

MEDIA RELEASE

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EMA to Explore the Potential of Geothermal Energy for Power Generation

The Energy Market Authority (EMA) is exploring the potential of harnessing geothermal energy in Singapore, following new developments in technology. If found to be feasible, geothermal energy could serve as a new and additional source of indigenous clean energy besides solar for power generation in Singapore.

2 Singapore is sited in a region with quality geothermal resources deep underground. With support from the National Research Foundation, EMA is working closely with Nanyang Technological University, Singapore and various ministries and agencies, including the Ministry of Trade and Industry and the National Climate Change Secretariat, to carry out exploratory studies on our geothermal potential. These studies will focus on determining the geothermal resource potential in northern and eastern Singapore. These areas have been identified to hold geothermal potential based on their higher surface temperature measurements.

3 The exploratory studies aim to establish preliminary findings by end-2022. If they yield positive results, EMA will explore undertaking further research to determine the viability and scalability of deploying geothermal systems in Singapore. Singapore could potentially see the adoption of geothermal energy for power generation in the future and be one of the first countries to deploy next-generation geothermal systems in a densely-populated city. More importantly, it would support Singapore's effort to lower its power sector's carbon emissions, and help meet its climate change targets.

4 As a small, resource-constrained country, Singapore has limited renewable energy options and imports almost all of its energy needs. Conventional hydrothermal systems, which harness heat from underground resources of hot water and/or steam, may not be applicable to Singapore due to the lack of quality resources at shallower depths. However, advances in technology such as Advanced Geothermal Systems have opened up the possibility of geothermal application in Singapore, by harnessing heat from deep hot dry rock, with minimal impact to environment and safety.

5 As geothermal energy is an indigenous source of renewable energy, the adoption of geothermal energy can potentially help to diversify Singapore's energy sources and improve Singapore's energy resilience.

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About the Energy Market Authority

The Energy Market Authority (EMA) is a statutory board under the Singapore Ministry of Trade and Industry. Through our work, we seek to forge a progressive energy landscape for sustained growth. 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.

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