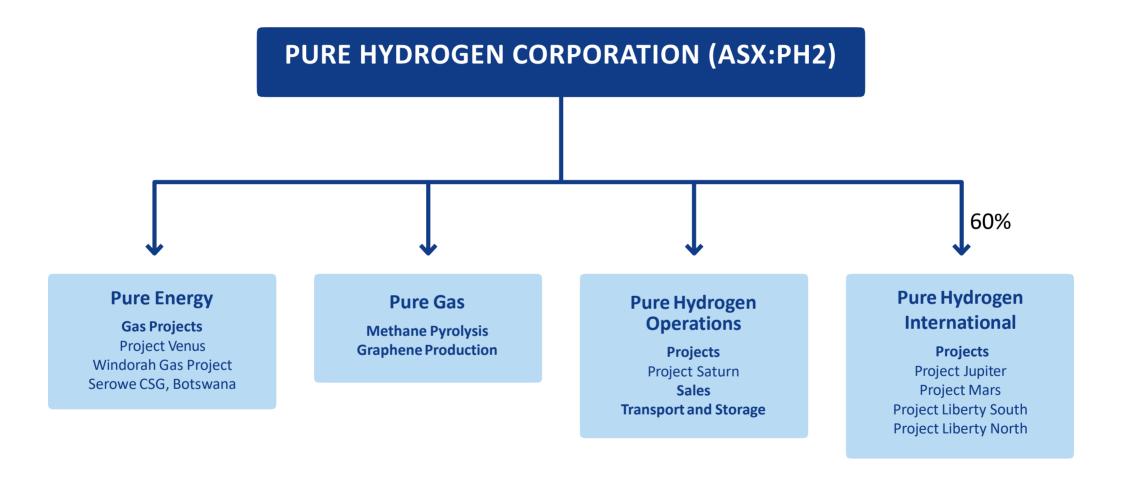


# Profitable Clean Energy for our Planet Growth initiatives for PH2

Pure Hydrogen Corporation Limited April 21 (ASX: PH2)

# **PURE HYDROGEN**CORPORATE STRUCTURE



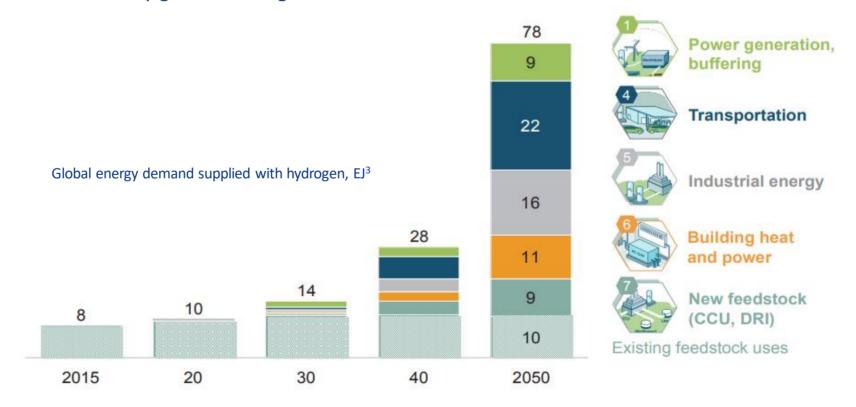


### **HYDROGEN DEMAND COULD INCREASE 10-FOLD BY 2050**

Hydrogen production is currently experiencing widespread political and business momentum, with a number of policies and projects around the world expanding rapidly.

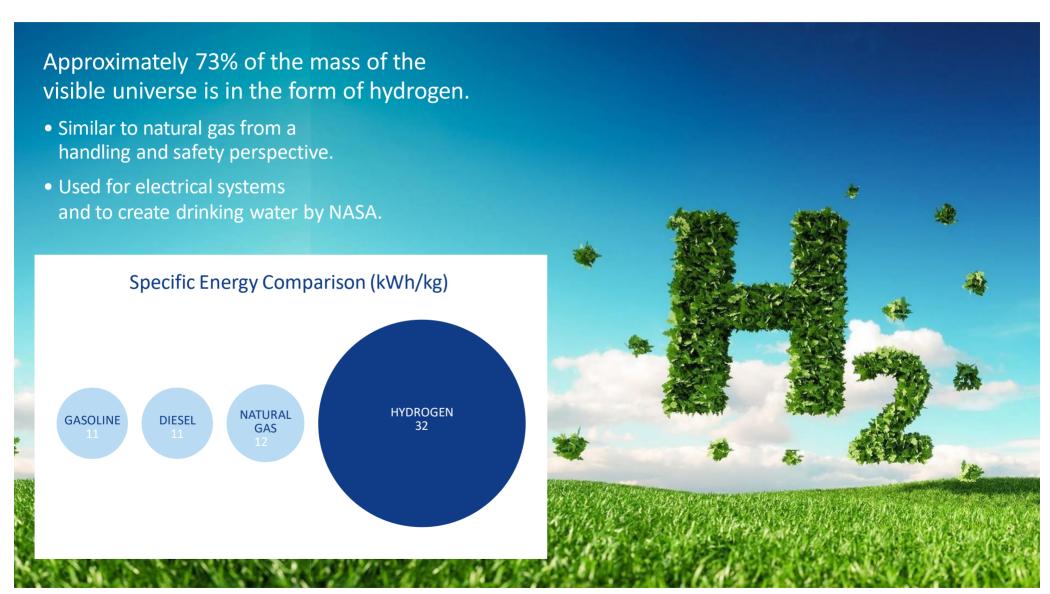
Global demand is forecasted to increase to 100 million tonnes by 2030 and exceed 500 million tonnes by 2050<sup>3</sup>.

With hydrogen consumption continually rising in the region, Asia-Pacific has been the largest hydrogen market and is expected to witness the fastest industry growth moving forward<sup>4</sup>.





# **HYDROGEN**HIGH POWER TO WEIGHT







## LARGE EXPORT-GRADE SITES LOCATED AT PORTS



# PURE HYDROGEN INTERNATIONAL

Pure Hydrogen International is a result of a partnership between Pure Hydrogen and Liberty Hydrogen to develop 4 large scale Hydrogen Plants in different ports on the east coast of Australia.

- Targeting to become the largest Hydrogen Producer in Australia
- The initial 4 projects is planned in Gladstone (Project Jupiter), Mackay (Project Mars), Port of Newcastle and Port Anthony (Victoria).
- Plans to supply the domestic market first then hydrogen fuel to the Asia Pacific specifically Japan and Korea.





## PROJECT JUPITER - GLADSTONE

Target Hydrogen Production STAGE 1:

100 tonnes per day, 500 tonnes of compressed hydrogen (C-H<sub>2</sub>).

Prelim design size: 190m LOA, 31.4 m breadth, 9.4 m full load draft.

#### STAGE 2:

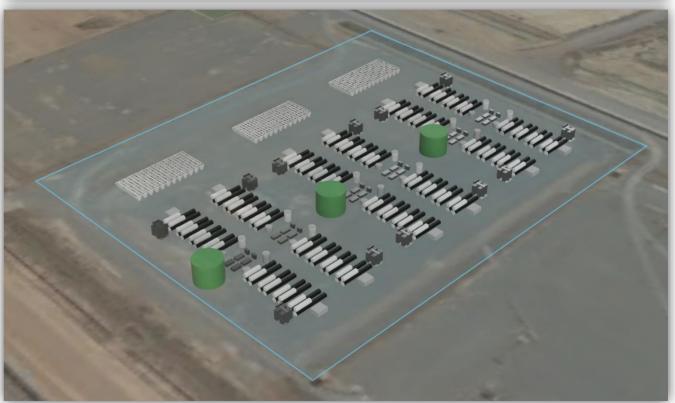
400 tonnes per day Vessel carrying capacity of 2000 tonnes of compressed hydrogen (C-H<sub>2</sub>).

Size: 393m LOA, 53.8m breadth,

12m draft; Note: FL1&2 @

12.9m; FL4&5 @ 11.2).



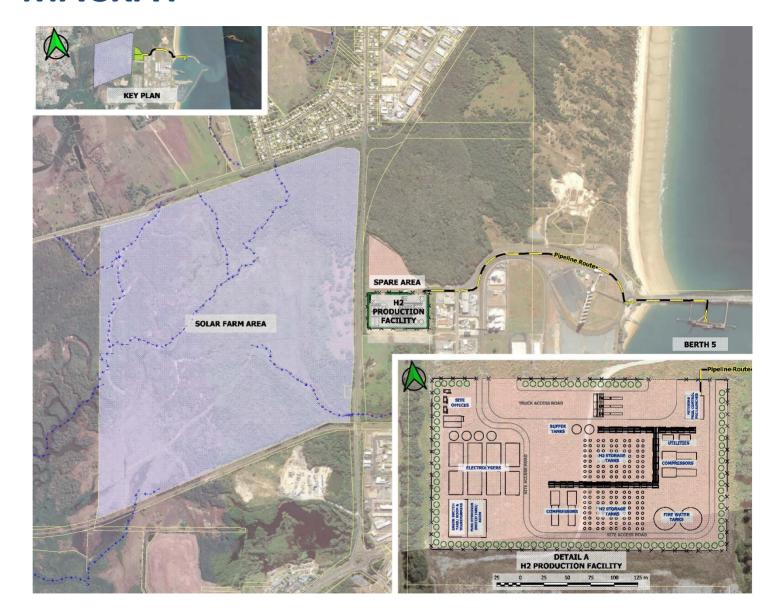




## **PROJECT MARS – MACKAY**

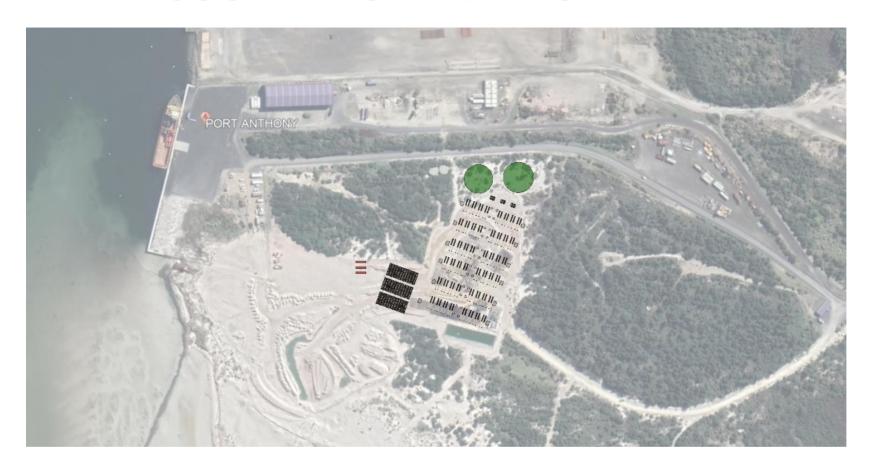
Pure Hydrogen is proposing a large scale Hydrogen Plant at Mackay, which is about 954kms north of Brisbane.

The site is chosen for several reasons – this includes that the significant amount of land close to the port and large users that are close by. The Port imports currently 2 billion litres of diesel. Hydrogen could eventually substitute most imported diesel





## **LIBERTY SOUTH - PORT ANTHONY**



Port Anthony is uniquely poised to take Victoria's Hydrogen production and distribution to a truly enviable global scale. The Port is located to the South East of Melbourne and is situated centrally in South Gippsland. Being linked to backbone transport and power infrastructure, the facility operates as an open access shipping terminal. The Port also has land availability, along with an extensive history of heavy industry and critical offshore energy development. Port Anthony H2 embodies the coupling of clean Hydrogen with existing oil and gas industry, and hastens the natural progression of the energy sector towards a greener sustainable future.



# **LIBERTY NORTH HYDROGEN**PORT OF NEWCASTLE - NSW

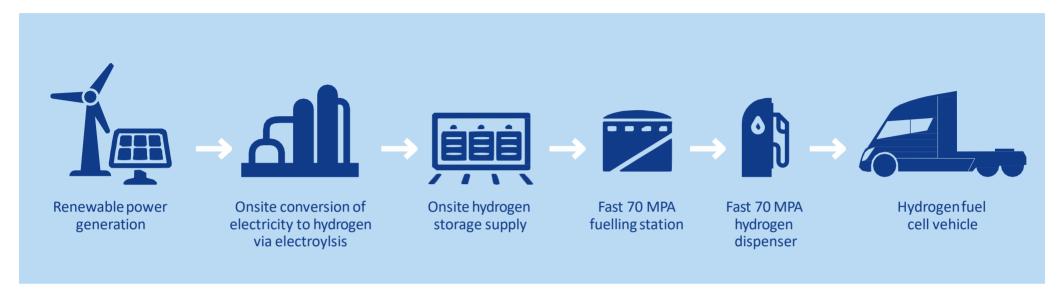




- Dual berth proposed from Newcastle Port
- Offloading arms and controls next to wharf
- Block 5 to be utilized for Hydrogen generation, liquefaction and storage
- Block 3 to be utilized for incremental power should solar increasing plant capacity
- Option on train turning circle for use rather than block 3
- Newcastle Port Authorities to lease land over 30-50years
- Newcastle Port to fund LH2 export infrastructure(small costs)
- LH2 & LNG Pipelines to be installed simultaneously reducing wharf disruptions and shared engineering.
- Newcastle Port confirmed facilities will be ready for late 2023.



# **HYDROGEN FOR TRANSPORT**ADVANTAGES











# PARTNERSHIP WITH HYZON HYDROGEN FUEL CELL BUSES AND TRUCKS

A MoU was signed with Hyzon Motors in January 2021.

Both parties collaboratively working on developing a fully integrated hydrogen supply, delivery and refuelling points in Australia.

Pure Hydrogen and HYZON are also focused on developing a 'wet hire' solution where supply of HYZON's vehicles would form part of the overall customer offering.



Images sourced from websites.



### MODULAR PORTABLE HYDROGEN GENERATOR

## 1,500KG PER PLANT per day – 4,500 Kg Carbon Products

On-site hydrogen generators leverage high heat recuperation to achieve greater energy efficiency.

Compact in size, modular units tap into existing natural gas pipelines or colocated biogas resources, to site hydrogen production at the point of use, eliminating the cost and emissions of transportation.

Term Sheet agreed between Synergen Met Pty Ltd and Pure Hydrogen to form a 50/50 Joint Venture (JV).

Carbon products include carbon black and the potential for high-value synthetic graphite, graphene flakes and/or carbon nanotubes

The modules are housed in 12 metre standard shipping containers offering easy expansion.





## **Local Supply Hubs - East Coast**

Pure Hydrogen is developing a hub strategy on the east coast of Australia so Pure can supply local customers on the east coast,

Pure has signed MOU/term sheets for the Hydrogen Supply with a number of counterparties most recent Wildfire Energy, who are converting waste to Hydrogen – they are looking to develop a number of sites on the east coast. Expect further deals to expand east coast coverage.





PURE HYDROGEN HAS AN 11.8 <sup>2</sup>TCF DIVERSIFIED GAS PORTFOLIO

100% Project Venus
Surat Basin CSG,
Queensland
694PJ in proven Walloon
CSG<sup>1</sup>



100% Windorah Gas
Project - Cooper Basin
gas
8.8 TCF



100% Project Serowe CSG, Botswana (farmed out) 2.38 TCF of high-grade CSG<sup>4</sup>



# PROJECT VENUS A FIRST CLASS ADDRESS

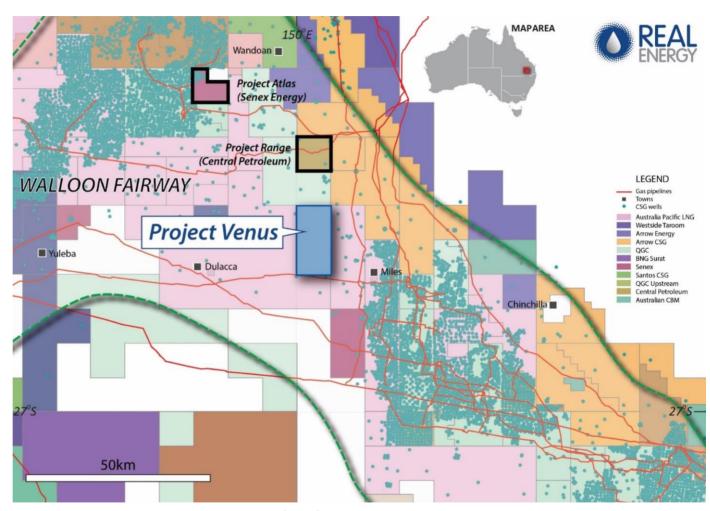
Walloon CSG fairway is prolific gas producing region with over 10,000 wells drilled (see green dots on map)

#### Nearby 'small' operators have:

The Ironbark Project was reported sold at \$231M with reported reserves of 129PJ<sup>1</sup>

Senex Energy<sup>2</sup> is developing Project Atlas – reported 2P reserves 234 PJ

Central Petroleum<sup>2</sup> is developing Project Range – reported 2C contingent resources of 270 PJ



**100% Surat Basin CSG, Queensland** 694PJ (640 BCF) in proven Walloon CSG<sup>1</sup>



# STRONG GAS IN PURE HYDROGEN'S FIRST PILOT CSG WELL VENUS 1



#### Drill Venus-1~1.8 km NW of Connor-2 core hole:

Drill to ~715 metres, encountered ~25 metres net gassy coals.

#### Flow testing the CSG pilot well:

Apply non-frack coal reservoir enhancement of the Juandah gassy coal seams using new technology coil tubing methods.

Short term pre and post stimulation flow tests.

Complete Venus-1 as the JV's first CSG Pilot well.

Resource Upgrade likely mid year.

Flow test until ~July 2021.



### **AT A GLANCE**

Pure Hydrogen Corporation to have: ~313 million ASX listed shares.
The MD and Chairman own ~10.5 %.

Two energy businesses:

**Hydrogen projects** 

**Natural Gas projects** 

### **Term Sheets & MOUs excuted**

MOU – Hyzon Motors – Jan 21

Term Sheet – Liberty Hydrogen- Jan 21

Term Sheet – Port Anthony – Feb 21

MOU – Wildfire Energy – Mar 21

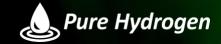
Term Sheet – Synergen Met – April 21

### **Contact**

www.purehydrogen.com.au

Scott Brown – Managing Director Ph: +61 2 9955 4008

E: scott.brown@purehydrogen.com.au



### **DISCLAIMER**

#### **Extent of Information**

This document has been prepared by Pure Hydrogen Corporation Limited and Real Energy Corporation Limited ("Company") based on based on the merge being completed.

This Presentation, including the information contained in this disclaimer, does not constitute an offer, invitation or recommendation to subscribe for or purchase any security and neither the Presentation, disclaimer not anything contained in such forms the basis of any contract or commitment. This Presentation does not take into account your individual investment objective, financial situation or particular needs. You must not act on the basis of any other matter contained in this Presentation but must make your own assessment of the Company.

No representation, express or implied, is made as to the fairness, accuracy, completeness or correctness of the information contained in this Presentation, including the accuracy, likelihood of the achievement or reasonableness of any forecast, prospects, returns or statements in relation to future matters contained in the Presentation ("Forward-looking statements"). Any such forward-looking statements that are contained in this Presentation or can be implied by the same are by their nature subject to significant uncertainties and contingencies associated with the oil and gas industry and are based on a number of estimates and assumptions that are subject to change (and in many cases are outside the control of Real Energy and Strata-X Energy and their directors) which may causes the actual results or performance of Real Energy and Strata-X Energy to be materially different from any future results or performance expressed or implied by such forward-looking statements.

To the maximum extent permitted by law, none of Real Energy's or Pure Hydrogen related corporations, directors, employees, agents nor any other person accepts and liability, including without limitation arising from fault or negligence, for any loss arising from use of this Presentation or its content or otherwise arisingin connection with it.

#### **Exclusion of Financial Product Advice**

This Presentation is for information purposes only and is not a prospectus or other offering under Australian law or under any others laws in the jurisdictions where the Presentation might be available. Nothing herein constitutes investment, legal, tax or other advice. This Presentation is not a recommendation to acquire shares and has been prepared without taking into account the investment objectives, financial situation or needs of individuals.

#### **Independent Advice**

You should consider the appropriateness of the information having regard to your own objectives, financial situation and needs and seek appropriate advice, including, legal and taxation advice appropriate to your jurisdiction. Real Energy and Pure Hydrogen are not licensed to provide financial advice in respect of its shares.

#### **Geological Information**

The geological information in this presentation relating to geological information and resources is based on information compiled by Mr Lan Nguyen, who is a Member of Petroleum Exploration Society of Australia and the Society of the Petroleum Engineers and has sufficient experience to qualify as a Competent Person. Mr Nguyen consents to the inclusion of the matters based on his information in the form and context in which they appear. The information related to the results of drilled petroleum wells has been sourced from the publicly available well completion reports.

#### **Notes**

- 1. See announcement dated 12 December 2019 Project Venus Prospective Gas Resources 694 PJ Best
- 2. The Prospective Gas Resources is a combination of Project Venus Prospective Gas Resources 694 PJ Best, with Serowe CSG Project Prospective Gas Resources of 2.4 Trillion Cubic Feet (Tcf) and the Windorah Gas Project Prospective Gas Resources of 8.8Tcf which was adjusted for the reduced ATP 927P area post partial relinquishment in September 2019.
- 3. The contingent gas resources were disclosed in Real Energy announcement dated 23 August 2019. The Prospective resource estimates certified by DeGolyer Mac Naughton in July 2015 for ATP927P Announced 21 July 2015. The stated figures have been adjusted for the reduced ATP 927P area post partial relinquishment in September 2019
- 4. See Strata X Energy Announcement dated 14 May 2019 83% increase in Prospective Gas Resource in the Serowe CSG Project.

