

# Building a leading near term, renewable energy company



Investor Site Trip  
Bristol Springs Project

ASX: FHE  
November 2022



# Frontier Energy – Bristol Springs Hydrogen Project

## About Frontier Energy Limited

- In 8 months since listing (\$0.13 / share) the Company has achieved multiple major milestones
  - Strengthen relationships with government and aligned the Company's strategy with policy and targets
  - Feasibility Study outlined the potential to be one of the first and lowest cost green hydrogen projects in Australia
  - Increased our renewable energy potential in the region from 114MW (Stage One) to +700MW
  - Enhanced the board and management team to ensure the right blend of expertise

## CAPITAL STRUCTURE

<b>292.4m</b>	<b>33.4m</b>
Shares on issue	Options
<b>\$155m</b>	<b>~\$12m</b>
Market Cap At \$0.53/ share	Cash Sept 22 Exc. \$8m investment in MZN 45% shareholder



**Samuel Lee Mohan**  
Managing Director

Mr Lee Mohan is an accomplished energy executive with over 20 years' experience in the energy and utilities industry. Mr Lee Mohan's experience spans many facets of the industry, from design and construction through to strategic asset management, regulation, policy and commercial.



**Grant Davey**  
Executive Chair

Mr Davey is an entrepreneur with 30 years of senior management and operational experience in the development, construction and operation of precious metals, base metals, uranium and bulk commodities throughout the world.



**Chris Bath**  
Executive Director

Mr Chris Bath is a Chartered Accountant and member of the Australian Institute of Company Directors, and has been CFO for companies listed on AIM, ASX and JSX.



**Dixie Marshall**  
Non- Executive Director

Ms Marshall has more than 38 years' experience in media, advertising, politics, and communications across a range of platforms, including television, radio, newspapers, and digital. She has won awards for journalism, and more recently advertising.



**Amanda Reid**  
Non- Executive Director

Ms Reid has a significant background in government relations providing advice to a wide cross section of companies and organisations for more than 15 years for two national government relations and corporate communications firms.

# Frontier Energy – Bristol Springs Hydrogen Project

Existing infrastructure surrounding the project puts Frontier in a class of its own

## Bristol Springs Project (BSP)

- 120km south of Perth in the Shire of Waroona - surrounded by major infrastructure critical for green hydrogen
  - Solar energy to be the renewable energy solution given favourable conditions

## Pre-Feasibility study (August 222) for Stage One (114MW) outlines one of Australia's lowest cost, near term green hydrogen projects

- Low Cost – A\$2.83/kg of hydrogen (inclusive of capital costs)
  - Total Capital Cost (Stage One) - \$236.8m (\$166.3m solar, \$69.9m hydrogen)
- Production - 4.4Mkg pa with potential to increase significantly both through Stage One and future expansion opportunities

## Major work underway to achieve construction commencement during 2023

- Pre-FEED Study → Finalise EPC Contractor → Offtake → Project Financing
  - CEFC & ARENA - funding potential to minimise dilution with favourable terms

## Job creation opportunity

- ~300 new jobs created during construction with an additional ~ 50 created during production

## Significant growth potential outside of Stage One development

- +1GW renewable energy target - additional opportunities being assessed
  - Own the land – Simplifies development (approvals timeline & native title)



# Location, Location, Location

The major barrier for entry into the sector is access to associated infrastructure that adds millions to the initial capital cost. Frontier is strategically located in the heart of this infrastructure that reduces the capital cost whilst allowing for future expansion

## Landwehr Terminal – SWIS (330kv Lines)

- Game changer for the Project
- **Secured access** to a 'bay' - no further access available on existing infrastructure
- Provides additional revenue from overflow energy
- Acts as an effective battery – cost saving and flexibility

## Water access (~9L for 1kg of hydrogen)

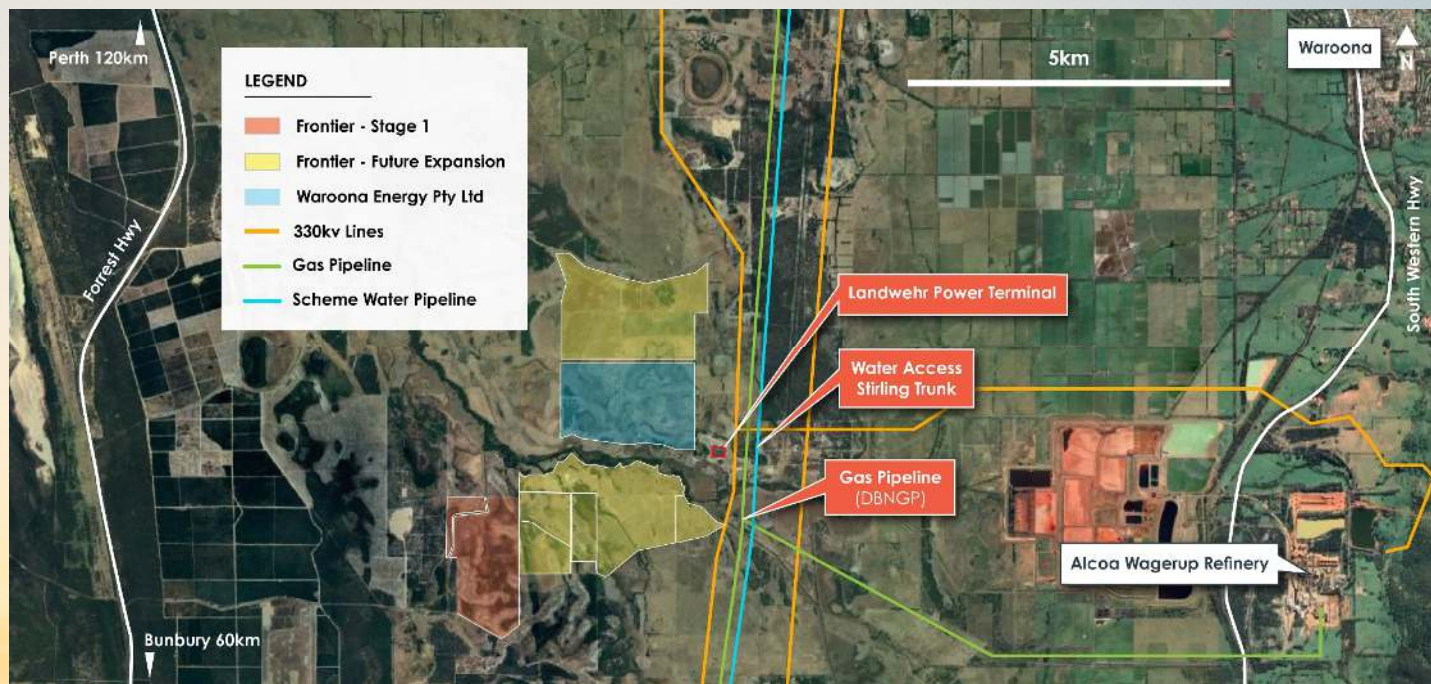
- **Secured access** to Stirling Truck Main (scheme water) of 1,250 KI/day. Sufficient for 150MW electrolyser
  - Avoids desalination – major cost, time and environmental approvals

## Gas pipeline (DBNGP)

- Probable pathway for Stage One offtake (H2 target for DBNGP is 10%. Stage One will contribute only 0.2% to this target)
- Offtake discussions with priority targets underway - not limited to end users of hydrogen, but also other participants within the energy industry

## Local skilled workforce with proximity

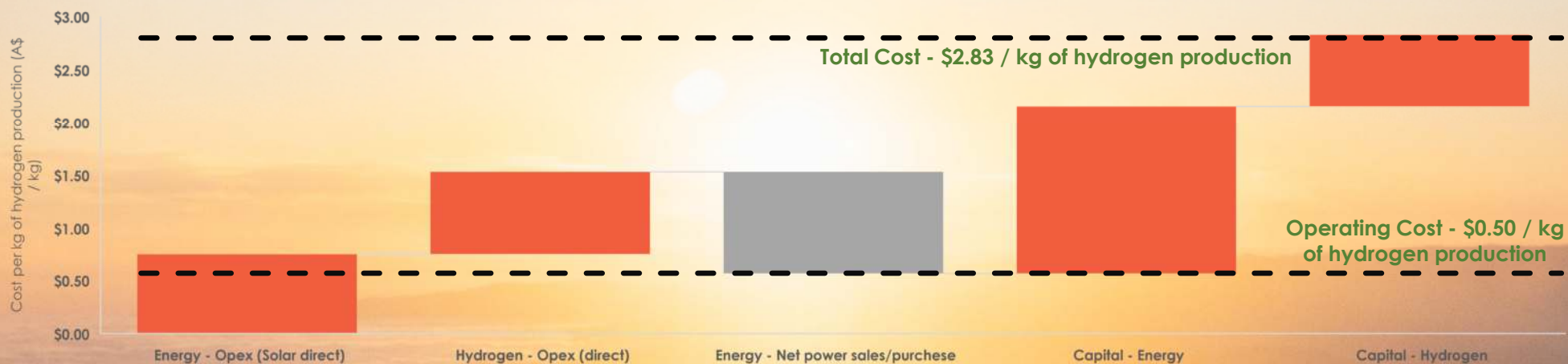
- 8km to Waroona, 60km to Bunbury, 120km from Perth (Population - Waroona (4k), Bunbury (89k) & Perth (2.1m))



# PFS outlines Low-Cost Green Hydrogen Production

## Bristol Springs Project - Stage One

- Stage One solar farm (114MW) - produce 4.4 million kilograms of green hydrogen pa
- Low estimated cost (inclusive of capital)<sup>1</sup> of \$2.83 per kilogram of hydrogen produced
  - Based on publicly available data, this is expected to place the Project as one of the lowest cost producers of green hydrogen in Australia
  - *Inclusive of total capital costs \$236.8m (\$166.3m solar, \$69.9m Hydrogen)*
- Potential to reduce costs further through optimisation, Behind-the-meter power supply and purchase refinement, reduce water costs and changing demand for Large Generating Certificates (LGC) (ie – carbon credits)
- Expansion Potential - Assessing additional opportunities to increase holding with a +1GW target
  - *Expanded production is expected to be at lower costs compared to Stage One due to shared capital and economy of scale*



# Grid provides additional income and battery capacity

The Landwehr Terminal is the game changer for BSS compared to more remote hydrogen projects. The Terminal provides increased income (reduced opex) and flexibility given it acts a battery

## Excess power sales

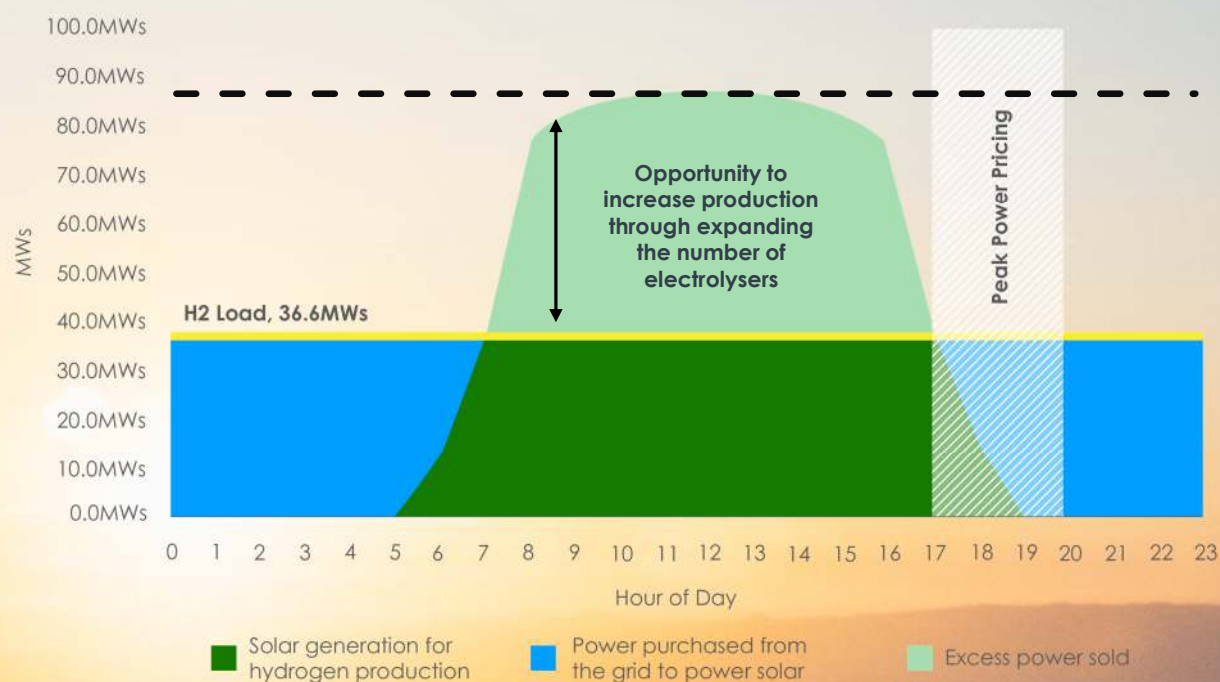
- During peak production excess power is sold into the grid
- LGC (carbon credit) remain with the Company

## Reserve capacity credits

- Electricity retailers are required to procure capacity credits in proportion to their share of the electricity load
- Twelve Peak SWIS Trading Intervals

## Replaces the requirement for a lithium ion battery

- Battery estimated cost \$1.9m / MW<sup>1</sup>
  - Limited life - 2 to 4 hrs
- Purchasing energy during offpeak times
  - Lower cost however service charges
- Retirement of LGC generated through solar production keeps hydrogen green



<sup>1</sup> - <https://www.nrel.gov/docs/fy21osti/79236.pdf>. Exchange rates used 1.14 USD/AUD

# Frontier's Path to Production

## BUILDING A SCALEABLE RENEWABLE ENERGY HUB IN SW WA

Leading the pack for commercial green hydrogen production in WA

Strategically located near major infrastructure and industry

Key contributor to Australia's hydrogen production strategy

Grid-firming & energy security support to the SWIS as the State transitions from coal

Major job creation within a new industry



## Major milestones through 2023

EPC Contractor  
(Solar)  
& Pre-FEED  
(Hydrogen)  
& DFS



Offtake negotiations



Project Financing



Commence Construction



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information contact**

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