



Project Barents Blue

High North Dialogue 2021

Date: 20 April

Presenter: Bjørgulf Haukelidsæter Eidesen, CEO Horisont Energi



Who we are



Based on the western coast of Norway

- **Founded** in 2019
- **Head office** in Sandnes

Focusing on commercialisation of carbon storage through

- **Clean hydrogen** and **ammonia**
- End-to-end **carbon storage**

Organised with competent and experienced personell for

- **offshore carbon facilities** developments; and
- **onshore hydrogen** and **ammonia facilities** development

Project Barents Blue

World scale clean hydrogen and ammonia



Barents Sea

MARITIME FUEL

CHEMICAL INDUSTRY

FERTILIZER

POWER

CO₂

CO₂ transport

GAS

Gas purchase

HYDROGEN

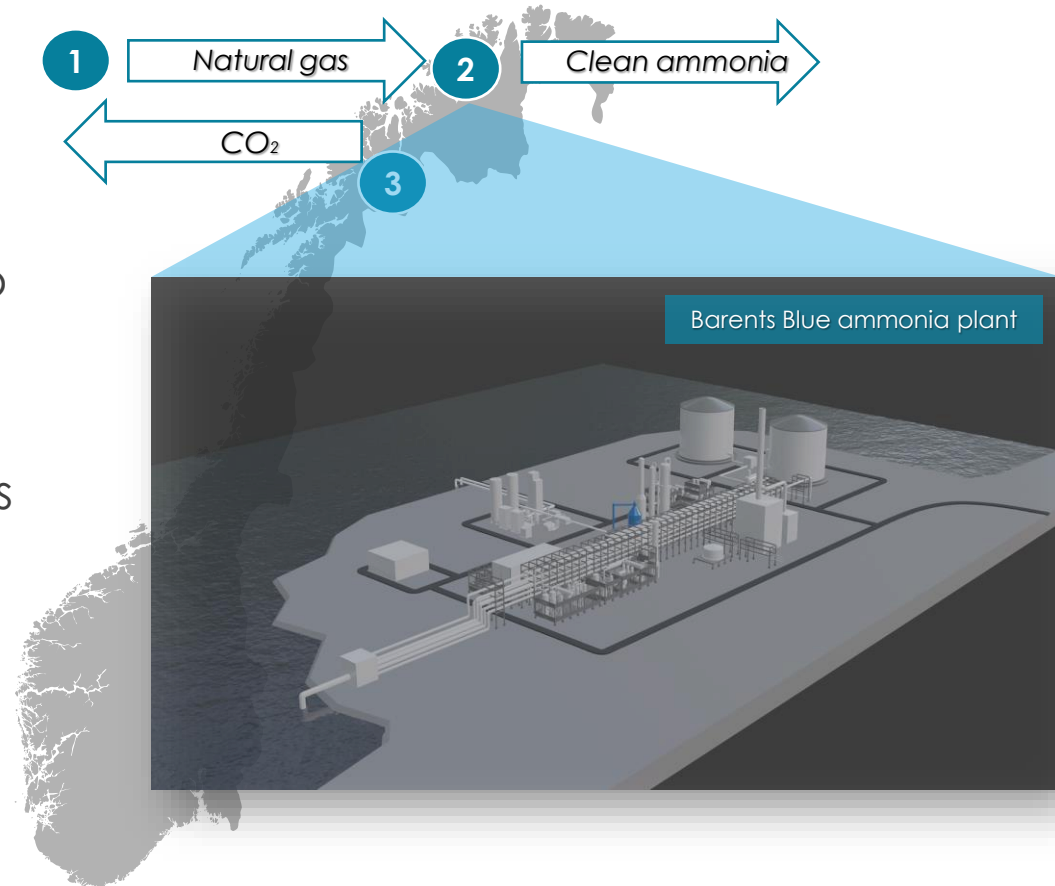
AMMONIA



Key project ambitions

Develop the most carbon and energy efficient ammonia plant in the world

- Zero emissions, environmentally friendly plant
- Self sufficient on power, renewable electricity for start-up
- Fully automated plant with high availability
- High focus on sustainable solutions and circular practices
- Focus on low noise level and plant light design
- Efficient winterisation utilising the benefit of the cold
- Highly modular construction strategy

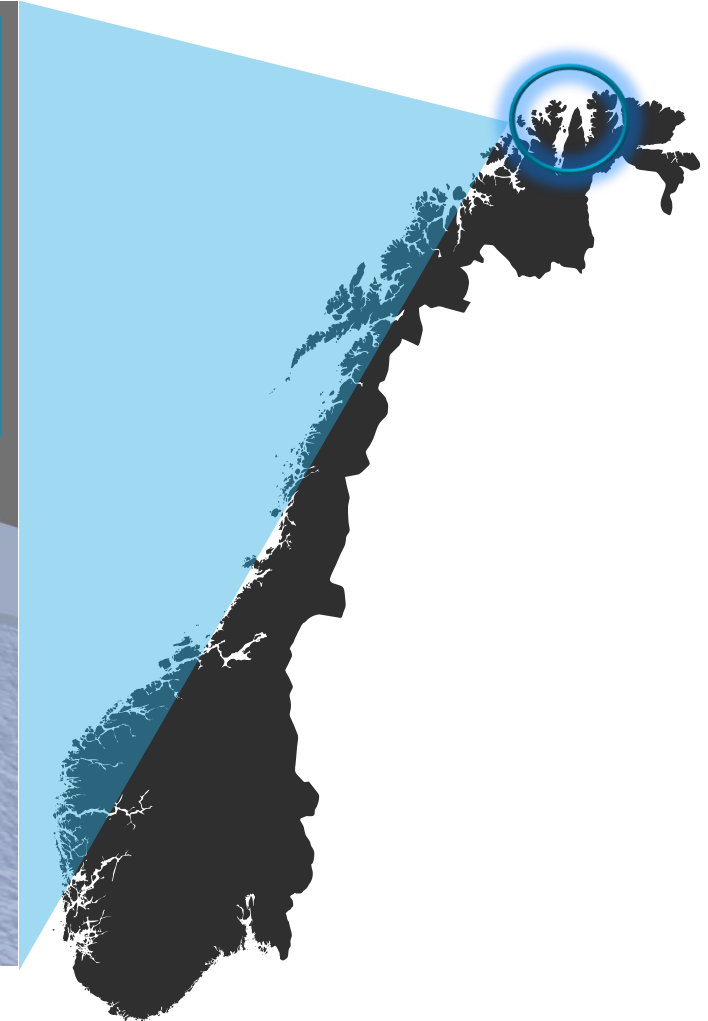
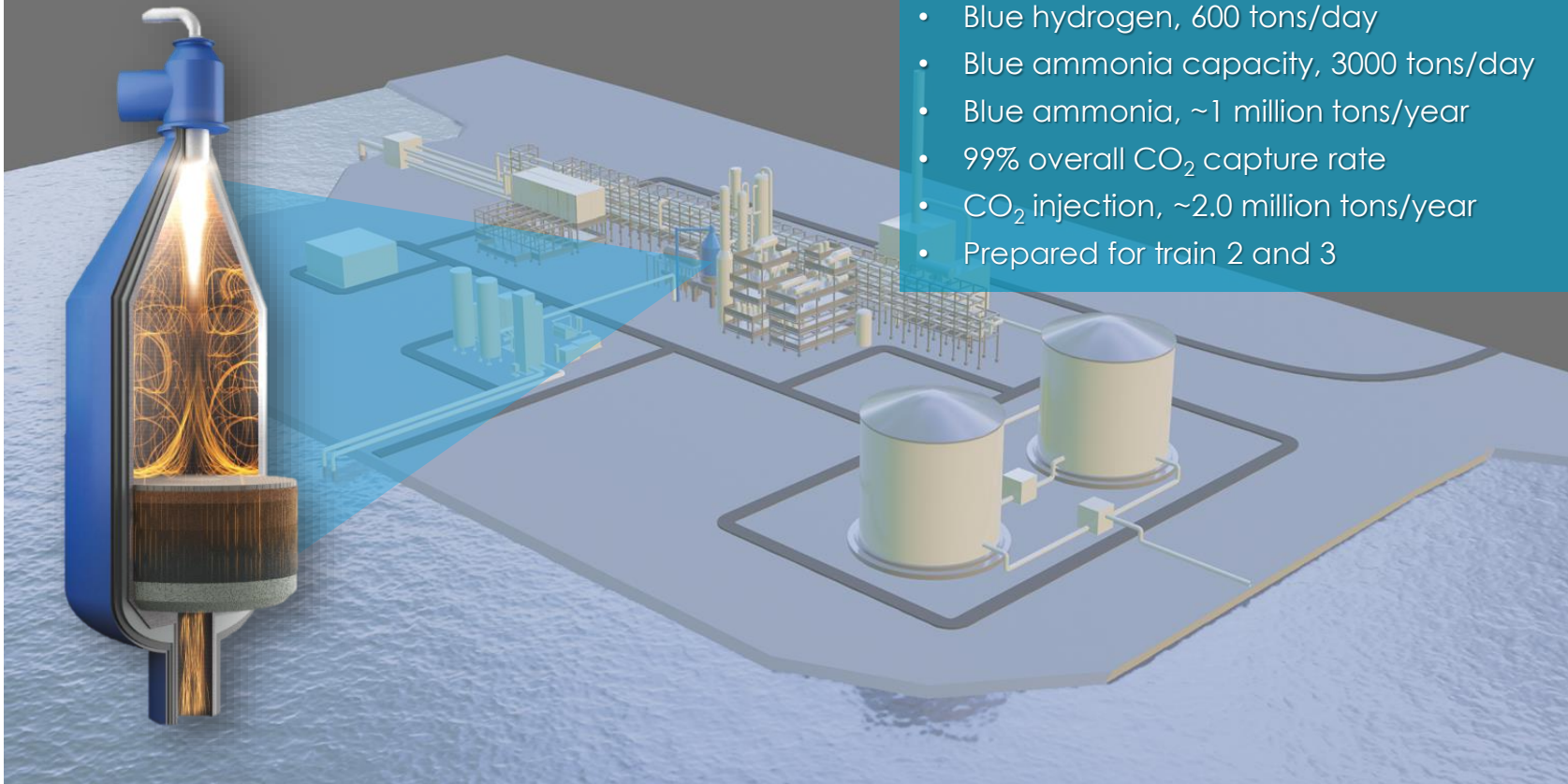


Project Barents Blue

Blue SynCOR Ammonia™ plant

Technical data

- Gas feedstock of about 2.8 MSm³/day
- Blue hydrogen, 600 tons/day
- Blue ammonia capacity, 3000 tons/day
- Blue ammonia, ~1 million tons/year
- 99% overall CO₂ capture rate
- CO₂ injection, ~2.0 million tons/year
- Prepared for train 2 and 3

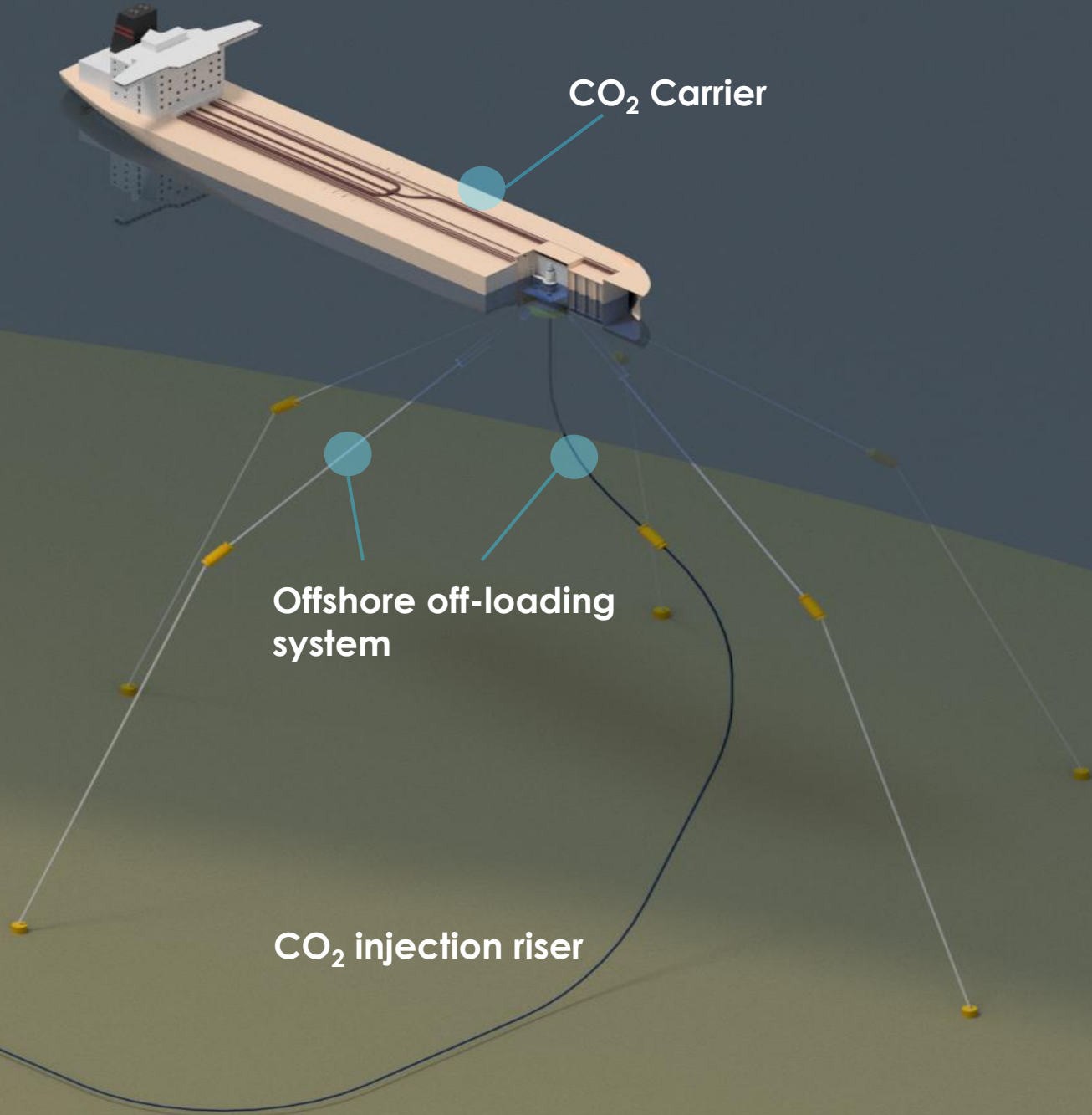


- Three sites being evaluated in Finnmark
- All sites regulated for industrial activity



Polaris CO₂ Injection Solution

Onshore Control Room



CO₂ Carrier

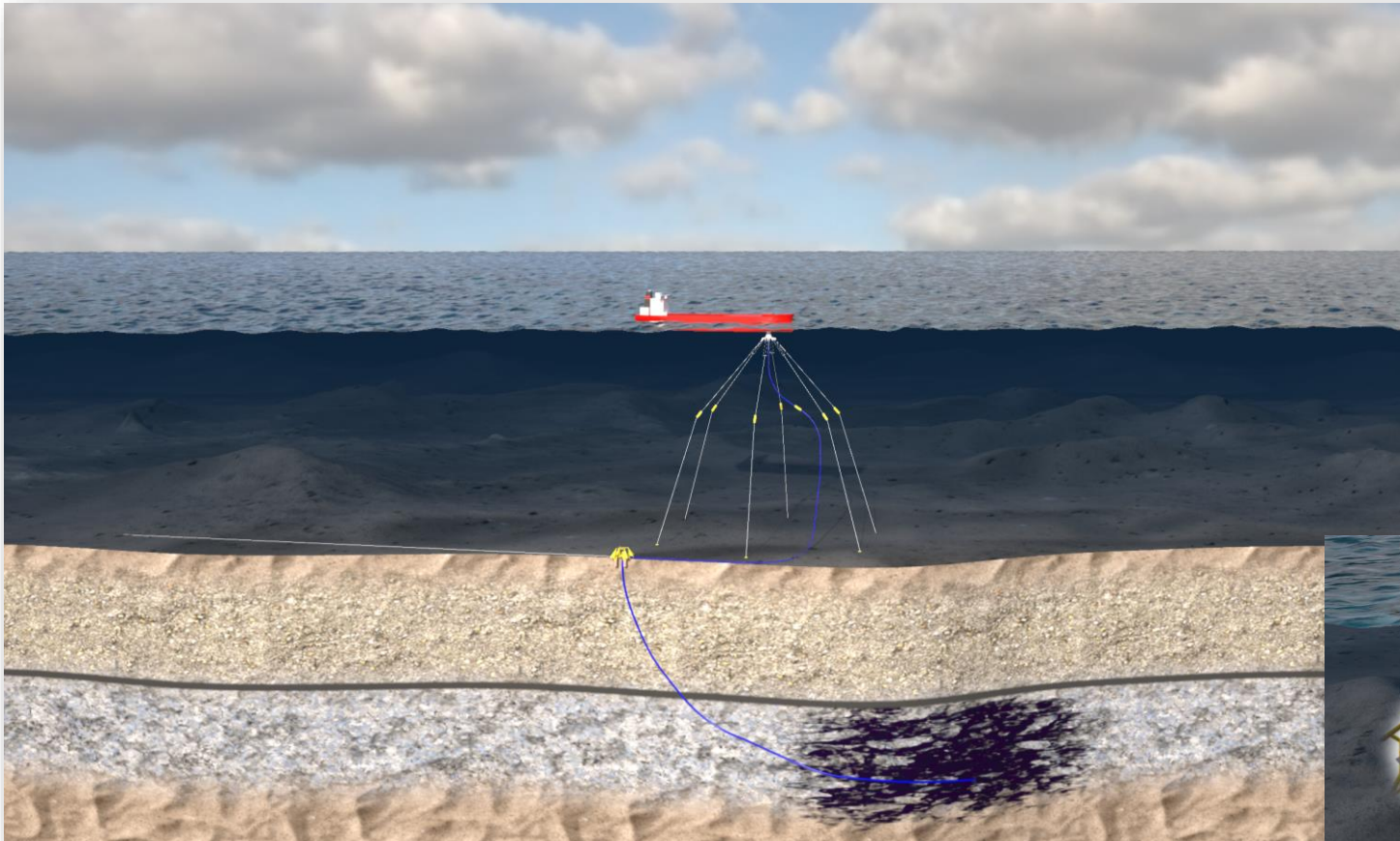
Offshore off-loading system

CO₂ injection riser

Power & control cable to shore

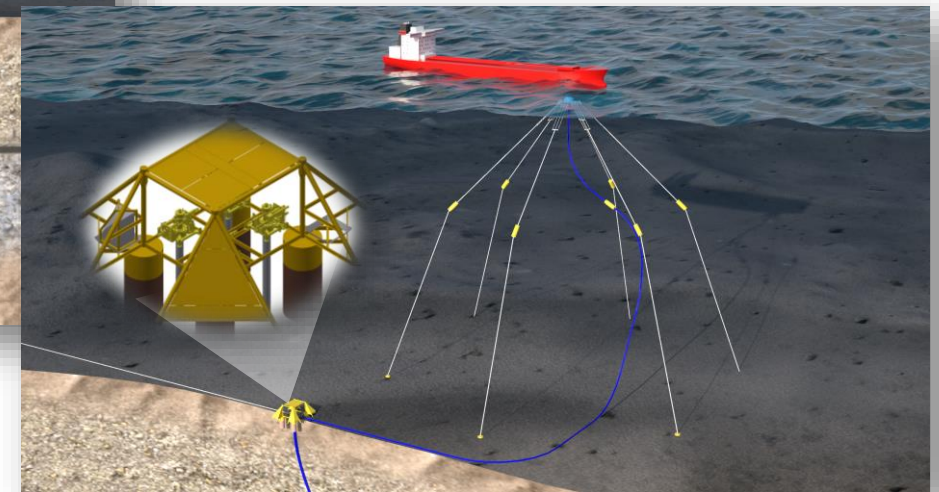
CO₂ injection system

Polaris – Carbon storage asset development



KEY DATA

- 100 km off the coast of Finnmark
- High quality reservoir, large structure
- 2 million tons/yr CO₂ injection capacity in the first phase
- Over 100 million tons of estimated storage capacity



Summary

- We are developing the first green field, large scale clean ammonia plant in Europe
- It is the most carbon and energy efficient plant in the world
- The Barents Blue project will deliver above 1 million tons of clean ammonia per year
- 2 million tons of CO₂ will be injected annually into the Polaris CO2 storage
- We will create a long term carbon free industry in Finnmark





THANK YOU