Pure Hydrogen

Moreton Bay Hydrogen Hub

Pure Hydrogen Corporation Limited

November 2022 (ASX: PH2)

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.

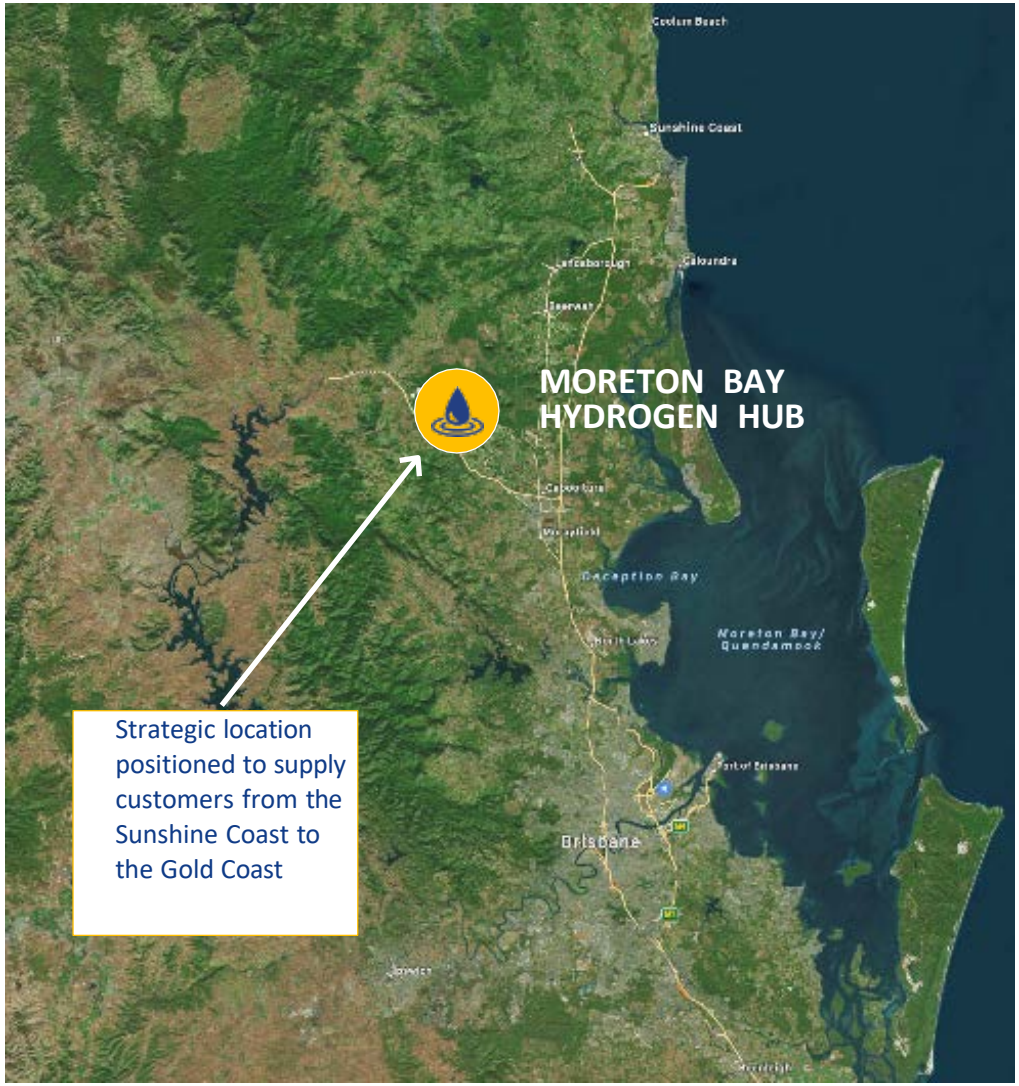
Material interest included a 23% interest

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.

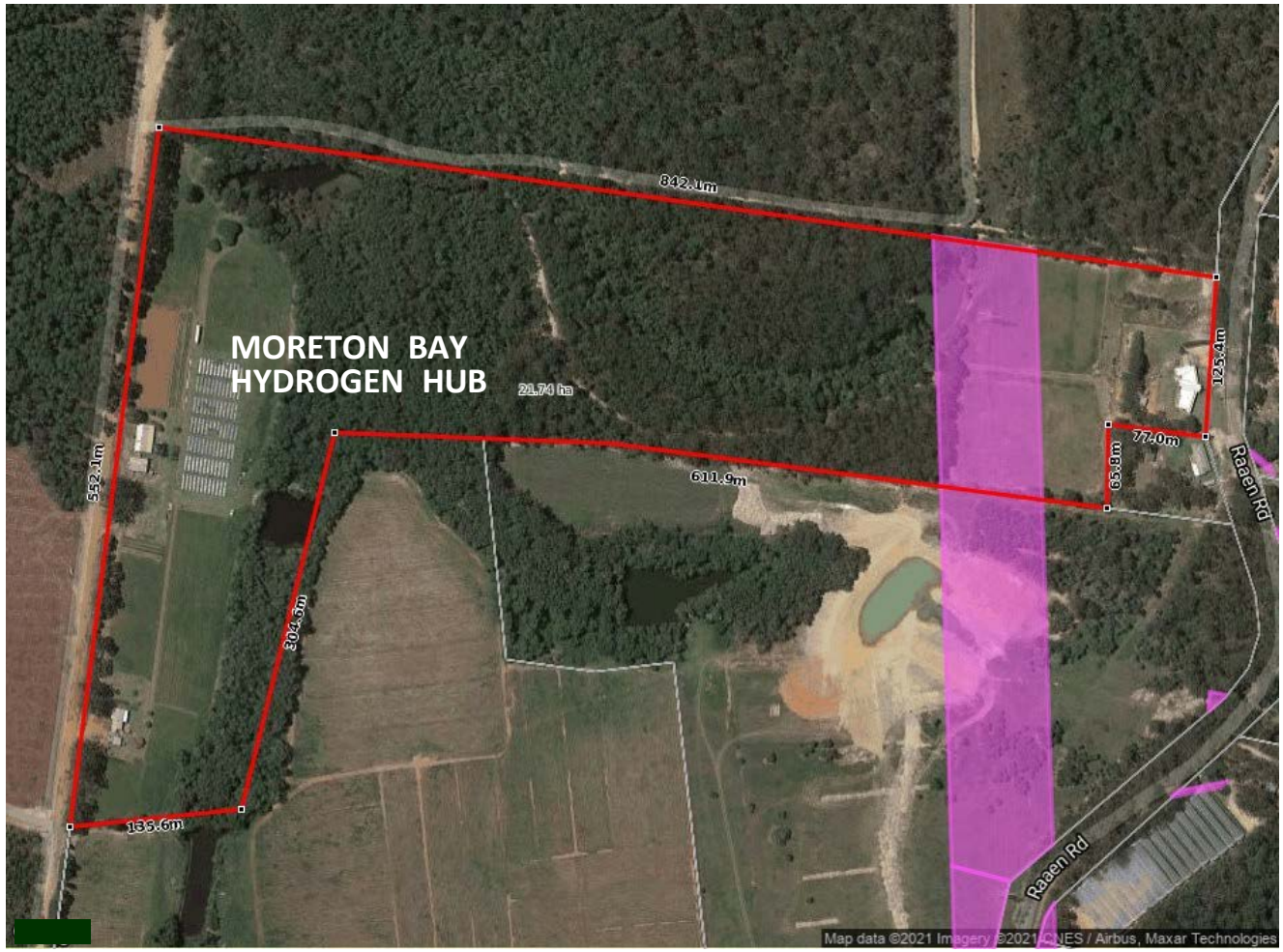
- Joint Venture with CAC-H2, a global renewable energy specialist
- CAC-H2 to provide waste-to-hydrogen conversion technology, with Pure Hydrogen to manage distribution and sales
- Land area secured through option to acquire 21-hectare lot adjacent to the Beerburram State Forrest, in proximity to major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



MORETON BAY HYDROGEN HUB

The Moreton Bay hydrogen plant marks Phase-1 of a three-phase rollout with plans for additional plants in NSW and Victoria

- The plant will be constructed to produce initial hydrogen output of 500kg per day, scaling up to 2,500kg per day once fully operational
- Caboolture Hydrogen (CAC-H2) will produce the hydrogen via waste from logging operations conducted in Beerburram State Forest
- Shared cost arrangement for joint development of the hydrogen production plant, to be funded from Pure Hydrogen ’s existing cash reserves.

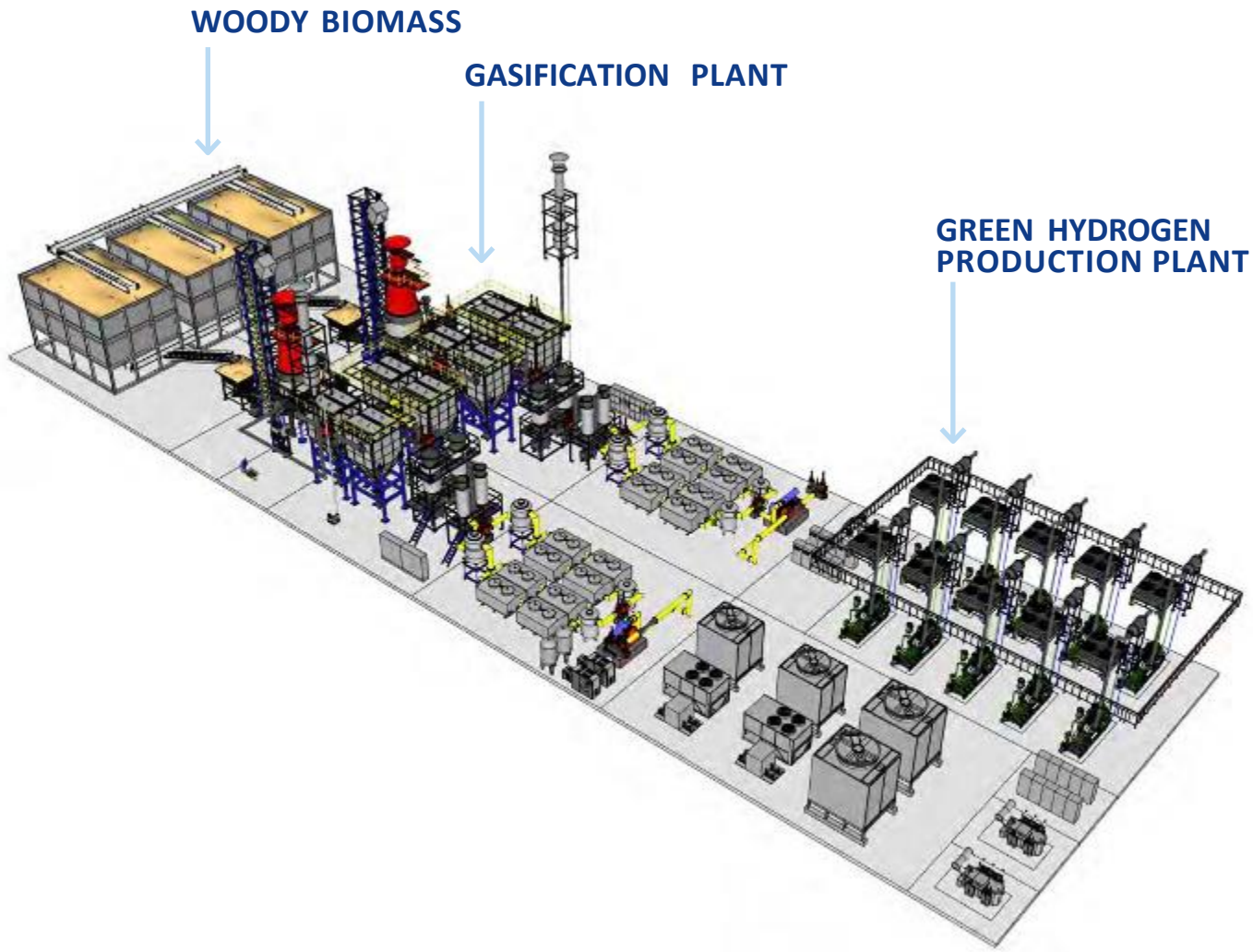


Aerial image of the acquired land holding, with proposed hydrogen plant construction adjacent to the entry road (left of image)

PROPOSED EMERALD HYDROGEN PLANT

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

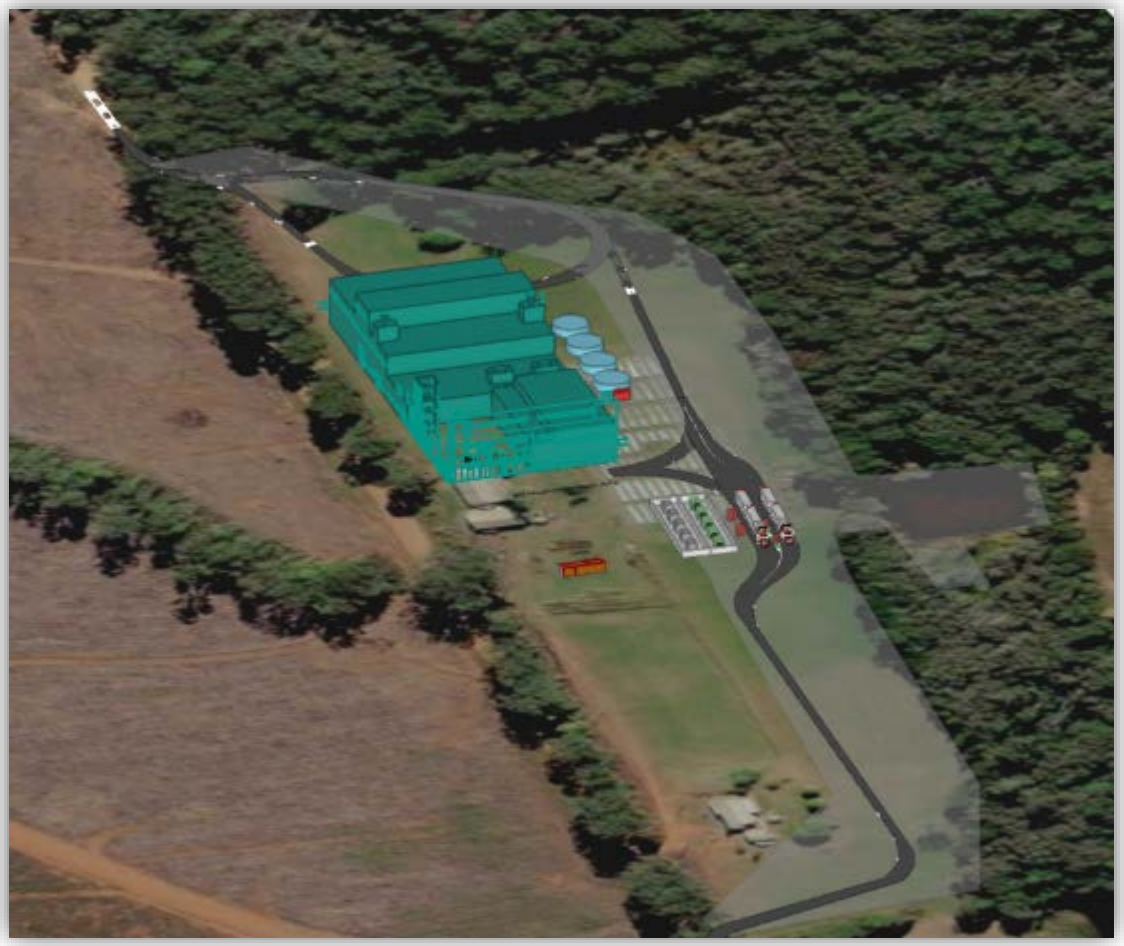
- Daily production of starting 500kg per day – rising to 2,500 kgs of Green Hydrogen @99.97% purity
- Saving 2,000 tonnes Co2e/yr carbon removal.



INDICATIVE FOOTPRINT - MORETON BAY H_2 HUB

The grey 40m corridor (Artist Image 1) is to provide a fire break between the facility and adjacent vegetation.

This will be used as an internal site access road and for materials handling (including biomass stockpiling)

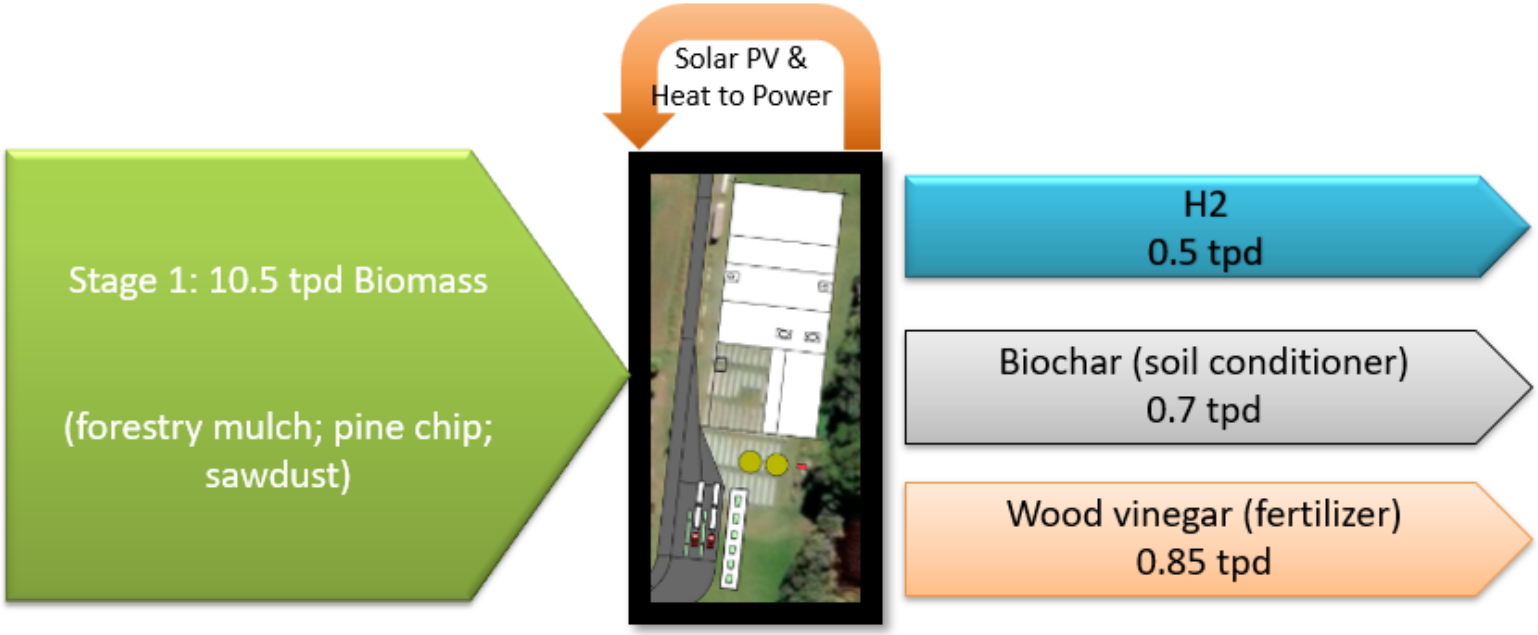


Artist Image 1: View towards Nth-E

Block Flow Diagram

Targets:

- Green Hydrogen.
- 100% renewable energy.
- Energy neutral.



HYDROGEN AS A ENERGY SOURCE

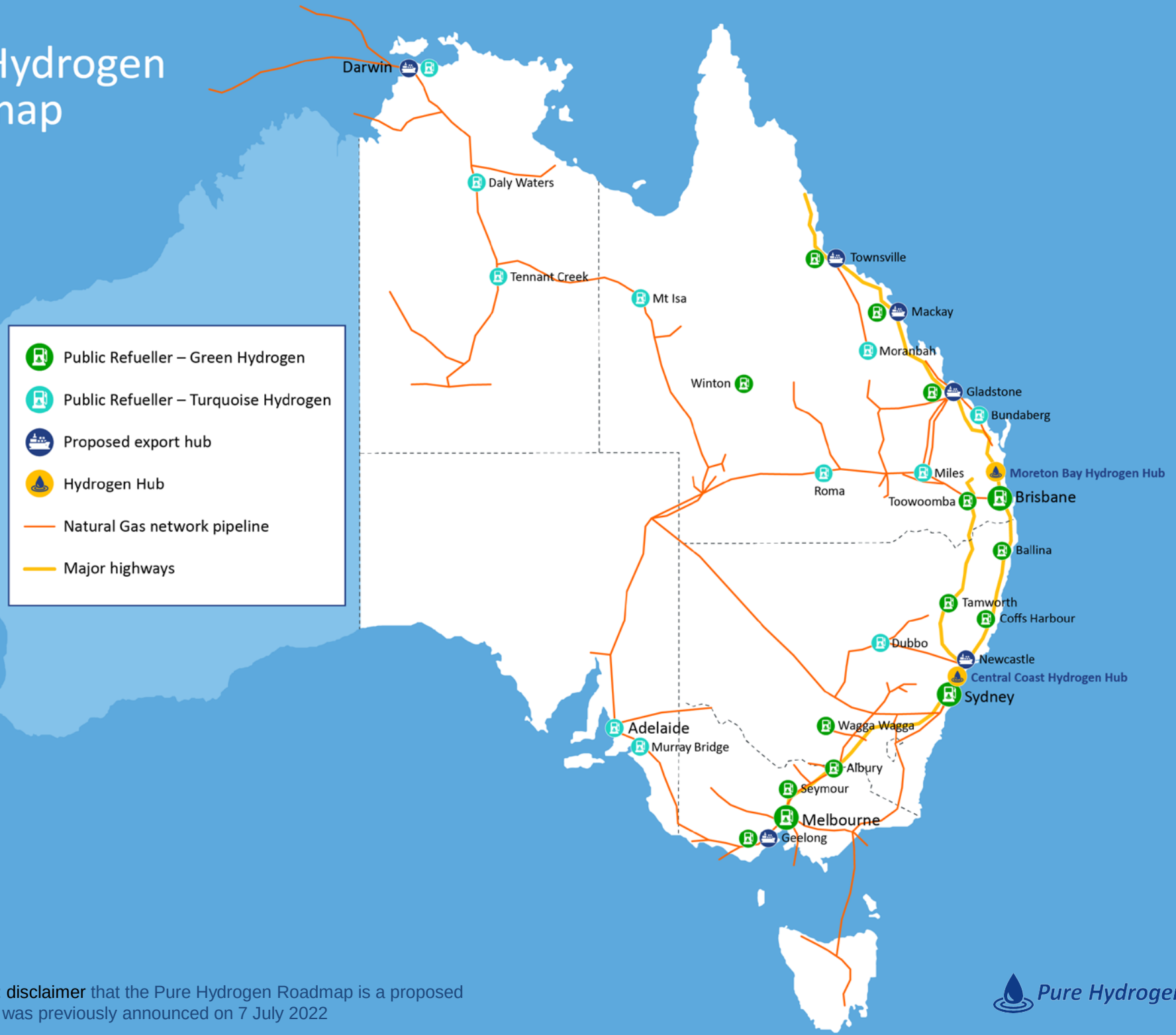
PH2 is seeking to be the H2 supplier of choice in the Australian market.

- 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

PEPSI PARTNERSHIP

Signed agreement with Pepsi to trial hydrogen fuel-cell powered truck

- 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

Pure Hydrogen

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Image sourced from websites.