

# Horisont Energi Bjørgulf Haukelidsæter Eidesen, CEO

Sparebank 1 Markets Energy Conference 1-2 March 2023



# Accelerating the transition to carbon neutrality

Clean energy production



Carbon capture and storage



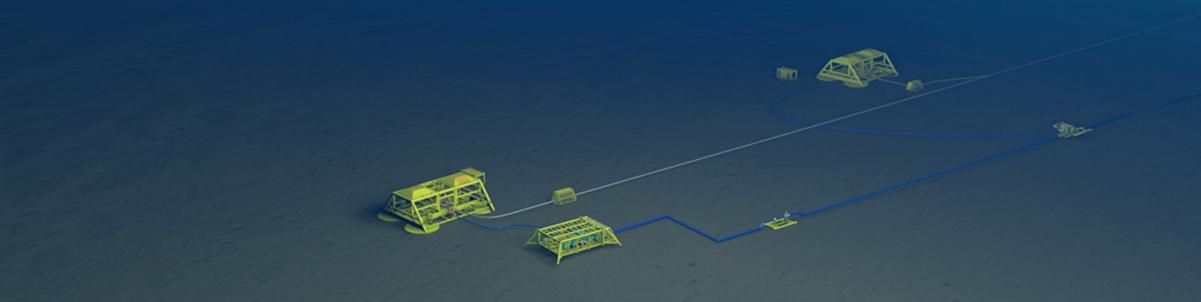


# A Norwegian clean energy and carbon capture and storage company





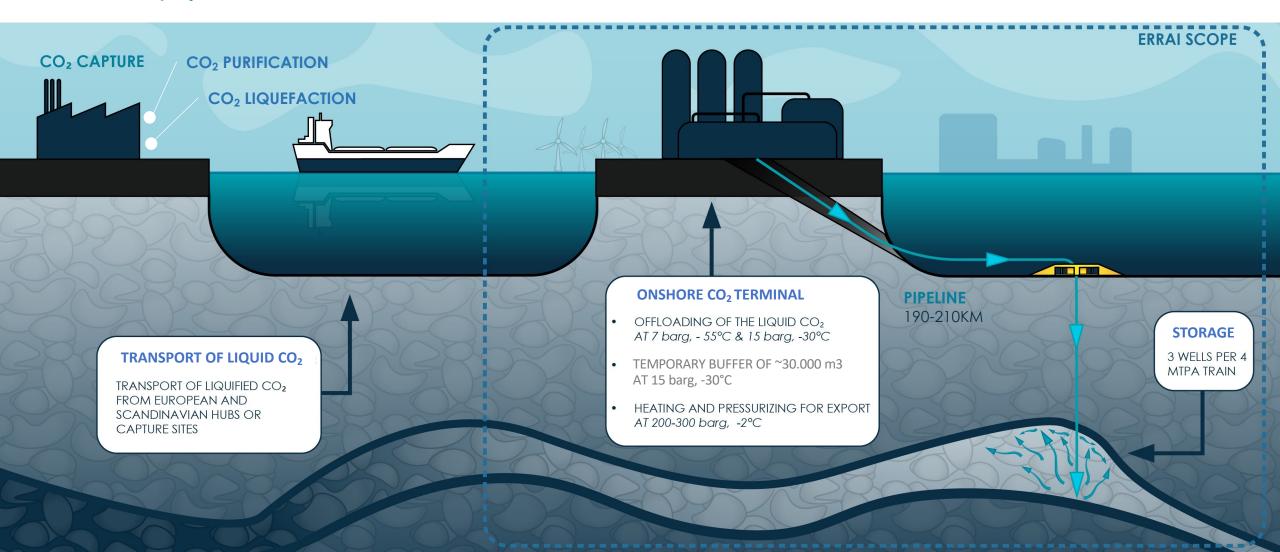
# The CCS opportunity





## What is CCS all about?

The Errai project CCS value chain





# CCS – key ambitions and goals

## BECOME A LEADING CARBON STORAGE ASSET DEVELOPER

2030 Ambitions

<500 Mt

Equity storage capacity

Become a carbon storage operator

Be central in the carbon market including CDR

TODAY
2 PROJECTS

Errai project in development

Polaris project in development

2027

5 PROJECTS

1 RESERVOIR IN OPERATION

Errai project phase 1 in operation

Errai project phase 2 in development

Polaris project in development

New projects in development

2030

5 PROJECTS

3 RESERVOIR IN OPERATION

Errai project phase 1&2 in operation

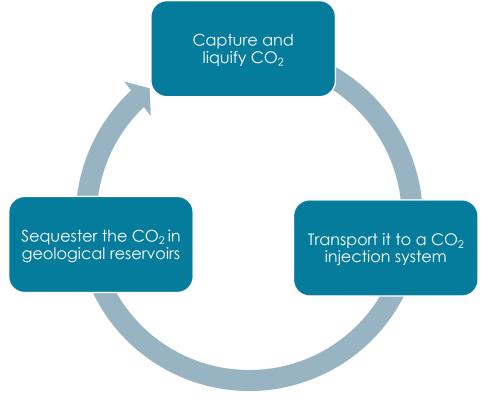
Polaris project in operation

New project in operation

New projects in development

# Establishing an end-to-end carbon storage business





Economy of scale across the entire value chain



Offshore carbon storage

Barents Blue

Ammonia plant and CO<sub>2</sub> termina

Fertiberia

- European industrial production generates
  3bn tons of CO<sub>2</sub> annually
- EU targets 55% emission reduction by 2030
- Above 80 billion tons of storage capacity offshore Norway



# Project Errai

#### An innovative commercial CO<sub>2</sub> project

#### **Project highlights**

- CCS project initiated by Horisont Energi in 2021
- First commercial CCS project in Norway, licence award pending
- Key part of planned CCS value chain
- Plan to store 4–8 million tonnes CO<sub>2</sub> annually in first phase, with additional potential
- Onshore terminal for intermediate CO<sub>2</sub> storage, with the intention to permanently store the CO<sub>2</sub> in an offshore reservoir
- Targeting European and domestic third-party customers

Errai represents a major step in industrialising CCS, including the development of the carbon market in Europe

#### Strategic partners







#### **Key figures**







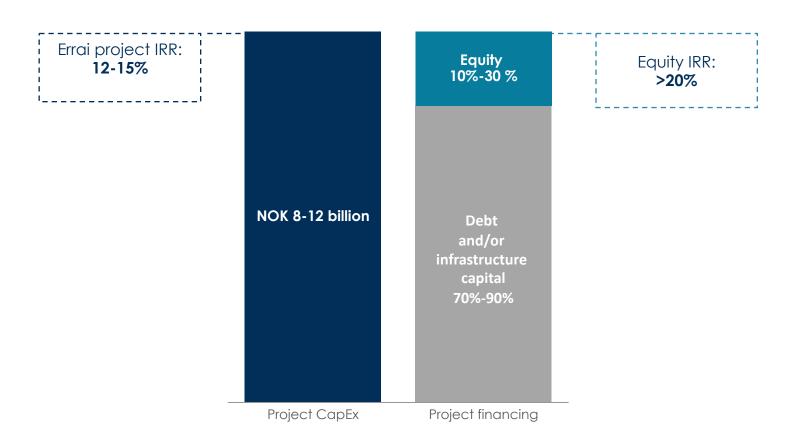




License group



# Errai business model designed for large-scale, with limited capital requirement



- Opportunities for both bank financing and infrastructure investments to leverage the project
- Equity partnership between Horisont Energy, Neptune Energy and E.ON
- Current HRGI equity share of 60%, with final equity share subject to Errai license award

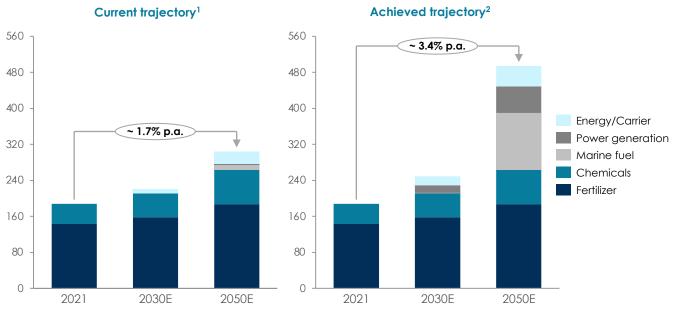




## The world needs clean energy

## Critical to decarbonize ammonia production to achieve carbon neutrality

#### Ammonia demand per sector (mtpa)



- Demand expected to grow through both conventional and new offtake markets
- Established ammonia markets have a critical need for decarbonization
- RePower EU, EU Maritime Fuel initiative, CBAM and other regulations are driving the EU market
- New markets in marine fuels, power generation and energy transport and storage, driven by regulations
- EU alone targets 100 mtpa of clean ammonia by 2030 and 200 mtpa by 2025

<sup>1)</sup> Current trajectory of renewables cost decline continues, however currently active policies remain insufficient to close gap to ambition.

<sup>2)</sup> Net-zero commitments achieved by leading countries through purposeful policies, followers transition at slower pace

# Project Barents Blue



## Building Europe's first world-scale clean ammonia facility

#### **Project highlights**

- Best-in-class life-cycle carbon footprint, with >99% carbon capture
  - Environmentally friendly plant with almost zero emissions
  - Modular construction strategy with focus on sustainable solutions and circular practices in design
  - Mostly self-sufficient on power, limited renewable electricity from grid
- Fertiberia adding more than five decades of ammonia plant operations and commercial operations knowhow
  - European-first industrial-scale CO<sub>2</sub>-free ammonia production
  - Fertiberia contemplating Barents Blue offtake to existing fertilizer plants, part of plan to become zero carbon by 2035

#### Simplifying the project and reducing costs:

- Reducing from three to two production trains maximum at site
- Focusing on first train and sourcing gas from Snøhvit
- Simplifying scope to one train and reducing cost at Melkøya gas plant

#### Signed cooperation agreement with Fertiberia









# New Partner de-risking project through ammonia operational and industrial competence and capacity

### Grupo Fertiberia at a glance

Shareholder

**Triton Partners** since February 2020

Solid balance structure

**Plants** 

**14 production** plants

In Spain, Portugal and France Presence

Sector leaders on the Iberian Peninsula

Solid market presence in both, Spain and Portugal **Brands** 

Complete, diversified and sustainable product portfolio

+530 products both for crop nutrition and for industrial segments

**Employees** 

Over 1,600 employees

across the Group's various sites and business Customers

+/-1
thousand in
80 countries

Distributors, cooperatives industrial customers o farmers





# Investment highlights

Early mover in carbon capture and storage and world-scale clean ammonia production

Large scale projects with strategic partners in place for rapid development

Highly attractive economies of scale

Experienced and committed team





# Accelerating the transition to carbon neutrality through pioneering projects

www.horisontenergi.no