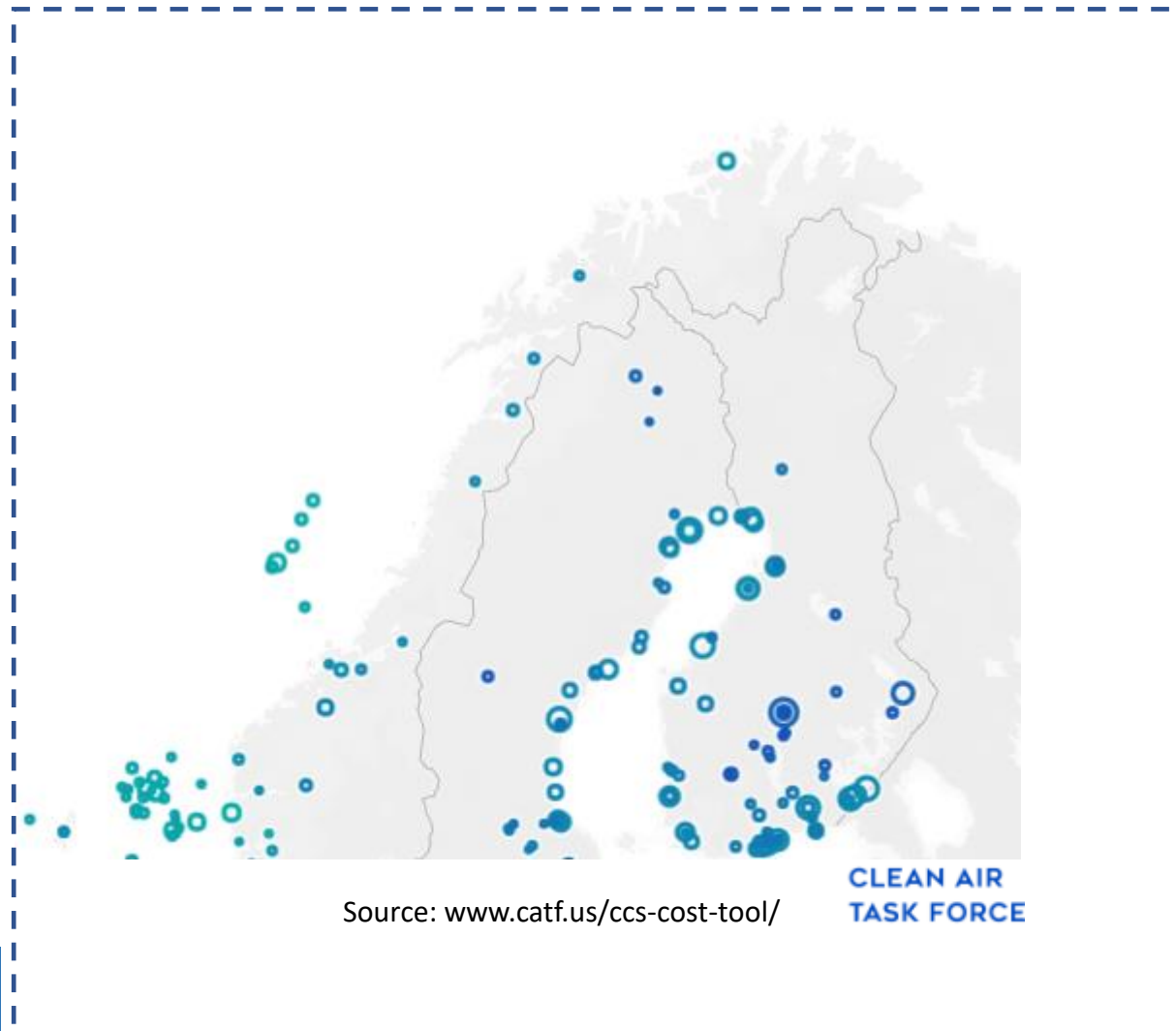




# Why Arctic CCUS Cluster

- Industrial area with high emissions
- Country and company ambitions to reduce emissions
- Currently limited outlet for the CO<sub>2</sub>
- Collaboration to build a positive business case and to accelerate the industrial decarbonisation

**Accelerating industrial decarbonisation**





# How to proceed with Arctic CCUS Cluster

- Gather interest
  - CO<sub>2</sub> emitters
  - CO<sub>2</sub> transport / infrastructure developers
  - Intermediate storage sites / harbour sites
  - CO<sub>2</sub> utilisation and storage providers
  - Academia
- Evaluate need for coordinated development / sharing of facilities and infrastructure / funding opportunities etc.

Ofofbanen / Malmabanen possible CO<sub>2</sub> transport route:



**Join a local initiative for global change**



# Accelerating the transition to carbon neutrality through pioneering projects



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