## On track to becoming a fully integrated renewable energy producer <br> FRONTIER <br> ENERGY LTD



September 2023

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## FORWARD LOOKING STATEMENT






 Company's supplies or service providers; reliance on key personnel, retention of key employees and the impact of the COVID-19 pandemic on the Company's business and operations.

 to be incorrect. The Company believes that the assumptions and expectations reflected in such forward-looking information are reasonable.

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## DEFINITIVE FEASIBILTY STUDY


 included in that announcement continue to apply and have not materially changed.

## ACKNOWLEDGEMENT OF COUNTRY

## Renewable Energy solution in the heart of industrial WA

Frontier Energy (FHE.ASX, OTCQB: FRHYF) has announced the proposed acquisition of Waroona Energy (WHE.TSXV) that aims to create a large-scale Australian renewable energy company, with shovel-ready solar generation of 355MW and the potential to expand to more than 1GW in South West Western Australial

- Target completion of transaction - December 2023


## Staged development approach that targets high demand

 markets and future growth opportunities1) Solar Energy - Approvals, permits and grid connection in place

- Stage One targeting l20MW, capex being firmed / finalised

2) 120 MW dual fuel hydrogen peaking plant

- Offtake for green hydrogen and access to peak energy prices

3) Green Hydrogen - 72MW Electrolyser

- DFS complete; Submission for Headstart program - IQ2024

What makes Frontier unique to other renewable energy players?

- Access to existing world class infrastructure that is essential for the renewable electricity and green hydrogen industries
- Significantly reduces the cost and time to first production

CAPITAL STRUCTURE 299m
Shares on issue Post deal - 445m'

## \$114m

At $\$ 0.38$ / share Market Cap Post deal - $\$ 170 m^{\prime}$
~\$8.8m
June 23
Cash
post deal - \$22m'


KWINANA,
PERTH SEAWATER
DESALINATION PLANT

## Western Australian Electricity market

The SWIS (South West Interconnection System)

- AMEO recently announced' the SWIS is facing a "major supply-demand deficit over the next decade and there is an urgent and imminent requirement for investment in new electricity generation"
- Major change in forecast compared to 12 months earlier when AMEO highlighted the SWIS was in a good position....what were the factors that caused this significant change in only 12 months?


## Demand

- Forecast increase of between $78 \%{ }^{12}$ and $220 \%{ }^{13}$ over the next decade compared to previous estimate that was relatively flat
- This increase in demand was driven by electrification, growth in airconditioning, EV uptake and expansion of industrial loads


## Supply

- The Federal Government is targeting $82 \%$ renewable power generation by 2030
- SWIS currently has $35 \%^{4}$ renewable energy
- The State has announced the planned closure of all coal fired power capacity by 2030'. This is currently $25-30 \%$ of supply

What is being done in response to this?
The State is planning a major expansion of the grid. This will however take time to complete, as will development of additional generation capacity.

Demand - Consumption forecast over the next decade ${ }^{1}$


Note *2022 Forecast is to 2031/2032

Supply - FY23 ${ }^{4}$ Solar Utility


## Electricity prices already on the rise in WA

Participants in the WA electricity market can receive revenue from three main sources

Wholesale Market Sales ${ }^{1}$ (WEM)

- Over the last year the average price increased by $48 \%$ to $\$ 82 / \mathrm{MWh}$
- Solar period price ${ }^{2}$ increased by $50 \%$ to \$66/MWh
- Afternoon peak energy price (4pm - 9pm) increased $45 \%$ to $\$ 119 / \mathrm{MWh}$

Average electricity price


## Reserve Capacity (RCP)

- Unique to WA as generators are paid for electricity generation capacity
- Intermittent capacity (renewables) is discounted (solar 25\%; batteries 20\%)
- Benchmark RCP is $\mathrm{A} \$ 193,400 / \mathrm{MW}^{3}$ for 2025/26
- Can be locked in for 5 years
- $1.3 X$ multiple applies when forecast market deficit

Reserve Capacity Price


Large Generation Cerifificates
One LGC per MWh of eligible electricity generated (renewable energy)

- Current spot price $\sim \$ 50$ per LGC
- LGC system expires in 2030
- To be replaced by Guarantee of Origin certificates



## Energy prices ${ }^{1}$ continue to trend higher at all times of the day

Multiple trends indicate energy prices are going to continue to rise

- Year on year at all times of the day energy prices have increased for the past 3 years
- Two peak periods have emerged (morning and afternoon) and the duration and price in both have expanded
- Whilst the "duck curve" is evident - the water below the duck (low prices) keeps getting higher


Focus on renewable energy solutions that provides the best returns for shareholders

## Why solar is our renewable energy solution?

- Solar is one of the most advanced and reliable renewable energy solution today
- Capital costs for solar have fallen significantly in the past decade whilst innovation upside is arguably nearing its peak
- Australia has some of the world's best solar conditions and WA has the longest daylight hours in the country
- WA has one of the world's highest installation rates of rooftop solar (PV) at $38 \%{ }^{1}$
- $P V=\sim 16 \%^{2}$ of WA (SWIS) electricity supply
- Estimated max. PV installation is $\sim 50 \%$ by 2030
- PV has been the major cause for the "duck curve" and the impact on day time electricity prices
- price dips to low/negative during peak solar conditions when demand is also low



## Solar energy to power our hydrogen strategy in low price periods

- Despite the "duck curve" the average solar price the Company would have received (including nil priced periods) would have been a $50 \%$ increase ( $\$ 66 / \mathrm{MWh}$ ) compared to the previous year
- Shoulder period prices increased
- Winter solar prices increased
- Frontier is developing a multi pronged strategy, aimed at meeting the electricity markets needs whilst maximizing our profitability
- Solar energy sales - shoulder period
- Green hydrogen production - midday
- Peaking plant (hydrogen consumptions) early evening/early morning (peak energy consumption)


Frontier strategy is to dynamically optimise production to suit the prevailing market conditions

## Staged development that targets high demand markets and future growth opportunities



## Access to existing world class infrastructure that is essential for the renewable energy and green hydrogen industries



If this infrastructure was not in place capex would be $+\$ 1 \mathrm{bn}$ whilst adding +5 years to the production timeline

## Solar - the foundation for Frontier's renewable energy strategy

Solar Energy - pillar for future development pathway

- Land ${ }^{1}-868 \mathrm{Ha}$ of flat, freehold land which is predominantly cleared
- All major approvals, heritage and permits in place allowing for solar construction to commence
- Two connections to the Landwehr Terminal providing up to $1.1 \mathrm{GW}^{1}$ of electricity production (export)
Stage One development targeting 120MW
- Class 2 cost estimate for complete project execution underway
- Including progressing the design, size and technology selection. This will also enable a final capital cost estimate
- Following this, the board will be in a position to make FID to commence construction of the Stage One solar facility

Potential Stage One Solar EBITDA ${ }^{2,3,4}$



## Peaking Plant - pathway for green hydrogen consumption

What is a Peaking Plant?

- Peaking Plants are a mature technology used to supply power and operate during periods of high demand (and pricing) for electricity
- Peaking Plants are a first mover in the consumption of hydrogen as a fuel given existing market mechanisms that are already in place
- The WA Government has announced plans to legislate $1 \%$ of the SWIS to come from green hydrogen

Green hydrogen (dual fueled) peaking plant study underway - 120MW

- Waroona Energy has commenced a Study assess the development of a green hydrogen (dual fuel) peaking plant ${ }^{1}$
- Completed during 4Q2023
- The peaking plant can be fuelled by both green hydrogen and natural gas
- Dampier to Bunbury Natural Gas Pipeline adjacent to the Project

Reserve Capacity Payments (RCP) provide bankability

- At 120MW, the RCP would be ~A\$23m pa based on the 2025/26 Benchmark of $\$ 193,400 / \mathrm{MW}$
- A $1.3 \times$ factor for 'additional required capacity' could potentially increase this to ~A\$30m per annum
- RCP can be locked in for five years providing revenue certainty and with it debt financing


Potential Green Hydrogen Consumption ${ }^{3}$

|  | Percent of hydrogen consumed (by volume) |  |
| :--- | :---: | :---: |
| Run time per annum | $\mathbf{2 5 \%}$ | $\mathbf{5 0 \%}$ |
| $\mathbf{1 , 0 0 0}$ hours | $\mathbf{1 , 0 3 5} \mathrm{tpa}$ | $2,610 \mathrm{tpa}$ |
| $\mathbf{2 , 0 0 0}$ hours | $2,070 \mathrm{tpa}$ | $5,220 \mathrm{tpa}$ |

- ASX Announcements 5 July 2023 and 30 August 2023

3- Based on preliminary technology assessment

## Hydrogen Headstart - What is required to be considered?


Australian Federal Government
announces $\quad \$ 2 b n$ for Hydrogen
Headstart, providing revenue support
for large-scale renewable hydrogen
projects through competitive hydrogen
production contracts

Additional funding programs likely after this first initiative

## Process and indicative timing

| Stage | Timing |
| :---: | :---: |
| Consulfation | 2 Q23 |
| EOI | 4 Q23 / 1Q24 |
| Initial evaluation | 2 Q24 |
| Second Round | 3 Q24 |
| Allocalion | 4 Q24 |
| Funding | $2026 / 27$ |
|  |  |

## Key criteria to be considered

| Criterion |  | Frontier's Position |
| :--- | :--- | :--- |
| Minimum Electrolysis - 50MW | 72 MW |  |
| Eligible end uses / offtake | Initial consumption through a peaking plant or <br> supplementing domestic natural gas supply |  |
| Hydrogen production <br> renewable energy | by | Powered by our 120MW solar facility |
| Comply with the proposed <br> GO scheme | Frontier's project is pre-certified under the zero carbon <br> certification scheme lone of only three projects in <br> Australia) |  |
| Location - Australia only | Waroona - 120km south of Perth (Lead Project status <br> with the Western Australian Government) |  |
| Frontier meets ALL of the key criteria to be a leader for consideration |  |  |

## FRONTIER

 future generations
## Sustainability

At Frontier, we care for our community, environment, and all stakeholders, by delivering safe, reliable and sustainable clean energy solutions

- Our solar energy and green hydrogen project will provide a significant contribution to both the Federal and State decarbonisation strategy
- We delivered our inaugural Sustainability Report in Q2 2023
- The Bristol Springs Project will create 300 jobs during construction
- Once construction commences the Company is targeting on-going future expansion
- No clearing of conservation significant flora is required for Stage 1 solar farm development
- We are focused on diversity and inclusion with $44 \%$ female representation in the leadership team ${ }^{1}$
${ }^{1}$ Leadership team includes Board and Executive Management (a total of nine people)


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## Frontier's Path to Production <br> BUILDING A SCALEABLE RENEWABLE ENERGY HUB



## FRONTIER

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## Appendix 1 - Share Plan to acquire Waroona Energy Inc¹

Indicative timetable and key dates

Frontier Energy (FHE.ASX) signed of a Letter of Intent with Waroona Energy Inc. (TSXV: WHE) (Waroona), to acquire all Waroona shares (the Transaction) not currently held by Frontier (Frontier already holds $20 \%$ of Waroona) via a Canadian Plan of Arrangement (Share Plan).

The Transaction aims to create a large-scale Australian renewable energy company, with shovel-ready solar generation of 355MW and the potential to expand to more than 1GW, based on adjoining freehold land ownership and grid connections that have been secured by the two companies in South West WA.

Under the Share Plan, Waroona shareholders will receive 1 new Frontier Share for every 4.27 Waroona Shares held on the Share Plan record date.

| Stage | Timing |
| :--- | :---: |
| Conduct due diligence and sign definitive agreement | October 2023 |
| Waroona to finalise proxy circular | October 2023 <br> Obtain interim court approval |
| October 2023 |  |
| Mail proxy circular | November 2023 |
| Shareholder meeting | December 2023 |
| Second Court Hearing to approve Share Plan | December 2023 |
| Implementation Date | December 2023 |
| Indicative capital structure post transaction |  |
| Share Structure | Shares on issue (m) |
| Current shares on issue | 298.9 m |
| Shares to be issued to Waroona shareholders | 145.7 m |
| Total shares on issue post transaction | 444.7 m |
| Indicative Market capitalisation (at \$0.38/share) | $\$ 170 \mathrm{~m}$ |
| Options | 56.9 m |
| Performance shares | 25.5 m |
| Cash Position | $\$ 8.8 \mathrm{~m}$ |
| Cash Balance - Frontier (June 2023) | $\$ 13.2 \mathrm{~m}$ |
| Cash balance - Waroona (June 2023) |  |

