PROVARIS

Provaris Energy

Enabling bulk-scale storage and transport infrastructure for the energy transition

March 2025

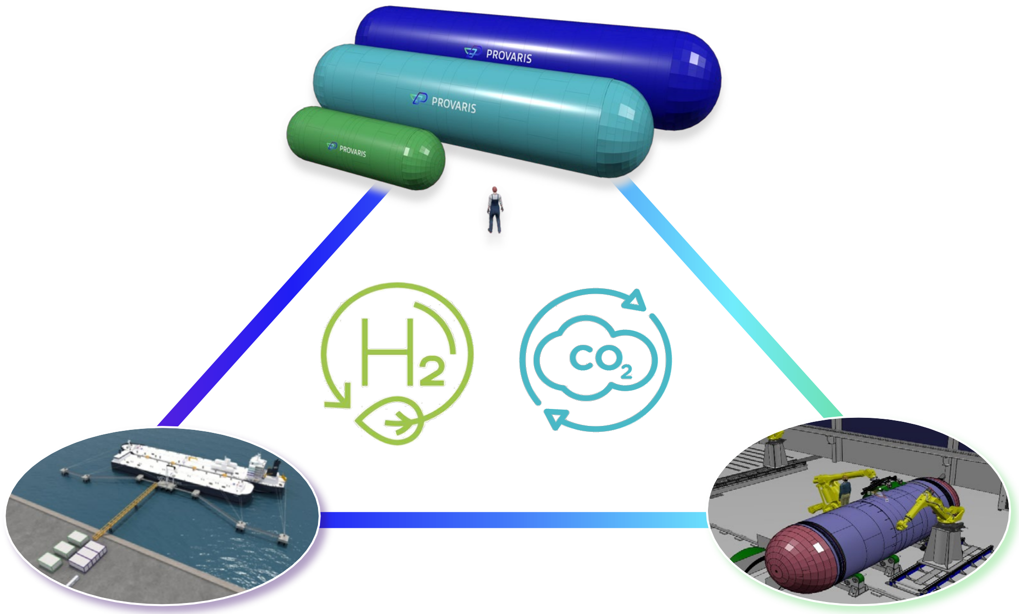
Simplicity | Efficiency | Flexibility

Provaris offers innovative storage and transport infrastructure essential to lower the cost of hydrogen and CO2 supply chains

Australian public company (ASX.PV1) with offices in Sydney & Oslo. Strategic focus on European regional market where energy security and decarbonisation rely on the development of new efficient and cost-effective storage for maritime solutions

- **Proprietary tank IP, fabrication and ship designs** provide unique advantages to unlocking economic storage and transport
- Studies demonstrate compression provides the **lowest cost for regional hydrogen supply**
- Advancing term sheets into **binding agreements in 2025 for hydrogen** supply to German utilities
- **Expanding tank IP and new license fees** with Yinson Production AS to innovate **liquid CO2 tank** and vessels
- **'Capital lite' model** to provide early cash flow from license fees, recurring revenue and remove capex
- **Growth opportunities** from pipeline of supply projects and new markets for gas and liquid storage tank solutions

Innovative tank designs for gas and liquids



Integrated solutions for storage and transport

Engineering, Class Approvals, Robotic Fabrication

Partnering with major industrial leaders to deliver viable supply chains

Recognition that early, scalable projects, not giga-scale will catalyse the Energy Transition

Hydrogen remains critical to all decarbonization goals and timelines…with a focus on cost and scale

2024 categorized as a reset for global hydrogen scale-up expectations…

> **High costs vs low demand** delaying "gigafactories"
>
> **Energy majors reducing transition investments**; postponing large projects
>
> **US focused on blue ammonia** with limited offtake to date
>
> **India emerging as a low-cost supplier** of green molecules
>
> **EU committed to green hydrogen**; easing regulations
>
> **Australia struggles** with distance-driven and cost barriers
>
> **$28 B in global auctions** announced to support supply FIDs
>
> **Role of green ammonia being challenged** as a hydrogen carrier due to cost (cracking and scale requirement)

Europe starts 2025 with a demonstration of real progress

Policy: Germany reaffirms EU climate goals; backs hydrogen for hard-to-abate industries and H_2 core-grid rollout.

Infrastructure: TSOs approve FIDs for hydrogen pipeline network — first sections live in 2025, full build by 2032.

Funding: €105B EU Clean Industrial Deal; H_2Global's second auction (€2.7B) underway.

Offtake: TotalEnergies signs first binding H_2 contract – 30ktpa for EU refineries.

Rising demand for Provaris in 2025…

Jan 2025 – Term Sheet signed with Uniper & Norwegian Hydrogen (42.5ktpa); HPA mid-2025.

Mar 2025 – Second MOU for 30ktpa Norway–Germany supply; Term Sheet due June.

Pipeline – Inbound interest >150ktpa from Nordics & Spain; German utilities seeking 2030-ready supply.

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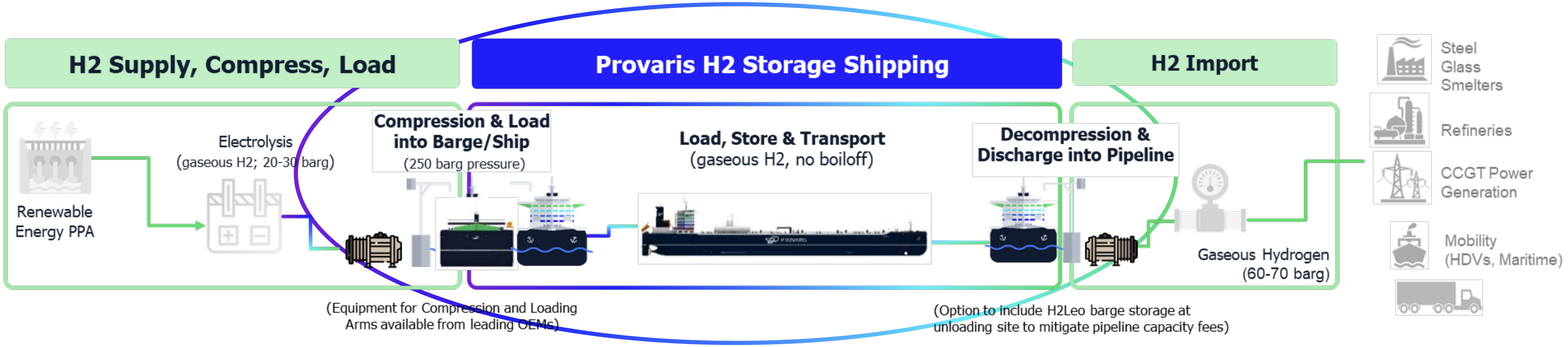
Notes: 1. BloombergNEF, January 2025

‘Ready to Use’ hydrogen, flexible and stable supply for buyers

No conversion, reduced infrastructure and faster, scalable exports

- Provaris has outlined the necessary compression, loading, and shipping infrastructure for large-scale **regional hydrogen supply**.
- Collaborating with industrial partners to develop viable supply chains and generate early cash flow via a licensing model.
- Several supply chains are currently in development, focused on the European market.
- The first Term Sheet signed with Uniper Global Commodities (January 2025) highlights the relavance of the Provaris solution.



Benefit to the Supplier:
Flexibility on Hydrogen Produced per MW installed
= Higher Project Returns

Benefit to the Buyer:
More Hydrogen Delivered + Flexible Import Solution
= Lower Delivered Cost

Compression recognised as a viable option for security of hydrogen supply

"Ready to use" hydrogen has key advantage to meet key drivers for demand

Use less renewable energy to deliver more hydrogen

Compression = 3% energy loss; vs Ammonia = +30% energy loss (synthesis + cracking)

Compression of Hydrogen is proven technology

(Equipment available from leading OEMs up to 700 bar)

Eliminates complex & capital-intensive supply chain processes

(ie. Compression vs conversion and cracking)

Offers the lowest delivered cost from regional supply projects

Delivers hydrogen aligned with Europe's demand & policy ambitions

(examples of recent binding contracts have been for hydrogen)

Flexible import solutions for off-takers to balance market demand

(Modest capex and scale enables multiple ports aligned to development of pipeline network)

Market leading carrier for hydrogen, focused on cost efficient fabrication and supports modular infrastructure development

Advanced design and approvals for hydrogen carrier gaining industry acceptance with European partners

H2Neo Compressed Hydrogen Carrier targeting final approvals 2025

Illustration of longitude tank.

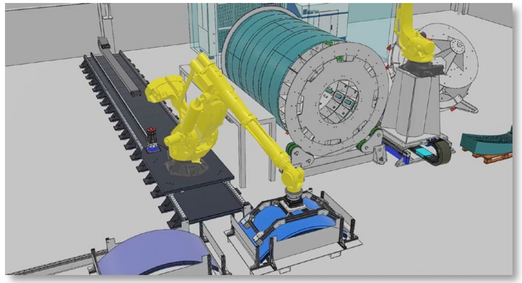
- **Fast to Market:** All design & safety studies complete — prototype in build now.
- **Lowest Total Cost:** Proprietary tank IP + automated fabrication drive down capital intensity.
- **Supply Flexibility:** Modular ships + barges enable multi-port hydrogen imports aligned with pipeline rollout.

Technical Partners & Advisors include:

PROVARIS WÄRTSILÄ Northern Marine DNV ABS CLARKSONS

Automated fabrication using robotic laser-hybrid welding

- Robotic laser-hybrid welding technology proven to lower costs, increase productivity and reliability.



Proven compression technology & loading arms enables flexible and low capex jetty solutions

H2Leo barge storage for loading and discharge sites
Received AIP from Class (300-600 t H2)

Regional supply model delivers 50% more hydrogen at a 20% Lower Cost !

Compression eliminates capital and energy intensive steps of alternative carriers

50% more gaseous hydrogen

delivered to the customer
(~3% used for compression vs +30% for ammonia)

~20% lower <u>delivered</u> cost

(~€ 1.40/kg discount)

20% reduction in capital intensity

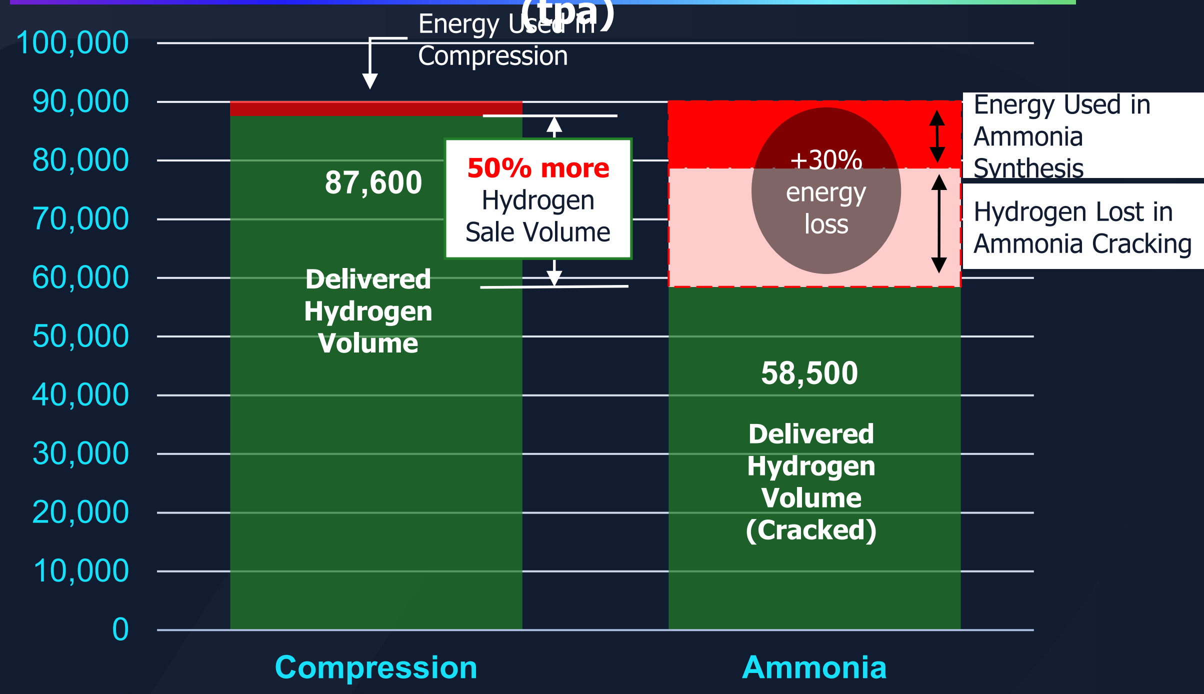
(€/kg H2 delivered)

5-10x the value of grid connected site

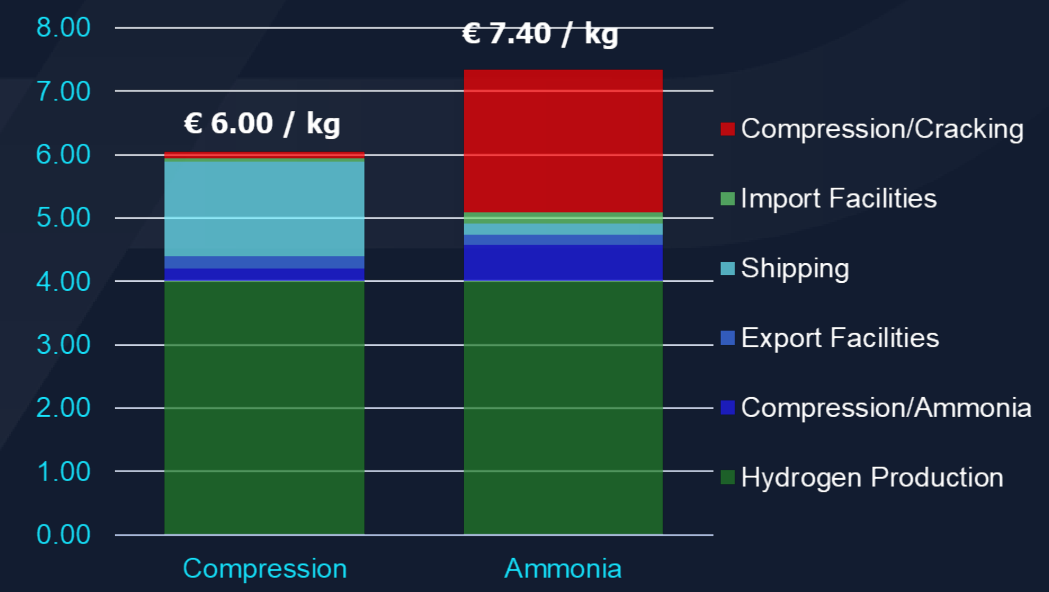
through higher net-back price received over 20yrs

Source: Provaris Energy, ASX release 2 Sept. 2024 “Studies reaffirms compressed H2 for low cost supply”. Outcomes for a 540MW renewable grid connected site, sailing 1,000 Nm, when compared to the ammonia supply chain (delivered as gas), confirmed by Compressor OEMs

Delivered Hydrogen Volumes 540 MW Nordic Project (tpa)

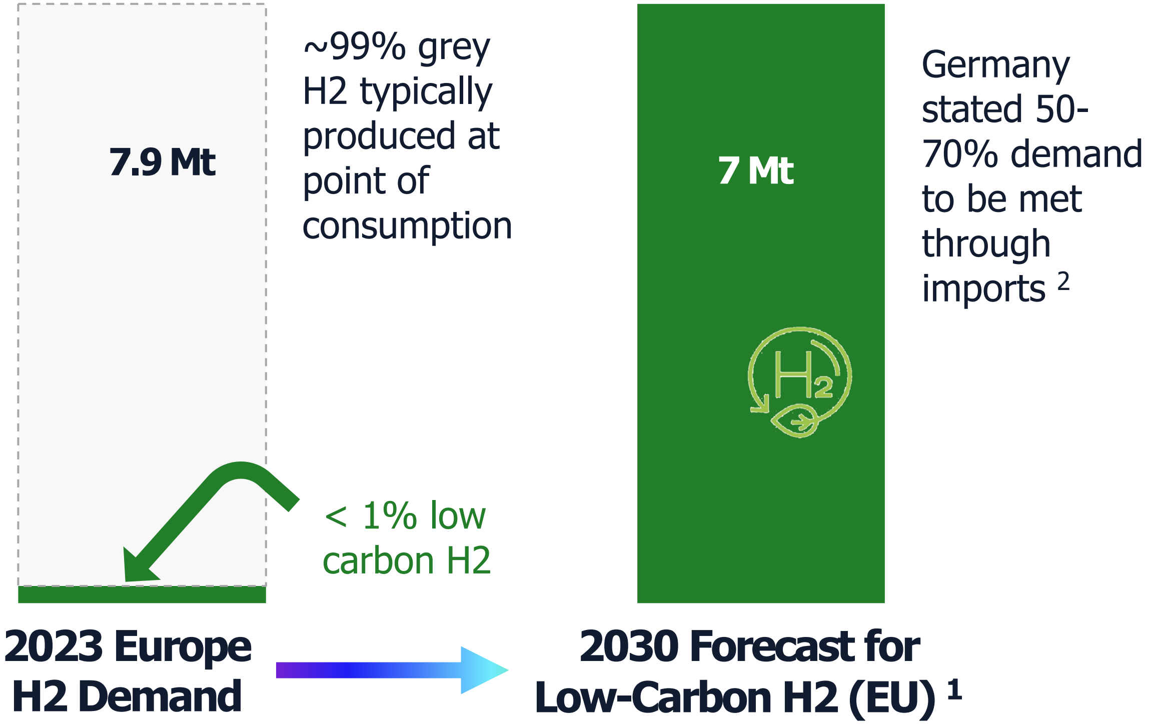


Delivered Price of Hydrogen (€/kg; 20 Yrs / 12% Project IRR



Europe needs 7 Mt of low carbon H2 imports by 2030 - Today <1% is low-carbon – so why does that matter ?

Hydrogen molecules — not carriers — is Europe's starting point. Provaris' compressed gas solution delivers the fastest, lowest cost route to closing this gap.

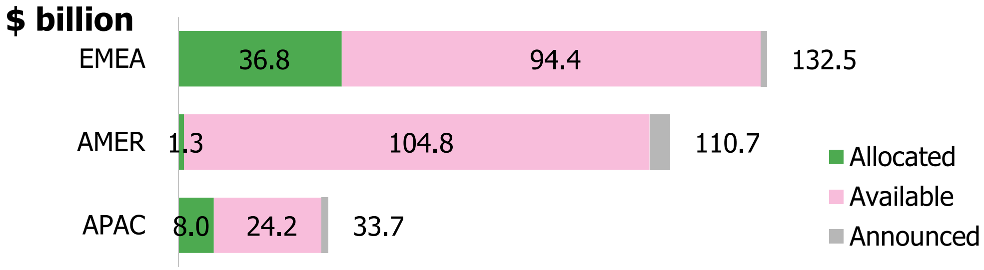


Policy tailwinds with an easing of regulations

Infrastructure build-out for ports and pipelines

Carbon pricing to support green premium

Growth in public funding stimulating supply



BloombergNEF, March 2025

Notes: 1. Hydrogen Europe: Clean Hydrogen Monitor 2024; 2. https://www.bmwk.de/Redaktion/EN/Hydrogen/Dossiers/national-hydrogen-strategy.html

Developing hydrogen supply chains from the Nordics to Europe

In collaboration with industrial supply and offtake partners

- Provaris solution driving region supply chain development
- Strategic supply from Nordic region: renewable baseload power, regional proximity, security of supply
- Demand confirmed via 3 collaboration MOUs with German utilities
- **Term Sheet signed: Uniper & Norwegian developer** – targeting Binding SPA mid-2025 (1×H_2Leo barge, 2×H_2Neo carriers)
- **Second MOU (Mar 2025): New Norway–Germany supply chain** – targeting Term Sheet mid-2025
- FID decisions expected in 2026

Growing Development Pipeline

- Discussions with 4 H2 supply projects in need of a transport solution across the Nordics and Spain
- Cumulative volume of 150 Ktpa = 10 H2Neo carriers + 4 H2Leo barge

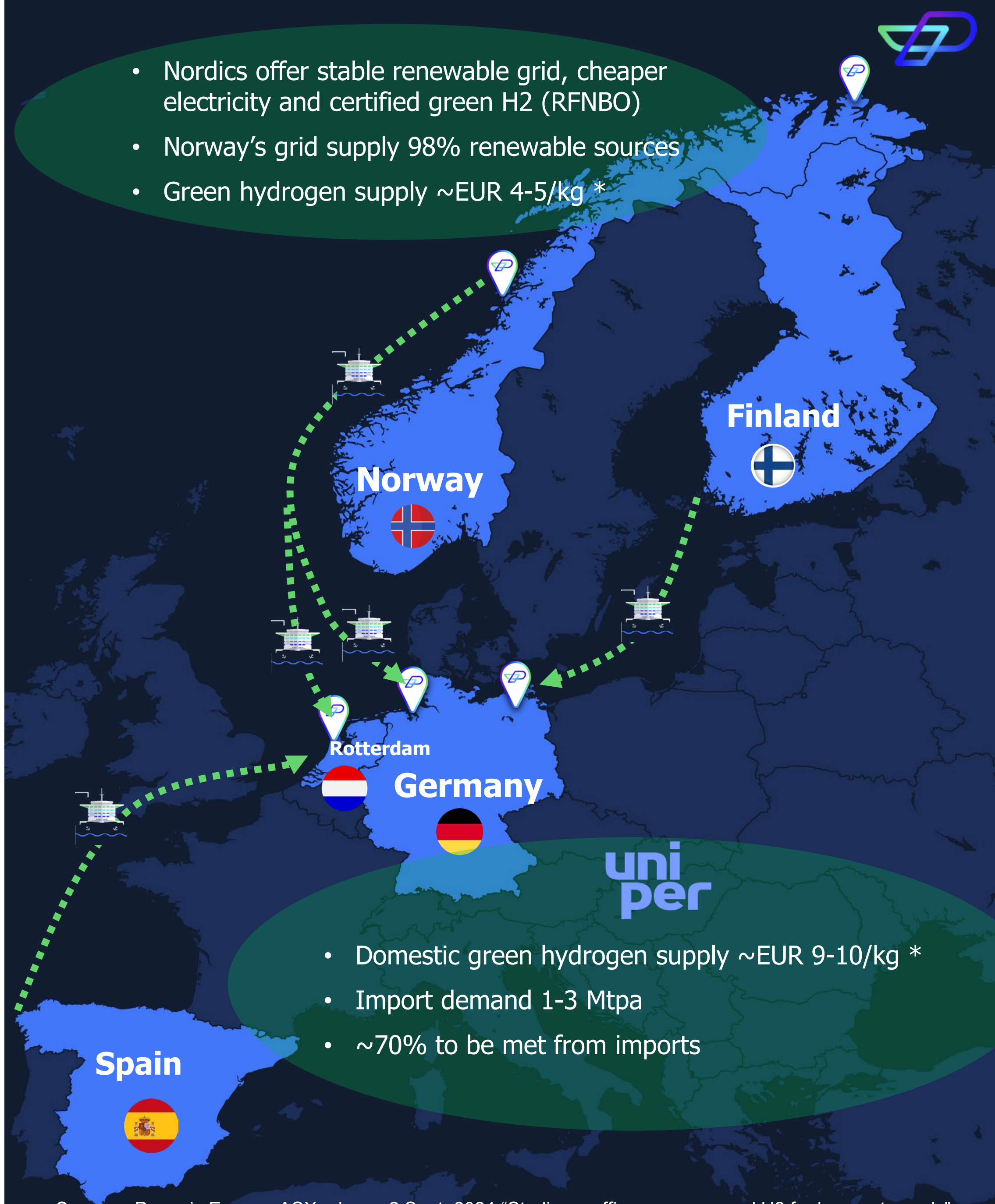
Key Milestones

2025

- Q2: Non-binding Term Sheets for supply & shipping
- Q2-Q4: Binding HPA & Shipping Agreements

2026

- First Project FID
- Newbuild orders
- License Fees



Source: : Provaris Energy, ASX release 2 Sept. 2024 "Studies reaffirms compressed H2 for low cost supply"
Source: Provaris Energy; BloombergNEF

Breakthrough term sheet with Uniper and Norwegian Hydrogen

42,500 tpa RFNBO-compliant hydrogen – Supply, Shipping & Offtake Framework Agreed

H2 Supply, Compress, Load	H2 Shipping	H2 Import

Norwegian Hydrogen

Hydrogen Supply

- **Norwegian Hydrogen responsible for supply**
- **42,500 tonnes per annum**
- **RFNBO compliant H2** based on EU regulations
- *FEED decision pending Power Capacity Reservation*

Storage & Transport

- **Provaris to provide H2 barge & carriers and arrange shipping**
- 2* H2Neo carriers and 1* H2Leo barge for storage and round-trip transport
- Long-term charter aligned to Hydrogen SPA tenure (10-15yrs)
- **Target newbuild order 2026 to trigger License and Origination Fees.**

uniper

Hydrogen Offtake

- **Uniper to offtake volumes, nominate import location**
- 10-year term (+5 yr options);
- Fixed price DAP; Take-or-pay obligations
- First cargos early 2029

Source: Norwegian Hydrogen AS

De-risking Milestones in 2025

June 2025: Binding Hydrogen SPA (conditional)

June 2025: Key Terms for Shipping Time-Charter;

December 2025: Shipyard LOI & Newbuild capex; Unconditional Hydrogen SPA

'Capital Lite' model enables early recurring revenue without large-scale capex

Upfront license fees + equity share in fleet, without owning ships

For each supply project

$$

Technology License Fee

5% on Capex for H2Neo carrier & H2Leo barge for our proprietary ship and tank design

- Based on proven LNG tank containment revenue model.
- Provides early cash flow and revenue payments during construction of the H2Neo and H2Leo newbuilds.

Origination Fee

5% as carried equity Ownership Interest in each H2Neo carrier and H2Leo barge

- Experienced shipowners or SPV to finance and operate the fleet.
- **Optional upside:** Provaris can co-invest in future offtake-linked projects.

Illustrative Returns:^ License and Origination Fee Income per supply chain project with a binding 15yr Time Charter for 2 x H2Neo carriers & 1 H2Leo barge. No capital contributions/outlay.

Per Supply Project [1]	Income USD Million	NPV_8 at FID USD Million
Technology License Fee [2]	16.5	14.4
Equity share of Time Charter Fees [3]	18.0	7.9
Total Per Project	**34.5**	**22.3**
	~54 (AUD M)	*~35 (AUD M)*

^ Notes:
1. Supply Project comprises of 2 x H2Neo carrier and 1 x H2Leo barge. All fees allow delivered cost estimates negotiated for delivered cost to be maintained in Term Sheet discussions.
2. The technology license fee is based on Clarksons Norway AS market knowledge on LNG tank containment license fees and industry charter models. Fee is based on newbuild price of USD 125 million per H2Neo carrier and USD 80 million for H2Leo barge. Fee payable in milestones over 30 months from signing Shipbuild Contract. Fees are pre-tax.
3. Based on an illustrative charter model developed with Clarksons Norway AS, which estimates a 'Bareboat Charter' rate of ~USD 51,000/day for each H2Neo carrier and USD 32,000/day for H2Leo barge (excluding O&M, commissions, port fees and fuel consumption) to deliver shipping investors a target levered equity rate of return of ~15%, over 15 years, 70% gearing. FID 2026. Fees are pre-tax.
4. Undiluted 687 M ordinary shares on issue. Pre-tax.

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Provaris and Yinson innovating CO2 storage and transport

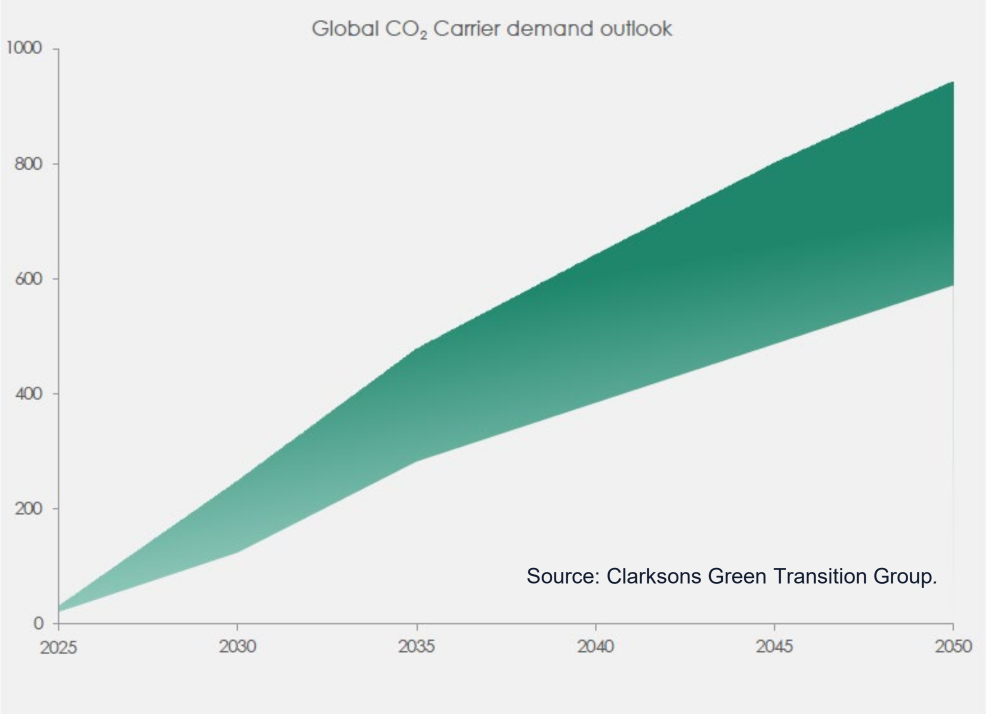
New tank designs in LCO2 transport at low pressure and temperature to **maximise storage and efficiency to reduce storage and transport costs**

YINSON Production

Leveraging Provaris IP to fast-track CO2 tank design

- Yinson Production AS: Global energy infrastructure leader (FPSOs, renewables)
- USD 1.6 B growth funding raised in 2024
- Joint Development Agreement to deliver bulk liquid CO_2 tank for floating, onshore, and ship-based storage
- Industry bottleneck: CO_2 tank capacity limited to ~7,500 cbm
- Targeting major gains in storage volume and reduced storage costs
- **March 2025: successful completion of Concept Design phase, including USD 200,000 technology fees.**
- **June-2025 milestone: Class-level integration of new tank design with Floating Storage Injection.**
- **Ongoing fees payable to Provaris.**

Rising Demand for LCO2 Carriers to 2050[1]



LCO2 tank design offers Provaris growth in Technology License Fee for floating storage, shipping, and land-based storage solutions

Provaris can be first to market for hydrogen, with a model that is clear and scalable, and growth from CO2 program

Multiple catalysts targeted for first-half 2025

Tri-party Collaboration
Uniper and Norwegian Hydrogen

Term Sheet for Hydrogen SPA	**January 2025** ✓
Binding Hydrogen SPA	June 2025
Key Terms for Time Charter	June 2025
Unconditional Hydrogen SPA	December 2025

Second Collaboration Underway
Norway Supplier & German Utility

Term Sheet for Hydrogen SPA	**June 2025**
Binding Hydrogen SPA	December 2025
Key Terms for Time Charter	September 2025

H2 Pipeline Opportunities

Spain: qualified discussions with developers and offtakes.

Finland: collaboration to identify suitable export sites

LCO2 Tank Development

Finalise Concept Design	**March 2025** ✓
Phase 2 integrate with Floating Vessel	June 2025
Ongoing Fees to Provaris	

Prototype Tank & H2Neo Class Approvals

Equipment Site Lease executed, and **Equipment Purchase Agreement** from Secured Lenders and Staffing to enable restart.

Restart of welding target Q2 2025

Complete Testing & Approvals aligned with binding shipping agreements by Q3 2025

Production Facility, located in Fiska, West Coast Norway

Uniper delegation to Fiska, Norway; August 2024

PROVARIS

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Appendices

www.provaris.energy

Board & Management

Effective team with experience in energy and gas infrastructure, utilities, ship newbuilds, operations, and capital markets

Martin Carolan

Managing Director & CEO

Commercial & Capital Markets

AUSTRALIA / NORWAY

Greg Martin

Chairman

Energy,, Infrastructure, Governance

AUSTRALIA

Andrew Pickering

Non-executive Director

Shipping, Newbuilds, Tankers, LNG

AUSTRALIA

David Palmer

Non-executive Director

Shipping, Commercial, Financing

ENGLAND

Per Roed

Chief Technical Officer

Newbuilds, Tankers, LNG, Ports, Operations

NORWAY

Mats Fagerberg

Business Development

Commercial, LNG, Shipbroking

PORTUGAL

Garry Triglavcanin

Product Development Director

Engineer, LNG, Project Development

AUSTRALIA

Norman Marshall

Group Commercial Manager

Legal, Commercial, Finance

AUSTRALIA

John Stevenson

Group Financial Controller

Accounting, Finance

AUSTRALIA

Jessica Roed

Operations Manager, Norway

Shipping, Logistics

NORWAY

Supported by world-class technical partners, advisors and industry organisations:

CLARKSONS DNV ABS Northern Marine WÄRTSILÄ CAPILANO MARITIME DESIGN Norsk Hydrogenforum Norwegian Energy Partners AHK

Corporate Overview – Provaris Energy Ltd

Australian public company, listed on the Australian Stock Exchange (PV1)

Capital Structure

Ordinary Shares on Issue (PV1.ASX; WS90.BE)	693 M
Market Capitalisation (at 1.2c)	A$ 8 M
Cash (December 2024)[1]	A$ 1.4 M
Macquarie Bank – Available Standby Bond Facility [2]	A$2,500,000
Convertible Bonds On Issue [2]	A$235,000
Unlisted Options [3]	40.9 M

1. Refer to December 2025 quarterly report.
2. A$3 million Two-year standby facility with Macquarie Bank, announced 3 May 2024.
3. Unlisted Options: 23.75M at 7.5c, Expiry March 2026; 8.2M at 7.5c Expiry Jul 2026; 4M at 6.6c, Expiry May 2027

Shareholding (Undiluted)

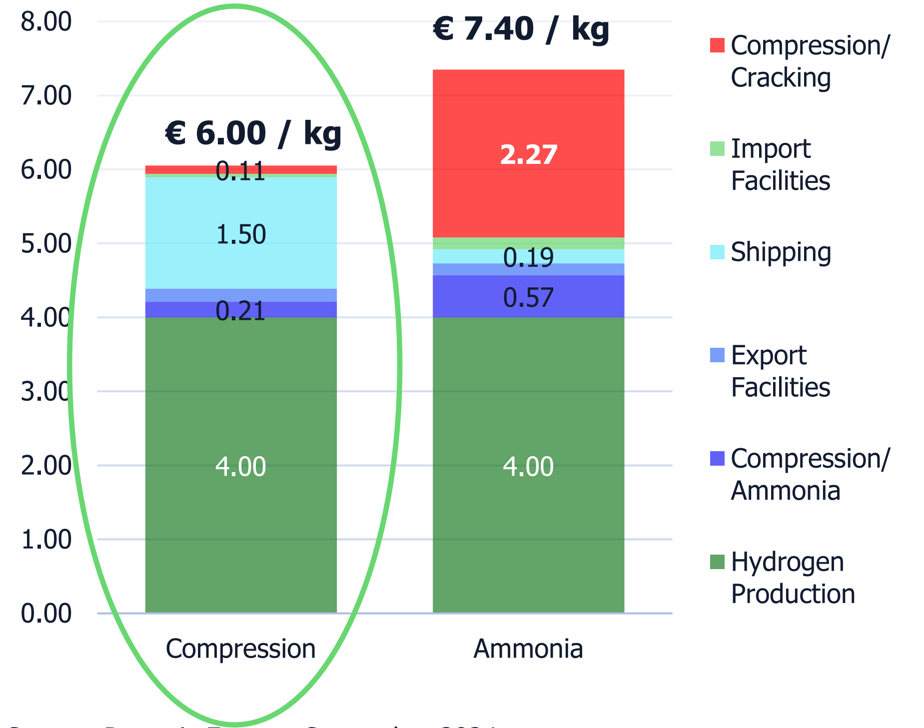
Regal Funds Management	5.7%
OC Funds Management	4.9%
Board & Management	6.0%
HNW/Family Office	15.0%
Total top 20	**40%**
Total top 50	**53%**

Offices in Sydney and Oslo

Industry analysis for delivered costs of green hydrogen reinforce the cost advantage of compression

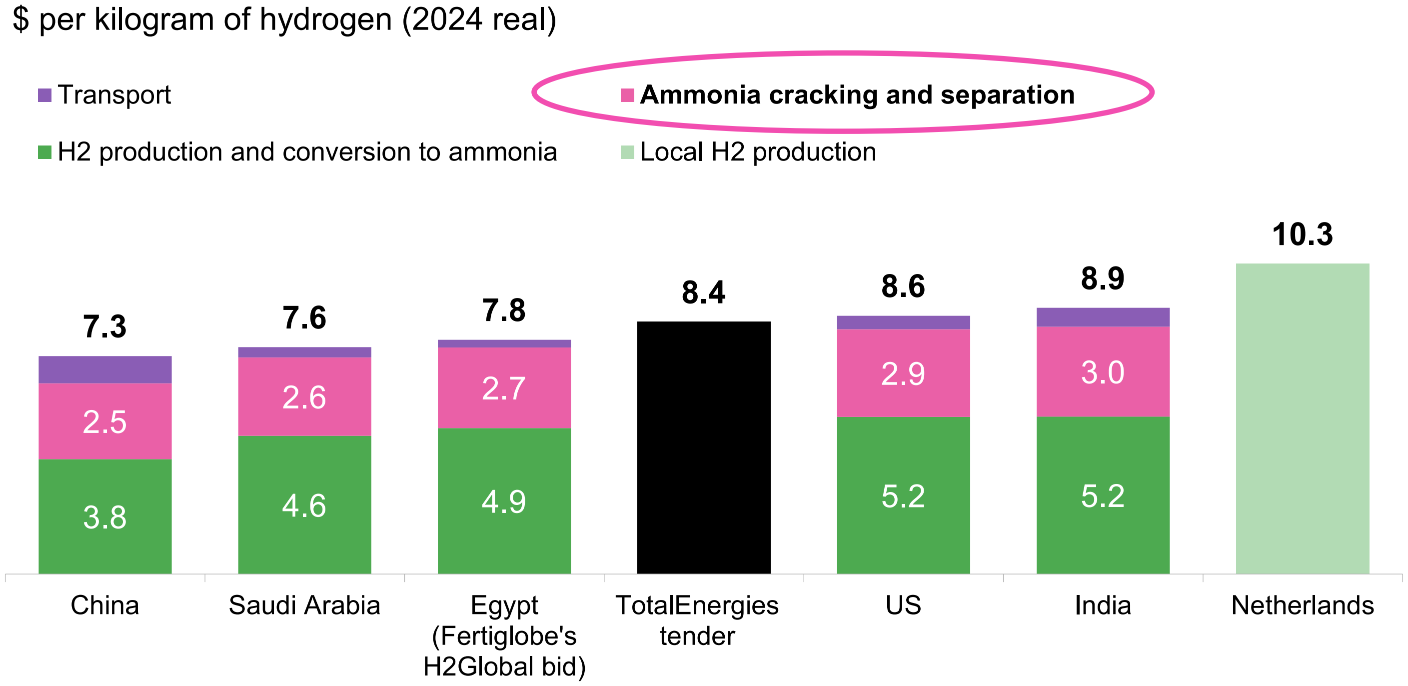
Provaris' studies demonstrated leadership in our understanding of the 'real' costs of delivered hydrogen

Nordic Grid Supply of Hydrogen to Germany
(€/kg; 20 Yrs / 12% Project IRR)



Source: Provaris Energy, September 2024

Cost of green hydrogen cracked from imported ammonia in 2028 versus local green hydrogen production costs in the Netherlands



Source: BNEF, February 2025

Understanding of the complete value chain costs for ammonia is resulting in an increase in demand for compressed hydrogen to be assessed for hydrogen supply

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Europe continues to prioritise hydrogen for the energy transition with 50% of supply will come from imports

Europe continues to establish policy and funding initiatives to stimulate supply and demand

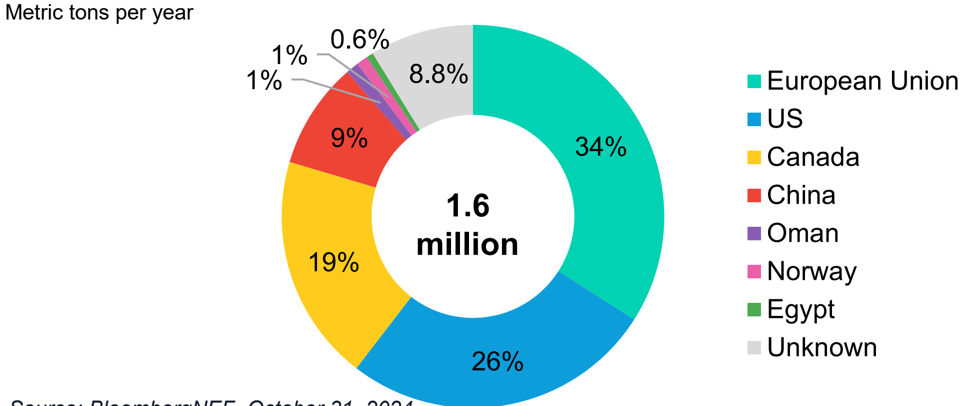
- **Policy and legislation mandating decarbonization** of hard-to-abate industries requires hydrogen (by 2030)

Steel Glass Smelters | Refineries | Power Generation | Mobility (HDVs, Maritime)

- **EU committed €138 billion to support industry** (Innovation Fund; Horizon Europe; EU Hydrogen Bank; H2Global)
- **Legislation sets quotas for use of green (RFNBO) hydrogen,** with subsidies only available for green hydrogen
  - Renewable Energy Directive (RED III) driving demand with 42.5% of hydrogen by 2030 must be RFNBO compliant
- **'Core H2 network' for transport infrastructure** under development connecting ports and industrial users, with €18 billion private investment committed
- **EU Taxonomy** to increase demand for green hydrogen produced regionally (CBAM creates a favourable environment for regional hydrogen, increasing subsidies for regional green H2)

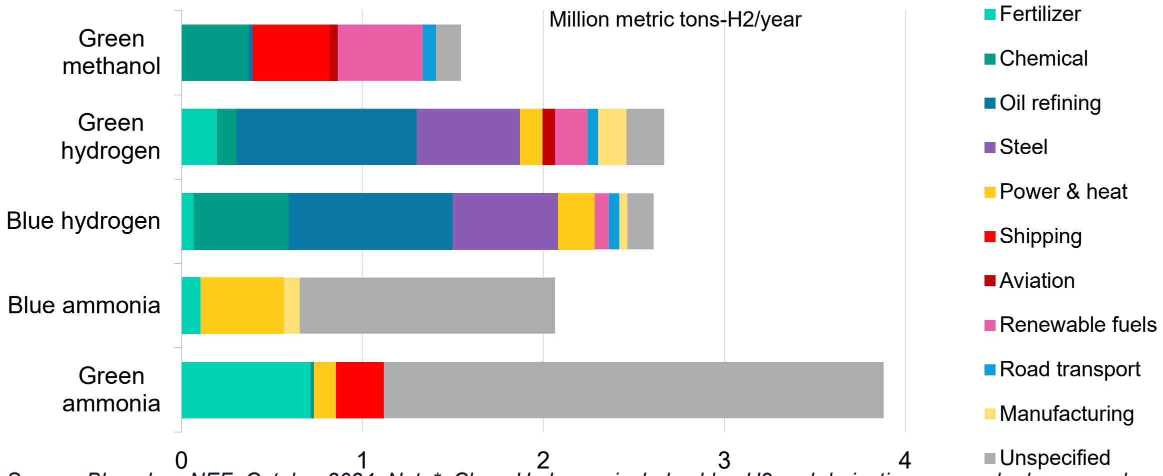
"Meeting German demand solely through domestic supply would neither be technically nor economically viable". Germany' NHS 2023

Europe is the largest market for binding offtake



Source: BloombergNEF, October 31, 2024

Clean hydrogen* binding offtake by type & end use (Global)



Source: BloombergNEF, October 2024. Note: Clean Hydrogen includes blue H2 and derivatives, green hydrogen and derivatives.*

European infrastructure advancing to receive imports end of 2028

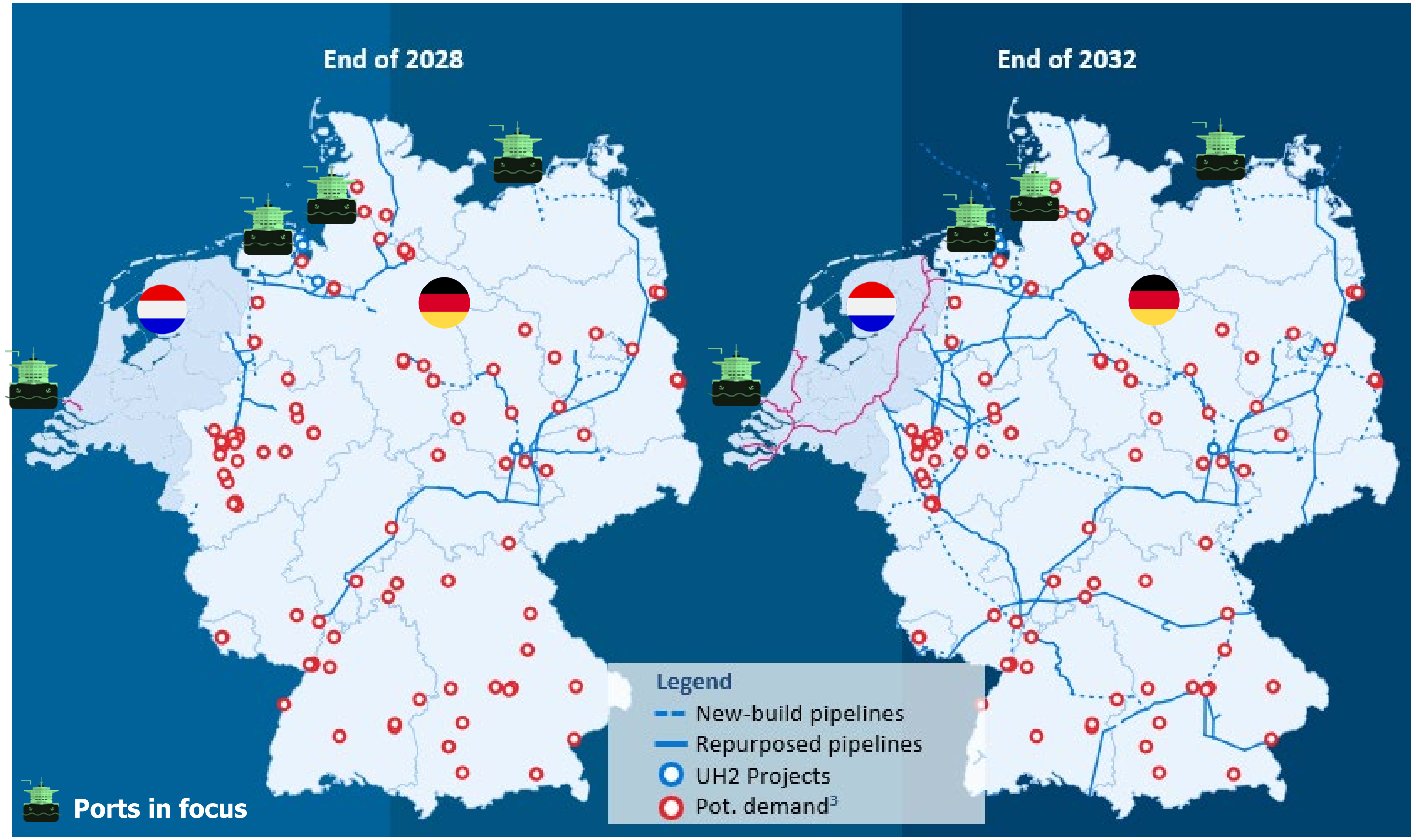
Provaris is in dialogue with ports, terminal operators and "TSOs" in Germany and the Netherlands to qualify an integrated network by 2030 to support imports to industrial hubs. **Collaboration with GES for Rotterdam import terminal.**

German backbone

- Approved 'Core Network' for construction at the end of 2024.
- TSOs with projects estimated for 2028 have taken FID.
- Total investment of €18.9 billion committed by TSOs, with €3 billion support by German state-aid.
- Tariffs to be published in 2025.

Dutch Backbone

- New rollout plan published late 2024.
- Phased development starting with Rotterdam, and DRC now expected 2032.
- Investment €3.8 Billion, with tariffs to be announced 2025.



Notes:
Germany Hydrogen Core Network by Bundesnetzagentur, October 2024
Netherlands draft Hynetwork, December 2024
The future potential hydrogen demand in energy intensive industries – a site-specific approach applied to Germany, Energy Conversion and Management, 2022.

Provaris and GES partner in developing a bulk-scale hydrogen import facility within Rotterdam's global energy hub

- Supported by Bluewater Energy and White Deer Energy, leaders in new energy storage operating four storage assets
- Strategically located in the world's largest energy terminal an established H2 market hub
- Located next to the HyNetwork H2 pipeline under construction with access to road, rail and barge for port-wide distribution
- Pre-feasibility study and co-marketing for during 2024
- Targeting **full** access to European markets by 2028

GES GLOBAL ENERGY STORAGE

www.gesgroup.global

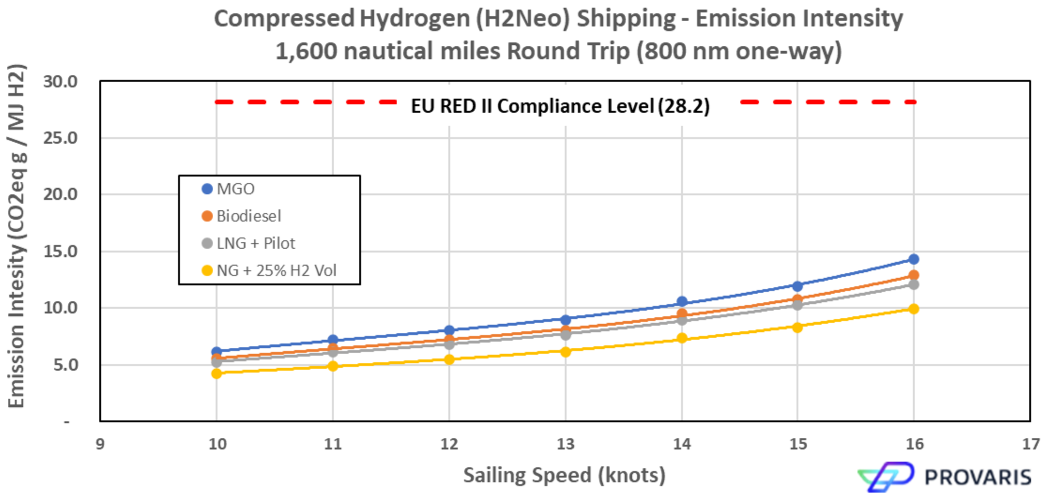
GES will finance and own the multi-product terminal, with operations targeted for 2028

RED II Compliance demonstrated for Compressed H2 supply chain

Compressed hydrogen supply comfortably below the stringent requirements set forth by the EU's RED II and RFNBO, based on 1,600 Nm round trip, Norway to Germany

Required carbon intensity for EU REDII compliance	**28.2 g CO_2e/ MJ H_2**
Estimated carbon intensity emission level for H2Neo	**7.6 g CO_2e/ MJ H_2**

Emission intensity results illustrated below vs. speed for differenting fuel types:



WÄRTSILÄ

> **Supporting analysis from Wärtsilä** in estimating the CO_2e emission per kg H_2, including methane slip values from test bed.

> **Selection of available hybrid electric propulsion plant with modern 4-stroke LNG Dual Fuel generating sets**. Options for future hydrogen blending also assessed based on existing generator set options, and further for when fuel cell / and generating set technology matures.

> **Carbon (equivalent) intensity** estimated for proposed "LNG +pilot" propulsion plant over a 1,600 nautical mile roundtrip; typical sailing speed of 13 knots.

> **Further 20-30% emission reduction identified** through future technology including 3,000 kW hydrogen fuel cell into the propulsion plant.

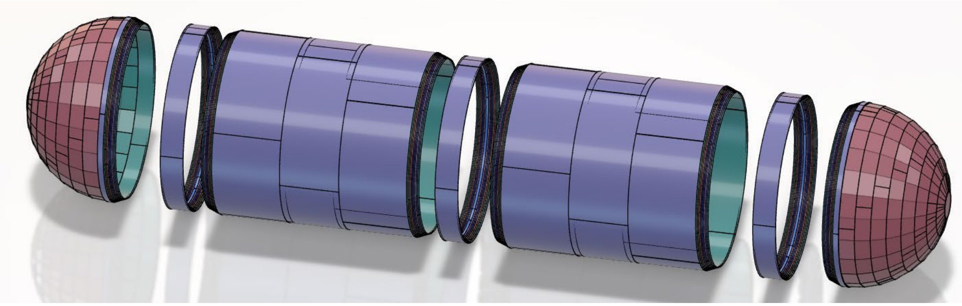
Choice of automated robotic laser welding to 'crack the code' on low-cost storage tanks through industrial scale production

Use of proven laser-hybrid welding procedures and materials approved for use by DNV for marine and industrial applications

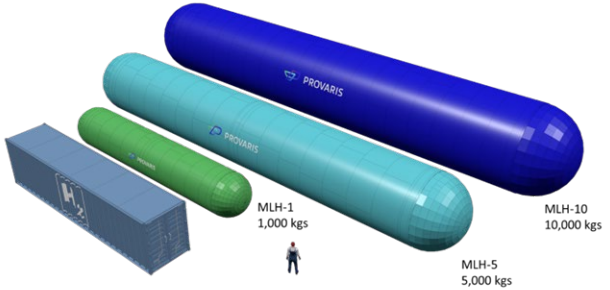
- Increased productivity (~20x vs manual TIG)
- 100% quality assurance (NDT)
- Reduction in construction costs
- Reduced heat & energy costs
- Reduction in CO2 footprint
- Extends IP to new applications (tanks 1-5t capacity from the same production cell)

Fiska, Norway

Construction of a prototype scaled tank underway, following by fatigue and pressure testing to achieve Class Approvals



Prototype Tank Specifications:
2.5m * 11m
650 kg H2 capacity at 250 bar
Constructed as 4 sections and then joined for final assembly
8 layers of 10mm Carbon Steel;
Internal liner of 3mm Stainless Steel.



Small Scale Tanks:
Layered carbon steel
Phase 1: 1 to 5 tonne capacity (2.5m diameter)
Phase 2: 10 tonne capacity (4m diameter)

Supported by:
DNV
ABS
SINTEF

PROVARIS

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