Pure Hydrogen

Building the Hydrogen Eco System

Noosa Mining Conference

Pure Hydrogen Corporation Limited

November 2022 (ASX: PH2)

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Extent of Information

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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.

Page 13 - Notes 1. As reported in Announcement dated 4 May 2021 – the 1C 87.7 Pj, 2C 130.3 Pj and 157,9 Pj – the remaining prospective resource was 536 Pj

Note 2 - The total of 1.1 TCF 3C AND 14.9 TCF Prospective is a combination of Windorah gas project 770 Bcf and 8.8 Tcf, Venus Gas Project 157.9Pj 3Cand 536PJ Prospective and Serowe Gas Project 200.7 Bcf and 10.072 Bcf best estimate – Pure Hydrogen has a 51% working interest in the Serowe Project.

Note 3 – The Contingent resources is a summary of of 2 reports for the Windorah Gas Project. One estimate prepared by DeGolyer and MacNaughton, a leading international petroleum industry consulting firm in June 2015 in respect of the Queenscliff Area and one estimate prepared by Aeon Petroleum Consultants in respect of the Tamarama area completed in August 2019. The Prospective estimate of 8.8 Tcf is based on the work by DeGolyer and MacNaughton adjusted for the permit that was relished by the Company.

Note 4 – As reported in the Announcement on the 18 November 2021 – the Serowe Project has contingent Resources of 1C 120.4, 2C 160.6 and 3C of 200.7 Bcf and best estimated of 10.07 Bcf – all figures 100%.

Image sourced from websites.

INVESTMENT HIGHLIGHTS

Targeting an integrated clean energy business
Aiming to be the leading hydrogen company with a diverse portfolio across the hydrogen eco system.

HYDROGEN FUEL CELL TECHNOLOGY

Equity* in hydrogen fuel cell vehicle company (HFCV) and power generation units.

First HFCV vehicles:

Demo Garbage truck and Warrego Vehicle

HYDROGEN GAS OPERATIONS

Manufacture or supply of hydrogen targeting net zero carbon emissions.

Targeting to become Australia's leading integrated hydrogen business, focusing on manufacturing, storage, transport and supply.

NATURAL GAS OPERATIONS

Uncommitted diversified natural gas portfolio in Australia and Botswana.

Leverage natural gas resources to be used as feedstock to convert into hydrogen and high value carbon products.

Material interest included a 23% interest

Capital Structure

Company ASX Code	**PH2**
Share Price[1]	**AUD$0.235**
Ordinary Shares on Issue M~	**349.278M**
Options on Issue ~	**26M**
Market Capitalisation (undiluted)	**~AUD82M**

Key Assets

- Pure Hydrogen has contingent 2C resources of 453 PJ for 100% Queensland gas projects – Project Venus and Windorah Gas Project
- Pure Hydrogen has a 23% stake in H2X Global
- Strong current cash position of circa $14.8 Million
- Pure Hydrogen has developed strong relationship which will enable it to advance its Hydrogen Operations.
- Pure Hydrogen as a 19.9% interest in Botala Energy and 30% free carried in the Serowe Project in Botswana

HYDROGEN OPERATIONS - DOMESTIC AND EXPORT

Image sourced from websites.

HYDROGEN STRATEGY

Partnering with Hydrogen Technology and providing funding for plants

- CAC H2
- Plenesys
- Omni

Partnering with Hydrogen Truck, buses and Hydrogen Fuel Cell devices manufactures

- H2X
- BLK
- Loop
- Advik

DEMAND FOR HYDROGEN

POWER GENERATION

- Off grid
- EV charging
- Back up for solar/wind
- Construction sites
- Farms and Mines
- Peak shaving power

TRUCKS AND BUSES

- Garbage Trucks
- Prime movers
- Short and long haul buses
- Long term supplying service Stations

MARINE

- JV Aus Ships
- Battery Charging/ Hydrogen Fuel Cells
- Establishing marine refuelling stations

TRIAL FUEL CELL H2 TRUCK FOR PEPSI

Pepsi have signed up for trial truck with potential of additional 10 more.

- Pure Hydrogen have exclusive rights to the truck design in Australia.
- Trial planned to commence Q2 CY2023 in Queensland.

Artist image: Proposed hydrogen fuel cell truck for PepsiCo

HYDROGEN AS A ENERGY SOURCE

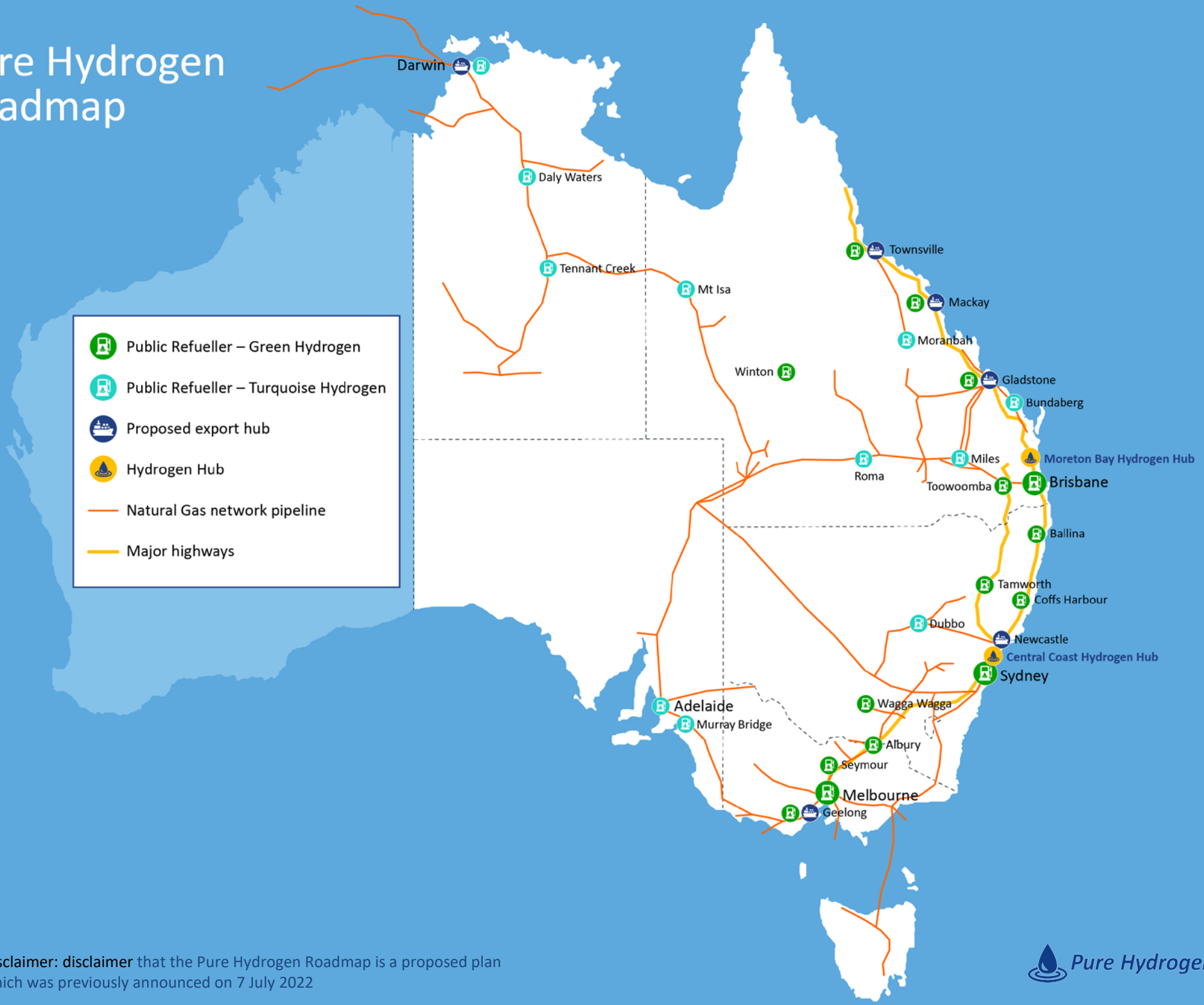
Pure Hydrogen is seeking to be the H2 supplier of choice in the Australian market.

- Similar to natural gas from a handling and safety perspective
- Hydrogen has high specific energy, making it very efficient when used in fuel cells for transport, buildings and power generation
- Hydrogen use today is dominated by industries such as oil refining, ammonia production, methanol production and steel production, with almost all of this hydrogen manufactured using fossil fuels (grey hydrogen),
- There is significant potential for emissions reductions from from PH2's hydrogen manufacturing methods which are based on waste conversion technology

Hydrogen Manufacturing Methods

Grey	Produced by steam methane reforming without carbon capture, using natural gas	High carbon emissions	
Blue	Produced by steam methane reforming with carbon capture, using natural gas	Low carbon emissions	
Green	Produced by electrolysis, using water and renewable electricity	Zero carbon emissions	**Pure Hydrogen's will utilise clean energy green, turquoise and emerald hydrogen production techniques**
Turquoise	Produced by methane pyrolysis, using natural gas and 1/8 of electricity required for electrolysis	Zero carbon emissions	
Emerald	Produced by waste to hydrogen technology, using biomass and heat	Net zero carbon emissions	

Pure Hydrogen Roadmap



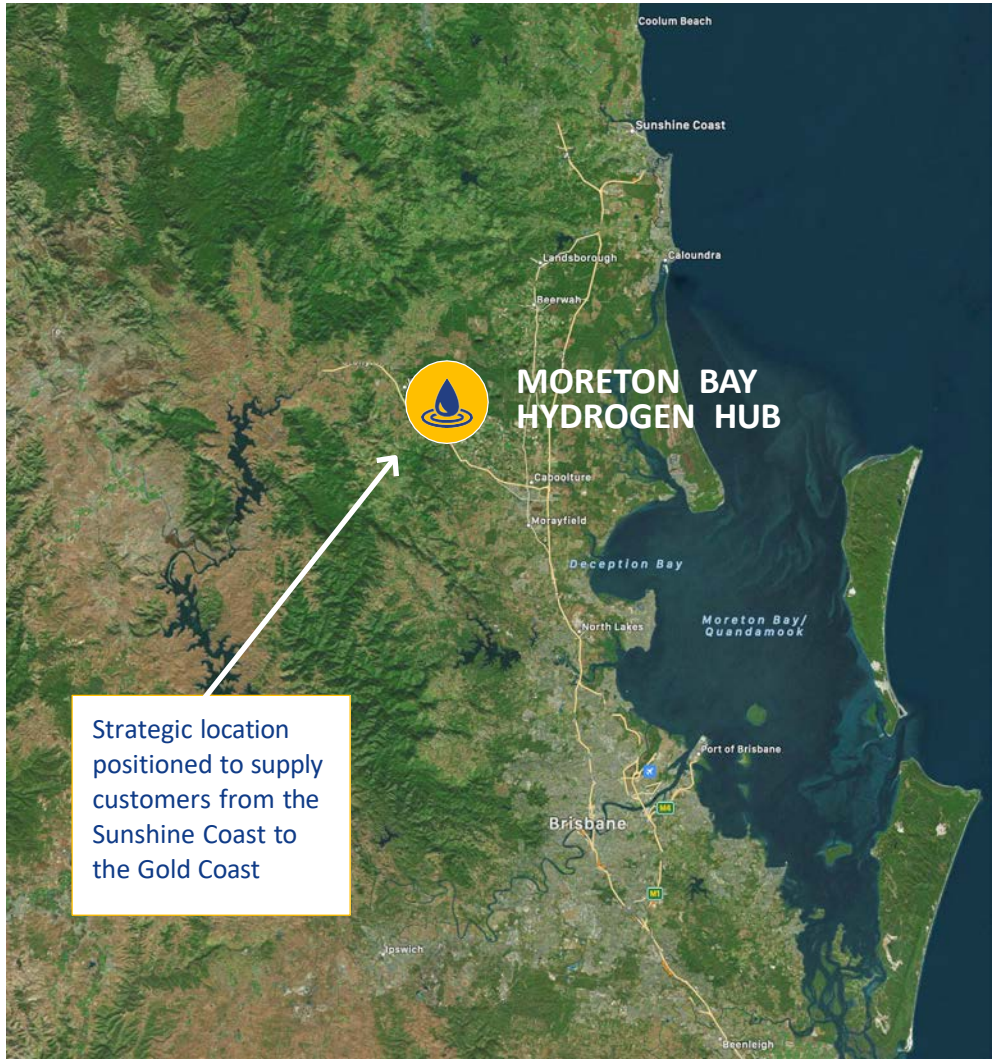
Disclaimer: disclaimer that the Pure Hydrogen Roadmap is a proposed plan which was previously announced on 7 July 2022

MORETON BAY HYDROGEN HUB

LEADING THE MARKET

The Moreton Bay project marks the first major step in Pure Hydrogen's market strategy to build and operate hydrogen Hubs on the east coast of Australia.

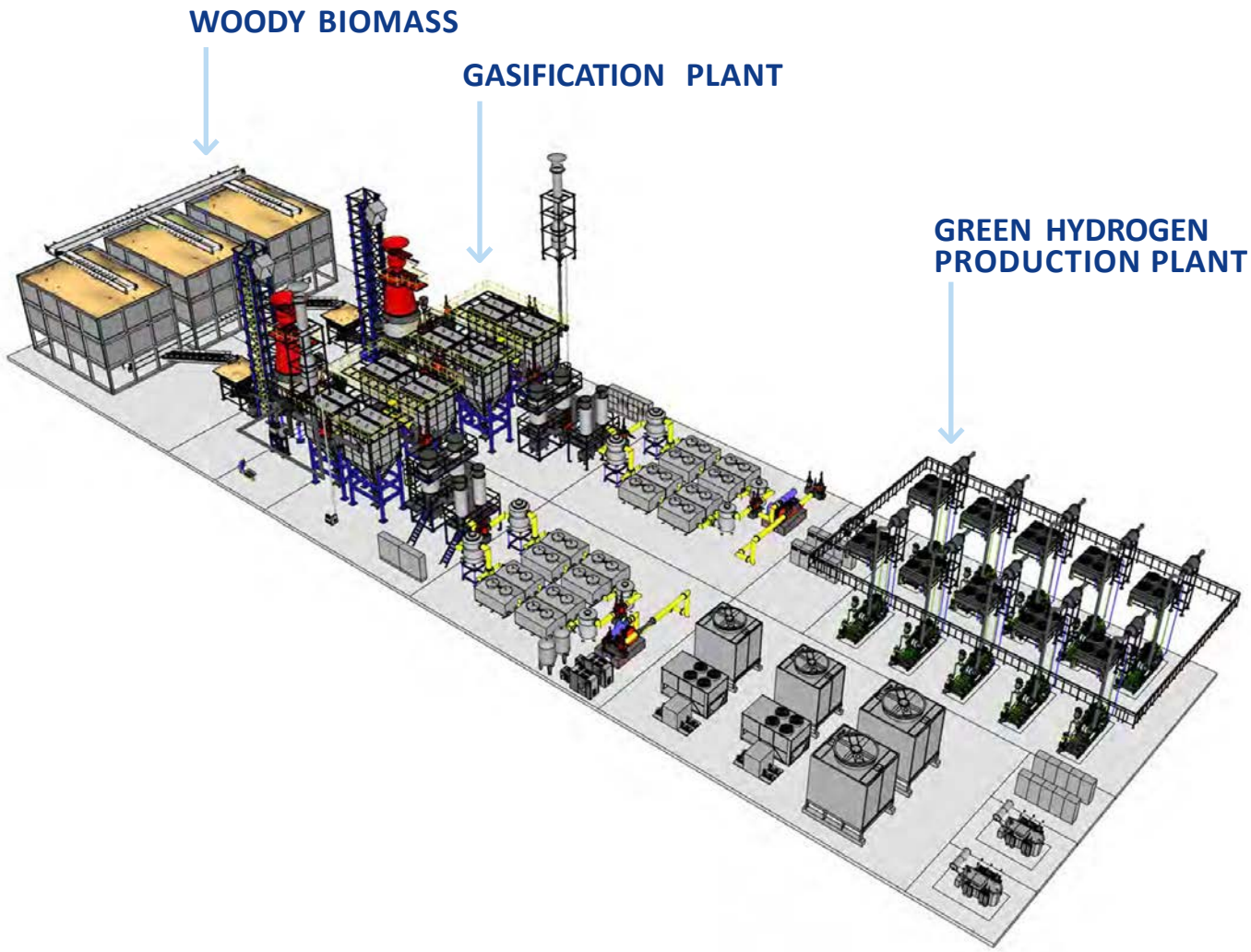
- Joint Venture with CAC-H2, a global renewable energy specialist
- CAC-H2 to provide waste-to-hydrogen conversion technology, with PH2 to manage distribution and sales
- Land area secured through option to acquire 21-hectare lot adjacent to the Beerburram State Forrest, in proximity to major SEQ population centres



PROPOSED EMERALD HYDROGEN PLANT

- Plant construction, leveraging IP of CAC-H2
- Annual conversion of 12,000 tonnes of wood waste

- Daily production of starting 500kg per day – rising to 2,500 kgs of Green Hydrogen @99.97%
- Saving 2,000 tonnes Co2e/yr carbon removal.

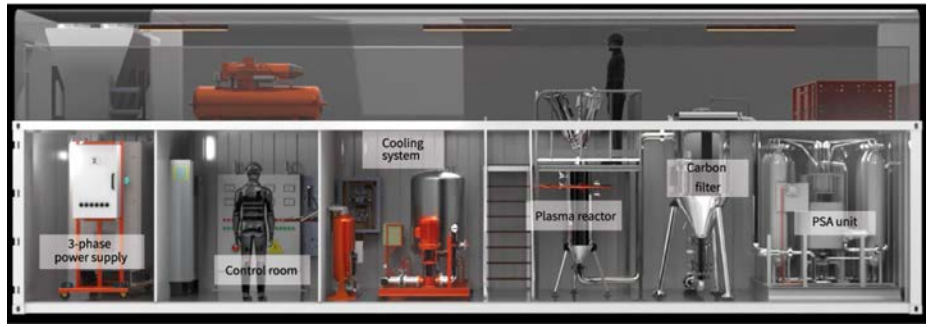


BACK-TO-BASE AND INDUSTRIAL CH_4 TO H_2-C MODULES

Repeatable as markets grow.

- Scaleable
- No CO_2 emissions
- Water not consumed in process

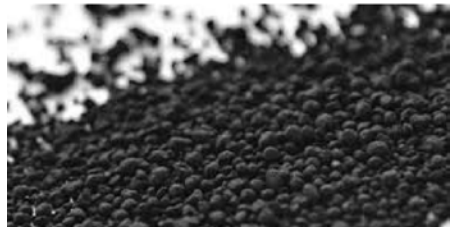
1500/5000 kg H_2 per day + 4500/15,000 kg Carbon Products

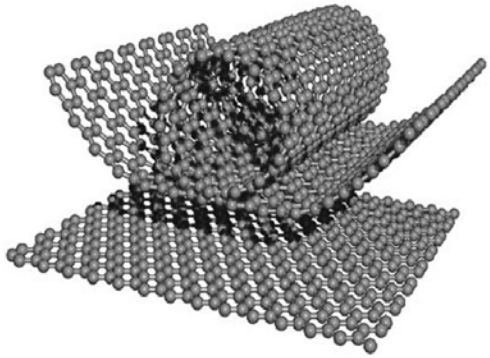


H_2

Value Driver = Carbon Products

100% Carbon





Carbon nanotubes

Graphene

Carbon processing

Image sourced from websites.

PURE'S METHANE PLASMA PYROLYSIS

What is it?

- The Plasma Arc technology
- Uses the Plenesys AC plasma torch to decompose Methane in an Oxygen-free reactor
- High Temperature of Plasma Arc splits the CH_4 molecule into solid C and H_2 gas components

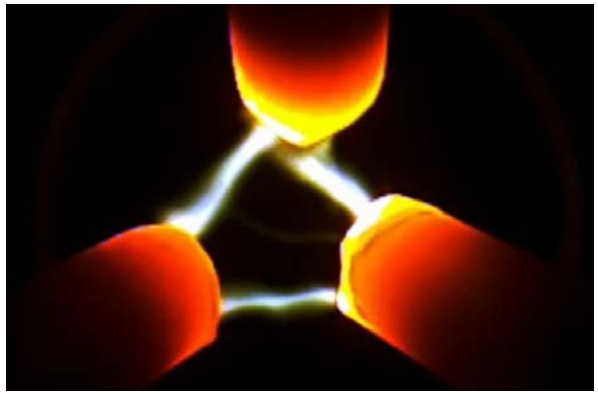
Targets

- Along with H_2, Pure is targeting a high % of Graphene / Carbon Nanotubes
  - Low-priced Hydrogen = Hydrogen Economy
  - Low-priced Graphene = Graphene Economy

21st Century Economies,
AND Global Emissions Reduction

When operated with renewable electricity and bio-methane, the process can become Carbon-negative.

Plasma Arc Technology



A/C Plasma Torch

Image sourced from websites.

NATURAL GAS DEVELOPMENTS

Independently Certified Contingent Gas Resources, net to Pure Hydrogen:

1C: 268 PJ • 2C: 575 PJ • 3C: 1,041 PJ

100% PROJECT VENUS SURAT BASIN CSG, QUEENSLAND

123 Bcf 2C, and 560 PJ in Prospective Resources in the Walloon CSG[1]

100% WINDORAH GAS PROJECT - COOPER BASIN GAS

330 Bcf 2C and 8.8 TCF Prospective Resources - basin centered gas[3]

30% PROJECT SEROWE CSG, BOTSWANA (FARMED OUT) + 19.9% of BOTALA ENERGY

317 Bcf 2C and Prospective Resource 8.008 TCF CSG[4]

Plan to use gas resources to manufacture turquoise hydrogen and high value carbon products

Refer to the disclaimer for notes

AN EXPERIENCED BOARD AND LEADERSHIP TEAM

Board of Directors

Scott Brown
Managing Director

Scott has over 25 years' experience as a director and an executive in US and ASX-listed companies, including Real Energy, Objective Corporation, Allegiance Mining and Mosaic Oil.

Ron Prefontaine
Chairman and Non-Executive Director

Ron has over 40 years' experience in the oil and gas industry and was the Executive and Managing Director at two successful ASX-listed companies, Arrow Energy and Bow Energy.

Lan Nguyen
Non-Executive Director

Lan has over 25 years' experience in petroleum exploration, development and production in Australia and internationally, and was the Managing Director at ASX-listed Mosaic Oil.

Executive Management

Les Nelson
General Manager Operations

Les has over 30 years' experience working in industrial and retail markets, including 20 years at Australia's largest Liquified Petroleum Gas distributor, Elgas Ltd, as General Manager.

Gareth Forde
Hydrogen Technology Officer

Gareth has over 20 years' experience in hydrogen, oil and gas, water, energy and process engineering. He is a Registered Professional Engineer of Queensland in both Chemical and Environmental Engineering.

Brendan Norman
CEO/CMO H2X Global

Brendan has held leadership and top management roles at various automotive groups in Australia, Africa, Middle East and Europe, including BMW Group, VW Group, Infiniti and Grove Hydrogen Auto.

Andrew Thompson
Hydrogen Production Technology

Andrew has over 30 years' experience in minerals processing, oil and gas in Australia, UK and Cuba, and has held executive positions at various companies including Arrow Energy.

Clint Butler
Sales Manager

Clint has 15 years' experience and has worked with numerous multi-nationals in the Liquid Petroleum Gas industry and was the Executive Director for an energy monitoring company for 11 years.

Image sourced from websites.

Pure Hydrogen project updates and highlights:

- Focussed on becoming Australia's leading hydrogen company and the H2 supplier of choice
- Pure Hydrogen has received an R & D tax incentive of $5.9M last month
- Pure Hydrogen as a 19.9% interest in Botala Energy and 30% free carried in the Serowe Project in Botswana
- JJ's Waste trial garbage truck - conversion to H2 in progress and strong interest in the industry;
- Trial of Prime Mover Truck for Pepsi
- Pure Hydrogen has a 23% stake in H2X.
- Hydrogen Fuel Cell Generator for PICCA
- Emerald Hydrogen project with Moreton Bay Hydrogen Hub
- Pure Hydrogen has contingent 2C resources of 453 PJ for 100% Queensland gas projects – Project Venus and Windorah Gas Project
- Pure Hydrogen is looking develop large scale export projects of compressed Hydrogen
- Pure Hydrogen and CAC H2 partnership –other locations apart from Moreton Bay Hydrogen Hub
- Turquoise Hydrogen - Methane Plasma Pyrolysis – targeting H2 along with a high percentage of Graphene/Carbon nanotubes – when operated with renewable electricity and bio-methane the process can become carbon negative

Pure Hydrogen

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Image sourced from websites.