

Frontier targets vertical integration in the green hydrogen industry with refuelling station strategy

Frontier Energy Limited (ASX: FHE) (**Frontier** or the **Company**) is pleased to announce the Company has placed an order with ENGV to deliver a hydrogen refuelling station in Perth, Western Australia. This refuelling station is due to be completed by 2023, making it one of the first of its kind in Western Australia.

This strategy aligns with the Company's long-term ambition to become vertically integrated across the green hydrogen industry. The Company remains on track to commence construction of the Bristol Springs Solar Project (the **BSS Project**) by 2023 and is currently conducting a renewable energy expansion study as well as a hydrogen study due to be completed mid-year (See ASX Announcement 15 March, 2022).

HIGHLIGHTS

- **Frontier has placed an order for a hydrogen refuelling station. This will be one of the first hydrogen refuelling stations to be built and operating in Western Australia**
 - *Finalisation of the location for this station is imminent with multiple, high-profile, central sites in Perth being considered*
- **The order was placed with ENGV who, working together with IVYS Inc. and PDC Machines Inc., recently built the first retail hydrogen refuelling station in Australia**
- **The Company is currently considering additional locations across Western Australia, with a strategy to roll out a hydrogen highway across the State**
- **The Western Australian Government's focus on renewable hydrogen in WA will see hydrogen play an important role in diesel replacement helping to reduce reliance on imports. WA currently imports 6.7 billion litres of diesel per annum¹.**
- **The development of hydrogen refuelling stations aligns with the Company's long-term ambition to become vertically integrated across the green hydrogen sector, from clean energy producer through to hydrogen sales and exportation**
- **The Company remains on track to commence construction of the Bristol Springs Solar Project by early 2023**

Managing Director Mike Young said, "Developing Stage One of our Bristol Springs Solar Project (114Mwdc) remains the major focus in the short-term, as the development of the Project demonstrates our commitment to not only talk about building clean energy projects, but demonstrates our ability to do so in a meaningful way.

"Stage One, however, is only the beginning for the Company's longer-term ambition, as we aim to be vertically integrated across all facets of the green hydrogen sector.

"By moving quickly to develop one of the first hydrogen refuelling stations in Western Australia, we are demonstrating our intention to be part of the whole value chain in one of

¹ 'Foreign oil dependence a 'massive vulnerability'', ABC News <https://www.abc.net.au/news/2022-03-21/calls-for-evs-to-wean-australia-off-foreign-oil-imports/100911930>



the world's fastest growing industries, however still clearly in its infancy. The Company will continue to assess other opportunities in the sector that add long term value for shareholders".

Frontier places an order for the first of its kind hydrogen refuelling station for Perth, Western Australia

Frontier has placed an order to enable it to build a hydrogen refuelling station in Perth, Western Australia. The order was placed with ENGV, who will work with IVYS Inc. and PDC Machines Inc., a partnership that has recently delivered the first hydrogen refuelling station in Australia. The development of this project will be the first of its kind in Western Australia, with targeted completion by 2023.



Figure 1: First Australia hydrogen retail station built in Canberra, Australia

The Company is close to finalising the location of the refuelling station with a number of high-profile locations in Perth being considered. In addition, the Company is identifying additional locations for refuelling stations, with the plan to roll out a hydrogen highway across Western Australia. Further information regarding this will be released as locations are finalised.

IVYS Inc. is a Massachusetts, US based hydrogen refuelling solutions company focused on bringing safe, cost effective and readily deployable dispensing and station products to enable clean mobility.

PDC Machines Inc. is a Pennsylvania, US based company making hydrogen compressors, hydrogen refuelling stations, and related industrial products.

Frontier's first hydrogen refuelling station will be a compact, on-site hydrogen station that will be a Western Australian first. It will integrate an electrolyser, compression, storage and dispensing sub-systems to support a fleet of hydrogen vehicles. The system will be capable of delivering 20 kg/day of green hydrogen at 700 bar pressure for fast-fill refuelling adhering to SAE Protocols. Fuelling will take under 3 minutes to completely fill up a 5 kg tank from empty.

Powered from renewable energy, the hydrogen will be produced on demand via PEM-based water electrolysis, purified to SAE J2719/ISO 14687 fuel cell quality, and compressed via a contaminant-free diaphragm compressor into on-board buffer storage tanks. The system is designed to be fully automated, generating and storing hydrogen as necessary to support full pressure refuelling at acceptable flow rates in the compact, distributed fuelling solution

The unique design will enable the installation of the system in a safe, practical and efficient way, providing the flexibility to adjust the infrastructure footprint for future growth whilst minimising congestion. The hydrogen station will also connect to external storage equipment which will enable higher utilisation of the system's hydrogen generation capacity (e.g. during periods of low demand), enabling an increase in supported fuel cell electric vehicle fleet sizes.

Authorised for release by Frontier Energy's Board of Directors.

ENDS

To learn more about the Company, please visit www.frontierhe.com, or contact:

Mike Young
Managing Director
+61 8 9200 3428
myoung@frontierhe.com

Adam Kiley
Corporate Development
+61 8 9200 3428
akiley@frontierhe.com

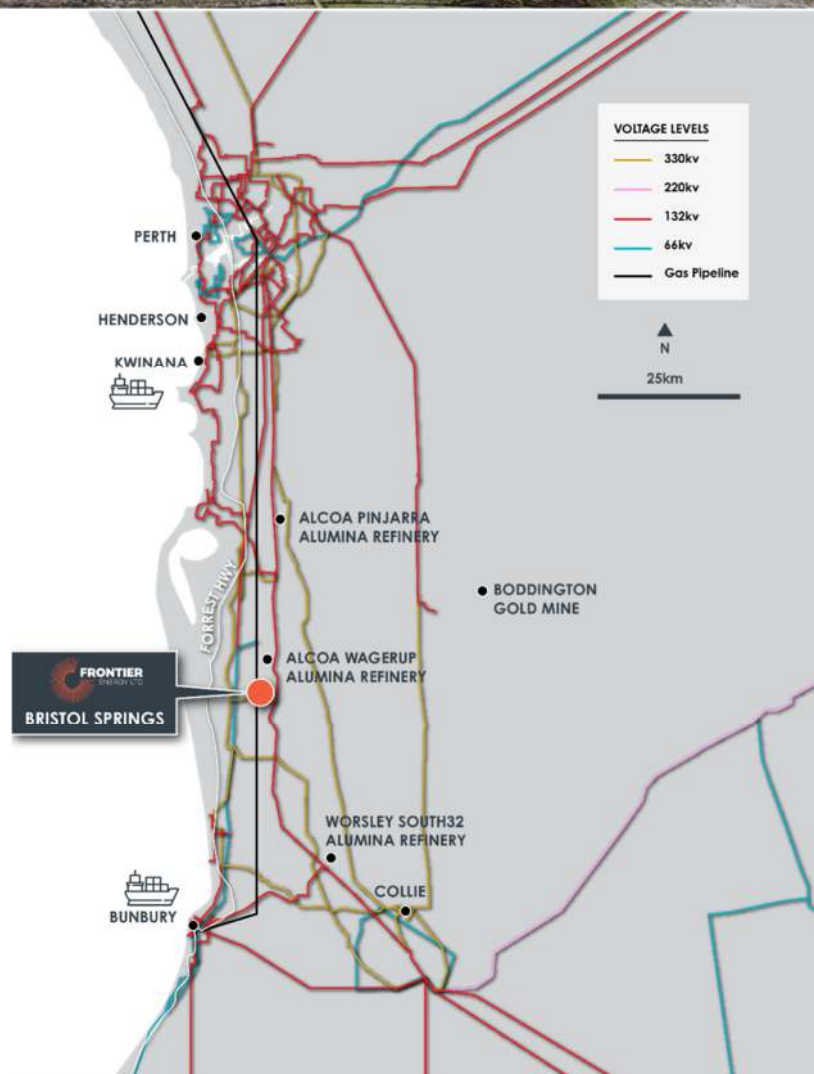


About Frontier Energy

Frontier Energy Ltd (ASX: FHE) is a clean energy company developing the Bristol Springs Solar Project (BSS Project) near Waroona in Western Australia.

The BSS Project will provide enough power for 45,000 homes and abate 180,000t of CO₂ emissions per year.

The Project is located 120 km south of Perth, and importantly is within the "Golden Triangle" of Kwinana-Bunbury-Collie, which provides both supporting infrastructure and potential offtake customers.



Directors and Management

Mr Grant Davey
Non-Executive Chairman

Mr Mike Young
Managing Director

Mr Chris Bath
Executive Director

Ms Dixie Marshall
Non-Executive Director

Registered Office

Level 20, 140 St Georges Terrace
Perth WA 6000

Share Registry

Automic Registry Services
Level 5, 126 Philip Street
Sydney NSW 2000

For a comprehensive view of information that has been lodged on the ASX online lodgement system and the Company website, please visit asx.com.au and frontierhe.com, respectively.