

MEDIA RELEASE

26 October 2026

EMA to conduct next phase of geothermal studies after positive geophysical survey findings

With next-generation geothermal technologies emerging, there may be potential for Singapore to tap on deep geothermal resources for its energy needs. The Energy Market Authority (EMA) will carry out the next phase of studies to further assess the feasibility of harnessing geothermal energy for power generation, cooling, and heating. This follows a two-year non-invasive geophysical survey which indicated that sizeable geothermal energy is present deep underground in Singapore.

2 The non-invasive survey was conducted from 2024 to 2026 by a consortium of leading global consultants, including Chevron, Metatek Group, and Surbana Jurong. The consortium found that Singapore has high-temperature geothermal resources at depths of several kilometres underground, which may be suitable for electricity generation.

3 The initial estimate of this geothermal resource potential is over sixty times the nation's current annual electricity consumption of around 60 terawatt-hours (TWh), also known as the technical potential. The consortium has also assessed that there are lower-temperature geothermal resources at shallower depths, which could potentially support industrial heating and cooling using heat pumps and absorption chillers. Further studies will be needed to validate these estimates of Singapore's geothermal technical potential and determine the amount of geothermal energy that can be feasibly extracted.

4 As an immediate next step, EMA has appointed a consortium formed by Surbana Jurong and GLJ Ltd to conduct a feasibility study on the potential deployment of next-generation geothermal plants in Singapore. This follows a [Request for Proposal](#) launched in April 2026. The study will cover safety considerations, technical

viability, and the cost of geothermal energy production. The study is scheduled to commence by the end of 2026 and is estimated to take about 15 months.

5 “Geothermal energy is an indigenous source of clean energy that can provide constant power, and can potentially play an important role in our energy mix. If proven to be viable for electricity generation, Singapore’s geothermal energy resources will strengthen our energy resilience and support the decarbonisation of the power sector,” said Puah Kok Keong, Chief Executive of EMA.

6 Any decision to deploy geothermal will be taken after further technical and feasibility studies are completed and will depend on the progress of technologies for deep geothermal energy.

Annex: Nationwide Non-Invasive Geophysical Survey Process

-- End --

About the Energy Market Authority

The Energy Market Authority (EMA) is a statutory board under the Singapore Ministry of Energy, Trade and Industry. Through our work, we seek to build a clean energy future that is resilient, sustainable, and competitive. We aim to ensure a reliable and secure energy supply, promote effective competition in the energy market and develop a dynamic energy sector in Singapore. Visit www.ema.gov.sg for more information.

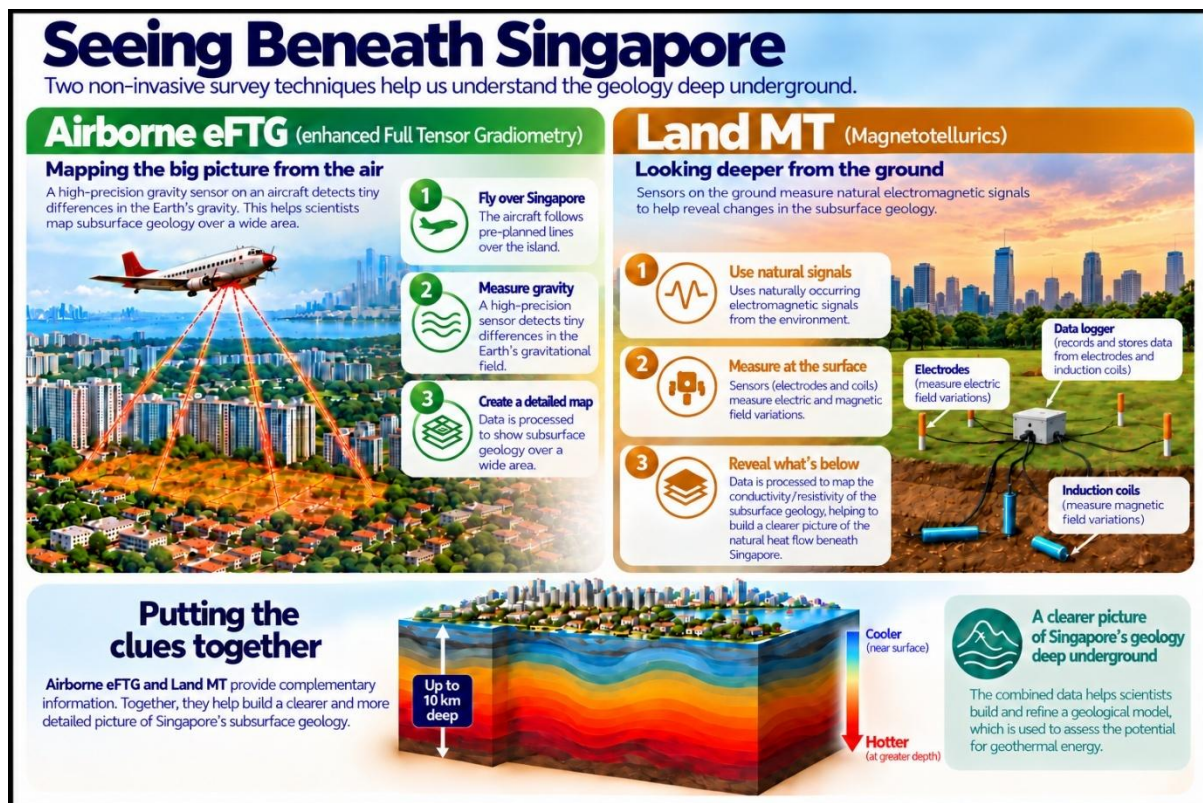
Nationwide Non-Invasive Geophysical Survey Process

The nationwide non-invasive geophysical survey was [commissioned by EMA in 2024](#) to assess Singapore's deep geothermal resource potential, at depths up to 10 km, for the purpose of power generation.

Two different non-invasive survey techniques were used to develop three-dimensional (3D) geological and heat resource models of Singapore.

1. **Enhanced Full Tensor Gradiometry (eFTG).** Using the world's highest resolution system, this technique measures the variations in the Earth's gravity field in three dimensions caused by differences in rock density, with high precision.
2. **Magnetotelluric (MT) survey.** This is a passive geophysical exploration method to determine subsurface electrical resistivity/conductivity, which helps provide subsurface information such as temperature and fluid movement.

The following infographic* explains the two techniques.



*For illustrative purposes. Image was created with the assistance of AI.

The nationwide non-invasive geophysical survey was conducted by a consortium led by Surbana Jurong, with Metatek Group undertaking data acquisition and processing,

while Chevron utilised the processed data to develop a 3D geological and heat resource model of Singapore.

Information on the consortium:

Surbana Jurong	SJ Group (SJ) is one of Asia's largest engineering and consulting groups, headquartered in Singapore, with public sector delivery experience across energy, infrastructure and the built environment. SJ brings direct geothermal credentials, including the Lihir 300 MW power plant extension and steam field design in Papua New Guinea, Kamojang Unit 2 and 3 rehabilitation and Unit 5 development, and Muara Laboh in Indonesia. SJ also has proven subsurface engineering expertise, supporting Singapore's Jurong Rock Caverns (JRC) across its full life cycle, from inception through design to deployment and operation. JRC is Singapore's first commercial underground storage facility and deepest civil subsurface programme.
Metatek Group	Metatek is a United Kingdom-based geophysical services business providing high-definition mapping of subsurface strategic and critical mineral natural resources, energy, helium and hydrogen, for exploration and development. The Company supports national energy security and fast-tracking of the discovery of resources, through the use of specially modified aircraft and the latest generation full tensor gravity gradiometer sensors. With this technology, Metatek can image subsurface features to depths beyond 10km, enabling customers to improve exploration targeting accuracy, reduce exploration risk, and accelerate decision-making across a range of exploration and development objectives.
Chevron	Chevron is one of the world's leading integrated energy companies. Demand for reliable power continues to grow, and geothermal energy has the potential to provide firm, around-the-clock electricity. Chevron is well positioned to help advance the next generation of geothermal

	development by leveraging the expertise of its people across subsurface and drilling, and project execution experience, partnerships, and assets. Disciplined, site-specific early appraisal plays a key role in understanding where next-generation geothermal technologies can reliably meet customer and market demand for firm, around-the-clock power. Chevron evaluates multiple geothermal technologies, with a current focus on enhanced geothermal systems, to inform development decisions and identify potential pathways for advancing geothermal solutions.
--	---