ASX ANNOUNCEMENT **8 July 2022**

INVESTOR PRESENTATION –ACQUISITION OF LEADING GREEN ENERGY DEVELOPER, WITHIN ENERGY PTY LTD

Greenvale Mining Limited (ASX: GRV) is pleased to advise that the attached presentation will be delivered to investors today relating to its proposed acquisition of geothermal energy company, Within Energy Pty Ltd ("Within Energy").

As announced on 1 June 2022, Greenvale has agreed to acquire an initial 51% interest (with the option to acquire 100%) in Within Energy, which is developing geothermal resources from naturally permeable formations in Queensland and across Australia.

The acquisition will position Greenvale at the forefront of the Australian green energy market, while also providing the Company with a clear pathway to fast-track the permitting and development of its Alpha Torbanite Project in Central Queensland.

As outlined in the attached presentation, Within Energy has invested significantly in identifying exploitable geothermal sources in south-east Queensland, with exploration permits covering approximately 11,000km^2, and is ideally positioned to deliver carbon neutral geothermal energy on Australia's eastern seaboard.

The presentation will be delivered by Within Energy CEO Adam Stepanoff.

The material terms of the proposed acquisition by Greenvale Mining Limited of Within Energy Pty Ltd can be found in the previously mentioned announcement.

Authorised for Release

This announcement has been approved by Greenvale Mining Ltd.'s Managing Director, Mr. Neil Biddle, for release.

Alan Boys
Company Secretary

Contact

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Carbon Neutral Geothermal Energy

Focused on Australia's Eastern Seaboard

JULY 2022

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This presentation contains forward-looking statements. Forward-looking statements are often, but not always, identified by the use of words such as "seek", “target”, "anticipate", “forecast”, "believe", "plan", "estimate", "expect" and "intend" and statements that an event or result "may", "will", "should", "could" or "might" occur or be achieved and other similar expressions.

The forward-looking statements in this presentation are based on current expectations, estimates, forecasts and projections about Within Energy and any of its associates or the industry in which they operate. However, please note, that 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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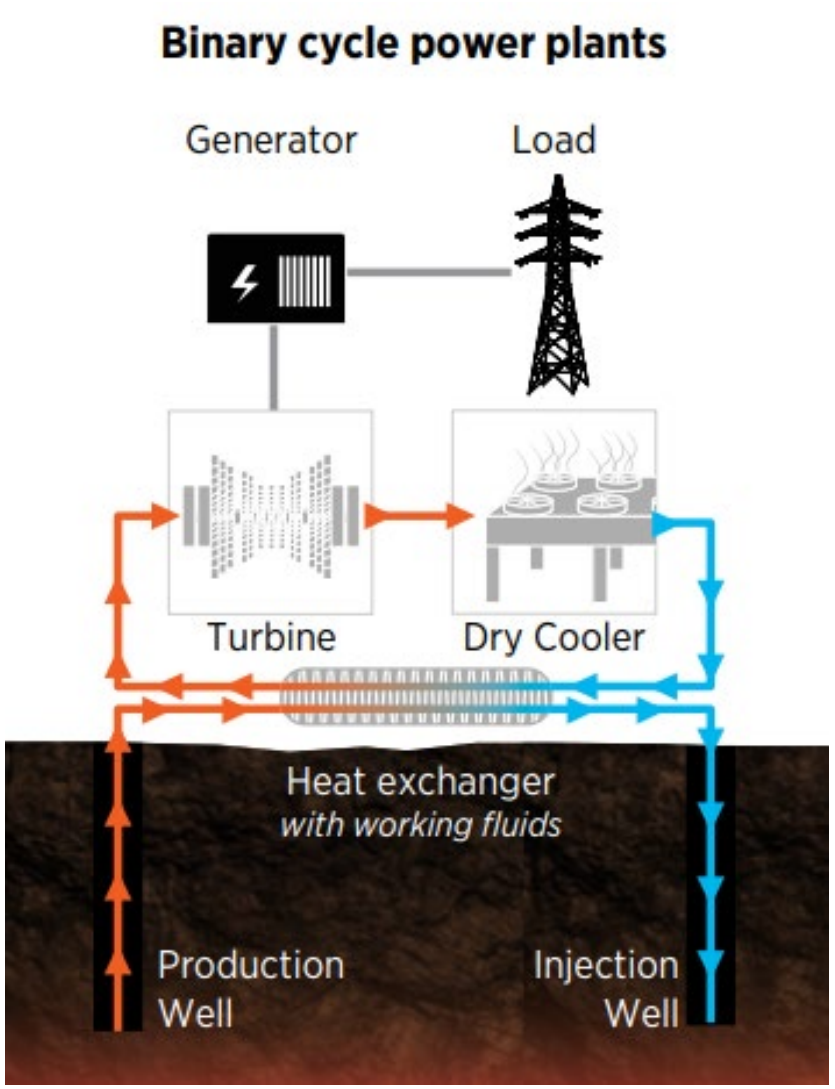
You are cautioned to place no undue reliance on any forward-looking statement. The forward-looking statements in this presentation reflect views held only as of the date of this presentation.

COMPETENT PERSON STATEMENT

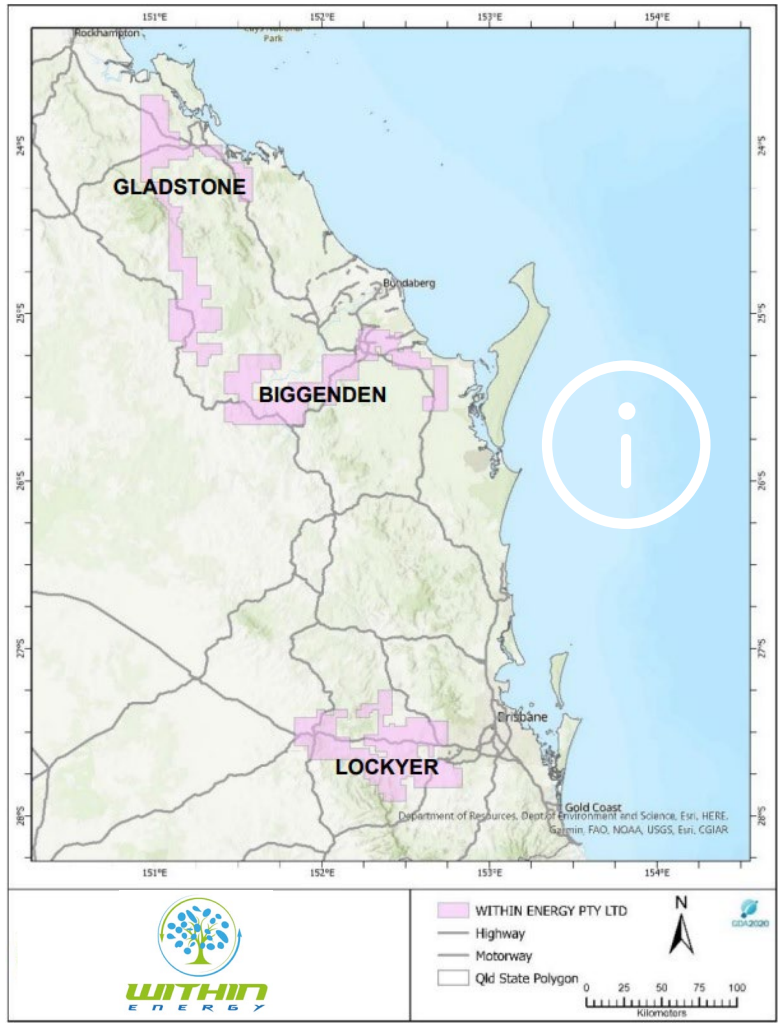
The geological information presented in this document is based on information compiled by Mr Stuart King.

Mr King is a Petroleum Geologist and has a Bachelor of Science in Geology and Geography (Hons) from the University of Western Australia and a Masters of Business Administration in Oil & Gas Management from Robert Gordon University. He is a member of the Society of Petroleum Engineers (SPE), the American Association of Petroleum Geologists (AAPG) and the South-East Asian Petroleum Exploration Society (SEAPEX) and has 25 years' experience in the petroleum industry in exploration, appraisal, field development planning, reserves and resources assessment, commercial valuations and business development.



BACKGROUND

- WITHIN Energy was established in 2021 to enter the renewable energy market with a focus on Geothermal energy in Australia with an initial focus on Queensland.
- WITHIN brings together multi-disciplined professionals from energy as well as oil & gas.
- WITHIN plans to develop Geothermal resources from naturally permeable formations east of the Great Dividing Range.
- The lower temperature compared with deep Cooper Basin Granites are to be exploited with Binary Rankine Heat Exchanger technology extensively used in the US.
- Shallow drilling targets and close proximity to consumers provide exceptional financial and carbon credit benefits.
- The lifecycle of a geothermal power plant is around forty years and is a true carbon-neutral energy source.



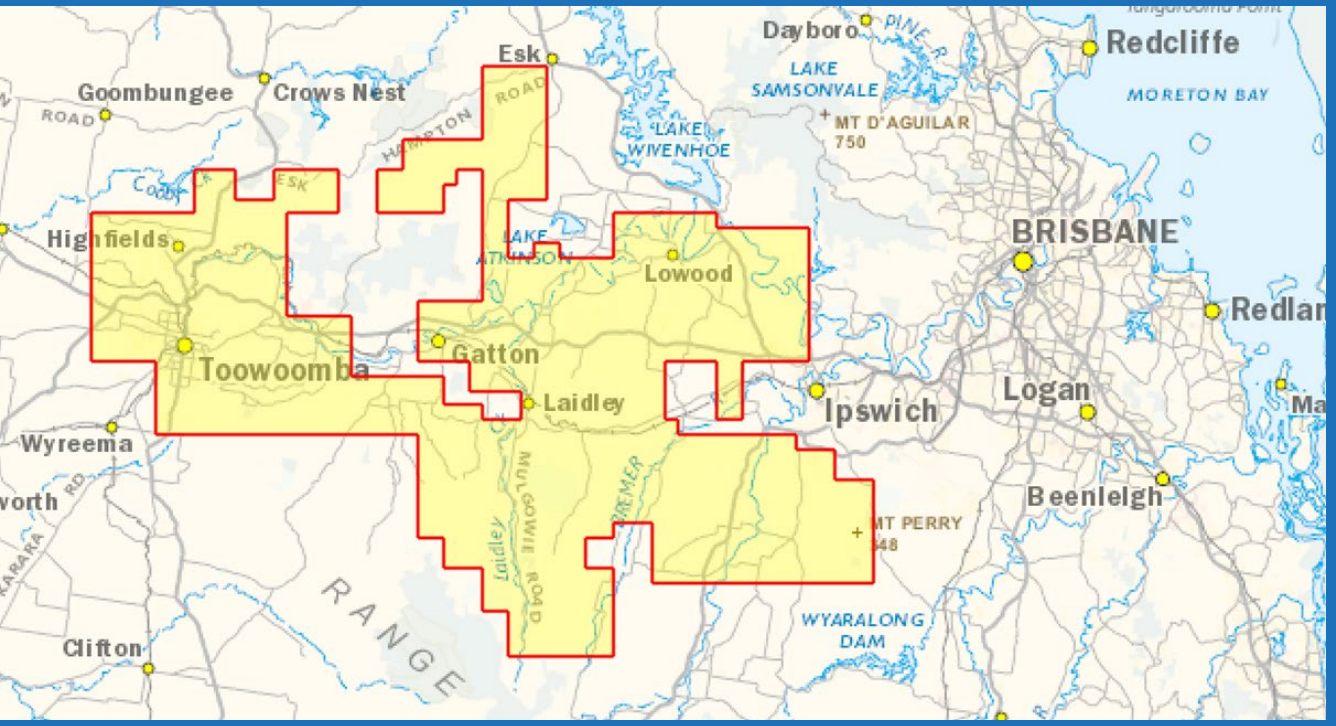
SEQ GEOTHERMAL LICENCES

South East Queensland;

Brisbane/Toowoomba, Maryborough and Gladstone locations

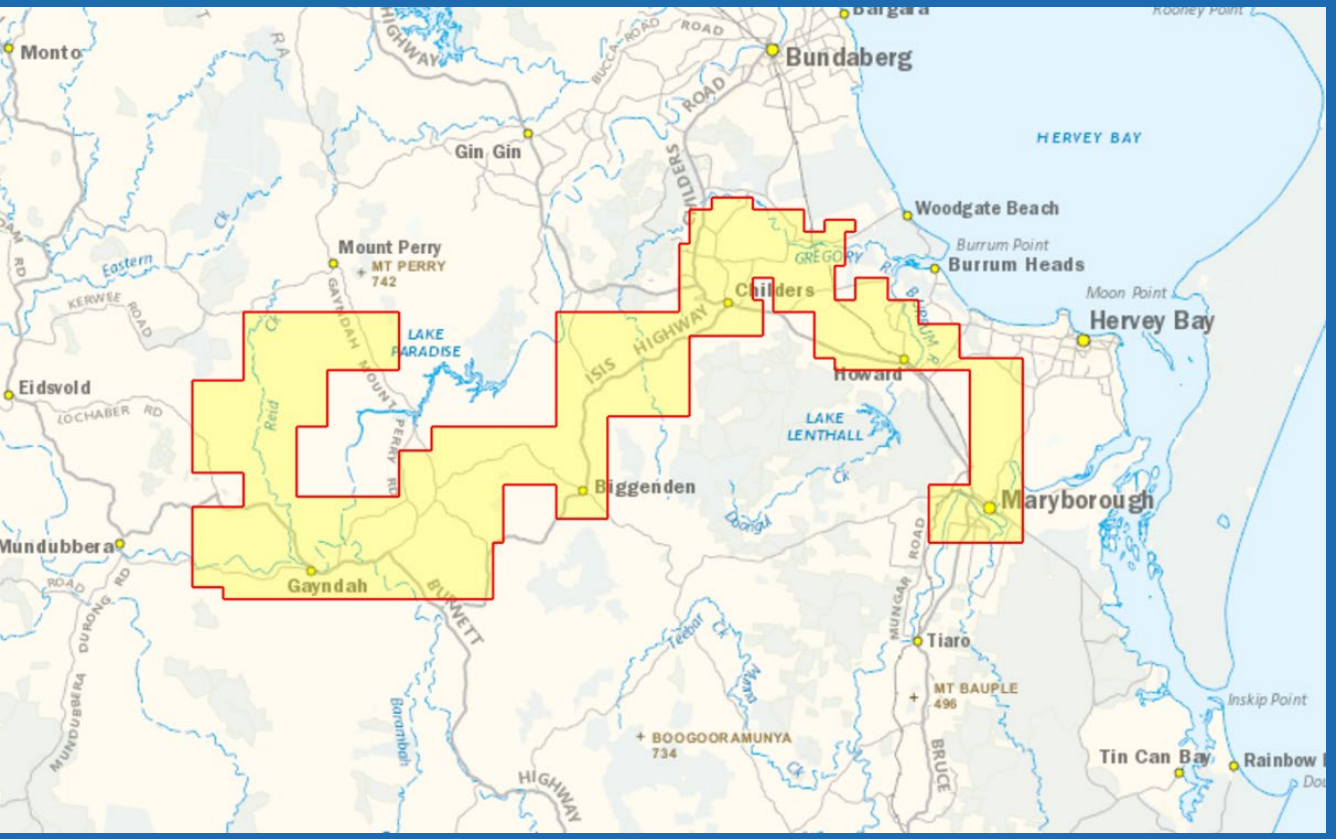
Up to 50 blocks per location totalling over 11,000 Km²

- Three tenures are close to major centres
- Minimum transmission distance to network
- Accommodation, fuel and water for project
- Gladstone tenure surrounds Fortescue $1B Gladstone hydrogen project
- Scalability with additional beneficial use projects i.e. High intensity glass house food production.



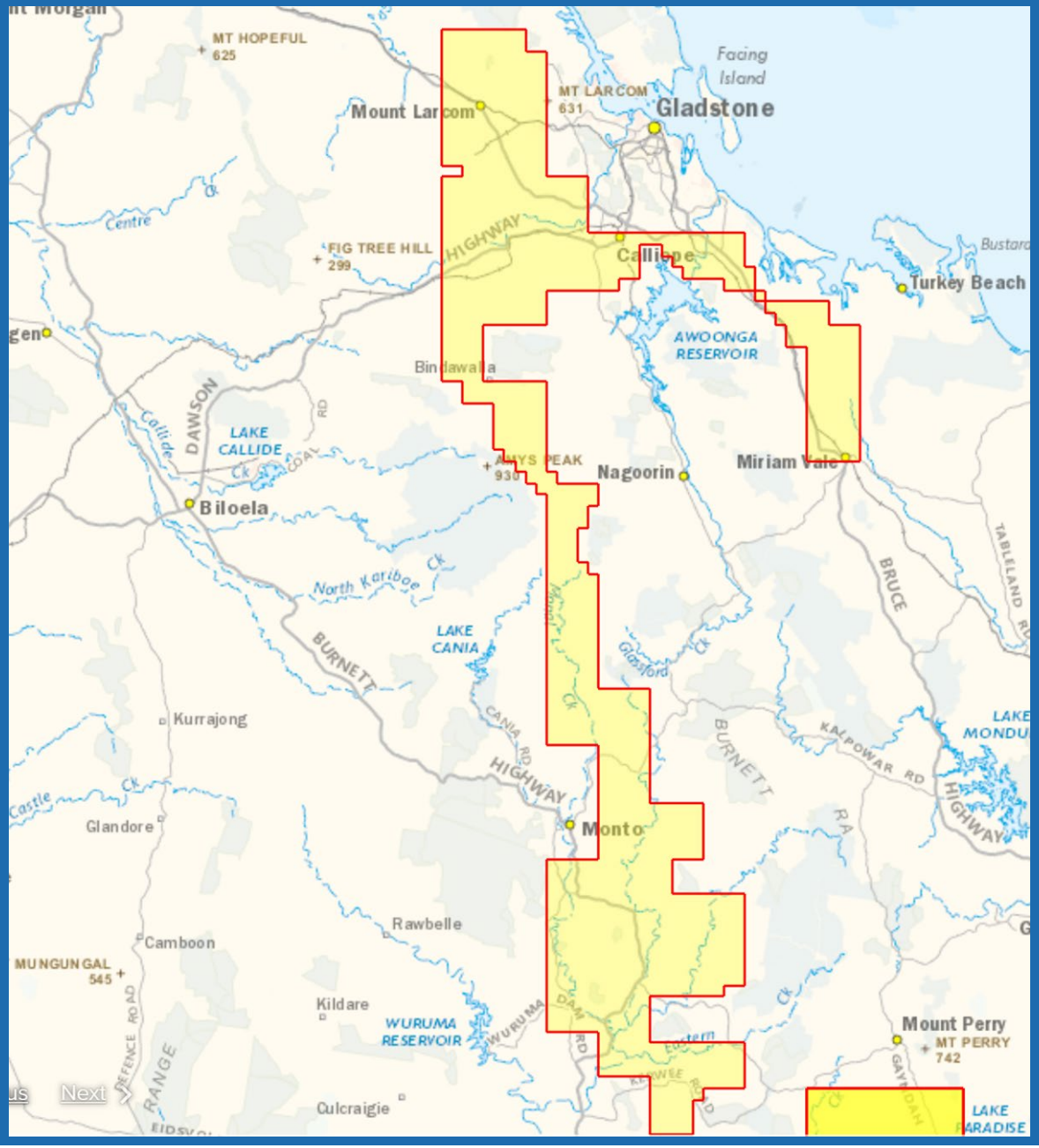
EPG 2026 – Lockyer Project

- Three volcanic centres.
- Located between queensland's capital and a major regional centre.
- Contains future inland rail logistics hub.
- Lockyer valley small cropping area.



EPG 2027- Biggenden Project

- Two volcanic centres
- Close to populated areas and transmission lines



EPG 2028 Gladstone Project

- Three volcanic centres
- Gladstone is a major energy user and shipping terminal
- Location of Fortescue $1B hydrogen project

TENURE ACCEPTANCE

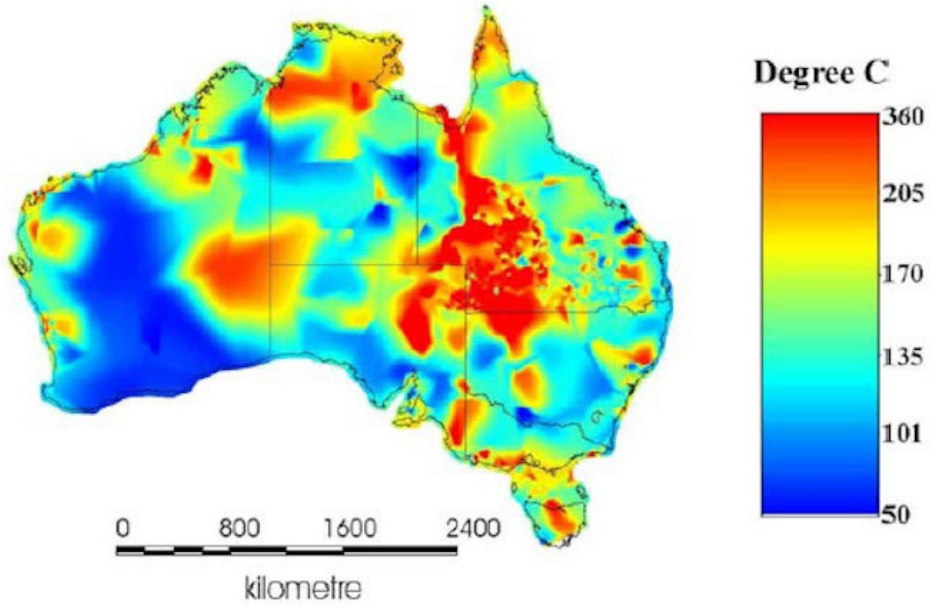
To date WITHIN has secured three EPG (Exploration Permit Geothermal) in South East and Central Coast Queensland.

- EPG 2026 Lockyer
- EPG 2027 Biggenden
- EPG 2028 Gladstone

Work program commitments begin once Environmental Authority and Cultural Heritage Approval has been granted.

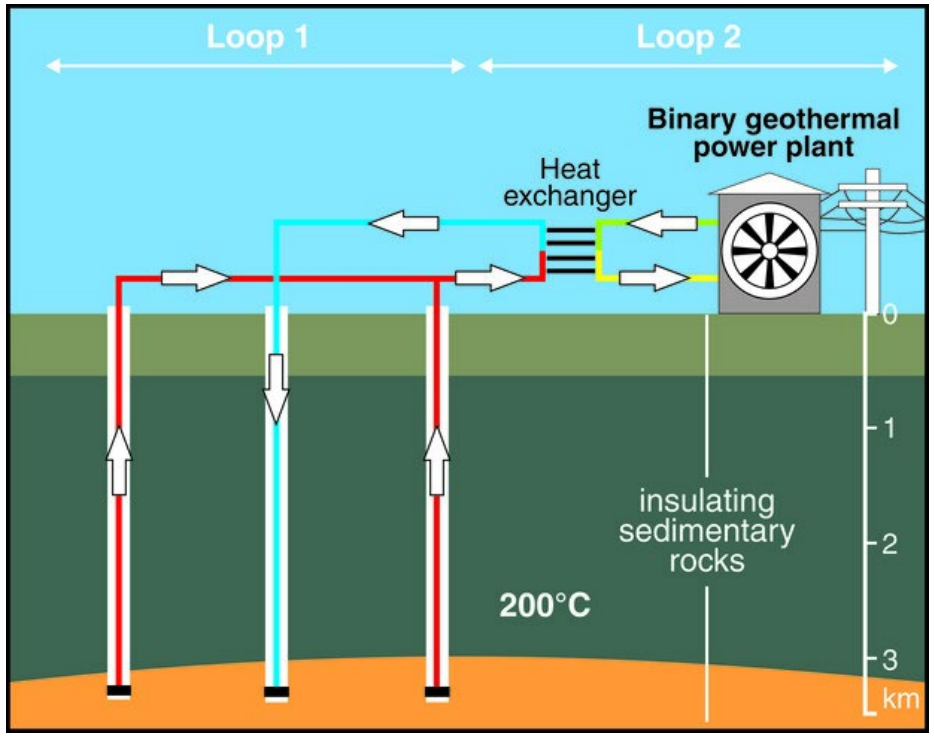
GEOLOGY

- Historic Geothermal projects in Australia have focused on High temperature reservoirs above 180°c which exist only in remote and deep formations.
- WITHIN is focusing on technology which has become widely adopted over the last few years with the use of Binary Cycle Systems that use lower temperature reservoir water of between 80-120°C and a heat exchanger process to operate a turbine in a closed loop.
- Binary Cycle Systems are currently contributing over 4,100MWh of energy in the US, with capacity growing by up to 4% per year.
- To achieve the required formation temperatures at relatively shallow drill depths (2,500-3,000m) WITHIN has land holdings, largely in the New England Orogenic Belt, that displays evidence supporting very recent, though now inactive magmatic intrusion and associated volcanism.



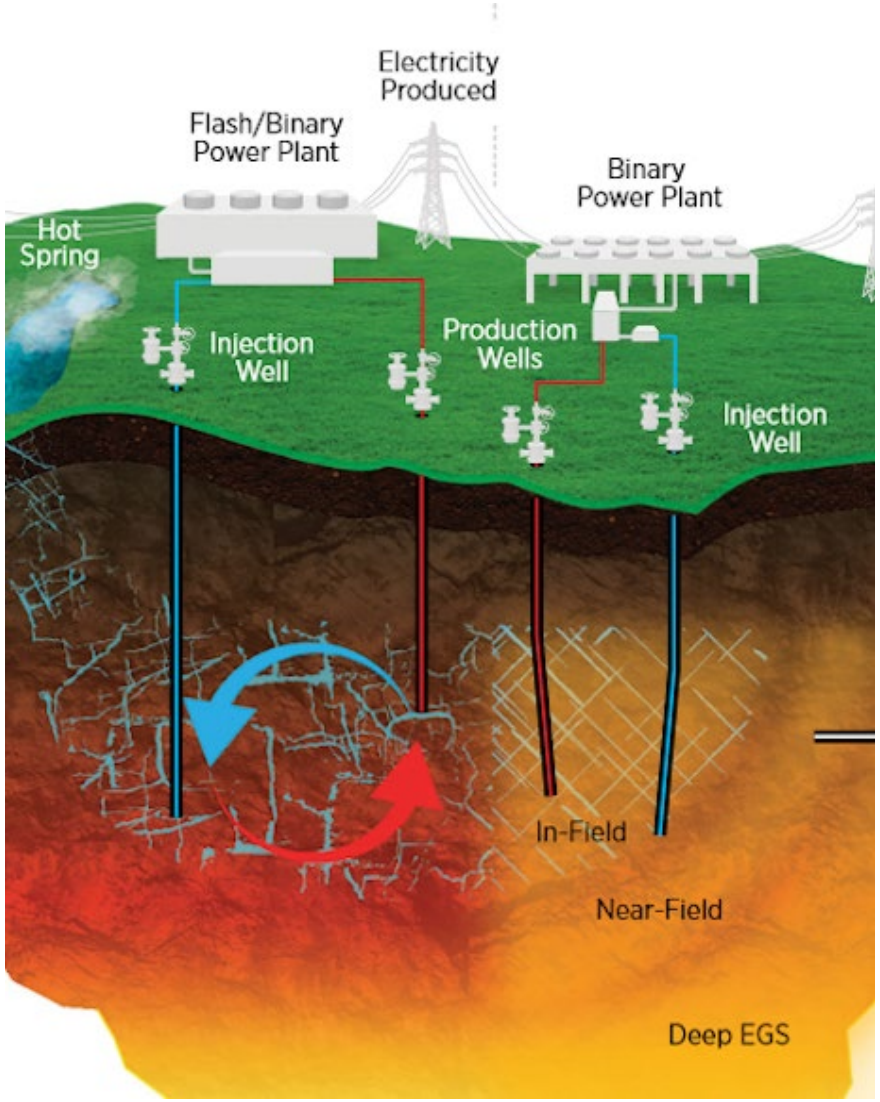
AUSTRALIAN GEOTHERMAL HEAT MAP

ENGINEERING



- **Organic Rankine Cycle (ORC)** systems are used for power production from **low to medium temperature heat sources** in the range of 80 to 150 °C. This technology allows for exploitation of low-grade heat.
- The working principle of an Organic Rankine Cycle power plant is similar to the most widely used process for power generation, the Clausius-Rankine Cycle.
- The main difference is the use of organic substances instead of water (steam) as working fluid. The organic working fluid has a lower boiling point and a higher vapour pressure than water – such as **Butane** and is therefore able to use low temperature heat sources to produce electricity. The organic fluid is chosen to best fit the heat source according to their differing thermodynamic properties, thus obtaining higher efficiencies of both cycle and expander.

PHILOSOPHY



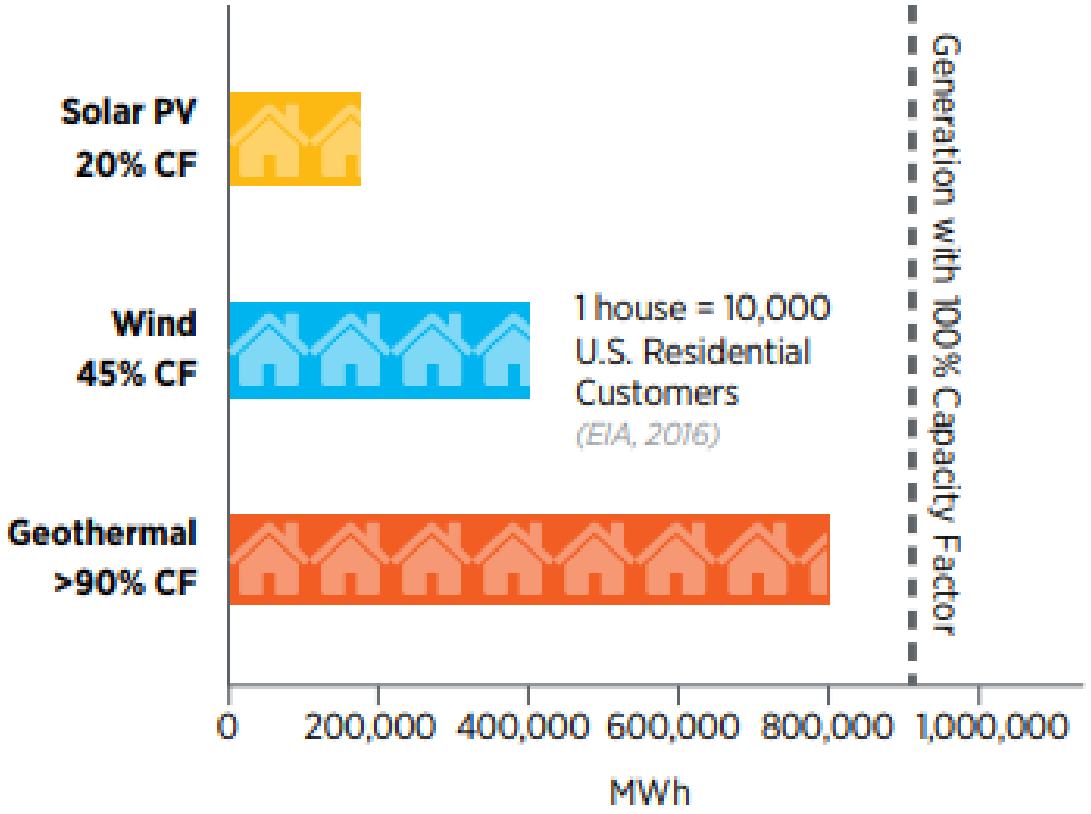
Generating Geothermal Power from lower temperatures, the cost associated in developing a Geothermal resource decrease.

- Initial exploration wells to prove concept, temperature and location can be drilled with low cost mineral rigs in a slim HQ core hole design for around $500,000 each.
- Lower cost of establishment will enable a greater margin with energy sales after capital amortisation.
- Lower temperature fluid throughout the process also creates lower ongoing operating and maintenance costs due to less stress on infrastructure.

EXISTING BINARY CYCLE GEOTHERMAL PLANTS

- More than 150 Binary cycle plants worldwide
- Major developers include Turkey, Europe and the US
- Southern Hemisphere largely undeveloped

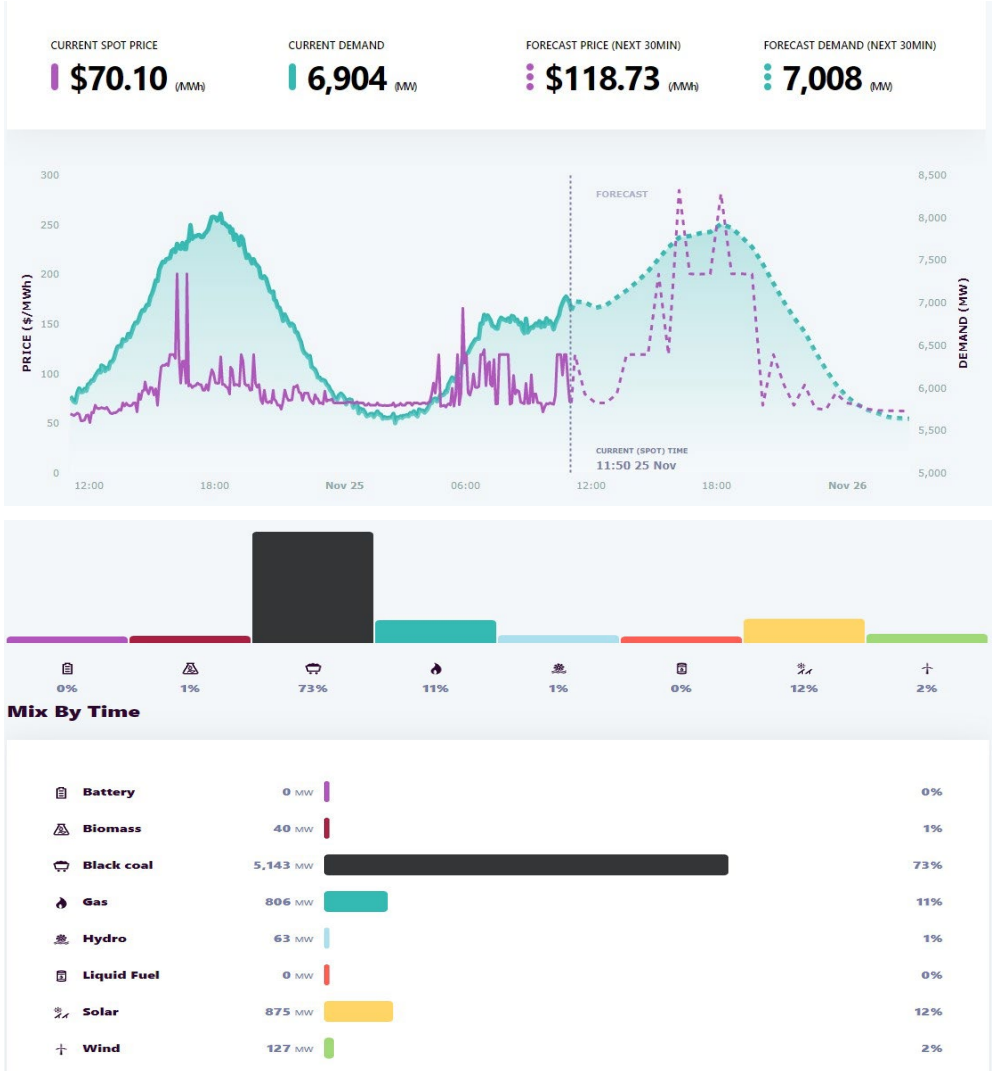
GEOTHERMAL ENERGY GENERATION



A geothermal power plant will generate 2-4 times as much electricity as a wind or solar plant of the same capacity due to its high capacity factor[1]

- In 2018, the U.S. generated the most geothermal electricity in the world: more than 18,700 GWh.
- Hydrothermal energy, typically supplied by underground water reservoirs, is a main source of thermal energy used in electricity generation. The water is often pumped as steam to the earth's surface to spin turbines that generate electricity.
- Binary cycle power plants feature geothermal water and a working fluid that are confined to separate circulating systems, or "closed loops." A heat exchanger transfers heat from the water to the working fluid, causing it to "flash" to steam, which then powers the turbine/generator to produce electricity.

1 Source: EIA 2016b, Cole et al. 2016



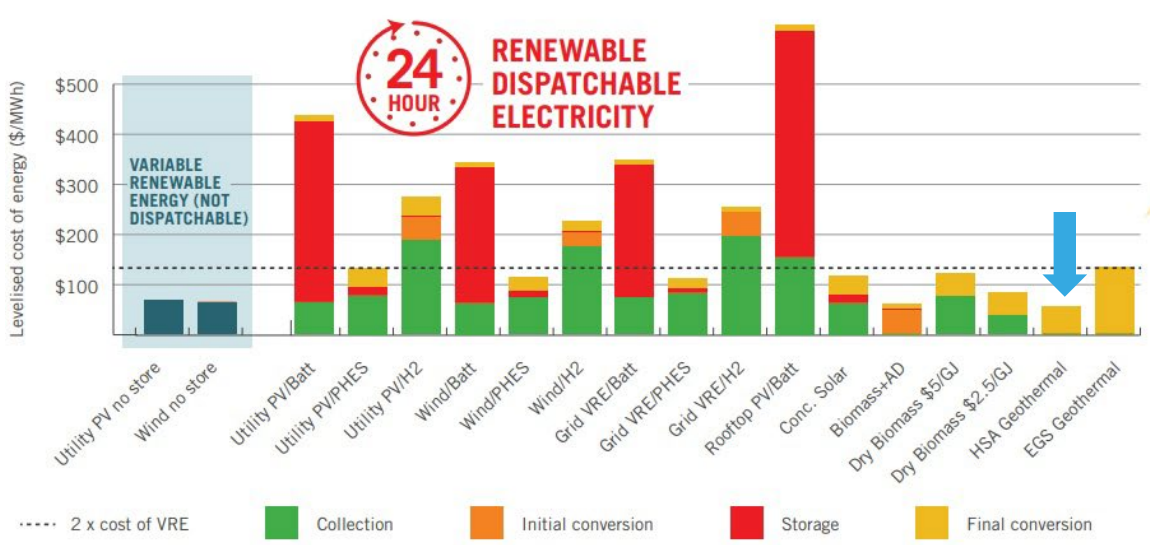
QUEENSLAND ELECTRICITY MARKET

- The Queensland electricity market has the highest generator returns in Australia with an average cost of >$84/MWh. The price is not fixed and fluctuates with demand.
- Geothermal benefits from these fluctuations where Solar and Wind do not due it being available 24hr and not dependant on weather conditions.
- Currently there is no Geothermal power supplied to the main grid.
- The Government is supporting renewable energy projects.

COMPARING ALL RENEWABLE ENERGY TECHNOLOGIES

- Hot Sedimentary Aquifer (HSA) Geothermal is considered the most cost effective renewable energy technology, when operating over a 24 hour period.
- Unlike Wind and Utility PV, HSA Geothermal is a dispatchable renewable electricity, demonstrating that geothermal power plants have the ability to vary output at the command of the operator and consumer needs.

Source *ARENA 2018w*



Each technology has timescales and configurations for which it is best suited.

Figure 18: Levelised Cost of Energy (LCOE) for the different combinations at zero, one, six and twelve hours of storage or duration of delivery for systems at 100MW$_e$ nominal capacity evaluated with a 6.5% weighted average cost of capital.

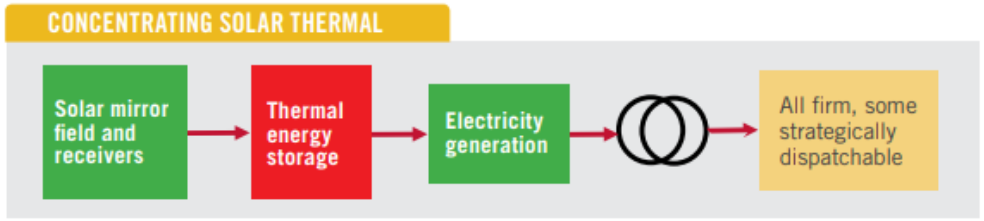


Figure 13: Configuration for achieving dispatchable power from a concentrating solar thermal generator

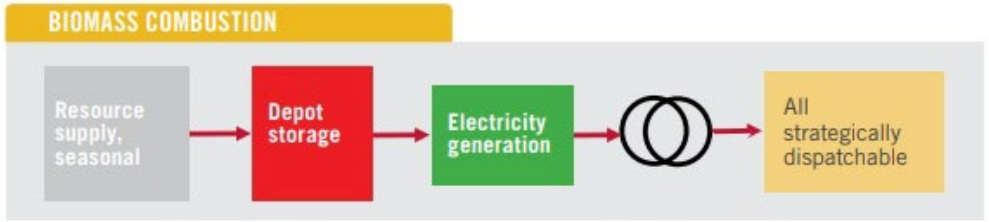


Figure 14: A biomass combustion generator – inherently dispatchable

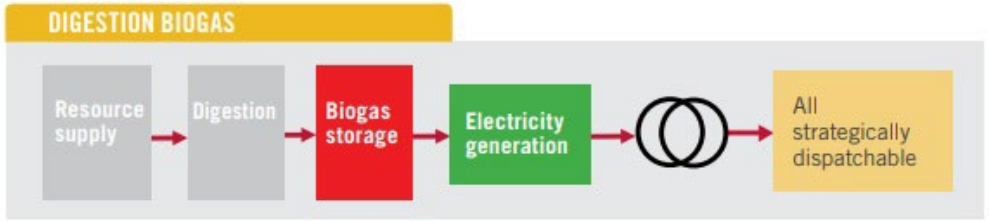


Figure 15: Configuration for achieving strategic high value dispatchable power from a biomass digestor plus gas engine generator

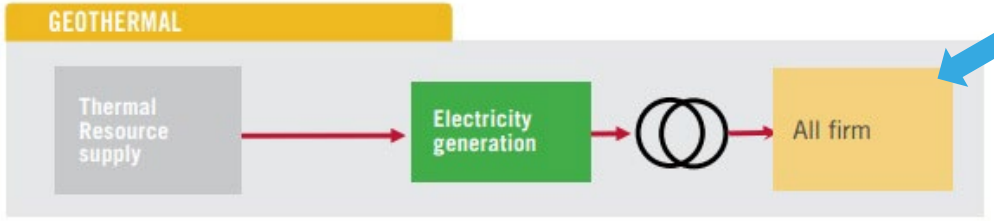
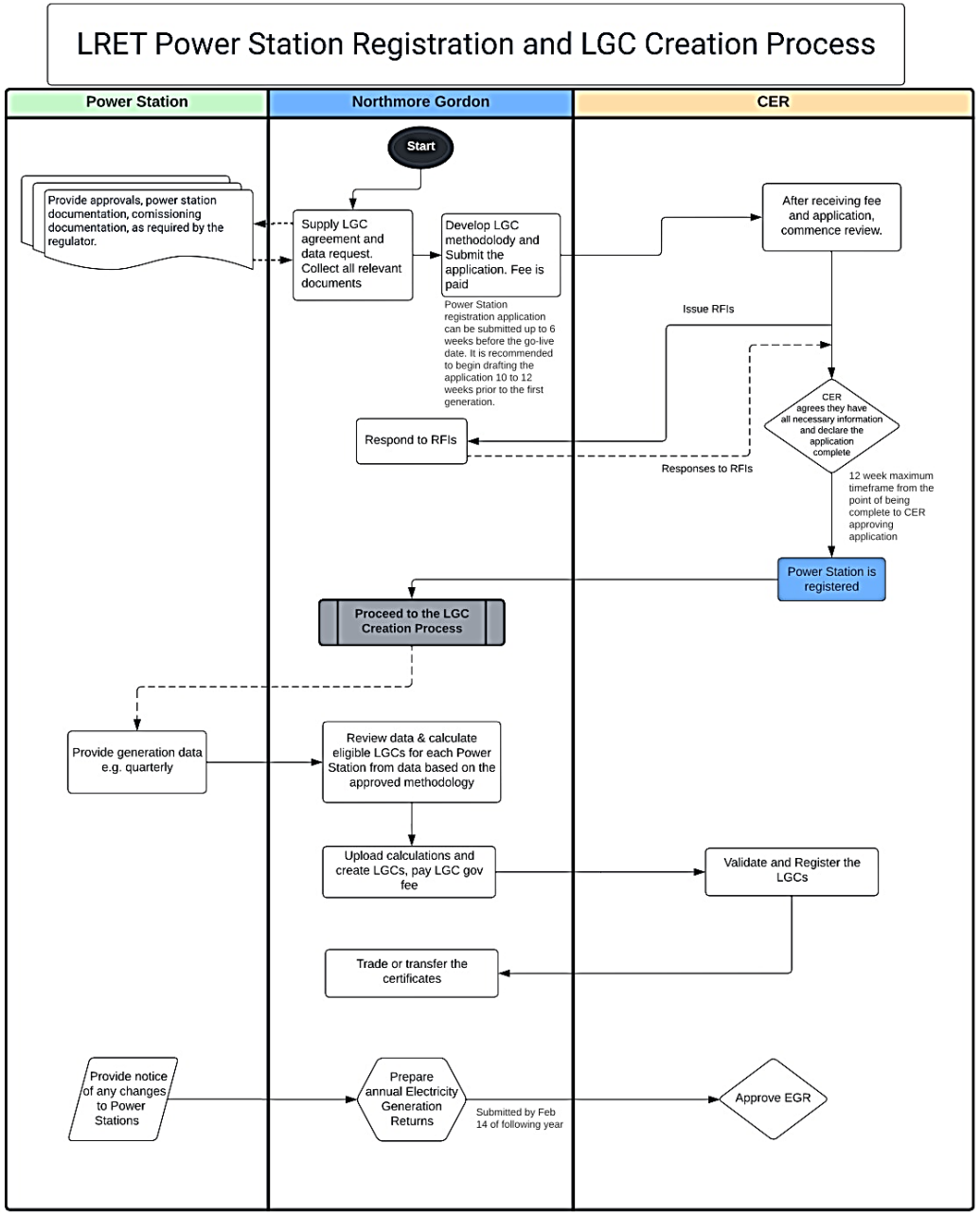


Figure 16: A geothermal generator is inherently dispatchable

CONFIGURATIONS FOR ELECTRICITY GENERATORS

- Geothermal power generation is inherently dispatchable
- The geothermal power generation process has no requirement for storage unlike solar, biomass combustion and digestion biogas

Source *ARENA 2018*



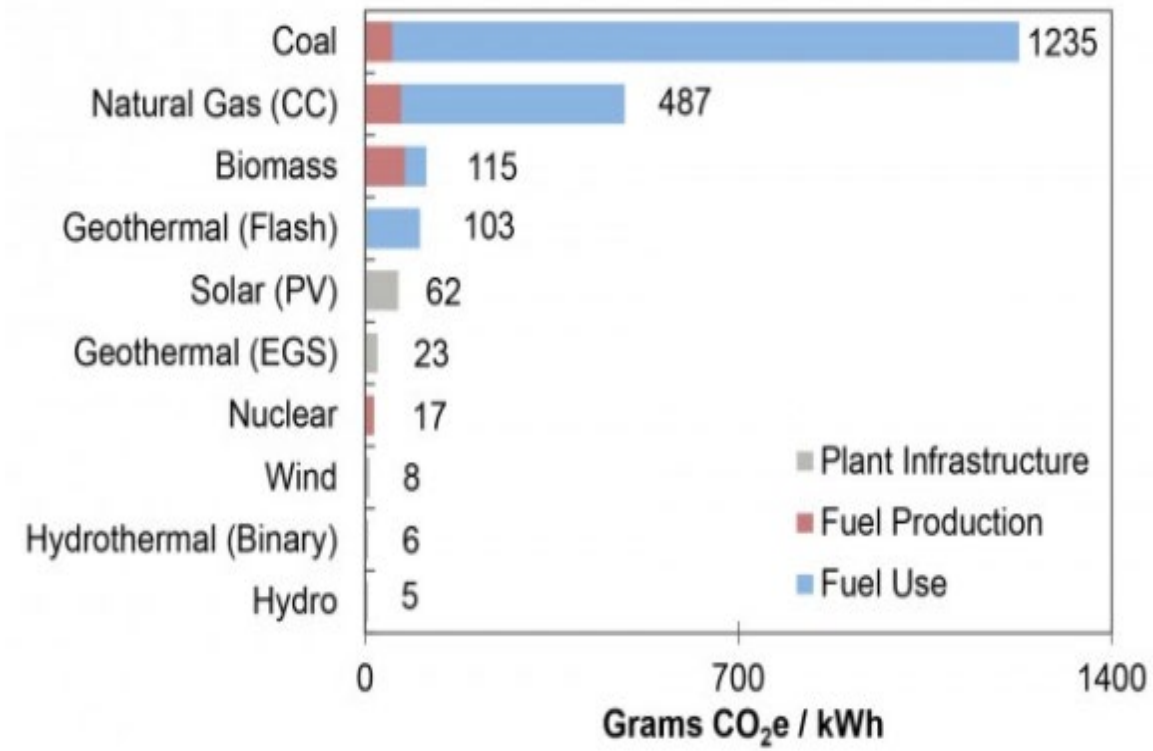
ENERGY AND CARBON PERFORMANCE

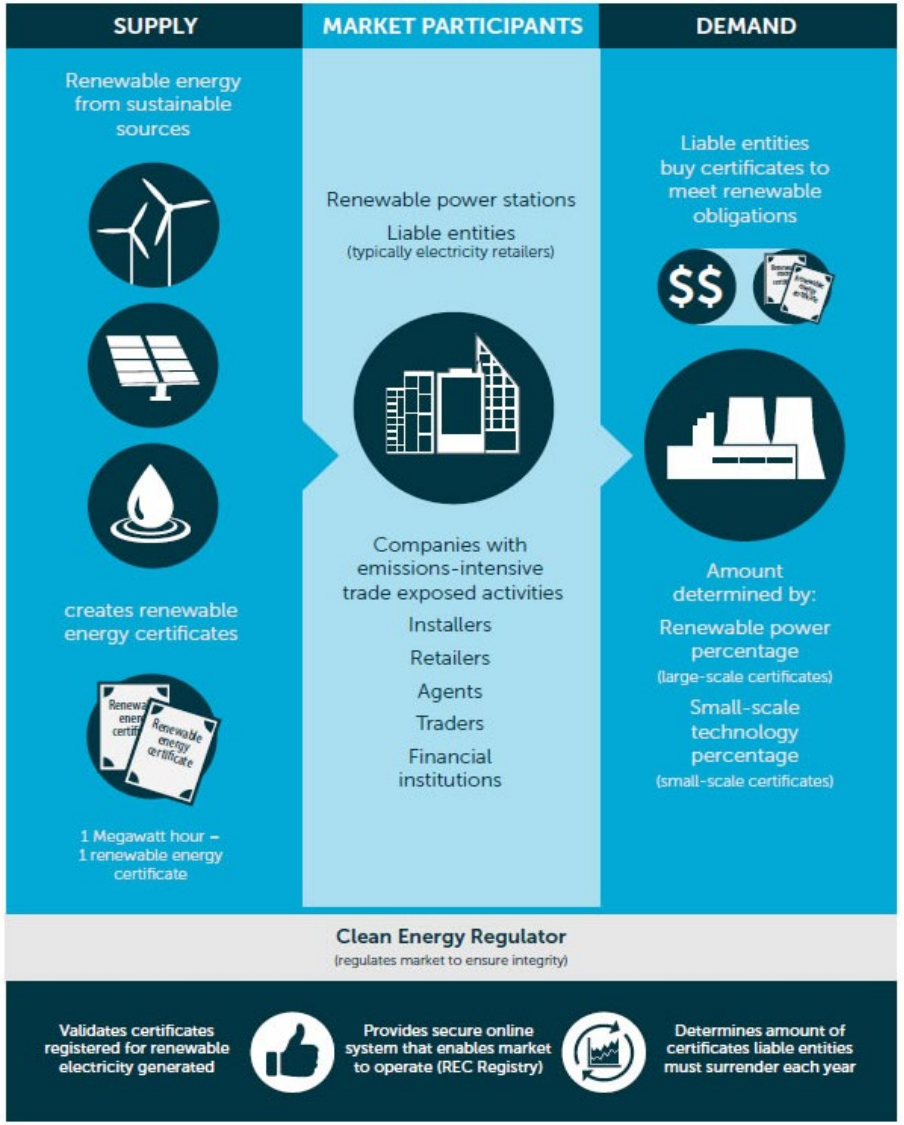
- Various carbon strategies are available for renewable geothermal energy projects, including Large scale generation certificates (LGC's)
- Under the LGC method, one LGC can be created per megawatt hour (MWh) of eligible electricity generated by a power station

CARBON CREDITS/RECS/ACCU

Geothermal energy projects are eligible for both carbon credits and renewable energy certificates:

- Renewable Energy Certificates (RECs) are a Federal Government based instrument that certifies the bearer owns one megawatt-hour (MWh) of electricity generated from a renewable energy source. Once the power provider has fed the energy into the grid, one (1) REC is received for one (1)MWh and can be then sold on the open market as an energy commodity.
- RECs must be purchased by entities that are polluting as a carbon credit to offset their emissions. For example: non-renewable energy providers must acquire 18.54% of their total sold capacity in RECs.
    - If a Coal fired power plant creates 1000MWh then they are required to purchase 180.54 RECs to offset their emissions.
- Australian Carbon Credit Units (ACCUs) are issued by the Federal Government's Clean Energy Regulator. One ACCU is allocated for each tonne of carbon dioxide equivalent stored or avoided by a project. These can be traded or sold both nationally and internationally.





ACCU/RECS PRICING

The price of a REC or ACCU can vary day to day and can be freely traded.

Prices vary from $35 - $120.

Current prices as of 31/01/2022 if traded through a REC trader are:

- $36.50 for RECs and,
- $37.50 for ACCUs

The RECs can also be surrendered to offset a project which is carbon creating, E.g. Gas fired generation.

The current renewable energy trading scheme is to the 2030 clean energy targets.

The trading of RECs is facilitated by the Clean Energy Regulator - http://www.cleanenergyregulator.gov.au/OSR/REC/The-REC-Registry

SCALABLE OPPORTUNITIES

The development of an industrial park surrounding a Geothermal power project could potentially bring numerous economic benefits to the Brisbane/Toowoomba and Gladstone areas.

The development of an industrial park could attract manufacturing via:

- Lower cost power – By remaining off the grid, energy could be supplied without the $0.12/kwh AEMO NEM charge
- Environmentally conscious manufacturers and other high-energy demanding customers

Other opportunities are:

- Explore manufacturing of green hydrogen with excess energy
- Potential for high-intensity glass house food production using latent heat from the geothermal process within the Lockyer Valley (Queensland's food bowl).
- Water heating for community infrastructure – recreation centres, schools, etc.

FORTESCUE GREEN HYDROGEN - GLADSTONE

Fortescue Future Industries (FFI) will build the world's largest green energy hydrogen manufacturing facility in Central Queensland.

The first step in the project — a $115 million manufacturing facility set to be built in Aldoga, west of Gladstone which is inside the Tenure is expected to double the world's green hydrogen production capacity and bring thousands of jobs to Queensland’s energy industry for years to come.

The plant will be manufacturing green energy infrastructure and equipment — such as electrolysers, cabling and wind turbines — to create green hydrogen that will be exported across the world.

Potential opportunities may exist to supply renewable geothermal energy to this project.

EXECUTIVE TEAM

Adam Stepanoff
CEO

Stuart King
Exploration Manager
Consultant

Christine Le Billon
HSEQ Manager