



Compression Simplicity Efficiency

ASX / MEDIA ANNOUNCEMENT

29 JANUARY 2021

ACTIVITIES REPORT FOR THE DECEMBER 2020 QUARTER

Global Energy Ventures Ltd (ASX: **GEV**, the **Company**), a leading developer of global integrated shipping projects for compressed natural gas (CNG) and compressed hydrogen (C-H2), is pleased to provide the following update on the Company's development activities for the quarter ended 31 December 2020.

HIGHLIGHTS:

COMPRESSED HYDROGEN SHIP (C-H2)

- Launch of the Compressed Hydrogen ship (C-H2 Ship) positioning GEV as an early mover in the marine transport of hydrogen. The goal is to establish an integrated compressed hydrogen supply chain for the export of green hydrogen from Australia to major energy trading partners across the Asia Pacific region.
- Completion of the C-H2 Ship specification design and general arrangement with the assistance of Capilano Maritime.
- Commenced the engineering and ship classification process with American Bureau of Shipping (ABS) for Approval in Principle, targeted for receipt in the first half of 2021.
- Filed a US provisional patent application relating to the apparatus for the marine storage and transport of hydrogen.
- Commenced a Scoping Study to analyse the supply chain economics and internal energy use of the Company's C-H2 transport solution compared with liquified and chemically bound hydrogen as ammonia, using a range of annualised volume and distances to target markets.
- Several technical suppliers, who are aligning to the hydrogen economy, have provided expressions of interest to support and work with GEV on the development of a C-H2 supply chain.
- Post the quarter, GEV entered into an MOU with Pacific Hydro to explore the export of green hydrogen from the Ord Hydrogen Project using a C-H2 supply chain.

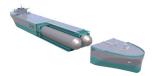
CNG OPTIMUM (CNG)

- In the Brazilian Pre-Salt, GEV received a Request for Information (RFI) for a marine CNG solution from an operator of multiple offshore oil and gas projects. Submission of the report is expected by April 2021.
- The operator represents the second global major oil and gas company engaged in Brazil, with much of the commercial and technical work to be leveraged from the Commercialisation Plan completed by GEV in April 2020.
- Late in the quarter, GEV received several unsolicited requests for a marine CNG proposal for the transport of natural gas in regions outside of Brazil, for which GEV has provided proposals and are now being considered.

Maurice Brand, Executive Chairman and CEO commented: "The December 2020 quarter has been a transformational period for the company with the launch of our Compressed Hydrogen Ship design and supply chain solution. Our goal is to deliver a regional transport solution for compressed hydrogen (i.e. NW Australia to Asia Pacific) that is commercially competitive and energy efficient when compared to alternative transportation methods, namely, liquefied hydrogen and ammonia.

During the first half of 2021, the Company will be focussed on obtaining Approval in Principle from ABS for the C-H2 Ship, which will demonstrate that the C-H2 ship does not have any impediments to the ultimate classification of the vessel. Concurrently, we are also working through a Scoping Study, with the support of GHD, to demonstrate the economic business case for the C-H2 supply chain from Australia. All of this will lead into a busy 2021 for our planned business development activities.

The continued advancements in power rating and efficiency of hydrogen fuel cells, brings closer our goal of making our C-H2 Ship a zero-emission transport solution. We believe this could be the holy grail for transporting green hydrogen to the markets that are now most active in developing a hydrogen economy.





We are also pleased to report our CNG development program has commenced with a second Brazil operator working with GEV to undertake a CNG study. Late in the quarter we also witnessed an improvement in unsolicited inbound enquiries from operators outside of Brazil seeking gas transport solutions that are highly suitable to CNG Optimum."

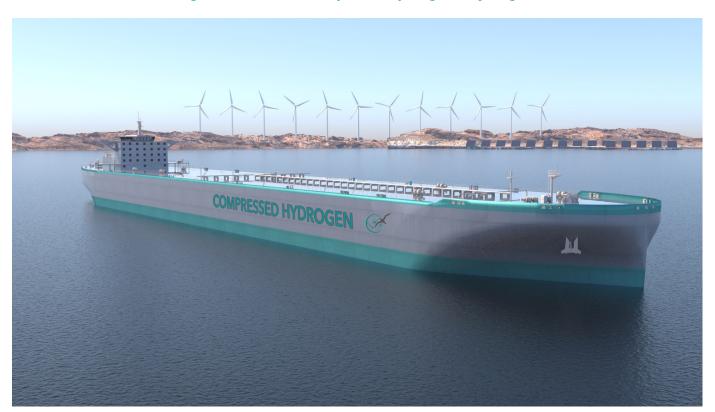


Figure 1: GEV's C-H2 Ship to transport green hydrogen.

COMPRESSED HYDROGEN SHIP (C-H2) & SUPPLY CHAIN

During the quarter, the Company announced the development of a new Compressed Hydrogen ship design to transport clean, renewable energy (ref ASX 14 & 20 October 2020). Hydrogen is set to become the pillar for decarbonising the world's heavy CO_2 emitting industries with a significant number of governments, corporates, and international investors all now aligning their business strategy to focus on the objective of net-zero carbon targets.

Australia is now recognised as a global leader for establishing a hydrogen economy with national and state level strategies in place, major State and Government funding support to follow and an abundance of renewable resources to produce green hydrogen. This recognition has already translated into several bi-lateral agreements with key markets for offtake that include Japan, South Korea and further afield in Germany.

Already there is a growing list of Australian hydrogen projects moving through feasibility to pilot scale in the next 12-24 months for a domestic supply phase, which will be followed by hydrogen exports at greater scale.

It is logical for GEV to expand its expertise in pressure marine vessels to include the transport of hydrogen. This has resulted in the launch of our Compressed Hydrogen ship and supply chain (C-H2) benefiting from the many years of engineering and design work in compression with natural gas.

The company is confident that a C-H2 transport supply chain will be commercially competitive and energy efficient, when compared to alternative transportation methods, such as liquefied hydrogen and ammonia.

A cost-effective engineering and development program is now underway for the completion through the first half of 2021, including:

1. C-H2 Ship specification and general arrangement drawings. Capilano Maritime has been appointed to assist with this work.





- 2. Engagement of American Bureau of Shipping (ABS) for Approval in Principle to demonstrate no showstoppers to ultimate full class approval (the same process successfully undertaken previously by GEV for the CNG Optimum ship).
- 3. Scoping Study including a techno-economic assessment of the supply chain economics and internal energy use of a C-H2 transport solution, as well as liquified and chemically bound hydrogen as ammonia using a range of annualised volume and distances to target markets. GHD Advisory has been appointed to assist GEV in this work.
- 4. A US provisional patent application has been filed relating to the apparatus for the marine storage and transport of hydrogen.
- 5. Identification of suitable Australian based hydrogen projects with export plans to the Asian markets that include Singapore, Japan, South Korea, and China.
- 6. Engagement with globally recognised technical partners to support the C-H2 supply chain.
- 7. Identification and application for state and federal government funding available for the development of hydrogen technologies and export project development.

Figure 2 is an illustration of GEV's C-H2 Ship. The ship and its innovative cargo system are in the patent process and GEV expects to receive broad patent protection for this novel ship, further extending our intellectual property suite.

The containment system will include ambient temperature hydrogen at a target pressure of 250 bar (3,600 psi). GEV's C-H2 Ship will have a storage capacity of up to 2,000 tonnes of compressed hydrogen. Smaller capacity ships will be evaluated by GEV for demonstration purposes based on specific pilot export project requirements.

With the rapid advancement in fuel cell technology for vessels, GEV intends to power the C-H2 Ship using hydrogen directly from the containment system, providing a 'zero-carbon' shipping solution. Discussions have commenced with suitable developers of hydrogen fuel cell systems capable of meeting the ship's power requirements.

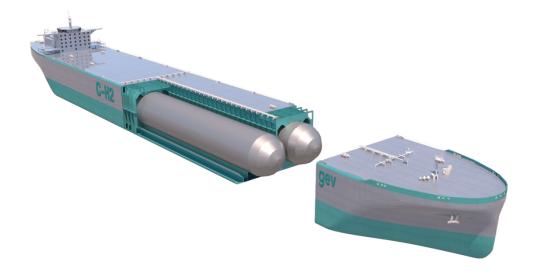
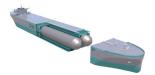


Figure 2: Illustrative ship design - C-H2 Ship containment system

The Company successfully filed a provisional patent application in the USA relating to the apparatus for the marine storage and transport of hydrogen. The provisional application has been made to protect multiple ideas that arose during the design work undertaken in support of the American Bureau of Shipping (ABS) approval process. The inventor is GEV Canada's Chief Technical Officer, John Fitzpatrick. The Company will now work with its advisors on the detailed filing over the coming 12 months.

Finally, with respect to hydrogen projects, the Company has been delighted with the inbound interest from project developers in Australia and further afield in Europe. Further commentary will be made during the March quarter if any discussions materialise into a pre-feasibility level study.





Post the quarter, GEV announced the Memorandum of Understanding (MOU) with Pacific Hydro to engage in discussions and explore opportunities regarding the production, storage, loading, ground and marine transportation, employing GEV's C-H2 supply chain, for the green hydrogen produced by the Ord Hydrogen Project. Further details will be provided in the March quarterly.



Figure 3: Location of the Ord Hydrogen Project & Proximity to Export Markets

CNG OPTIMUM - BRAZIL PRE SALT

During the quarter, the Company commenced the preparation of a technical and economic report in response to a Request for Information (RFI) from a second operator in the offshore Brazil region. The operator has supplied GEV with a scoping document that outlines the key inputs for the evaluation of multiple marine CNG cases, including gas supply points, export volumes, gas specifications, transportation distances, and delivery locations. The scale of the opportunity is significant, with the requirement for a large fleet of CNG ships, over a period of up to 20 years.

GEV will leverage the findings of its Commercialisation Plan undertaken in early 2020 for a Pre-salt Brazil operator. This work involved extensive in-house and third-party engineering to establish the technical viability of continuous gas export utilising a dual STL system, fleet of CNG Optimum ships and dedicated CNG unloading terminal.

GEV will deliver its formal response to the RFI by April 2021, providing the operator with sufficient technical and economic information to support their internal analysis and validation process.

The Company also continues to engage with the operator of the completed Commercialisation Plan in April 2020. An ongoing technical Q&A has predominantly been the focus of discussion, with the next stage of the project expected to re-engage in the first half of 2021.





Figure 4: CNG Brazil Scope of Work



US CNG EXPORT PROJECT

During the quarter, the focus for the proposed US CNG Export Project has been on gas supply and pipeline capacity to GEV's preferred CNG export site and securing markets sufficient to commence phase one, being a minimum of 100 MMscf/d of export volumes. Progress has been slower than planned, with the outcome of key milestones expected in the March quarter to clarify the timing of future development.

CORPORATE

Cash on 31 December 2020 was \$2.1 million (\$2.5 million 30 September 2020). Refer to the separately announced Appendix 4C for further details. Cash expenditure during the quarter was in line with guidance with total operational cash outflows of \$318,143. The Company received a payment of \$171,059 for the 2020 R&D Tax Incentive cash rebate during the December quarter. The forecast operational cash outflow for the March 2021 quarter is not expected to increase materially beyond the recent quarterly run-rate.

The aggregate amount of payments to related parties and their associates included in item 6.1. In the Company's ASX Appendix 4C for the quarter ended 31 December 2020 of \$163,000 comprises fees, salaries and superannuation paid to directors.

The Letter of Intent (LOI) with CIMC Raffles expired on 31 December 2020, and the parties are continuing to work together on CNG project opportunities and at the appropriate time, the parties intend to enter into a revised LOI covering the number of CNG Optimum ships and a schedule of activities leading to the award of a shipping contract.

The Company held its Annual General Meeting on 25 November 2020. All resolutions were passed.

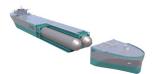
Post the quarter on 28 January 2021, the Company announced changes to the Board's Non-Executive Directors with the appointment of Andrew Pickering to the Board as of 1 February 2021, following the resignations of both Thomas Soderberg and Paul Garner as of 31 January 2021. Refer to the ASX Announcement dated 28 January 2021 for further details.





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

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ABOUT GLOBAL ENERGY VENTURES LTD

Global Energy Ventures Ltd was founded in late 2016, with the Company's mission to create shareholder value through the delivery of integrated compressed shipping solutions transporting energy to regional markets. The business model is to build, own and operate integrated energy transport projects for either natural gas or hydrogen.

The primary focus is the development of integrated Compressed Natural Gas (CNG) marine transport solutions with the Company's construction ready **CNG Optimum ship**. CNG is a well proven gas transport solution with design and commercial advantages along with being safe and a 'lower emission' solution for the transport of gas than in the form of liquified natural gas (LNG).

With the world's focus on Energy Transition to zero-carbon fuels, the Company has also introduced the world's first large-scale **Compressed H2 Ship (C-H2 Ship)** design that will support the transport of hydrogen as a green energy fuel of the future. Hydrogen's role in the future energy mix will greatly assist governments and corporations with their respective 'net-zero carbon' targets through the decarbonisation of heavy emitting industries.

Value creation for shareholders will be achieved by:

- Continue to maintain global leadership in marine pressure vessel designs and intellectual property.
- Pursue a portfolio of CNG Optimum projects to improve and mitigate against binary outcomes and offer CNG project stakeholders' flexible commercial arrangements.
- Advance the future transport of green energy through the development of the C-H2 Ship.
- Employ world class management and staff that are leaders in their chosen discipline.
- Maintain the highest standards of efficiency, safety and environmental responsibility.

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

CNG Optimum Ship (Natural Gas) Approved for Construction & Ready for Commercialisation Port to Port Offshore Loading Single Anchor Loading - SAL Submerged Turret Loading - STL



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, fluctuations in gas and CNG 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.