

EARTHS ENERGY PRE-RELISTING UPDATE

Earths Energy (ASX:EE1) (**Earths Energy** or the **Company**) is pleased to provide an update following its successful \$6 million capital raise to advance its exploration of geothermal energy opportunities in South Australia and Queensland. The Company is a front-runner in the Australian geothermal energy industry, which has strong potential to provide vital support for Australia's clean energy transition.

HIGHLIGHTS

- **Earths Energy is an early mover in the Australian geothermal energy industry, and aims to create a leading renewable energy solution with 24/7 production capability to help move towards Australia's clean energy targets**
 - *Geothermal energy stands out from other renewables due to its ability to provide constant, 24/7 baseload power generation, and is already proven as a reliable energy source in more than 30 countries globally.*
- **The Company reports under the United Nations Framework Classification for Resources to Geothermal Energy Resources ("UNFC")¹**
 - *The Company currently reports geothermal resources in accordance with UNFC as referenced in the Queensland geothermal legislation². South Australia has not legislated geothermal resource reporting requirements and therefore the Company has applied UNFC resource reporting to its South Australian projects for consistency.*
 - *In due course, following further geological studies, the Company intends to release further resource guidance.*
- **The Company's portfolio of geothermal exploration licences is strategically located near existing infrastructure, to support commercialisation and access to customers**
 - *In South Australia, the Company has secured a 12,035km² geothermal exploration licence footprint that is located close to major existing mining and processing operations, and power grids.*
 - *In Queensland, Earths Energy's granted geothermal exploration permit is located near Brisbane, with the electricity grid on the permit footprint.*

¹ United Nations Framework Classification for Fossil Energy and Mineral Reserves and Resources 2009 (UNFC-2009) and Specifications for the application of the United Nations Framework Classification for Fossil Energy and Mineral Reserves and Resources 2009 (UNFC-2009) to Geothermal Energy Resources.

² Geothermal Energy Regulation 2022 (QLD) made under the Geothermal Energy Act 2010 (QLD).



- *Three additional blocks are under application near major industrial activity.*
- *An interview with Managing Director Matt Kay published in The Australian on 29 December 2023 headed "Former Beach Energy boss Matt Kay to relist geothermal company" refers to "an independent report which estimates an energy resource of up to 22,100MWe in SA and 1500MWe in Queensland."*
- *The energy numbers referred to in The Australian are indicative estimates of Electric Resource Potential calculated by the Independent Technical Expert³ and should not be construed to be compliant with UNFC. They serve to illustrate product potential pending successful proof of concept, successful geological de-risking via appraisal and overcoming commercial hurdles.*
- *The Independent Technical Expert's indicative aggregate estimates of Electric Resource Potential for the granted South Australian acreage range from 9,700Mwe to 54,100Mwe.*
- *The Independent Technical Expert's indicative aggregate estimates of Electric Resource Potential for the granted Queensland permit range from 200Mwe to 1,100Mwe.*
- *The Company remains in the exploration phase of the Geothermal life cycle and no decisions have been made on development concepts and timings.*

Geothermal Energy

Geothermal energy is a renewable energy from natural sources of heat contained within the earth. It can be extracted for uses including heating, drying and electricity generation. Geothermal is established as a reliable and environmentally benign source of power.

The geothermal energy industry has been active globally for over 100 years and geothermal power plants have been installed in 30 countries⁴. While well developed in other countries, the Australian geothermal industry is in infancy, given Australia's historic abundance and acceptance of fossil fuels.

Geothermal energy has seen a strong increase in demand over the past decade as the world moves towards zero carbon emission targets. Compared to other renewable energy solutions, geothermal energy is unique given it provides a base-load alternative that produces energy 24/7, a major challenge for alternative renewable energy solutions such as solar and wind. Geothermal energy therefore plays an important role in the future energy transition towards zero carbon emissions, given its ability to provide grid security and reliability.

³ Independent Technical Expert's Report was completed by Dr. Arnout JW Everts, who holds a PhD in Geology from VU University Amsterdam, has 33 years of industry experience and a proven track record of technical leadership, project management, and technical task and project delivery.

⁴ <https://www.thinkgeoenergy.com/geothermal/geothermal-energy-production-utilisation/>



As of January 2023, global geothermal power generation capacity stood at 16,127 MWe with 154 MWe capacity installed during 2022⁵.

Earths Energy is an early mover in geothermal exploration in Australia and has strategically secured and applied for prospective licences with resource potential near prospective customers, in what is a rapidly growing field in Australia.

South Australian geothermal exploration licences (Earths Energy: 84% attributable)

Earth Energy's geothermal assets in South Australia are at the nexus of the state's push towards renewable energy, with substantial exploration blocks spanning 12,035 km² in prime locations (see Figure 1). These blocks are strategically situated along major transmission lines and adjacent to large-scale mining operations, such as Olympic Dam, Carrapateena and Four Mile / Beverly, all major consumers of energy in South Australia.

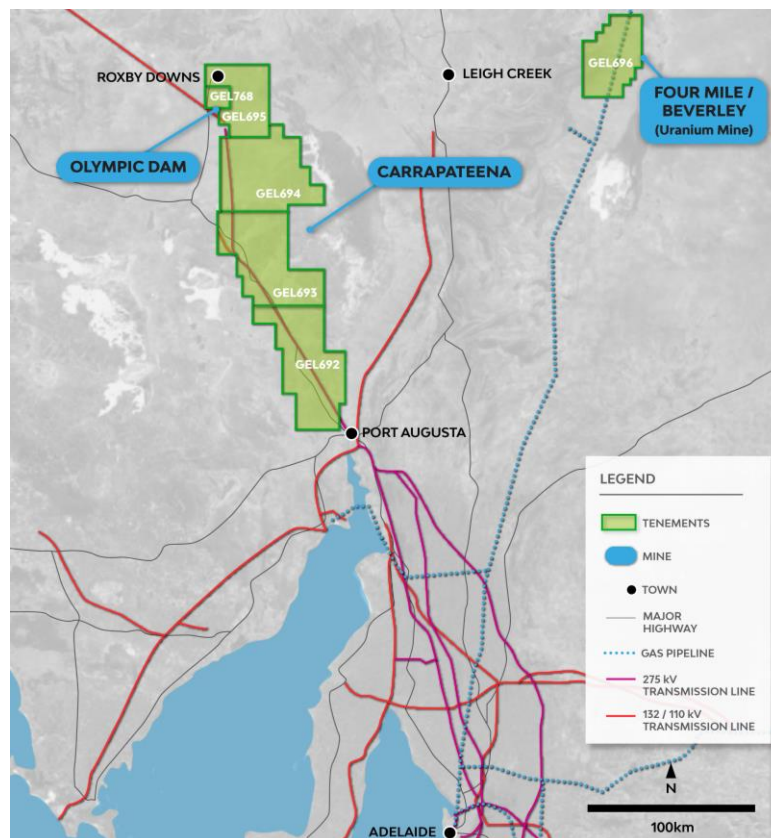


Figure 1 – South Australian geothermal exploration licences

⁵ <https://www.thinkgeoenergy.com/thinkgeoenergys-top-10-geothermal-countries-2022-power-generation-capacity-mw/>



Queensland geothermal exploration licences (Earth's Energy: 84% attributable)

In Queensland, Earth's Energy has one granted geothermal exploration permit and three blocks under application. EPG2026, located near Brisbane and substations and regional power networks. Tenements under application are located near the Gold Coast and major industrial activity in the Bowen and Surat Basin mining and coal seam gas areas.

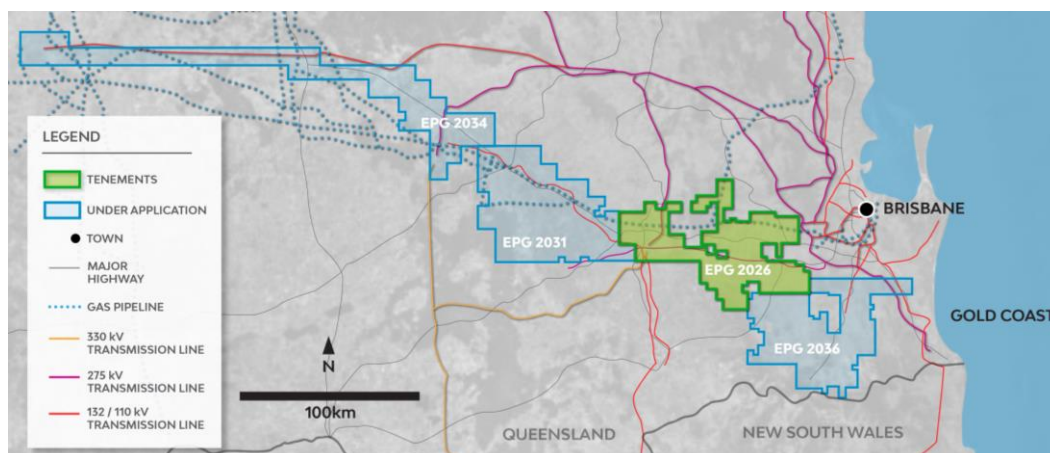


Figure 2 – Queensland geothermal exploration licences and applications

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

ENDS

To learn more about the Company, please visit www.ee1.com.au, or contact:

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About Earth's Energy

Earth's Energy has entered into binding Sale Agreements to acquire 84% interest in Volt Geothermal Pty Ltd ("Volt") and Within Energy Pty Ltd ("Within"), who hold geothermal projects in South Australia and Queensland, respectively (collectively the "Projects"). The Projects comprise of prospective geothermal exploration licences, surrounded by key existing infrastructure for electricity generation, including powerlines and sub power stations. The Company plans to focus on systematically exploring early-stage geothermal targets and developing geothermal resources at the Projects. This will involve a fit-for-purpose exploration programme analysing subsurface geology to identify thermal resource potential at different well depths, undertaking preliminary survey and resource assessments based on offset well data, exploration location definition and exploration drilling. This will determine priority targets for exploration drilling for geothermal resources.

Board & Management

Grant Davey
Executive Director

Matt Kay
Managing Director

Chris Bath
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Financial Officer

David Wheeler
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Dr Lawrence Meckel
Head of Subsurface