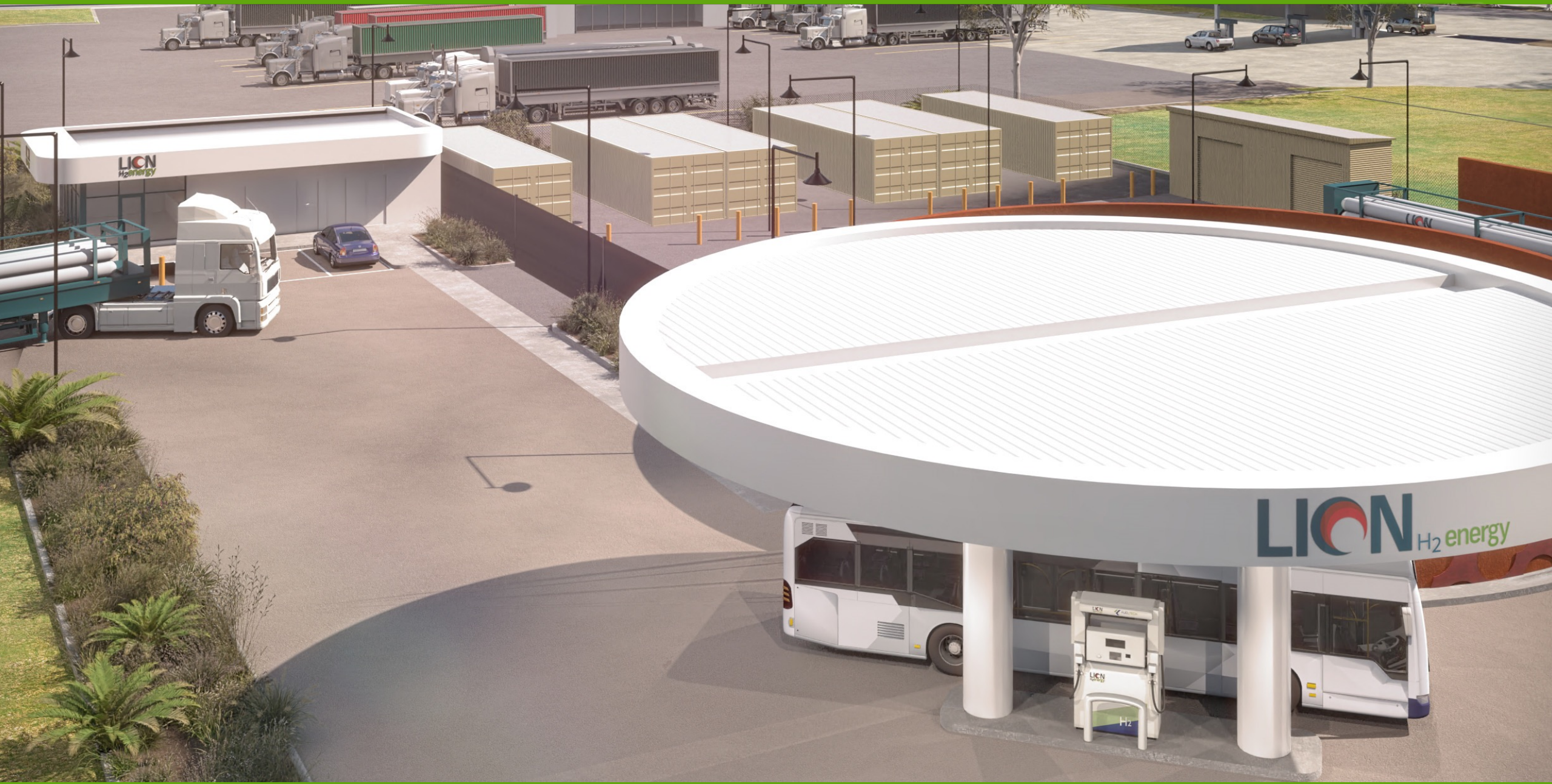


Lion Energy Ltd, Peak Microcap Investor update – July 2023

Overall investment thesis

- ✓ Lion will be Australia's first mover in supplying green hydrogen to the heavy mobility sector. Setting a platform of skills, network and knowledge to be replicated throughout the decade.
- ✓ Recently completed marine and onshore seismic has allowed Lion to mature a material, deep and diverse portfolio of exploration opportunities attractive to investors seeking exploration exposure
- ✓ Lion USD 4.4m in cash*, generates USD1m in revenue from oil sales, and is poised to commence green hydrogen production next year.
- ✓ **Market cap AUD 15m but Lion positioned for exposure to early green hydrogen production and carried high impact oil exploration drilling**

*as of 31 March 2023

Green Hydrogen

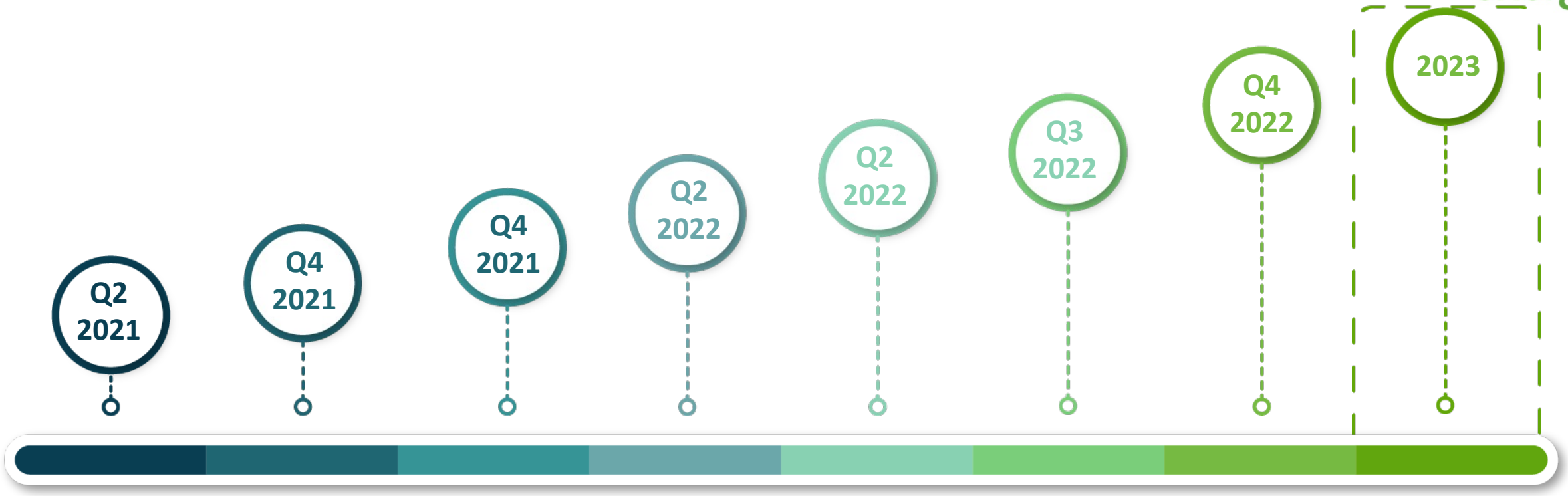
Green Hydrogen Business models in Australia

- Three business models are emerging for green hydrogen in Australia

Model	Capital intensity and time to market	Considerations for Lion
Large scale production with integrated electricity production, focused on export markets	High, long	Long gestation period and uncertainty as to which projects will actually materialize
Medium scale production adjacent to an industrial user	Medium, medium	Limited number of industrial users actively looking at green hydrogen. Risk of getting tied to the wrong horse
Small scale production targeting the domestic heavy mobility market	Low but scalable, short	Progressive scalability a good fit for Lion size

- The AUD 16 billion domestic heavy mobility refuelling market is the most relevant market for Lion initially
- A subset of this market is buses (10% of the total size):
  - Strong regulatory support
  - Vehicle are readily available

The Lion journey into Green H2



GREEN H2 STUDY

- ✔ GPA study
- ✔ Established hydrogen advisory board
- ✔ Launch strategy

BUSINESS MODEL AND VISION

- ✔ GPA study
- ✔ ARRB study
- ✔ Updated strategy
- ✔ MOUs with BLK, Foton and Bus Queensland

CAPITAL RAISING

- ✔ Raised capital for hydrogen initiatives

MARKET ASSESSMENT & GEOGRAPHIC FOCUS

- ✔ QUT geospatial software
- ✔ Engaged with operators and transit authorities

FRONT END ENGINEERING DESIGN

- ✔ Wasco FEED commenced
- ✔ Equipment scoping
- ✔ Vendors approached

VENDOR SELECTION

- ✔ 3 vendors selected
- ✔ WASCO FEED completed

LOCATION SELECTION

- ✔ QUT Geospatial software
- ✔ First mover advantage
- ✔ First location

FIRST REFUELLER

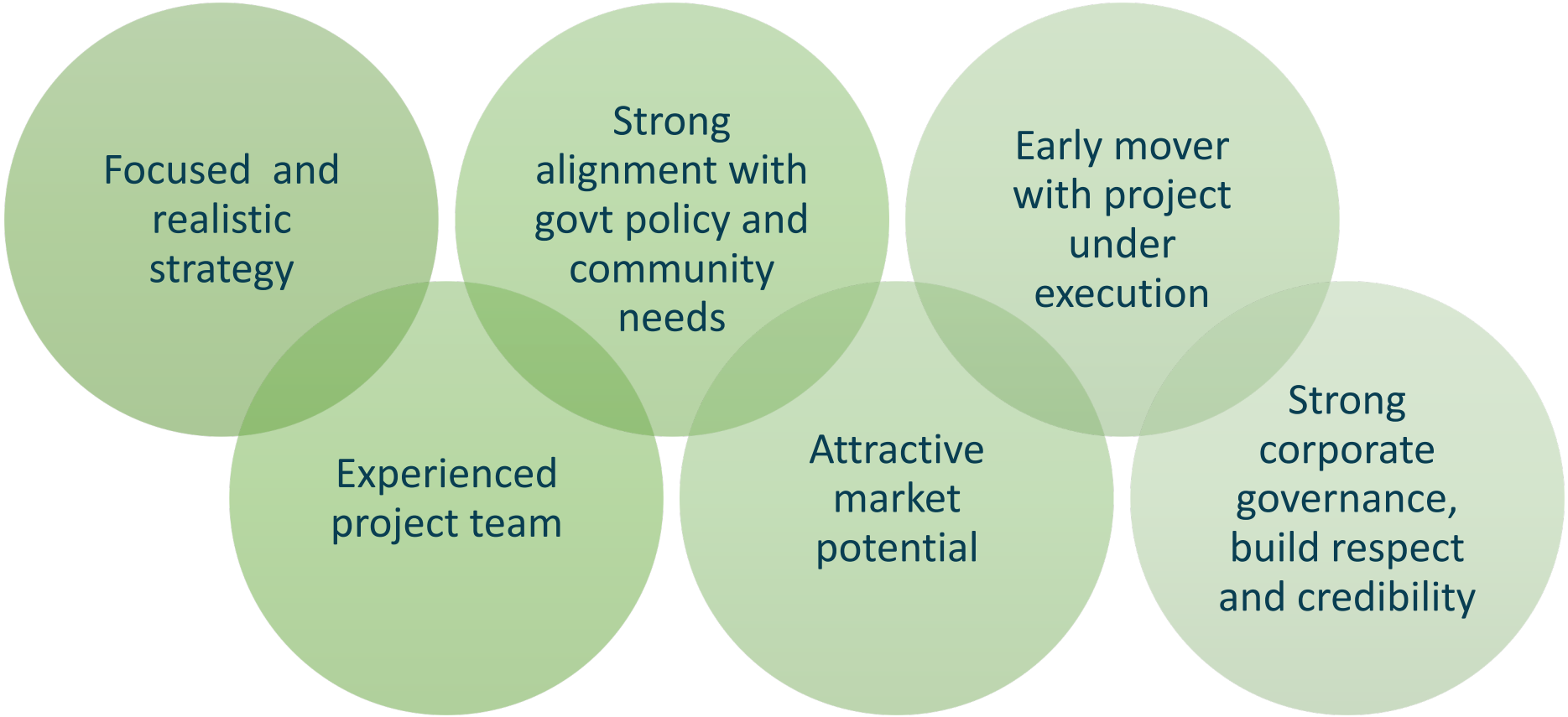
- ☐ EPC selection
- ☐ Electrolyser and refueller setup
- ☐ Market hydrogen

Lion’s hydrogen vision

Becoming the leading independent producer and distributor of green hydrogen in Australia for the domestic mobility market.

Initiate 2023, Replicate – 2024, Expand – 2026 onwards

Key investment themes



Lion's strategy - be a major H2 refuelling player in Australia

Positioning	▪ Solution provider for Australia's zero-emission targets commencing 2025 ▪ Production, storage and dispensing of green hydrogen ▪ Focused/realistic strategy
Markets	▪ Back-to-base heavy mobility (buses then trucks) ▪ Later, other transport (lighter vehicles, trains, ships, planes) ▪ Complement the battery electric vehicles' rollout
Model	▪ Small-mid onsite production hubs, each servicing a few dispensing stations ▪ Demand-driven, proximity to customers ▪ Proven, low-cost technology

Project management team

Tom Soulsby
Executive Chairman

30years

Accounting · Oil & Gas · Investments · Leadership

Damien Servant
Executive Director

20years

Finance · Oil & Gas · Commodities · M&A

Alistair Wardrope
Technical Director

16years

Mech Eng · Renewables · Biomethane · Hydrogen

Andrew Lelliott
Project Director

15years

Mech Eng · Gas Industry · Procurement · Hydrogen

Mitch Blyth
Project Manager

20years

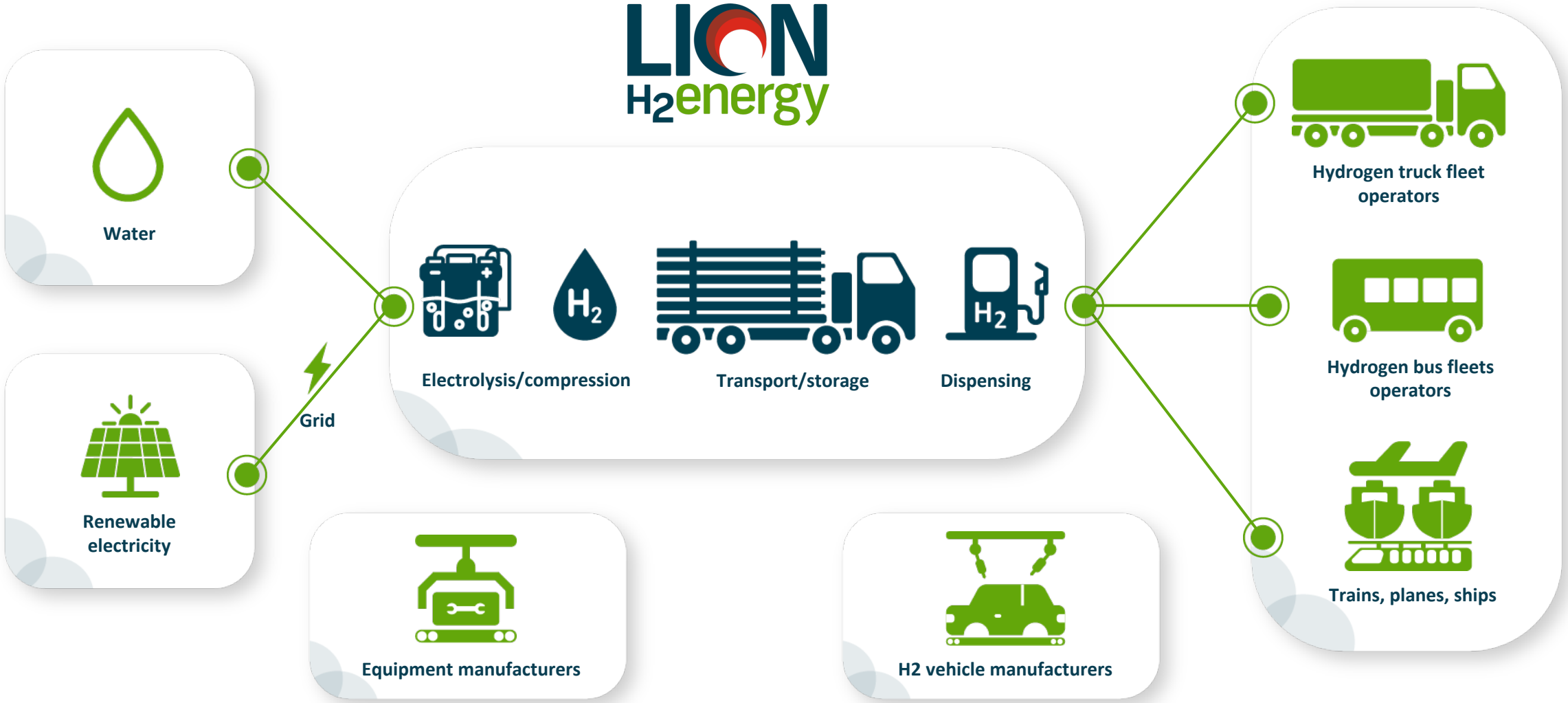
Mech Eng · Oil & Gas · Commercial · Hydrogen

Dr Andrew Dicks
Board Advisor

30+years

Chemistry · Fuel Cell · PhD · Hydrogen

Lion’s initial positioning in the value chain



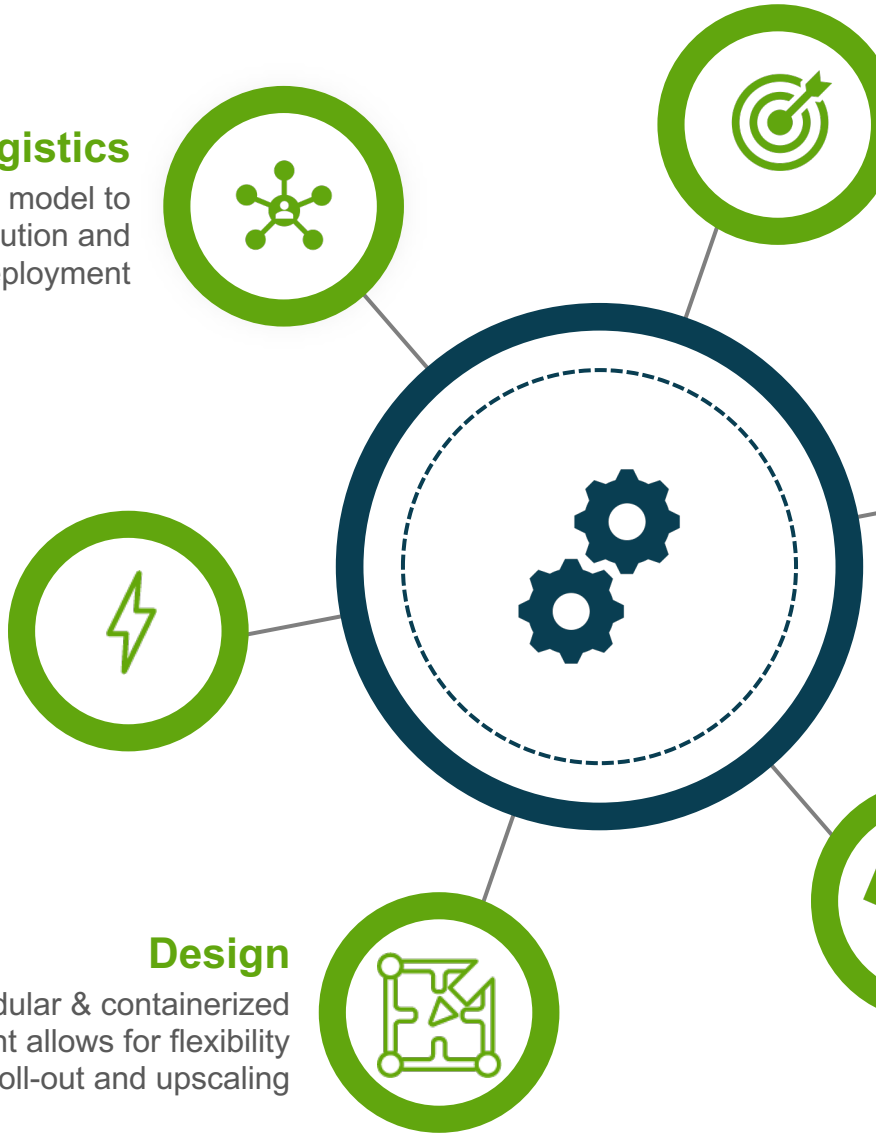
Driving the Future:
Hydrogen Dispenser vs Electric Recharging Unit

- Lion is arguably the most advanced prospective commercial scale H2 refueller in Qld, if not Australia
- Demonstrate what our study is showing us for BEB's and the recharging thereof
- Provide a simple to understand graphic showing our H2 refuelling capability vs the results of our research into existing BEB recharging
- Both technologies can recharge faster in the "perfect world" with unlimited access to power, which is not the case.
- The comparison has sparked significant debate online

Roadmap

PHASE 1 (“Initiate”) 2022-2023	PHASE 2 (“Replicate”) 2023-2025	PHASE 3 (“Expand”) 2026 onwards
▪ Establish replicable commercial business model ▪ Build, market and execute first location ▪ Start hydrogen production ▪ Finalize detailed rollout and funding plan for Phase 2	▪ Execute off-take contracts with broader customer group ▪ Signing EPC contract for 20 stations ▪ Set-up inhouse O&M team ▪ Build, market, execute ▪ Finalize detailed rollout and funding plan for Phase 3	▪ Replicate for an additional 30 locations ▪ Begin “merchant” roll-out (i.e. non-back-to-base) to other transport sectors ▪ Enlarge hub, consider renewables ▪ Optimize hydrogen production storage and infrastructure

Execution philosophy



Locations

On or close to depot refuelling to ensure proximity with customers

Logistics

Hub & spoke model to optimize distribution and flexible deployment

Technology

Proven, safe and reliable electrolysis, compression and storage technologies

Energy

Initially power from the grid with contractual arrangements optimizing lower off-peak prices

Vendors

Selected cost-competitive Asian and Western vendors with long track record and supply chain capacity

Design

Modular & containerized equipment allows for flexibility and fast roll-out and upscaling

Target market : Hydrogen buses – the early adopters

Manufacturing availability and track record in other markets

Predictable routes and back to base

City Buses

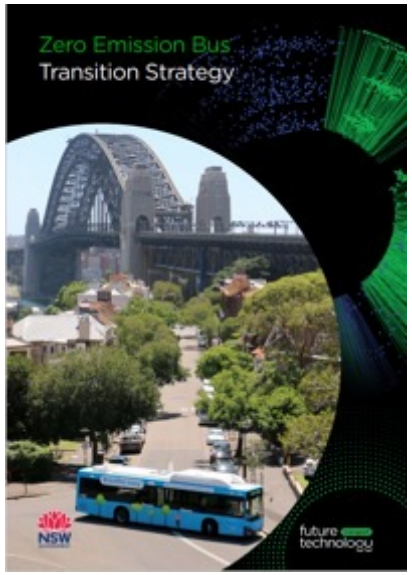
Government policy settings for Zero Emission commence 2025

Aust Road Research Board Conclusions

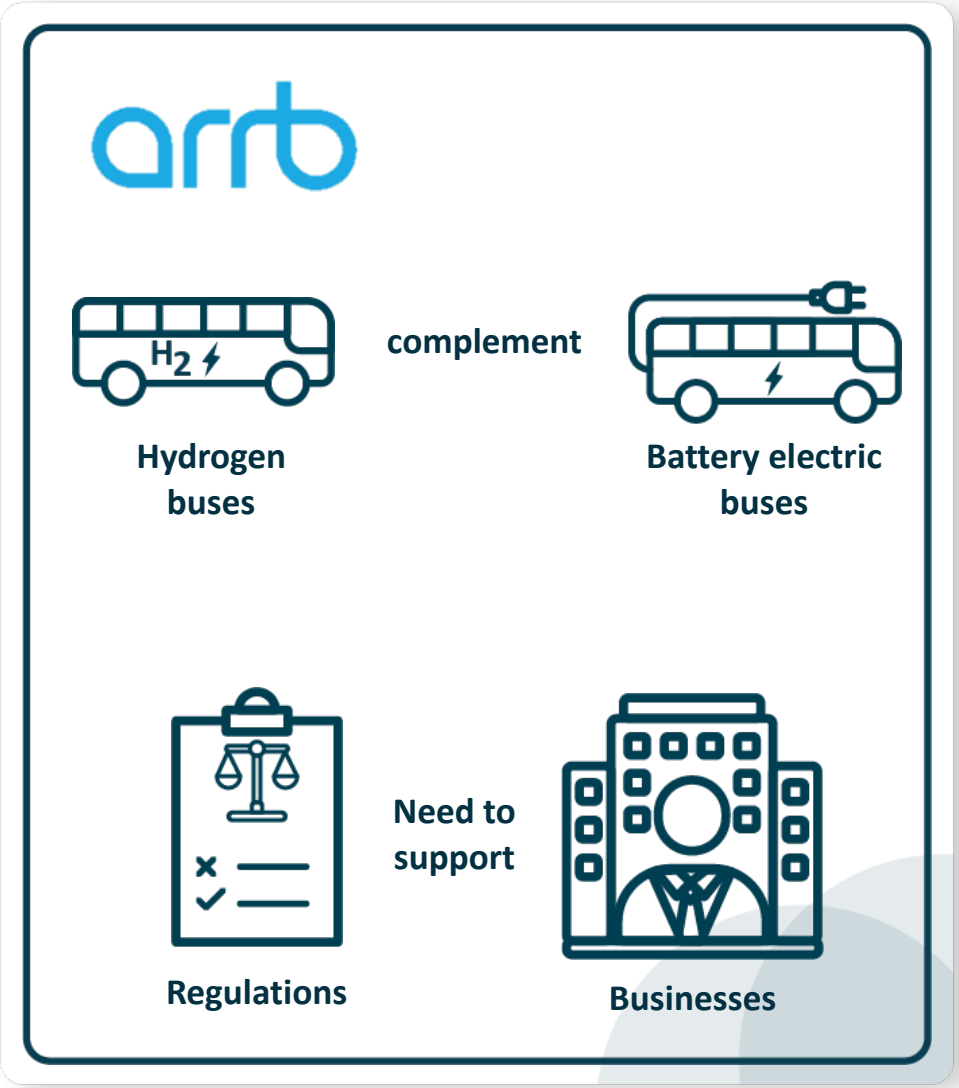
Commissioned by Lion Energy in 2022

Regulatory momentum

- Transport for NSW (TfNSW) plans to see its 4,100 Sydney buses fully transitioned by 2035
- Queensland Government committed that every new urban bus added to the fleet in South-East Queensland will be zero-emissions by 2025, followed by state-wide mandate by 2030.
- Victorian Government has pledged that all new bus purchases will be zero emission buses from 2025.
- The aggressive cut-off date for ZEB is driving bus fleet operators to quickly embrace battery and hydrogen technologies
- The Eastern Seaboard has regulatory settings conducive to the take up of ZEB.



ARRB study confirms role of H2 buses for Australia's roll-out of zero-emission buses



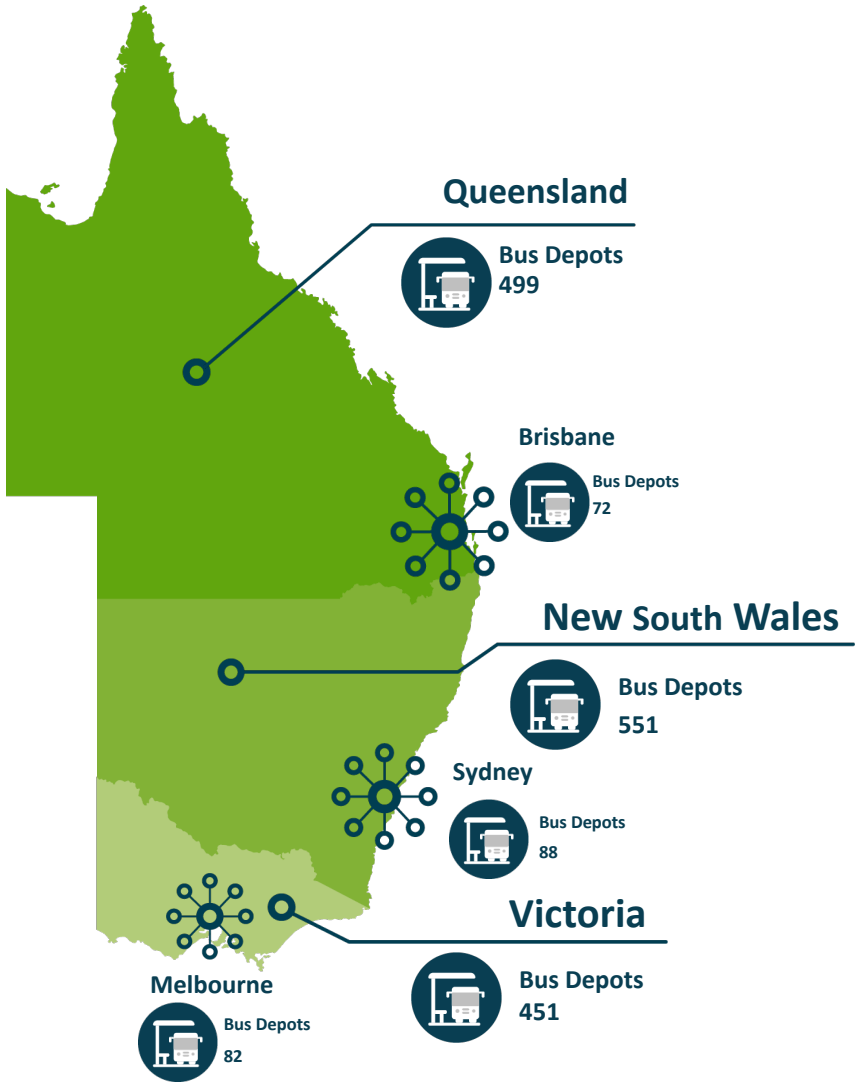
Issues for Battery Electric Buses

- limited depot space for charging infrastructure
- High infrastructure investments (chargers, energy storage and electricity connection/substation upgrades)
- Short range and long charging times of BEBs likely requiring additional BEBs to maintain service levels
- Disruption to operations by rollout of infrastructure

Clear role for FCEB

- Small footprint of H2 refuelling infrastructure and limited disruption to services
- Fast refuelling,
- No range restrictions comparable to current bus fleet
- **FCEB** (vehicle and gas) purchase prices will further reduce as the technology matures and production volumes increase

Fast replication to multiple locations

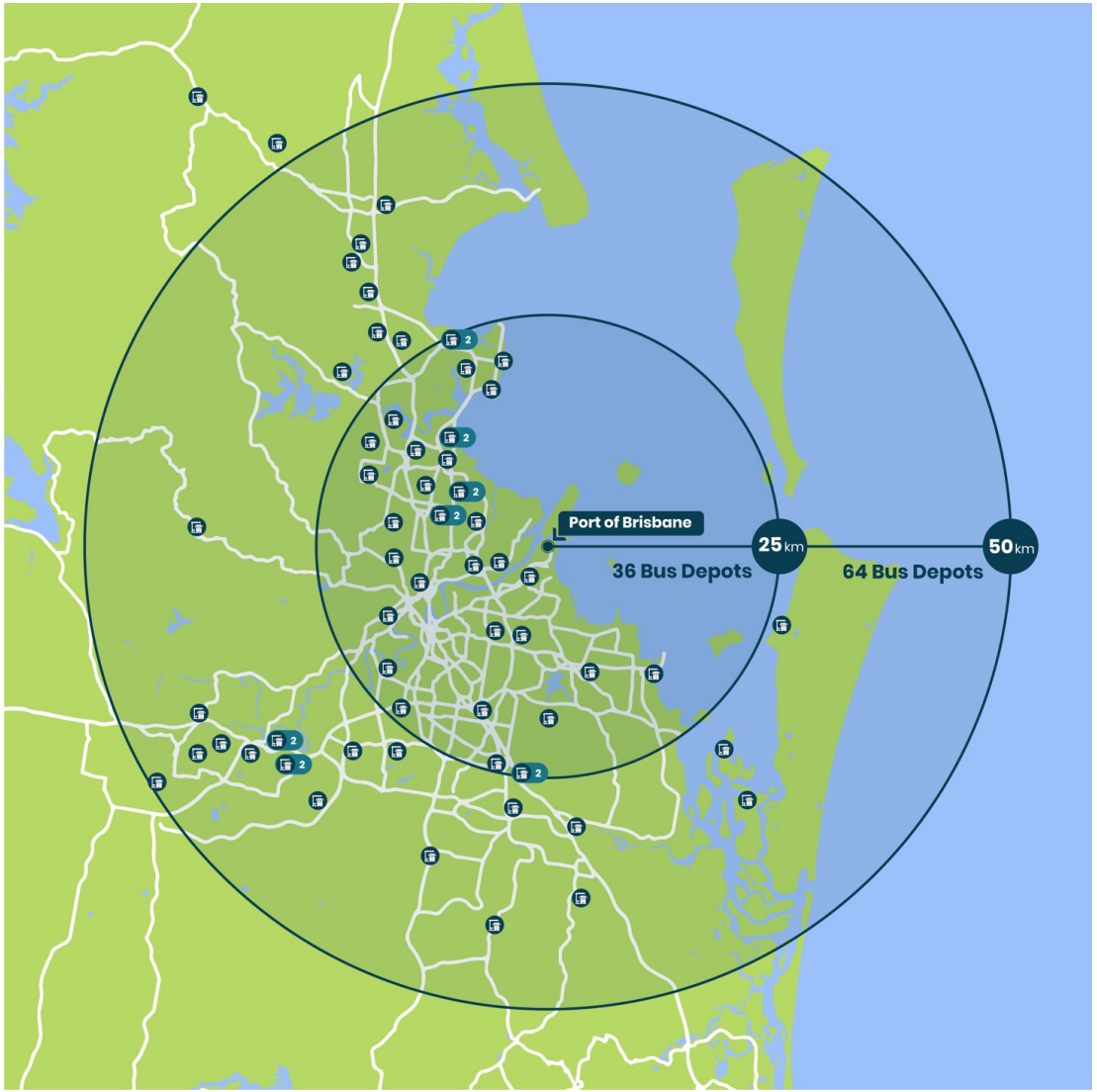


Operate a series of production hubs and up to 50 refuelling stations in Australia, with a focus on the untapped East Coast market.

There are currently no hydrogen refuelling stations for bus operations in Australia

Top 20 operators operate 300 depots with an average of 60 buses per depot

Port of Brisbane location strategically located



Current status

- Site secured at PoB
- Hydrogen refuelling station equipment procured
- Electrolysers and compressors procured
- Commercial offtake discussion in progress
- Development approval submission in July
- First commissioning targeted for 2Q2024
- Total budget: ~A$13m