MEDIA RELEASE

14 July 2025

Three gencos to conduct carbon capture and storage studies to support Singapore's decarbonisation goal

Three power generation companies – Keppel's Infrastructure Division, PacificLight Power and YTL PowerSeraya – will be conducting carbon capture and storage (CCS) feasibility studies for the power sector. Five proposals from these companies have been selected by the Energy Market Authority (EMA) to receive co-funding for the site-specific CCS studies. This follows a Grant Call launched in October 2024 which invited the industry to explore potential power sector CCS solutions as part of Singapore's energy transition towards a low-carbon future.

2 The grant facilitates the study of two power sector CCS pathways: (a) post-combustion carbon capture and (b) pre-combustion carbon capture.

- Post-combustion carbon capture for natural gas power plants refers to the installation of an onsite CO_2 capture unit to capture CO_2 from the flue gas produced during the combustion of natural gas in power plants.
- Pre-combustion carbon capture refers to the installation of an onsite CO_2 capture unit to capture CO_2 generated during the production of H_2 from natural gas. The H_2 would then be transported to the power plants and combusted to generate electricity. Please refer to the Annex for more information.

3 The five studies targeted for completion in 2026 are:

Power Generation Company	Scope
Keppel's Infrastructure Division	Post-combustion carbon capture
Keppel's Infrastructure Division	Pre-combustion carbon capture

PacificLight Power	Post-combustion carbon capture
YTL PowerSeraya	Post-combustion carbon capture
YTL PowerSeraya	Pre-combustion carbon capture

4 The findings from these feasibility studies will allow EMA and the power generation companies to deepen our knowledge and understanding of the power sector CCS pathways, as well as identify infrastructure and site-specific requirements. The findings would also provide a useful foundation to conduct more detailed engineering studies in future, such as preliminary Front End Engineering Design (pre-FEED) and FEED studies, to further assess the feasibility of CCS to decarbonise the power sector.

-- End --

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.

ANNEX

Figure 1: Post-Combustion Carbon Capture

Figure 2: Pre-Combustion Carbon Capture