

The logo for HYON, featuring the letters H, Y, O, and N in a stylized, white, sans-serif font. The 'Y' is composed of two diagonal lines meeting at a point, and the 'O' is a simple circle. The background is a dark blue, textured surface resembling water ripples, with large, semi-transparent, curved shapes in a slightly darker shade of blue on the right side.

HYON

Company presentation

Updated January 31, 2023

HYON

About HYON

We deliver the safest and fastest high-capacity hydrogen transfer to ships

Born in Norway for a global quest



Providing the missing piece in the hydrogen value chain



Founded in 2017
as a JV between Nel,
Powercell and Hexagon



Restructured in 2021 with
strong industrial owners



Strategy and value chain
position redefined to address
maritime hydrogen fueling



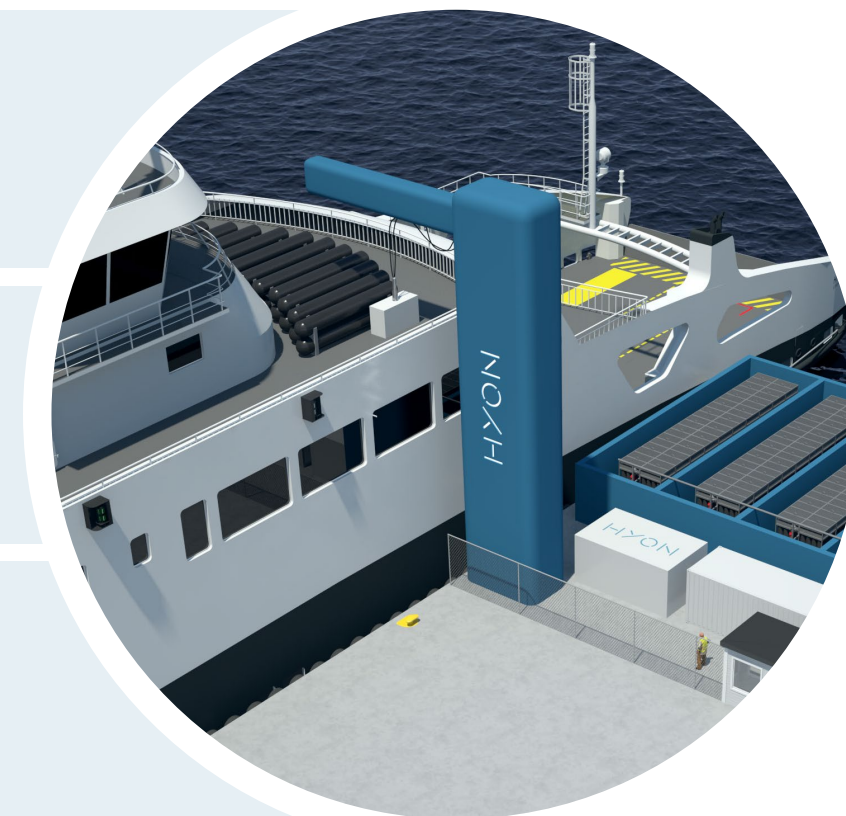
Listed on Euronext Growth,
Oslo (ticker: HYON)



Multiple consortium
projects executed



Located in Drammen
and Ulsteinvik, Norway



Company update as of Q2 2022



Strong engineering progress at Hellesylt Hydrogen Hub

Engineering phase to be completed in Q3



Well-positioned for maritime hydrogen infrastructure projects

MNOK 670 Enova grant towards five hydrogen infrastructure hubs to be considered a market starter



Strong interest from global majors in the maritime trade

HYON recognized as important and missing piece to realize future zero carbon value chains



Expanded HYON organization to cover core disciplines

Team with extensive experience and capacity to lead



Entered agreements with key suppliers to provide comprehensive offering

Suppliers bring unique competency in the fields and capacity to execute

Revenue
MNOK 3.7

EBIT
MNOK -8.1

Cash end of period
MNOK 33.7

No. of shareholders¹
254

¹ As per June 30, 2022

Our two high-capacity fueling solutions



SOLUTION A

Integrated hydrogen factory and high-capacity fueling for coastal sailing

- ✓ Local production and fueling of hydrogen
- ✓ Typical range: 500-3,000 kg H₂/hour
- ✓ Capacity down to 500 kg H₂/hour to facilitate smaller fishing and transport boats








SOLUTION B

Distributed high-capacity fueling configuration for the maritime sector

- ✓ Built for high-capacity transfer with short fueling time
- ✓ 1,000 kg H₂ / 30 min

Partnering up with leading companies

Key milestone in H1'22

				
<p>Handling System Located in Ulsteinvik, Norway</p> <p>Leading developer of automated marine handling systems for the maritime industry, focusing on efficient and safe operations.</p> <p>Experienced team with more than 30 years of skills inhouse from handling systems for advanced, maritime operations.</p>	<p>Process System Located in Rakkestad, Norway</p> <p>The Slättland Group has been a highly trusted fabricator for the oil and gas industry, marine and industry markets for almost three decades.</p> <p>Experience with engineering and fabrication of hydrogen process modules for the Deep Purple project.</p>	<p>Connector System Located in Lier, Norway</p> <p>Subsea Design AS is an engineering, design and fabrication company providing systems, products and services for the mechanical, oil, gas and renewable energy industry.</p> <p>Specialized in gas connection systems.</p>	<p>Process Engineering Located in Asker, Norway</p> <p>CITEC is an international multi-discipline engineering partner at the forefront of the clean energy movement.</p> <p>For close to 40 years they have delivered services through a high-performing expert organization and have vast experience within LNG, carbon capture, solar and hydrogen.</p>	<p>Control System Located in Lysaker, Norway</p> <p>Nebb provide total solutions for automation, electrical and information systems to a number of industries world-wide, including process industry, food & pharma, marine, energy, subsea and PMC.</p> <p>Their core competence lies within automation, electrical, instrumentation, SCADA, software and digitalization.</p>

The core of HYON

Management and technical team



CEO
Jørn Kristian Lindtvedt



COO
Harald Bjørn Hansen



CFO
Jan Frode Andersen



Product Development Manager
Sondre Rosfjord Askim



Project Engineering Manager
Øyvind Oppheim



Technical Manager
Kjellbjørn Kopperstad



Project Manager
Arne-Kristian Krydsby Johnsen



Controls & Automation Manager
Fredrik Østheim



Process Systems Manager
Kine Temte

Board of Directors



Chairman
Otto Søberg



Board Member
Jens Berge



Board Member
Silje Smådal



Board Member
Bjørn Simonsen

Main owner



Partners



The maritime hydrogen market

Zero emission focus emerging in maritime industry



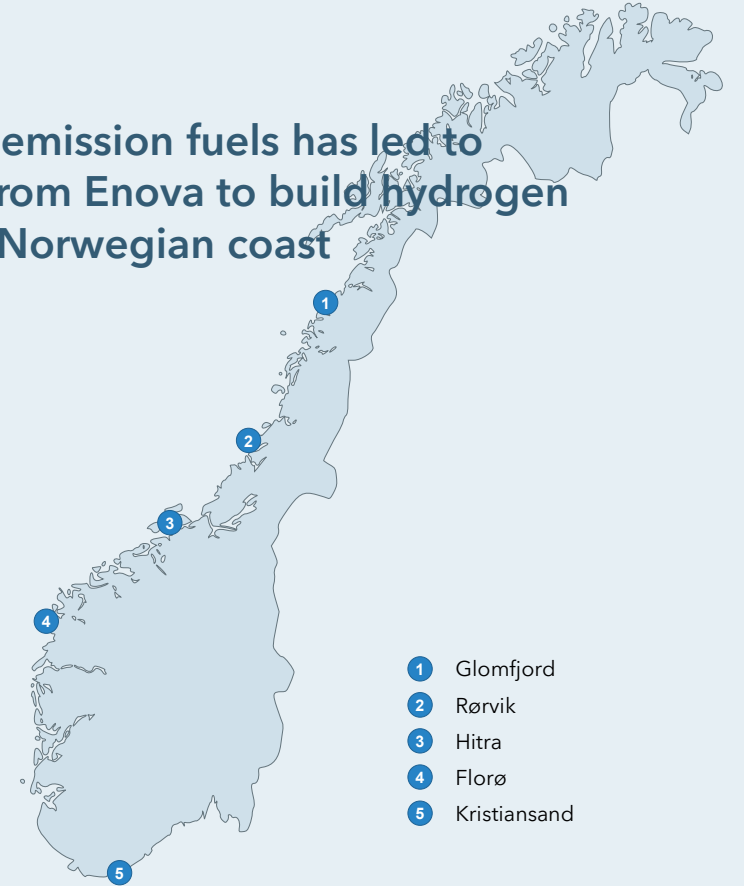
Shipping included in EU Emissions Trading System, significantly increasing costs of operating fossil fueled ships



IMO to implement new measures from 2023: 40% of today's tankers, bulk carriers and container fleets will need modification by 2026¹



Increased focus on zero-emission fuels has led to **NOK 1.1 bn** in support from Enova to build hydrogen infrastructure along the Norwegian coast



¹ According to Clarksons Platou

HYON is initially targeting three key segments, starting in the Norwegian market

Passenger ferries

Aquaculture

Offshore wind

Vessel types

High-speed passenger ferries and sightseeing boats

Well-boats, processing vessels, working vessels for the aquaculture industries

Service operation vessels (SOV) for offshore wind farms



Current number of vessels in initial market (Norway)

- 90 active high-speed passenger ferry routes
- Est. 1,000+ vessels for different sightseeing purposes
- ~300 bunkering stations



- 71 well-boats
- 10+ processing boats
- 1,200+ sites with ~500 working boats
- ~5,800 fishing vessels
- ~2,000 bunkering stations



- 70+ SOVs in operations today
- Estimated 270+ SOV from 2030
- In addition, a substantial amount of smaller working vessels linked to each site
- ~100 bunkering stations



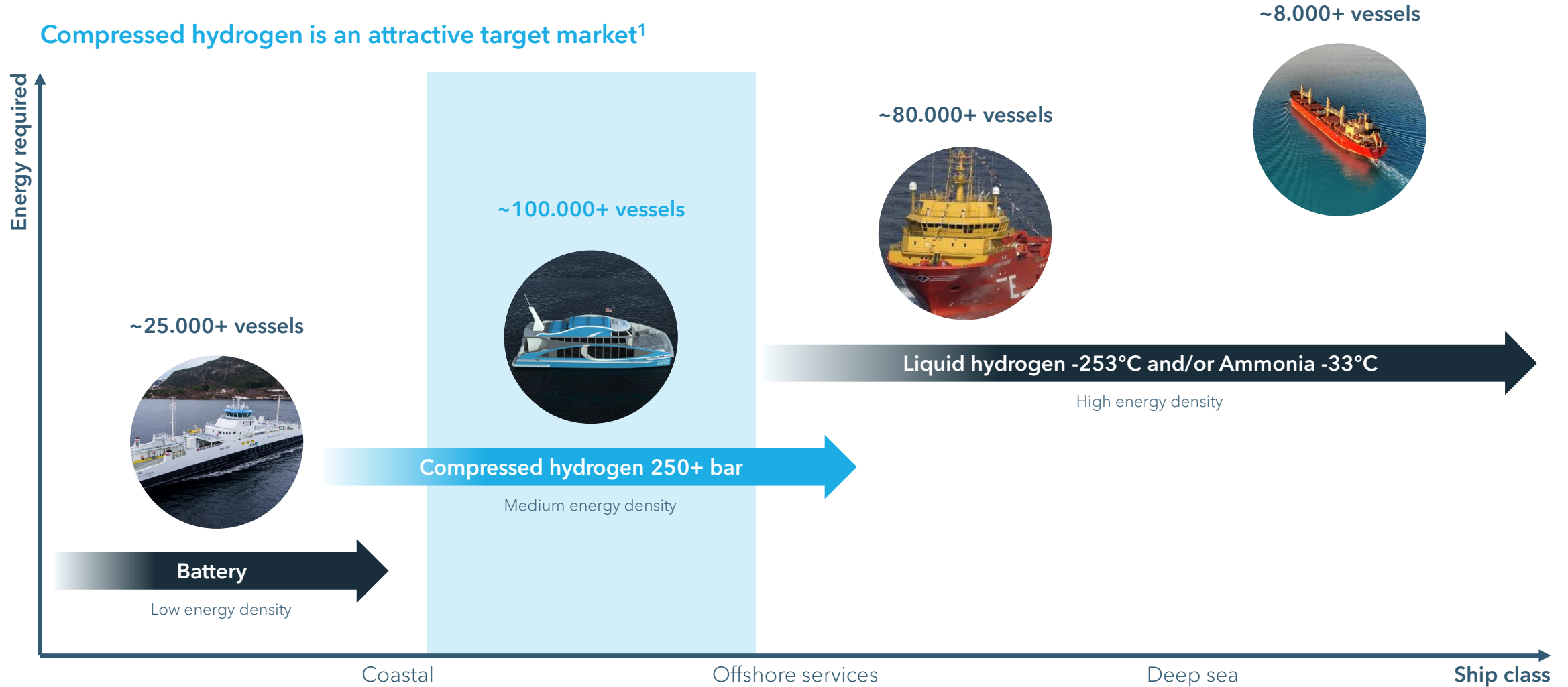
TAM ROW¹

If net zero is to be achieved in 2050, 100.000 vessels will need to run on low emission fuels, corresponding to >20.000 bunkering stations

¹ Total Addressable Market, Rest of the World: Hyon analysis of IRENA Decarbonize Shipping 2021, Figures 3, 30 and 34 and IEA Global Hydrogen Review 2021
Image credits: SWITCH Maritime LLC, Knut Troim (via Unsplash), Nicholas Doherty (via Unsplash)

Zero emission fuel technologies have different applications and maturity levels

Compressed hydrogen is an attractive target market¹



¹ Number of vessels globally for each category based on HYON estimates

Compressed hydrogen gaining momentum in maritime sector



Torghatten Nord decided on compressed hydrogen for Vestfjorden ferry



Salmonor with service vessel on compressed hydrogen from 2023



Egil Ulvan Rederi is building the world's first cargo ship on compressed hydrogen



Samskip and Ocean Infinity with two hydrogen-powered, containerships from 2025



Tor Dahl's zero emission bulk carrier from 2024

Hydrogen projects are gaining momentum also outside Norway



Hexagon Purus received Rhine river transport order of EUR 1.1 million



SWITCH Maritime is building the first fleet of zero-emission vessels in North America



Gotlandsbolaget speeds up project for two high-speed ferries to operate on hydrogen from 2025 and 2027

Recent developments

First bunkering project

Hellesylt Hydrogen Hub

- Pilot E project in execution to deliver compressed hydrogen for the maritime fleet in the Geiranger fjord
- Norwegian Hydrogen is leading the consortium and will also be the owner and operator of Hellesylt Hydrogen Hub
- HYON is responsible for development and supply of vessel bunkering solution
- Bunkering solution scheduled to start operation in 2023
- Executed front-end engineering design (FEED)



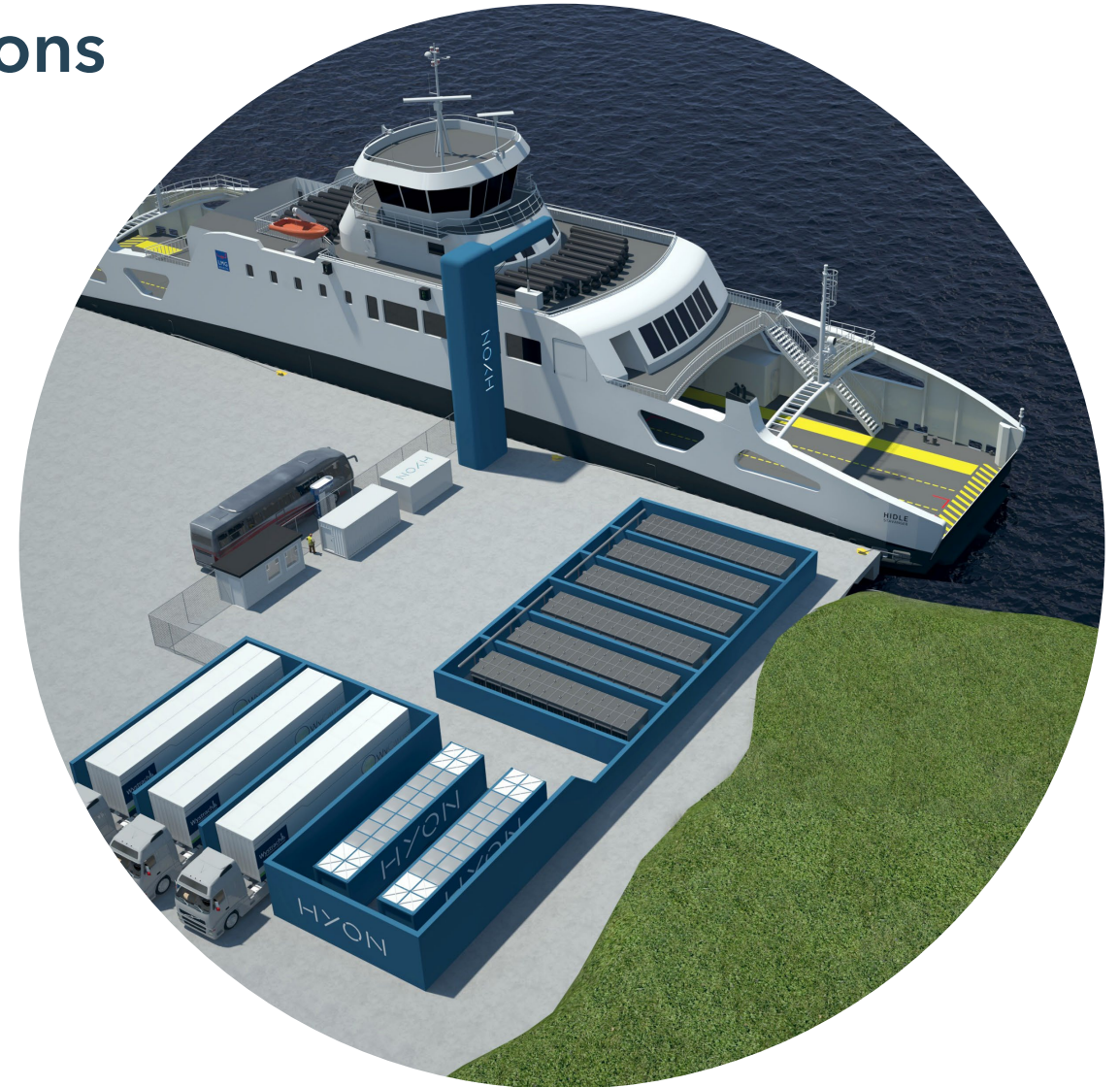
Partnership with Gen2Energy and ASCO to establish Green Arctic HyHub

- Hydrogen hub to include large-scale production of compressed hydrogen in Mosjøen and bunkering sites for maritime transport in Sandnessjøen and Mosjøen
- Project aims to produce cost-competitive compressed green hydrogen at large scale and to make it available to fuel several types of vessels in Nordland



Collaboration agreement with Mitsui to develop hydrogen fueling solutions

- Setting the stage for large-scale development of hydrogen fueling solutions with international collaboration
- Collaboration agreement signed May 10, 2022
- Parties aim to together venture into business opportunities related to establishing hydrogen fueling infrastructure in Europe, Asia and other geographies
- Opens for financial and strategic commitment from Mitsui
- Joint feasibility study to start second half of 2022



Summary

Important targets ahead



Be the supplier of high-capacity fueling solutions for a majority of the Enova-financed hydrogen hubs



Standardize our product offering and delivery process



Utilize position in Norway to win selected international projects



Finalize our service offering package and sign first service contract



Successfully upscale our technology development and project delivery capacity to fulfil future demand



HYON

HYON

HYON

LMG
MARITIM

Building a global champion for zero emission fueling solutions for maritime applications



High growth market

The zero emission fuels market is growing, especially in maritime sector



Management know-how

IP and know-how to develop hydrogen fueling stations for maritime sector



Strategic owners

Main owner provide a unique ecosystem of industry expertise



Asset-light business model

Asset light, highly scalable business model with attractive return potential

Enova funding creating a unique and immediate market opportunity for HYON in Norway



HYON