

MEDIA FACTSHEET

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EMA to Award Up to \$44m to Operators of the First Two Advanced Combined Cycle Gas Turbines

To help lower the carbon emissions of power plants, the Energy Market Authority (EMA) will award up to \$44 million under the Advanced Combined Cycle Gas Turbine (CCGT) Incentive Scheme to operators of the first two advanced CCGTs in Singapore, Keppel's Infrastructure Division and Sembcorp Industries (Sembcorp). The scheme is part of efforts to encourage the adoption of advanced CCGTs to improve the power sector's generation efficiency and reduce carbon emissions.

2 Advanced CCGTs are more efficient power plants with larger capacities for electricity generation (at ~600 megawatts each) than current CCGTs in the power system (up to ~400 megawatts each). Expected to be deployed by December 2026, the advanced CCGTs operated by Keppel and Sembcorp are expected to produce at least 200,000 tonnes less carbon emissions annually than current CCGTs in the power system today. This is equivalent to reducing the carbon emissions of around 80,000 households in Singapore in a year.¹

3 However, advanced CCGTs, given their larger capacities, incur additional reserve cost as they require larger reserves (i.e. backup power) for contingencies. For the first two advanced CCGTs entering the system, the magnitude of such additional reserve cost can outweigh their efficiency benefits and result in an initial cost disadvantage. The scheme will thus help to offset the additional reserve cost incurred for being the first adopters of advanced CCGTs in Singapore.

4 As more advanced CCGTs are deployed, the reserve cost is shared across more CCGTs and the cost borne per CCGT will decrease. At that point, advanced

¹ Based on National Climate Change Secretariat's (NCCS) Singapore's emissions data (2022) and Department of Statistics' (DOS) Singapore's residential data (2024).

CCGTs are not expected to incur any more cost disadvantage compared to current CCGTs as efficiency benefits outweigh the cost.

5 Hydrogen-ready advanced CCGTs like Keppel's and Sembcorp's will play an important role in Singapore's transition towards a low-carbon energy future. They provide secure, reliable and more efficient baseload power generation capacity, complementing Singapore's growing solar capacity, low-carbon electricity imports, and other low-carbon solutions. EMA will continue to advance innovative, cleaner and more efficient energy technologies to strengthen Singapore's energy infrastructure in the energy transition.

6 For more information about the incentive scheme, please refer to: <https://www.ema.gov.sg/partnerships/calls-for-proposals/proposals/incentive-scheme-for-advanced-combined-cycle-gas-turbines>

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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 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.