

APPROVAL MILESTONE FOR INNOVATIVE COMPRESSED HYDROGEN SHIP

HIGHLIGHTS:

- **American Bureau of Shipping (ABS) issued its Approval in Principle (AIP) for GEV's pilot compressed hydrogen ship with a 430-tonne cargo capacity.**
- **GEV's compressed hydrogen ship is a safe, energy efficient and cost competitive hydrogen carrier to advance the commercialisation of multiple hydrogen greenfield export projects proposed or under development.**
- **Commercialisation opportunities for hydrogen transport using the GEV pilot ship, include the recently announced MOU with the HyEnergy project in Western Australia.**
- **Successful AIP demonstrates GEV's high standards of design and adherence to international standards and certification rules for bulk gas carriers.**
- **GEV will now work with ABS to progress the various engineering steps towards Approval for Construction.**

Global Energy Ventures Ltd (ASX: **GEV**, the **Company**) is pleased to announce that ABS has issued its AIP for the Company's pilot-scale compressed hydrogen ship, based on a cargo capacity of 430 tonnes of hydrogen.

Martin Carolan, Managing Director and CEO commented: "GEV is pleased to report that we have received AIP from ABS for our pilot scale 430-tonne hydrogen ship, which follows AIP received earlier this year for our innovative compressed hydrogen ship with a 2,000-tonne capacity. ABS is a leading classification society for gas carriers and GEV is looking forward to working with them to ensure that our compressed hydrogen ships continue to meet the highest safety standards."

Marine storage and transport solutions are required for hydrogen to contribute to global decarbonization ambitions. Efficient, safe and cost competitive marine transport solutions for high purity hydrogen are required before 2030 to enable the development of greenfield hydrogen supply chains at scale. GEV views the compressed hydrogen ship as a competitive carrier and the ideal scale to advance the commercialisation of several hydrogen greenfield export projects proposed or under development."

HIGHLY FUNCTIONAL AND SUSTAINABLE HYDROGEN GAS CARRIER

The pilot scale compressed hydrogen ship is a highly functional Handymax sized gas carrier, designed to support the requirements of greenfield hydrogen projects being established for export by the mid-2020s. Handymax sized ocean-going ships are relatively small and able to enter most ports. The ship is equipped with an electric drive propulsion system, using Wartsila's highly efficient dual fuel (natural gas and hydrogen) engines powering generators coupled to two electric drive fixed pitch propellers. The ship can also be equipped with dynamic positioning (DP) to allow it to hold its position using bow and aft thruster systems. This DP system will support safe and efficient offshore loading operations. GEV is also working with Ballard Power Systems to ultimately power the ships with marine fuel cells using 100% hydrogen, providing a zero-carbon shipping solution.

RECEIPT OF AIP DE-RISKS PATH TO COMMERCIALISATION

Extract from the AIP: ABS has reviewed GEV's design in accordance with the 2020 ABS Guide for Vessels Intended to Carry Compressed Natural Gases in Bulk, 2021 ABS Guide for Liquefied Gas Carriers with Independent Tanks, 2017 ABS Guidance Notes on Review and Approval of Novel Concepts, 2017 ABS Guidance Notes on Qualifying New Technologies, 2021 ABS Marine Vessel Rules, 2016 IMO IGF Code and 2016 IMO IGC Code, and considers that the proposed conceptual design for the 430 tonnes Compressed Hydrogen Carrier is feasible.

GEV views Class Approval for Construction as the Company's key technical barrier to achieve commercialisation for the compressed hydrogen ship and supply chain, with AIP being the pre-cursor to ABS Approval for Construction. **The receipt of AIP and accompanying road map to Approval for Construction has materially de-risked the path forward to a construction ready milestone.**

GEV will now work with ABS to progress the various engineering phases, with further details to be provided over the coming quarters as material milestones are achieved.

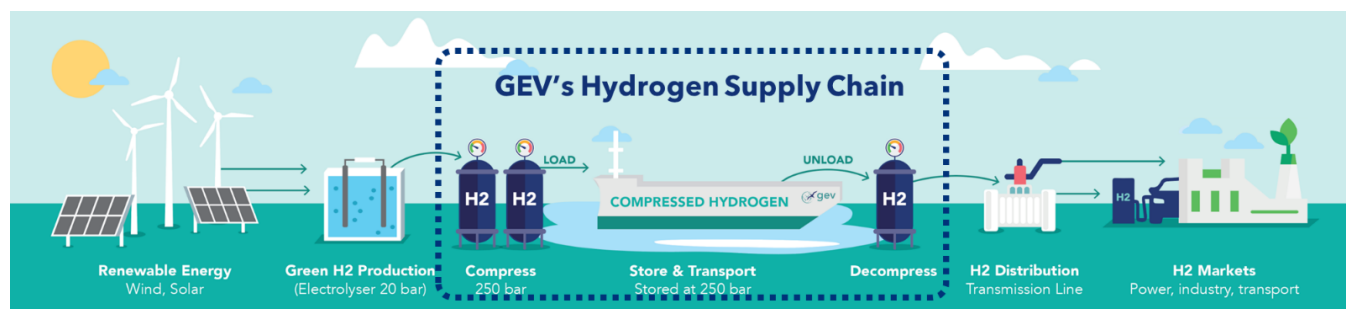
Figure 1: Compressed Hydrogen Ship General Arrangement



ADVANCING COMMERCIALISATION OPPORTUNITIES

The Company's discussion with several hydrogen development projects has reinforced GEV's view that compression can provide a simple and energy efficient shipping solution between hydrogen suppliers and customers up to a shipping distance of 4,500 nautical miles. Many of the outcomes of our Scoping Study released in March 2021 have provided a platform for commercial and technical discussions with third parties and we remain encouraged by the quality of organisations now making direct enquires about compression as an alternative to other carriers being assessed for FEED selection.

Figure 2: Compressed Hydrogen Transport Supply Chain



GEV recently announced its collaboration with the HyEnergy project located on the Gascoyne Coastline of Western Australia. A feasibility study will be undertaken for completion by mid-2022 with the pilot ship to be used as a base case for the transport of green hydrogen to Asia Pacific markets.

Further details are available in the [ASX announcement on 9 August 2021](#)

GEV remains in discussion with several parties about undertaking similar feasibility level studies to gain selection in FEED design for an integrated hydrogen export project.

- END -

This ASX announcement has been authorised by the Board of GEV.

FOR FURTHER INFORMATION PLEASE CONTACT:

Martin Carolan
Managing Director & CEO
T: +61 404 809 019
E: mcarolan@gev.com

For more information visit:
www.gev.com

 @GEVmarineCH2

 +61 8 9322 6955

 19 / 40 St Quentin Ave.
Claremont WA 6010

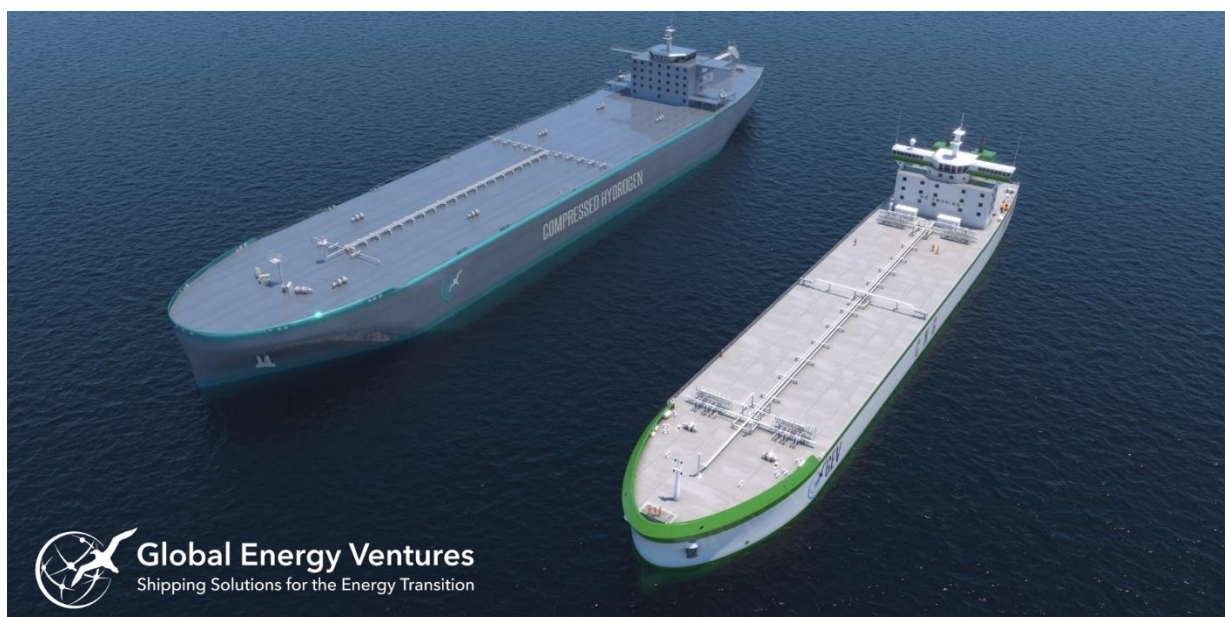
ABOUT GLOBAL ENERGY VENTURES LTD

Global Energy Ventures (ASX: GEV) is an energy transition company with a mission to deliver compressed shipping solutions for transporting energy to regional markets. Our business model is to Build, Own and Operate the production, storage and shipping of natural gas and green hydrogen.

In 2020, GEV introduced the world's first large-scale compressed hydrogen ship and positioned the company as an early mover to fast track the marine transport of Hydrogen. The engineering and design of the compressed hydrogen ship has benefited from the Company's long-standing history in developing compressed gas carriers through to final construction approval.

GEV has demonstrated that the simplicity and energy efficiency of its shipping solution is ideally suited for exporting hydrogen over medium distances (i.e., Australia to Asia-Pacific) providing a lower delivered cost and eliminating the technical barriers of other transport alternatives.

For more details on the Company please visit www.gev.com



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 GEV. The expectations reflected in such Projections are currently considered by GEV 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 gas supply, gas reserve estimates, the ability to locate markets for CNG and hydrogen, fluctuations in gas 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. GEV 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 any transaction or investment or other decision in relation to GEV. \$ refers to Australian Dollars unless otherwise indicated.