## Horisont Energi Renew Summit 2024 13-14 March 2024

Bjørgulf Haukelidsæter Eidesen, CO-CEO





#### Founded: Aug 2019

Employees: ~40 people

Funding: Seed \$1M, Series A \$15M, Series B \$42M

Soft funding: \$26m (Horisont equity)

Locations: Stavanger, Oslo and Hammerfest in Norway, Edinburgh in the UK

Existing owners: Industrial ownership with E.ON as largest shareholder in topco with 25%, management and employees about 40% total



"Our ambition is to become a leading clean energy company offering costeffective clean ammonia, with market leading sustainability performance."

> BJØRGULF EIDESEN CO-CEO / Founder



Horisont energi

# The original blue ammonia project globally



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Markoppneset

Name Markoppneset Located Hammerfest, Finnmark Area available 400 acres Regulated for Industrial activity Planning program Approved

Northern Norway

# Setting the standard for CLEAN AMMONIA



## Key design ambitions

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

- Minimum all emissions & use of clean water
- $CO_2$  capture rate: > 99 %
- Minimise renewable electricity use, high energy efficiency
- Focus on sustainable solutions and circular practices
- Efficient process utilizing the benefit of the cold climate
- Low noise level and negligible light pollution minimize effect on surroundings and impact on biodiversity
- Full EU Taxonomy compliance



#### **Project facts**

Established May 2020 by Horisont Energi Based upon Topsoe ammonia technology Design developed together with Saipem EU IPCEI Hydrogen project



## **Key Technical Data**

Hydrogen technology: Oxyfuel Auto Thermal Reforming (ATR) (SynCOR Ammonia<sup>TM</sup>) CO<sub>2</sub> capture rate: > 99 % Gas feed: ~2.8 million Sm<sup>3</sup>/day Blue hydrogen capacity: 675 MT/day Blue ammonia capacity: 3000 MT/day Annual output NH<sub>3</sub>: 1 million MT/year Renewable electricity: 45 MW Carbon footprint scope 1-3: 300 g CO<sub>2e</sub>/kg H<sub>2</sub>



50%

**Barents Blue** 

project share





2025 Final investment

decisior

Est. production

2029



## Project highlights

• The original blue ammonia project globally

• A unique European (IPCEI) project, the first European world-scale ammonia plant

Opens up Northern Norway as a global clean
ammonia hub

 Probably the highest sustainability standard clean ammonia in the global market



### "Barents Blue will be a flagship project of great importance for Norway and Europe."

"The project will demonstrate that new, energy-efficient technology for ammonia production including carbon capture can make low-emission ammonia competitive."

> NILS KRISTIAN NAKSTAD CEO Enova



## Our mission Accelerating the transition to carbon neutrality through pioneering projects



www.horisontenergi.no