



## ASX Announcement

10 March 2025

### Geothermal Projects Update

Earth's Energy Limited (ASX: **EE1**) (**Earth's Energy** or **Company**) provides an update on the Company's geothermal projects located in South Australia and Queensland.

#### **SOUTH AUSTRALIAN PORTFOLIO**

The Company's geothermal assets in South Australia have the potential to play an important role in the state's transition to renewable energy. The Company has been granted exploration licences covering an area of 12,035 km<sup>2</sup> and are strategically located along major transmission lines and adjacent to large scale mining operations, such as Olympic Dam, Carrapateena and Four Mile / Beverly, all of which are major consumers of energy in South Australia.

#### **Electricity market assessment – South Australia**

The Company engaged specialist electricity market consultant, Resources WA, to prepare an initial assessment of electricity offtake opportunities for the Company's South Australian projects. Resources WA's report indicates that a primary market mechanism in South Australia is large-scale power purchase agreement, combined with ancillary services sold into the wholesale market, that could achieve the following prices:

- Electricity pricing in the range of \$65/MWh – \$100/MWh
- Market and large generating certificates – \$12/MWh

The Resources WA report highlights the significant revenue opportunities available through the Frequency Controlled Ancillary Services (**FCAS**) market, particularly with the introduction of "very fast" FCAS services. FCAS is a process used by the Australian Energy Market Operator to maintain the frequency of the power system.

The Resources WA report confirms that Flinders West is strategically located near key substations and high-voltage transmission networks.

### Paralana Technical and Economic Feasibility Study

In September 2024, the Company engaged GLJ Ltd (**GLJ**) to conduct a Techno-Economic Feasibility Study (**TEFS**) on its South Australian projects. GLJ are a recognised global energy leader in geothermal project evaluation and carbon capture utilisation and storage (**CCUS**). GLJ's engagement followed a review of Earth's Energy's project data by GLJ.

The TEFS was designed to delineate the geothermal resource potential and evaluate the viability of integrating next-generation technologies, including Advanced Geothermal Systems, Enhanced Geothermal Systems (**EGS**), and supercritical CO<sub>2</sub> geothermal plants. These technologies have the potential to significantly enhance both energy output and commercial viability, by allowing for shallower drilling depths, thereby reducing capital expenditures and operating costs.

As part of the TEFS, GLJ completed a Technical Review and Red Flag Assessment, which confirmed that Paralana (GEL 696) is technically suitable to host a Next-Generation EGS. The TEFS focused on two potential EGS zones at Paralana:

- Paralana Alpha - An initial zone consisting of a dolerite / tuff reservoir with existing permeability, covering an area of approximately 20km<sup>2</sup>; and
- Paralana Omega - A secondary zone consisting of a porphyry basement non-permeable reservoir, covering an area of approximately 49km<sup>2</sup>.

GLJ has now delivered a draft report, which is currently being assessed by the Company.

GLJ's preliminary recommendations are to:

- Prioritise Paralana Alpha for economic assessment and development planning;
- Evaluate hybrid development technologies to optimise thermal performance and minimise drilling costs; and
- Define a roadmap toward developing Paralana Alpha and derisking Paralana Omega.

## **FLINDERS WEST CORRIDOR PROSPECT DEVELOPMENT**

The Flinders West project is at an earlier stage than Paralana, however owing to its on-grid location, has a key advantage over more remote geothermal sites. Preliminary data indicates lower geothermal gradients compared to Paralana across much of the licence area, although certain sections exhibit encouraging temperature profiles and potential for deeper EGS targets. Further work to be undertaken at Flinders West is currently being assessed, including developing a more detailed geologic understanding to evaluate the potential for EGS development opportunities.

The opportunity at the Flinders West Corridor Prospect is focused on commercialising the supply of onsite power to customers near Roxby Downs and Olympic Dam.

The ability to deliver power and secure commercial offtake terms will be driven by the costs to develop and commercialise the geothermal resources at Flinders West and the terms of any offtake agreements that can be secured.

The Company continues to evaluate this project's development potential.

## **QUEENSLAND GEOTHERMAL DATA CENTRE STUDY**

In Queensland, the Company holds one granted geothermal tenement (EPG 2026), and three tenements under application. EPG2026 is located near Brisbane and provides potential to access approximately 400 substations and over 75% of Queensland's population via existing distribution (subject to regulatory approvals). Tenements under application are located near Brisbane and are proximate to major industrial activity in the Bowen and Surat Basin mining areas.

The Company conducted a study into the development of geothermal powered data centres at its Queensland project and has held discussions with potential development partners, however the potential commercial opportunities require further analysis and assessment.

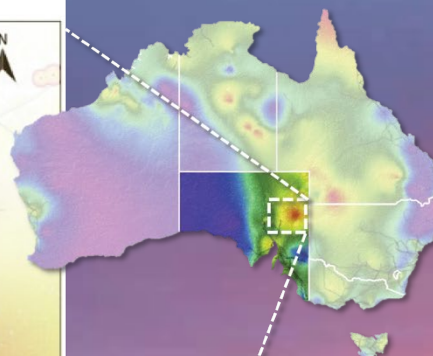
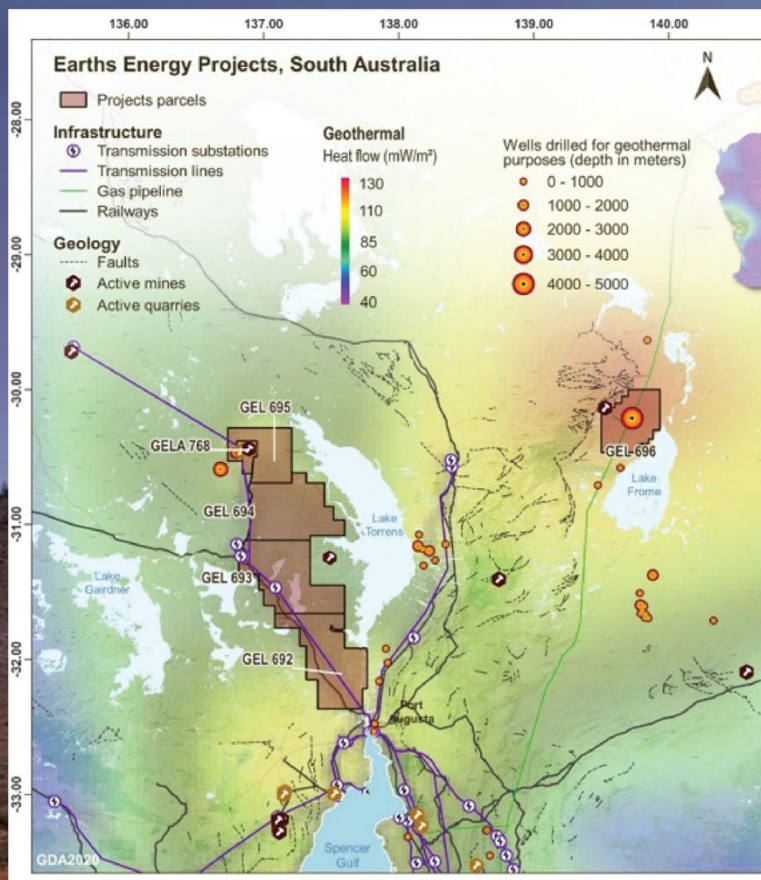
## **NEXT STEPS**

The Company continues to assess the Paralana project and GLJ's preliminary recommendations and to evaluate the potential at Flinders West.

The Company also intends to continue identifying, evaluating and, if warranted, acquiring additional resource projects and assets if the Board considers that they have the potential to add Shareholder value. The Company will consider acquiring these additional interests by way of direct project acquisition, farm in, joint venture or direct equity in the project owners.

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





## About Geothermal

Geothermal Projects provide green baseload power to electricity grids around the world. The USA produces 17.2 TWh of geothermal power per annum, equivalent to Western Australia's entire annual electricity demand.

The USA, Indonesia and Philippines combined produce enough geothermal power to meet over 17% of Australia's annual electricity demand.

## About Earth's Energy (ASX: EE1)

**Australia's Most Advanced Geothermal Explorer and Developer**

**Committed to the production of green baseload power in Australia**

EE1 holds 84% of the Paralana and Flinders West geothermal projects located in South Australia, which stand as Australia's most advanced geothermal projects and have outstanding development potential.

EE1 also holds an 84% interest in geothermal projects located in Queensland.

EE1's landholdings comprise prospective geothermal exploration licences, surrounded by key existing infrastructure including powerlines and power substations.

The Company is focused on assessing the feasibility of commercial scale geothermal power generation capacity at multiple sites, including the suitability of its projects for carbon capture.

## Shares on Issue

Total Shares on Issue	750.3m
Escrowed until 7 Feb 2026	220.4m
Tradeable Shares	529.9m

## Top 5 shareholders

Mimo Strategies	10.7% (fully escrowed until Feb 2026)
Stephen Biggins	10.2% (fully escrowed until Feb 2026)
Grant Davey	6.7%
Jadematt Investments	5.9% (fully escrowed until Feb 2026)
Sunset Capital	5.7%

## For more information see

### Company Website

[www.ee1.com.au](http://www.ee1.com.au)

### LinkedIn

[www.linkedin.com/company/earths-energy/](https://www.linkedin.com/company/earths-energy/)

### Phone

+ 61 (8) 9200 3425

### Contact

**Josh Puckridge, Chief Executive Officer**

[jrp@ee1.com.au](mailto:jrp@ee1.com.au)