



Smart Energy, Sustainable Future

MEDIA RELEASE

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Three Power Generation Companies Awarded \$23 Million For Energy Efficiency Projects

The Energy Market Authority (EMA) has awarded Senoko Energy Pte Ltd, Tuas Power Generation Pte Ltd and YTL PowerSeraya Pte Ltd with a total of \$23 million to embark on energy efficiency projects that will reduce their carbon emissions. The projects would be implemented between now and 2024. When completed, the projects are expected to achieve an annual carbon abatement of over 30 kilo tonnes per annum (ktpa). This is equivalent to taking about 9,200 cars off the roads annually.

2 On the significance of these projects, EMA Chief Executive Mr Ngiam Shih Chun said: "Lowering our carbon emissions by promoting greater energy efficiency within our power generation sector is critical in our fight against climate change. We are heartened by the power generation companies' efforts to be more energy efficient and will continue working with them towards a more sustainable energy future."

3 These grants are part of the Genco Energy Efficiency Grant Call, under the Enhanced Industry Energy Efficiency Package, that will co-fund up to 50 per cent of energy efficiency projects by power generation companies. The grants awarded correspond to the carbon abatement achieved through the respective projects, subject to a cap of up to 50 percent of the project's qualifying costs.

4 One of the grant recipients is Senoko Energy. Its President & Chief Executive Officer Mr Bernard Esselinckx said: "Sustainability is a core pillar of Senoko Energy's business. EMA's support has been critical in moving the needle on cutting carbon emissions in the power generation sector. This grant is going to take us further as we continue to drive energy efficiency gains in power generation to advance Singapore's transition towards a green energy future."

5 To continue supporting the power generation companies in improving their energy efficiency and lowering their carbon emissions, EMA will launch the second run of the Genco Energy Efficiency Grant Call in January 2021. Details will be available soon at www.ema.gov.sg/Energy_Efficiency_for_Power_Generation.aspx.

ANNEX: Overview of the Energy Efficiency Projects Awarded

About the Energy Market Authority

The Energy Market Authority (EMA) is a statutory board under the Ministry of Trade and Industry. Our main goals are to ensure a reliable and secure energy supply, promote effective competition in the energy market and develop a dynamic energy sector in Singapore. Through our work, EMA seeks to forge a progressive energy landscape for sustained growth.

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Overview of the Energy Efficiency Projects Awarded

Senoko Energy Pte Ltd and Tuas Power Generation Pte Ltd have embarked on projects to improve their Combined Cycle Gas Turbine (CCGT) thermal efficiency and performance. This includes upgrading the internal components in the CCGTs with new cooling technologies and advanced materials.

2 These initiatives are expected to result in annual fuel consumption savings¹ of over 492,000 gigajoules in total, equivalent to the emissions produced by over 8,300 cars each year.



One of the gas turbines which Senoko Energy has upgraded with new cooling technologies and advanced materials, such as thickened thermal barrier coating on the turbine blades (in yellow).

3 Tuas Power Generation Pte Ltd and YTL PowerSeraya Pte Limited are also looking to optimise the performance of their power plants by installing variable speed drives (VSDs) on components such as pumps and cooling systems. VSDs use inverter technology, similar to that found in energy saving household appliances such as washing machines and refrigerators. The expected annual power consumption savings² of such efforts are over 6,800 megawatt hours. This is equivalent to the annual emissions of over 800 cars.

¹ Savings based on the energy content of fuel saved before electricity is generated.

² Refers to savings based on electricity drawn from the power grid.