Greenvale ENERGY LIMITED

**ASX ANNOUNCEMENT** **17 May 2023**

# INVESTOR PRESENTATION-RESOURCES RISING STARS

Greenvale Energy Ltd (ASX: **GRV**) ('**GRV**', '**Greenvale**' or '**the Company**') is pleased to advise that Director and Chief Executive Officer, Mark Turner, will be presenting at the Resources Rising Stars Investor Series, which is to be held on the Gold Coast, Queensland. Mr Turner will be presenting on 17 May 2023 at 9:45 AM AEST / 7:45 AM AWST.

The presentation slides to be delivered by Mr Turner are attached to this announcement and investors will be able to livestream the presentation at no cost by going to:

https://www.bigmarker.com/series/resources-rising-stars-2023-/series_summit

**Authorised for Release**

This announcement has been approved for release by Kurt Laney, Joint Company Secretary.

**Contact**
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Greenvale
ENERGY LIMITED

# DRIVING CHANGE

*A dynamic fusion of bitumen and geothermal energy to help meet Australia's infrastructure needs*

RESOURCES
RISING STARS
Opportunities + Insights for Resources Investors

# Important Information

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**FORWARD-LOOKING STATEMENTS**
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The forward-looking statements in this presentation are based on current expectations, estimates, forecasts and projections about Greenvale Energy and the industry in which they operate. However, please note, they do relate to future matters and thus are subject to various inherent risks and uncertainties. Actual events or results may differ materially from the events or results expressed or implied by any forward-looking statements.

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You are cautioned place no undue reliance on any forward-looking statement. The forward-looking statements in this presentation reflect views held only as at the date of this presentation.

**COMPETENT PERSON STATEMENT**
The information in this presentation that relates to the Alpha Mineral Resource Estimate is based on information compiled by Mr. Carl D’Silva, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy (Member number 333432). Mr. D’Silva is a full-time employee of SRK Consulting (Australasia) Pty Ltd, a group engaged by the Company in a consulting capacity.

Mr D’Silva has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’. Mr D’Silva consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the Mineral Resource Estimate dated 9 March 2022 as announced to the ASX on that date and which is available at www.greenvaleenergy.com.au. The Company confirms that in relation to the Alpha Torbanite Project Mineral Resource Estimate, all material assumptions and technical parameters underpinning the estimate continue to apply and have not materially changed when referring to its resource announcement made on 9 March 2022.

The information in this presentation that relates to liquefaction testing is based on information compiled by David Cavanagh, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy AusIMM Member number 112318. David Cavanagh is a full-time employee of Core Resources.

David Cavanagh has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’. David Cavanagh consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

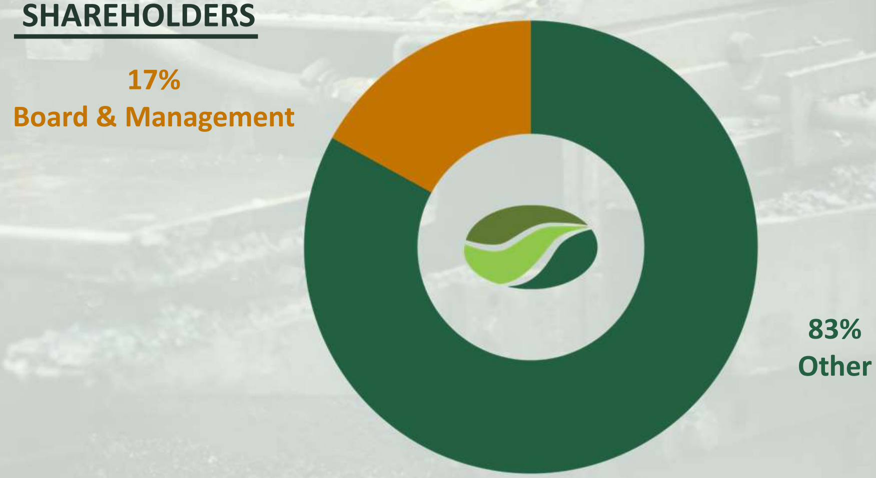
# Corporate Summary

## Greenvale Energy Ltd (ASX: GRV)

| CAPITAL STRUCTURE | | |
|---|---|---|
| Shares on issue | M | 433 |
| Options | M | 34 |
| Share price (11 May 2023) | A$ | $0.11 |
| Market Capitalisation (11 May 2023) | A$ | $47.6m |
| Cash & Liquid Investments (11 May 2023)[1] | A$ | $8.53m |
| Top 20 Shareholders | % | 45% |

1: The above liquid assets amount includes the Company's shareholding in Astro Resources NL (ASX:ARO). It is noted that the following shares held in Astro Resources by the Company remain subject to escrow terms:
(a) 13.80 million shares which are to be released from escrow on 28 November 2023; and
(b) 23.00 million shares which are to be released from escrow on 28 November 2024.

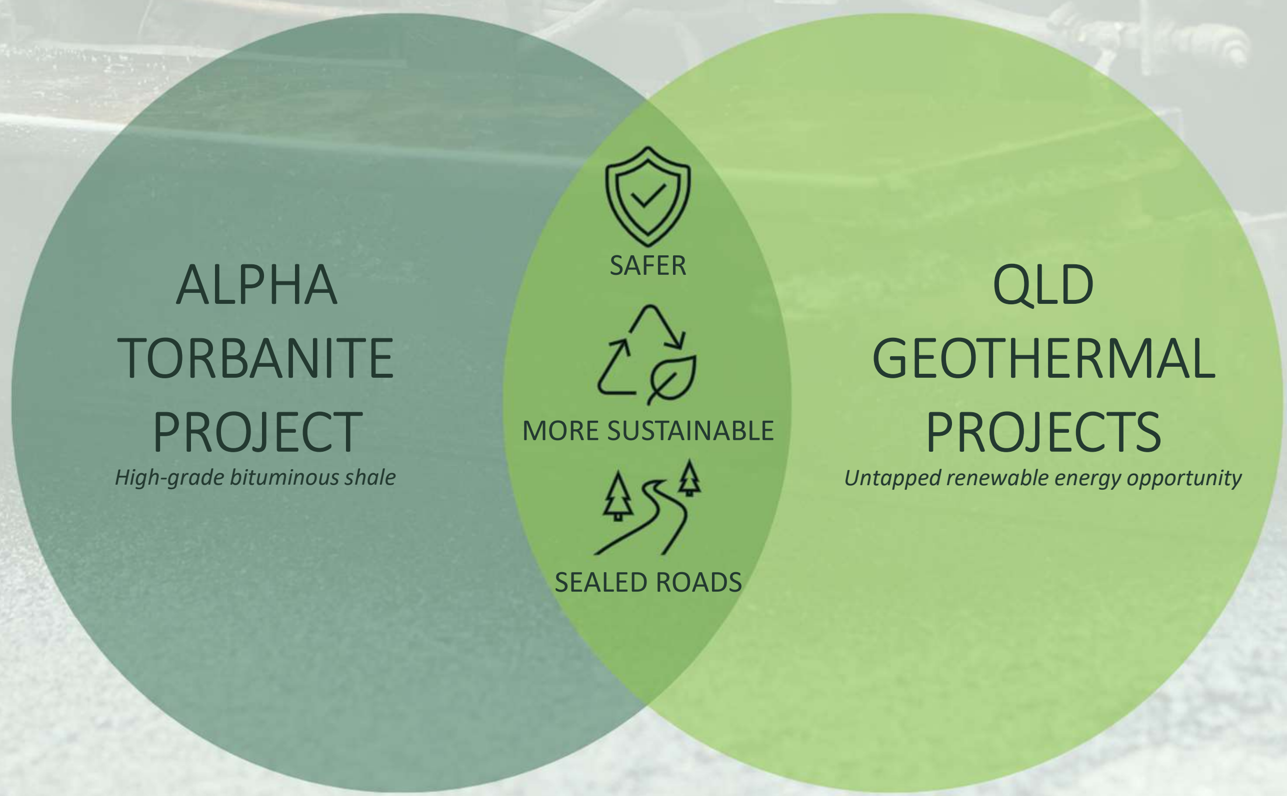
### SHAREHOLDERS




### SHARE PRICE

# Greenvale Energy Ltd – Value Proposition

Two unique projects, one driving goal.



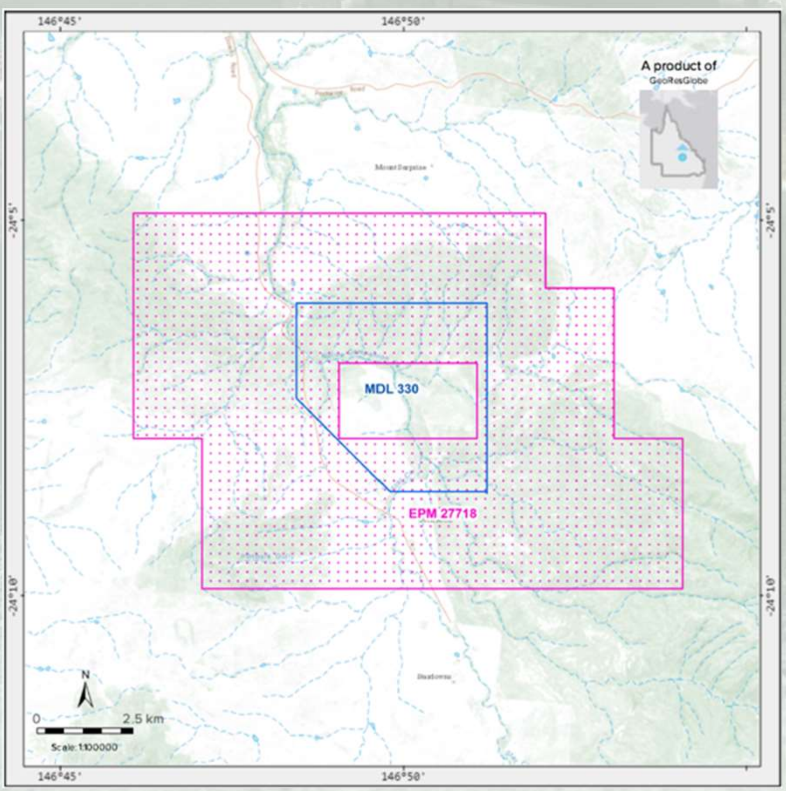

*Australia's only end-to-end producer of high-quality and sustainable bituminous products*

# ON THE ROAD TO SUCCESS

## ALPHA TORBANITE PROJECT (QLD)

# Alpha Torbanite Project – Summary

A unique and viable indigenous source of bitumen




Located in central QLD, 500km west of Rockhampton

**18.6Mt**

**inferred resource of Torbanite & Cannel Coal**

**698ltrs**

**of hydrocarbons per tonne of Torbanite**

**21.29m**

**barrels of synthetic oil equivalent**

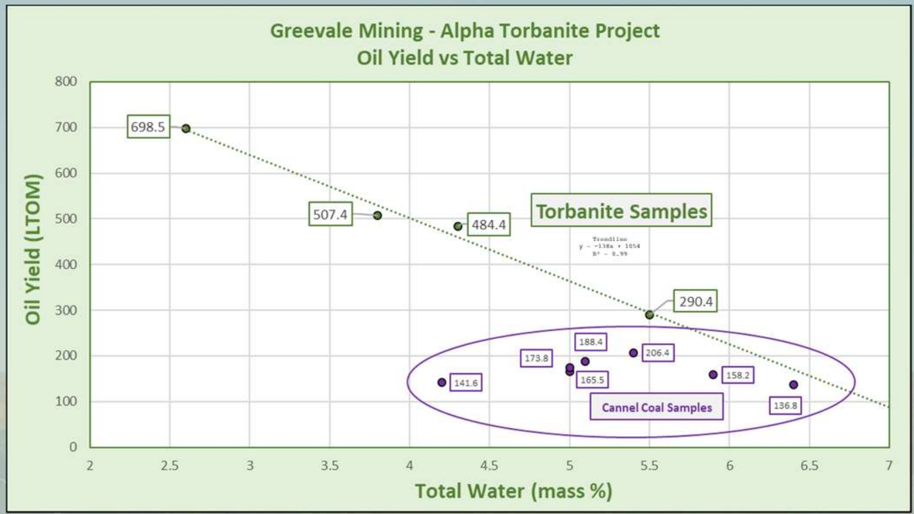
# Top of the class

## Alpha among the highest yielding oil shales globally

**Comparative data of various oil shales**

| Deposit | Torbanite/Coal/ Oil shale | Oil Yield (LTOM) | |
|---|---|---|---|
| | | Range | Average |
| **Alpha, Qld** | **Torbanite** | **50 - 620** | **420** |
| | **Cannel coal** | **50 - 150** | **120** |
| **Green River (USA)** | Oil shale | 45 - 460 | 135 |
| **Rundle, Qld** | Oil shale | 50 - 200 | 105 |
| **Stuart, Qld** | Oil shale | 50 - 220 | 94 |
| **Duaringa, Qld** | Oil shale | 50 - 130 | 82 |
| **Condor, Qld** | Oil shale | 50 - 120 | 65 |
| **Julia Creek, Qld** | Oil shale | 50 - 100 | 60 |

Source: Crisp, P.T., Ellis, J., Hutton, A.C., Korth, J, Martin F.A., and Saxby, J.D., 1987, Australian Oils Shales – A compendium of geological and chemical data: North Ryde, NSW, Australia, CSIRO Inst. Energy and Earth Sciences, Division of Fossil Fuels, 109pp.




*Modified Fischer ASSAY (MFA) Results*

**Yield of 179 litres per tonne at zero moisture (LTOM) for 21.29 million barrels of synthetic oil equivalent**

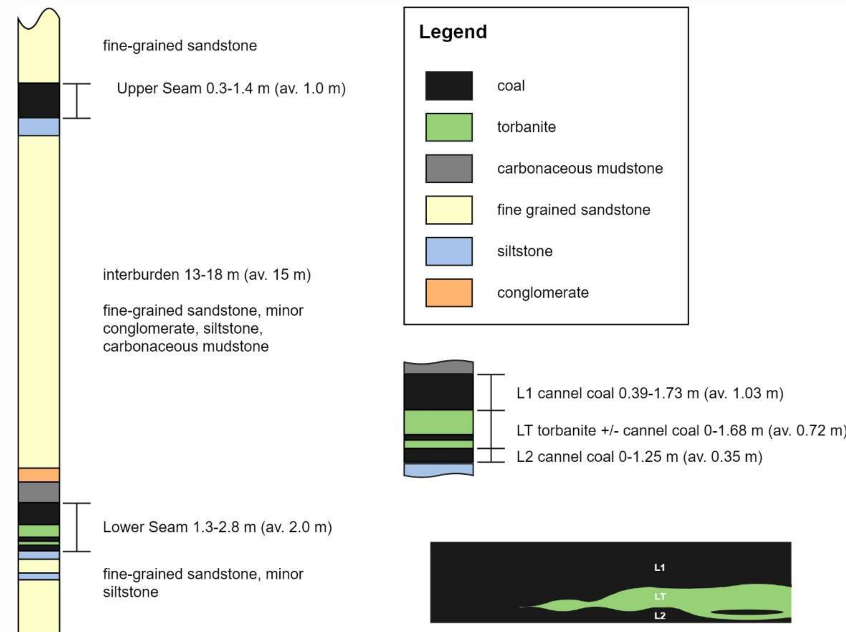
# Mineral Resource Estimate JORC

Greenvale ENERGY LIMITED

## Maiden JORC MRE complete

**MDL330 Inferred Mineral Resource estimate by seam and ply unit**

| Seam/Ply | Area (m²) | Volume (m³) | Waste Thickness (m) | Waste Volume (bcm) | Tonnes (Air-Dried) |
|---|---|---|---|---|---|
| U | 2,587,232 | 2,733,615 | 13.27 | 77,182,496 | 3,280,338 |
| L1 | 6,322,012 | 6,466,130 | 13.18 | 111,466,664 | 7,912,602 |
| LT | 6,242,029 | 3,878,046 | 0.24 | 1,174,048 | 4,595,434 |
| L2 | 6,081,965 | 2,344,780 | 0.10 | 522,118 | 2,862,935 |
| | | | | **Total** | **18,651,309** |



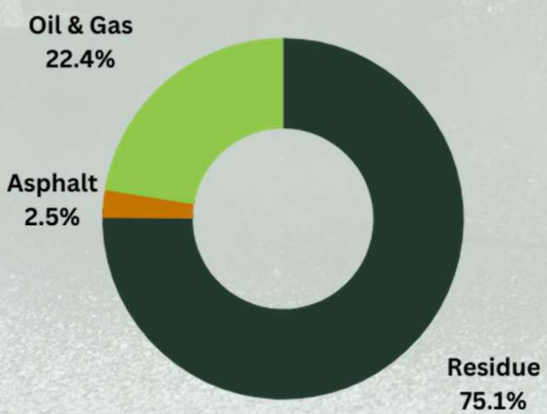

*Alpha Project Seam Geology*

**Maiden Inferred *JORC* Resource Estimate of 18.6Mt of Torbanite and Cannel Coal**

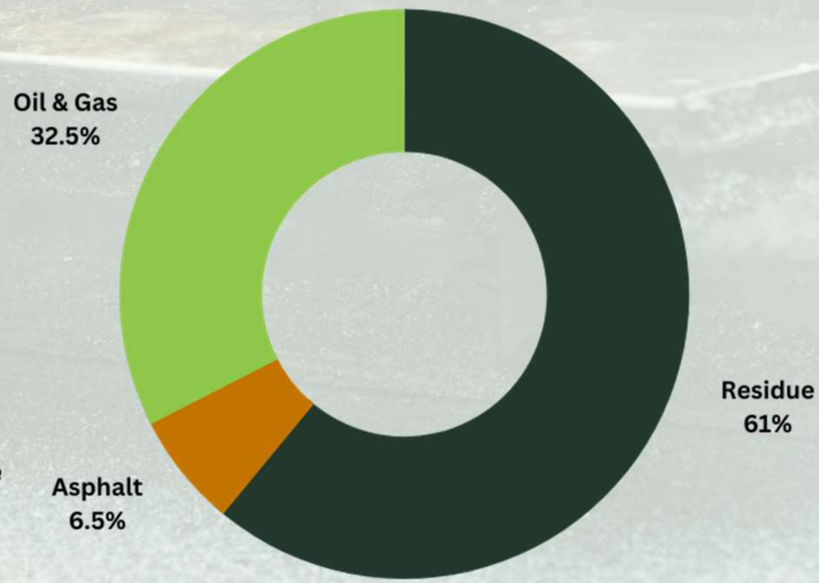
# Alpha Project – Liquefaction Test Program

Extensive liquefaction test program underway and yielding exciting results

**Liquefaction Cannel Coal Sample Conversions (wt%)**




**B1 - Cannel Coal**
**Test Program 1**




**2B3 - Cannel Coal**
**Test Program 2**

**↑57%**

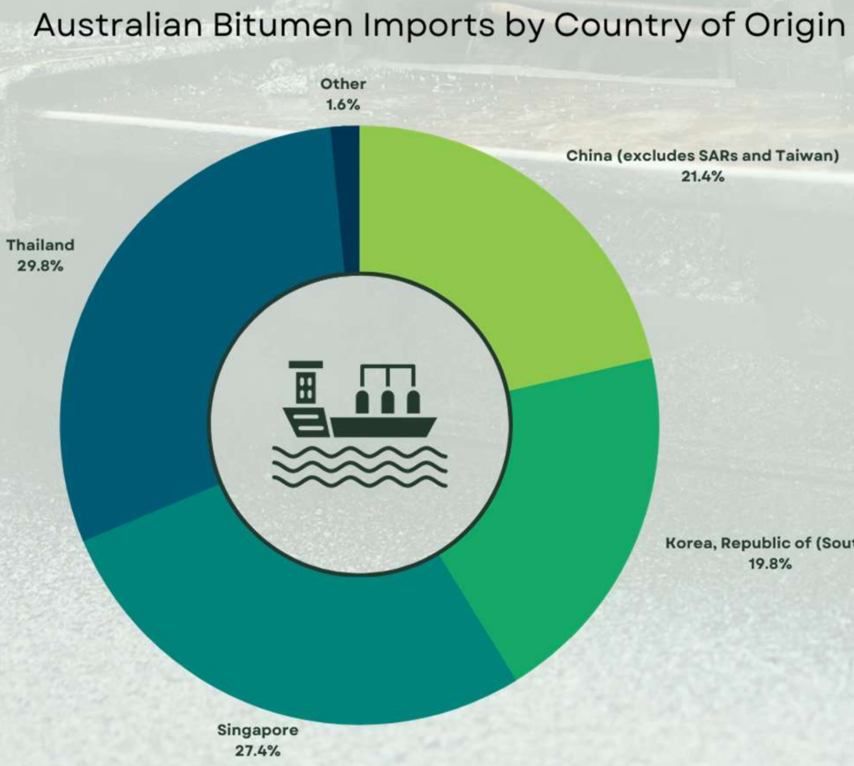
**increase in conversion from solids to oil and gas (Test Program 1 to 2)**

**<1%**

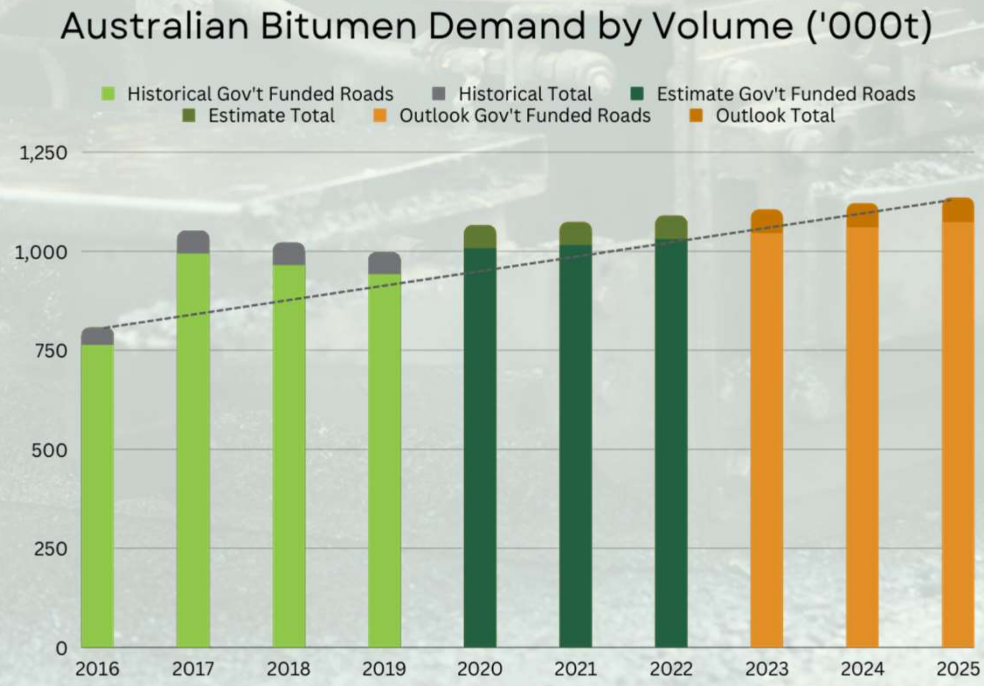
**converting to gas, boosting the emissions profile**

# Bitumen Market – Supply & Demand

Bitumen importation feeds critical infrastructure with a heavy reliance on China



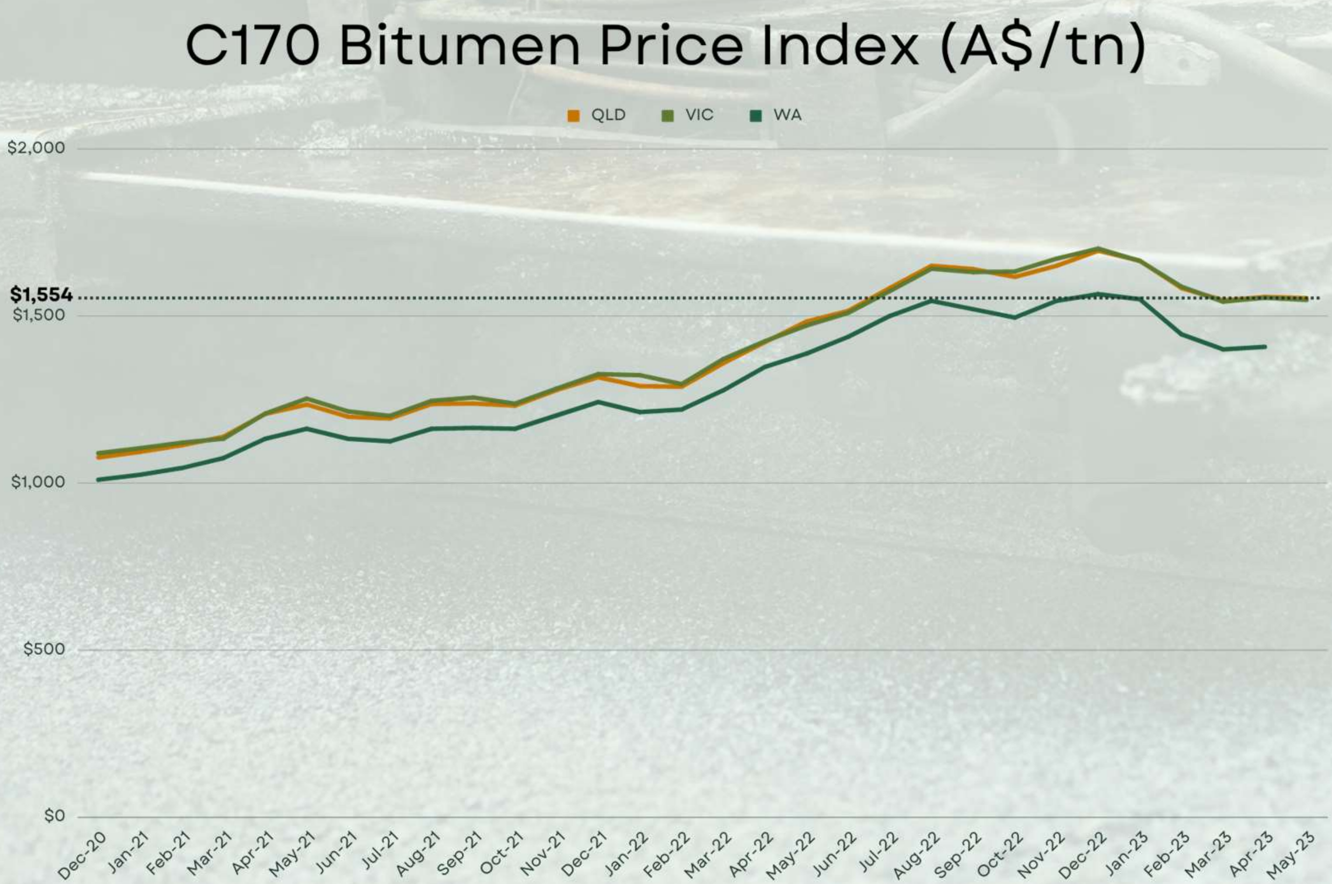

Source: Department of Climate Change, Energy, the Environment and Water, Australian Petroleum Statistics SEP 2022




Source: Argus Asphalt Annual 2021 - Bitumen Demand & Government Funded Roads Australia

# Bitumen Market – Price

C170 bitumen prices remain strong




The bitumen index is the straight average of the major bitumen suppliers' Monthly Gate List Prices (Published List Selling Price) for C170 grade bitumen. Source: vicroads.vic.gov.au; mainroads.wa.gov.au; tmr.qld.gov.au

**↑44%**

Increase in average monthly gate prices for C170 bitumen since DEC 2020

**$1,554**

Average gate price ($A) per tonne of C170 bitumen in Queensland (May 2023)

# UNTAPPED POTENTIAL

## GEOTHERMAL PROJECTS (QLD)

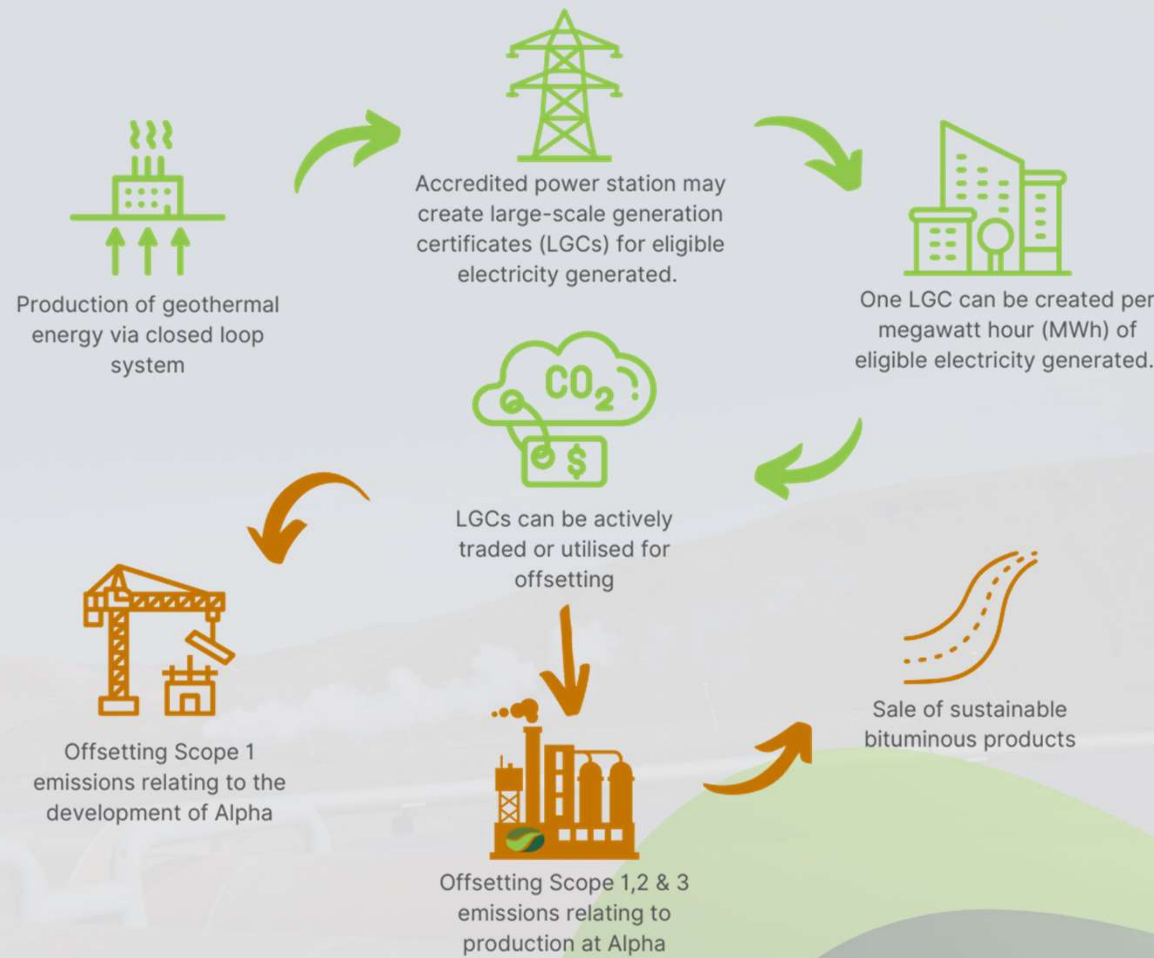
# Why Geothermal?

Sustainable production, significant opportunity

Not Reliant on Weather

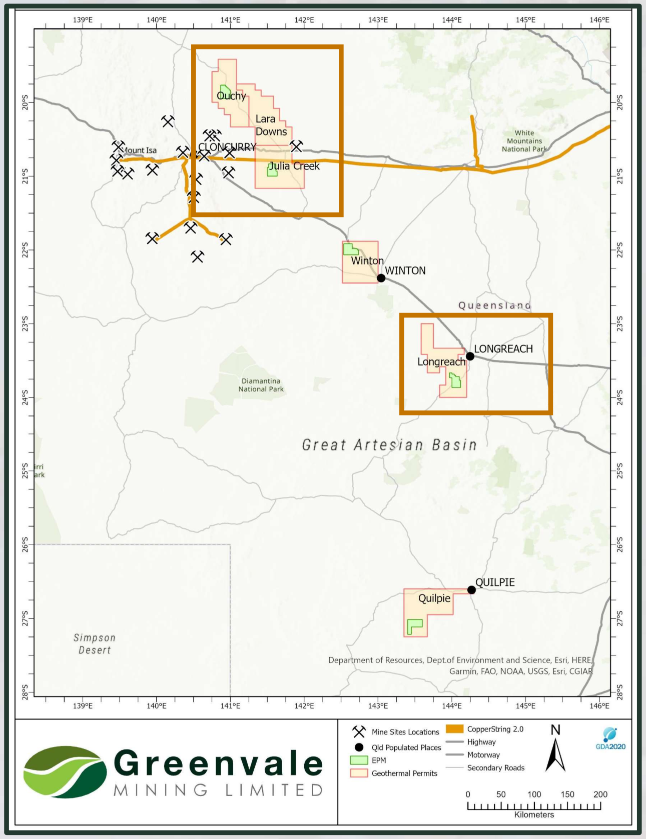
24hr Dispatchable Electricity

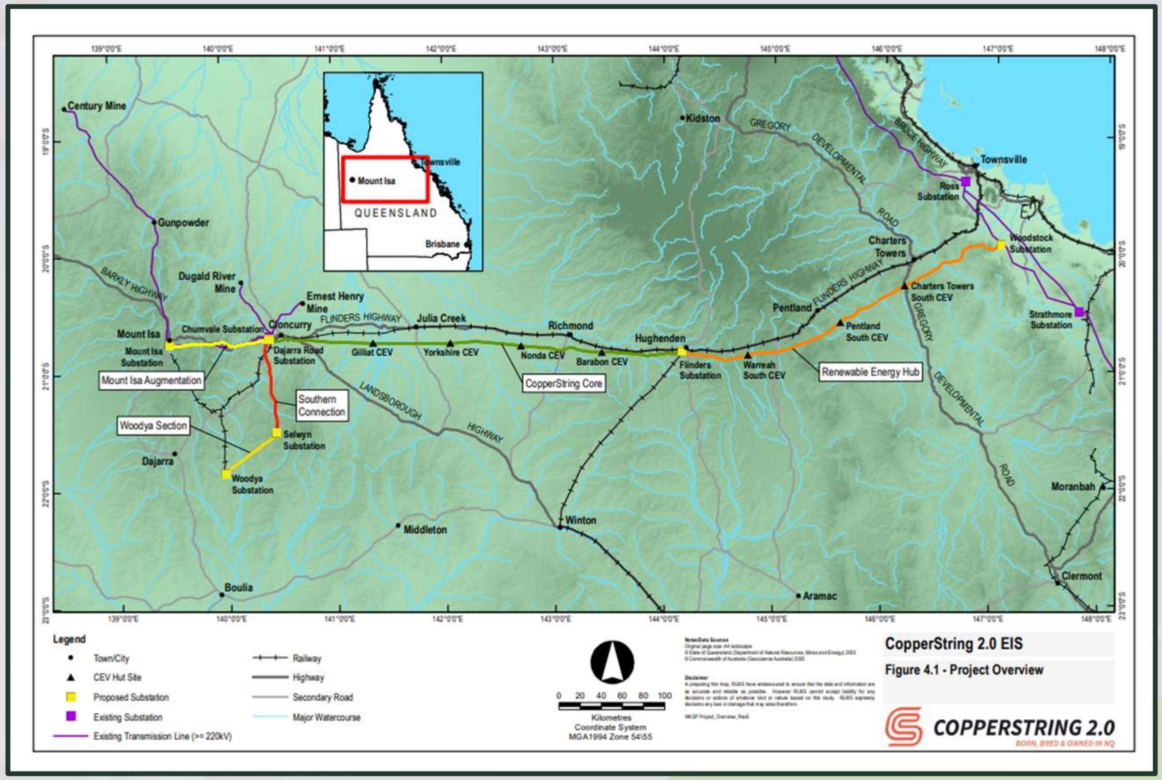
Ultra-Low Emissions Profile



# Geothermal – Project Status

## Untapped Renewable Energy Opportunities in Queensland



# Geothermal – Closed Loop Technology

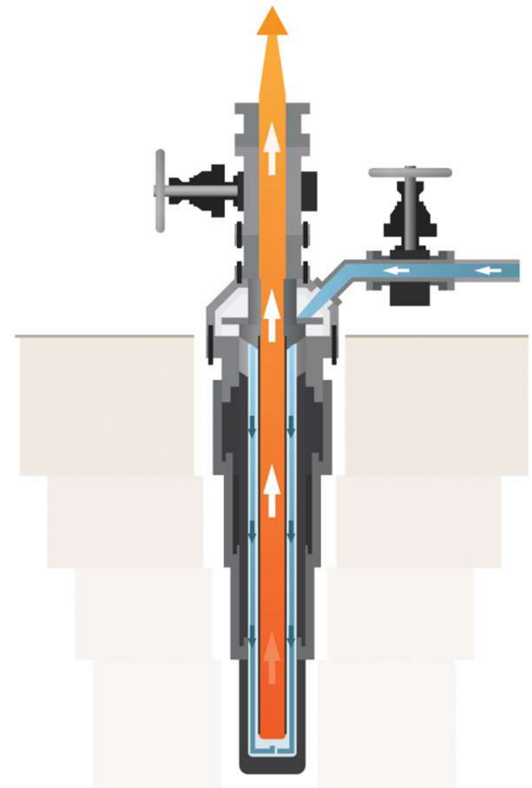
Breaking new ground in Australia with CeraPhi Energy

No GHG

No fracking

No water use

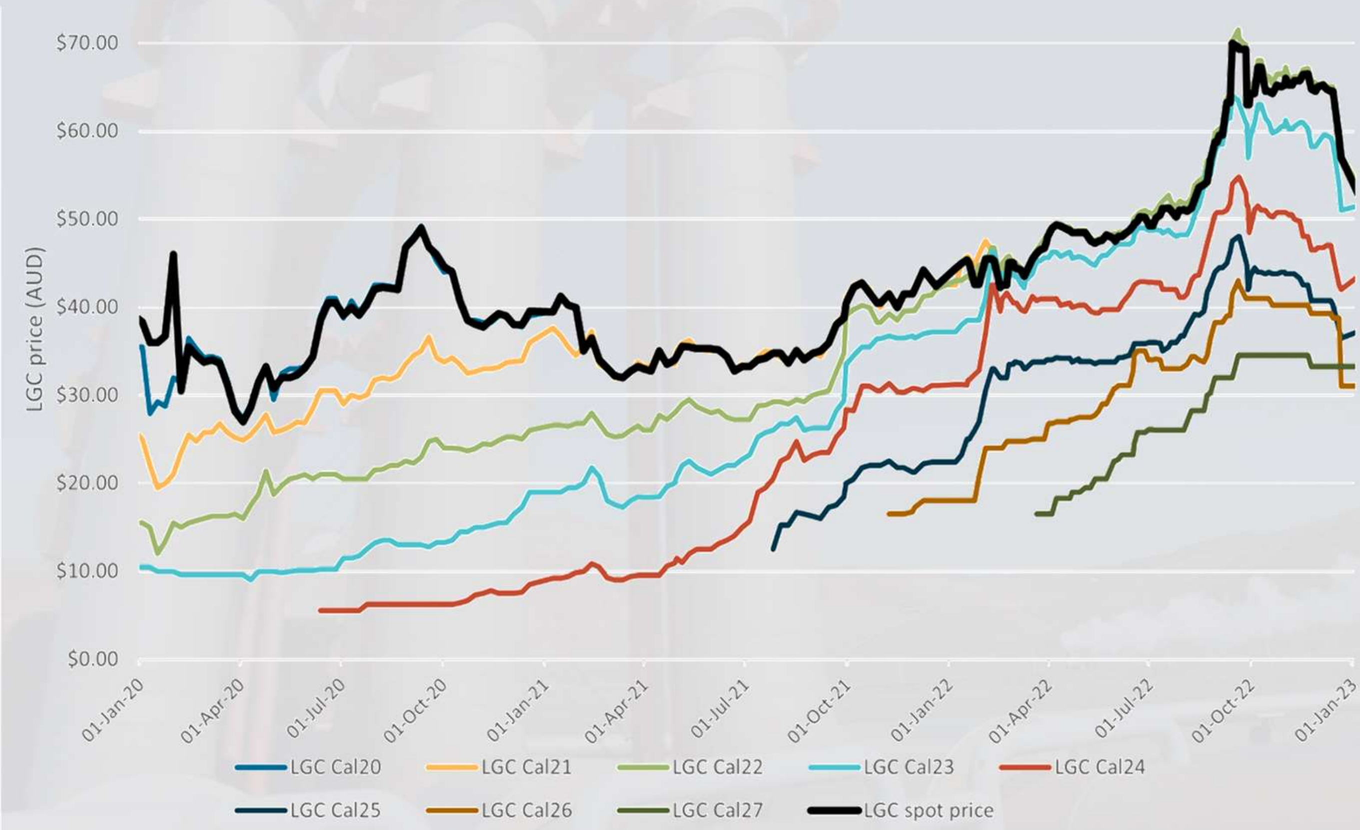
No aquifer contamination



Closed loop down hole heat exchanger

# Geothermal – REC (LGC)

Significant standalone opportunity as Australia transitions to renewable energy




Source: Quarterly Carbon Market Report December Quarter 2022

**$49.85**

**LGC Spot Price (31/01/23)**

# The road so far…and the road ahead

Major milestones achieved along the way and those to come

2020 2021 2022 2023 2024 2025 2026 2027

**SRK Scoping Study**
Focus project on higher value products – bitumen and activated carbon.

**Modified Fischer Assay**
MFA results confirm high-yielding nature and strong commercial potential.

**Expanded Field Program**
62 drill holes completed, with 284m of 4C core samples; total program meterage of 2,195m.

**Mineral Resource Estimate**
Maiden JORC Mineral Resource Estimate (MRE) completed for Alpha.

**Liquefaction Test Work**
Production of heavy oil fractions required for bitumen – significantly enhanced emissions profile.

**PARR Reactor Tests**
Third-party PARR reactor testing and analysis

**Bitumen Certification**
Product samples sent to Technix for final certification.

**Alpha PFS**
Delivery of preliminary feasibility study Q3 2023

**Alpha Pilot Plant**
Commencement of Alpha pilot plant trials Q4 2023.

**EPG Grant**
Longreach EPG granted Q3 2023; Millungera EPGs Q4 2023

**Geothermal Plant Feasibility & Design**
Q4 2023 Longreach

**Alpha Plant Design & Build**
Design, approvals, build and commissioning of processing plant.
Q1 2024 – Q1 2026

**Enviro. Approvals**
Geothermal environmental approvals Q2 2025

**Drilling**
Drilling at Longreach Q3 2025

**Alpha Production**
Plant fully operational.

**10MW Power Plant**
Geothermal power plant commissioned.

# Why Greenvale?

GRV is paving the way

- Experienced Board and Management.
- Clear vision to become the only sustainable, end-to-end, domestic and fully carbon-offset producer of bitumen products to feed the critical infrastructure needs of Australia.
- Geothermal energy is the only truly renewable, fully dispatchable energy source capable of supporting base load requirements and presents a significant standalone opportunity.
- Have two unique projects, One driving goal, to be Australia's only carbon neutral end-to-end producer of high-quality and sustainable bituminous products