

# Shareholder Letter

Dear Provaris Shareholder,

Given the focus of recent ASX announcements on our Prototype Tank program, we take this **opportunity to update shareholders on Provaris' commercial activities in the hydrogen sector**. We would like to reassure our shareholders that engagement with both hydrogen suppliers and off-takers continues to grow in 2024. There is increasing interest in developing future hydrogen supply chains using Provaris' unique compressed hydrogen storage and carriers. Our partners remain supportive of our development plans.

In recent weeks, Provaris' Management team has made material progress through workshops and analysis, focusing on the scope and objectives under existing MOUs and collaborations announced in recent months. This work supports our unique and innovative approach and intellectual property (IP) for compressed hydrogen, positioning it as a viable alternative for the regional supply of gaseous hydrogen to Europe. Each agreement is moving towards 'binding level' commitments which will clarify the scale of commercial returns and timelines.

Additionally, we are advancing through technical and economic due diligence processes with several new parties interested in committing to collaborations and partnerships. This supports our view that there is an increasing interest in Provaris' compressed hydrogen storage and marine transport solutions.

Our goal by 2030 is to develop ~1.5 GW in hydrogen supply chains, transporting ~250,000 tonnes of hydrogen regionally to Europe. This would involve a total fleet of 10-15 H2Neo carriers based on Provaris' proprietary technology and design.

## The key drivers that make our approach relevant to the hydrogen market in Europe include:

- **Critical need for Bulk-Scale Storage and Transport Solutions:** The demand for safe, efficient and cost-effective storage and transport solutions 'at bulk-scale' is essential to meet regional and global hydrogen supply and use ambitions. Provaris is uniquely focused on compression, a proven technology, for this purpose.
- **Scarcity of Gaseous Hydrogen Export Projects:** There is a lack of supply projects producing gaseous hydrogen for export. Most supply projects targeting production and export this decade are focussed on hydrogen derivatives such as ammonia or methanol, which service separate industrial markets.
- **Unique IP and Compression Efficiency:** Our unique IP combined with the simplicity and efficiency of compression, results in a lower delivered cost of hydrogen. For instance, a grid connected site in the Nordics utilising compression, increases the energy efficiency, allowing for the production and delivery of more hydrogen with lower capital intensity, thus reducing the overall delivered cost.
- **Alignment with German Utilities:** German utilities are focussed on a portfolio of H2 supply alternatives, including regional projects that can supply gaseous hydrogen at a price and scale that align with their customer demands and timing requirements.

## As a reminder, significant work over the past 12 months has positioned Provaris to advance our hydrogen supply chain model through to several commercial agreements with partners in the first half of this year, including:

- **Three Memorandum of Understanding (MOUs) with German Utilities:** We have secured MOU's with three German utility companies seeking alternatives for the supply (import and offtake) of hydrogen for their own demand and delivery to industrial customers. One named partner is Uniper Global Commodities, with whom we are now at a stage of sourcing a suitable H2 supply project(s) to advance development of a full supply chain. Collectively all three utilities have announced a combined budget of 60 billion Euros for the Energy Transition by 2030.
- **Collaboration with Global Energy Storage (GES) for a dedicated import terminal:** We are working with GES to establish a dedicated compressed hydrogen import facility at the Port of Rotterdam, providing access to the European market and connection to the European Hydrogen Backbone (already under construction in Rotterdam). Feasibility studies and co-marketing activities are underway, targeting operation by 2028. GES will finance and own the terminal.



- **Partnership with Norwegian Hydrogen:** We are collaborating with Norwegian Hydrogen to develop large-scale green hydrogen projects in the Nordics, focusing on Norway, Finland and Denmark. This agreement includes joint development roles and equity participation in hydrogen supply projects.
- **Beyond the Nordic region for supply:** we are observing renewed interest from Iberian developers of hydrogen production sites who are conducting due diligence on the shipping of compressed hydrogen to sites in Europe.
- **Work with OEMs for Compression Facilities and Concept Design:** We have collaborated with OEM's to refine the compression design plants and requirements, both installed capacity (MW) and energy use (kWh), for the loading and unloading of compressed hydrogen to/from Provaris' H2Neo carrier and H2Leo storage barge.

As highlighted above, we continue to see increasing focus and interest in Provaris' solutions for storage and transport of hydrogen with new opportunities that we hope to translate into agreements that will be announced upon completion.

While our target for Class Approvals remains 2024, the critical path for many of our engagements often hinges on the investment decision of a hydrogen supply project, bankable offtake or distribution network in the target market, rather than solely the readiness of a shipping solution for operation. That is why we are developing a portfolio of supply chain opportunities and partners.

**Analysis continues to demonstrate compelling economics of Compression vs Ammonia supply chains for grid connected sites in the Nordics, highlighting the benefits for German Utilities seeking a regional supply of gaseous hydrogen.**

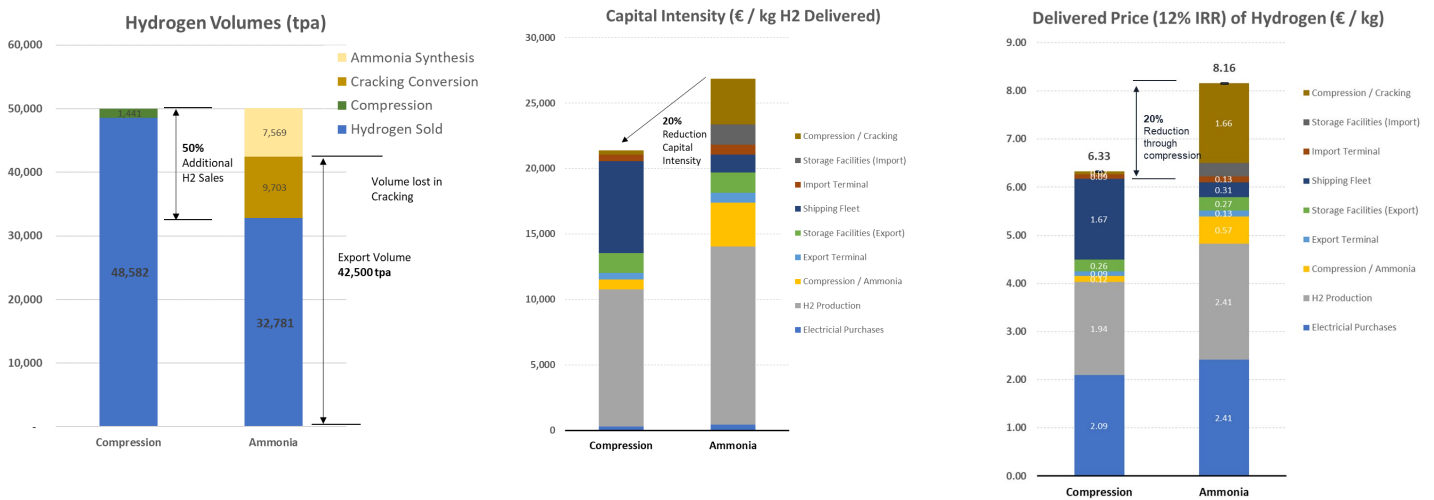
Provaris continues to optimise its analysis to showcase the economic and commercial advantages of a compressed hydrogen supply chain from regional grid connected sites in the Nordics, delivered as gas to the core hydrogen network in Europe.

The key outcomes for compression for a 300MW grid connected site, when compared to the ammonia supply chain:

- ✓ **50% More Gaseous Hydrogen delivered:** Compression delivers 50% more gaseous hydrogen to the customer.
- ✓ **20% Lower Delivered Cost:** The cost is reduced by approximately 20%, offering a discount of around €1.80/kg.
- ✓ **20% Reduction in Capital Intensity:** Capital intensity is decreased by 20% per kilogram of hydrogen delivered.
- ✓ **Significant Increase in Value:** The value and returns of grid connected sites can increase materially (5-10x).

Nordic sites can address the scarcity of gaseous hydrogen molecules required to scale up supply for industrial sectors in Germany. The low volumetric density of hydrogen is offset by a substantial increase in energy efficiency - 97% for compression compared to 65% for ammonia when delivered as gas.

The figures below summary results of comparative analysis.



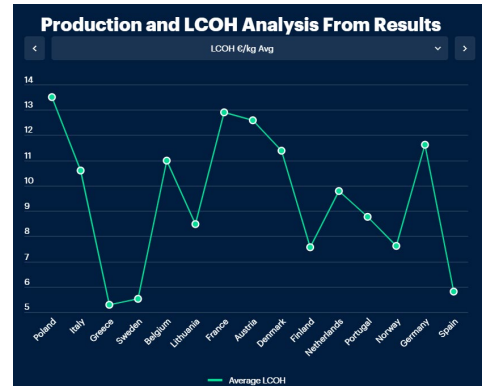
**The recent results from the Hydrogen Bank pilot auction underscore the potential for low-cost hydrogen supply from the Nordics and Iberia, particularly when combined with our shipping solutions**

On 30 April 2024, the European Commission announced the results of the first EU Hydrogen Bank auction. These results provide market participants with valuable price information to support future supply projects when bidding in the next program in Q4 2024.

In total, €720m was allocated across seven projects to support 1.5 GW of electrolysis capacity, which is expected to produce 1.58Mt of hydrogen over 10 years, or approximately 158,000 tonnes per year. Notably all seven projects, out of 132 project submissions, were located in either Norway, Finland, Spain or Portugal. This highlights a competitive Levelised Cost of Hydrogen (LCOH) range of €6-8/kg at scales ranging from 1.7ktpa to 51ktpa, and again supports Provaris’ regional focus. We note these costs are for H2 site production only, and exclude any midstream transport costs.

For more information, refer to a summary report: ICIS Explains: EU Hydrogen Bank pilot auction results

<https://www.icis.com/explore/resources/news/2024/04/30/10994621/icis-explains-eu-hydrogen-bank-pilot-auction-results/>




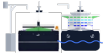


**Norway remains a strategic focus for Provaris due to the advancement of compressed hydrogen projects and developments within shipping, transport and industrial applications. Recently, Enova SF, a Norwegian Government agency, awarded 1.2 billion NOK (~USD 120 M) to six shipping companies for the construction of 9 hydrogen and 6 ammonia fuelled ships. This funding supports the integrated development of compressed hydrogen as fuel for maritime transport, including hydrogen supply, hydrogen storage and fuel gas supply systems, and hydrogen storage and bunkering hubs in Norway.**

The funding allocation is the largest by Enova to the shipping sector and comes from the Climate and Energy Fund, with the purpose of establishing the first functioning value chains for ammonia and hydrogen for maritime purposes and bunkering, with complimentary funding programs underway for supporting hydrogen production and supply and bunkering infrastructure. While Provaris did not make an application in this round, given the timing and requirements of the program, we are highly encouraged by the outcome as it demonstrates a desire by the Norwegian Government to support the development of hydrogen for maritime use.

Furthermore, we also see the potential of each hydrogen fueled ship successful in the recent tender as a potential customer for our hydrogen bunker tanks under development, and ready for market subsequent to successful prototype testing.

**Provaris’ unique business model provides multiple revenue streams and value creation opportunities across the hydrogen supply chain, positioning us for sustained growth and success in 2024 and beyond.**

The Board and Management team, who are collectively material shareholders, remain committed to the Company’s goals for 2024. They are confident in the future development of our IP and solutions, which are aligned with delivering long-term value returns and driving shareholder value in the near term.

Operating Segment	Potential Revenue Stream
 Hydrogen Production for Export	Equity share in hydrogen production assets
 Bulk Storage and Shipping Solutions	License fees from Owners for H2Neo ship design Share of cash flow from long-term charter agreements
 Small Scale Industrial Storage Tanks	License fees for proprietary designs for hydrogen and other liquid or gasses. JV ownership for hydrogen tank production and sales
 Port and Distribution	Long-term supply agreements for hydrogen to underwrite investment in supply chain assets

Finally, we want to thank all shareholders for their continued support in the Company and we will continue to communicate to shareholders through our Investor Centre and social media channels. Also, you can send any enquiries directly to the Company at our contact details below.

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**This announcement has been authorised for release by the Chief Executive Officer of Provaris Energy Ltd**

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## About Provaris Energy

For more information: [www.provaris.energy](http://www.provaris.energy)

Provaris Energy Ltd (ASX: PV1) is an Australian public company developing a portfolio of integrated green hydrogen projects for the regional trade of Asia and Europe, leveraging our innovative compressed hydrogen bulk storage and carrier. Our focus on value creation through innovative development that aligns with our business model of simple and efficiency hydrogen production and transport can establish an early-mover advantage for regional maritime trade of hydrogen and unlock a world of potential. In August 2022 Provaris Norway AS was established to advance the development of regional hydrogen supply in Europe.

**Disclaimer:** This announcement may contain forward looking statements concerning projected costs, approval timelines, construction timelines, earnings, revenue, growth, outlook or other matters ("Projections"). You should not place undue reliance on any Projections, which are based only on current expectations and the information available to Provaris. The expectations reflected in such Projections are currently considered by Provaris to be reasonable, but they may be affected by a range of variables that could cause actual results or trends to differ materially, including but not limited to: price and currency fluctuations, the ability to obtain reliable hydrogen supply, the ability to locate markets for hydrogen, fluctuations in energy and hydrogen prices, project site latent conditions, approvals and cost estimates, development progress, operating results, legislative, fiscal and regulatory developments, and economic and financial markets conditions, including availability of financing. Provaris undertakes no obligation to update any Projections for events or circumstances that occur subsequent to the date of this announcement or to keep current any of the information provided, except to the extent required by law. You should consult your own advisors as to legal, tax, financial and related matters and conduct your own investigations, enquiries and analysis concerning