



Infrastructure

Keppel provides compelling end-to-end solutions spanning power, renewables, clean energy and decarbonisation, which are essential for sustainable development.

FUNDS UNDER MANAGEMENT¹

\$19b

LONG-TERM CONTRACTS

\$6b

Revenue from long-term contracts secured by the operating division

CONTRACTED PORTFOLIO

~70%

Power capacity contracted for three years and above

Keppel is creating and investing in solutions across the renewables, clean energy and decarbonisation value chains to mitigate the impact of climate change and support the transition to a low carbon economy. As a leading infrastructure operator, Keppel develops strategic assets and projects in power generation, waste-to-energy (WTE) and water treatment. Leveraging its deep expertise across power, renewables, clean energy and cooling solutions, the Infrastructure Segment is also working with the Connectivity Segment to provide more sustainable digital infrastructure.

These solutions developed by Keppel support a pipeline of alternative real assets for the Company's private funds and listed infrastructure trust.

INTEGRATED POWER BUSINESS

Keppel plans to double its power capacity from 1.5 GW to 3 GW by 2030 through power generation and the importation of low carbon electricity. The Keppel Sakra Cogen Plant, Singapore's first hydrogen-compatible cogeneration power plant, was 85% completed as at end-2024 and is set to commence operations in 1H 2026. Keppel is also upgrading a second gas turbine at the 1,300 MW Keppel Merlimau Cogen Plant, enhancing its operational reliability and efficiency, following the completion of the upgrade of the first gas turbine in 2022. In addition, with certain modifications, the upgraded turbines will also be able to co-fire hydrogen blended with natural gas, supporting Singapore's decarbonisation goals.

Presently, about 70% of Keppel's contracted power capacity is locked in for three years and above, abating the effects of wholesale electricity price fluctuations in Singapore.

Keppel is a pioneer importer of low carbon electricity into

Singapore through Phase 1 of the Lao PDR-Thailand-Malaysia-Singapore Power Integration Project (LTMS-PIP) in 2022. Phase Two of the LTMS-PIP commenced in 2H 2024, doubling the electricity import capacity to 200 MW, which includes an additional 100 MW from Malaysia's grid. Keppel has also received conditional approvals to import 300 MW of solar power from Indonesia and another 1 GW of low carbon electricity from Cambodia. The Company's strategic access to renewables and low carbon energy further bolsters its data centre assets in Singapore, including the upcoming third building at the Keppel Data Centre Campus, which will be powered by low carbon electricity.

During the year, Keppel was shortlisted in a closed request for proposal by the Singapore authorities to carry out the pre-Front End Engineering Design (pre-FEED) study for low- or zero-carbon ammonia power generation and bunkering solutions on Jurong Island.

DECARBONISATION & SUSTAINABILITY SOLUTIONS

Keppel's suite of decarbonisation and sustainability solutions span Energy-as-a-Service (EaaS), WTE technology and waste and water management services. By end-2024, the Infrastructure Division had secured \$6 billion of revenue to be earned from long-term contracts spanning 10 to 15 years.

Energy-as-a-Service

Keppel drives the adoption of cleaner and more efficient energy solutions through its EaaS model, offering cooling, smart energy management, distributed solar photovoltaics, and electric vehicle (EV) charging on a cost-effective subscription basis.

Since late-2021, Keppel's EaaS business has grown rapidly, breaking into overseas markets like China, India, Thailand, and Vietnam.

¹ Gross asset value of investments and uninvested capital commitments on a leveraged basis is used to project fully-invested FUM.

Operating & Market Review

Infrastructure

During the year, Keppel secured several major contracts in Singapore. These include long-term contracts to provide cooling utilities to Raffles City Singapore and to establish and operate Southeast Asia's largest public EV fast-charging hub under SETSCO Services. The Company also won a 20-year contract from the Housing & Development Board to design, build, own and operate centralised cooling systems at three new Build-to-Order projects in Tengah Town. Meanwhile, the district cooling system in Bulim Phase 1 at Jurong Innovation District is on track for commissioning in 1H 2025.

Keppel has also expanded regionally via strategic partnerships. In Thailand, it joined hands with Global Power Synergy Public Company Limited, a PTT company, to deliver EaaS solutions as well as pursue opportunities in Thailand and Singapore.

In China, Keppel was appointed to design, retrofit, manage and operate the cooling and heating systems at two of Perennial Holdings' flagship developments in Chengdu, Sichuan Province for 10 years.

In India, the Company secured its first EaaS contract with Blackstone's Nucleus Office Parks in Bangalore. Keppel also formed strategic partnerships with key players, namely the JBM Group, Johnson Controls and Tata Power, to support India's clean energy and infrastructure goals. The scopes of these partnerships involve electro-mobility and e-waste management and integrative EaaS for energy-intensive sectors.

Environment

Keppel offers comprehensive environmental solutions, specialising in various aspects, from design and engineering to technology provision, as well as the development and operation of waste and water management facilities. Specifically, the Division's WTE technology is well adopted across Asia and Europe,



As a leading infrastructure operator, Keppel develops strategic assets like power generation, waste-to-energy and water treatment plants, such as the Keppel Marina East Desalination Plant, which was showcased at the Singapore International Water Week. Second from left: Mr Baey Yam Keng, Senior Parliamentary Secretary, Ministry of Sustainability and the Environment (MSE); Ms Grace Fu, Minister for Sustainability and the Environment; Ms Cindy Lim, CEO, Infrastructure of Keppel; and Dr Koh Poh Koon, Senior Minister of State, MSE.

offering effective solutions for managing waste and recovering energy.

In 2024, Keppel made significant progress on the Hong Kong Integrated Waste Management Facility (IWMF) and Singapore's Tuas Nexus IWMF, which were 89% and 65% completed respectively by year-end. These facilities will provide sustainable solid waste management solutions upon completion.

During the year, Keppel was awarded a contract to design and build a new WTE plant in La Tronche, France, featuring two waste incineration lines, each capable of processing 82,500 tonnes of residual waste annually. Keppel also secured a retrofit cum 3+1 year extension for the operations and maintenance of the Senoko WTE Plant in Singapore.

Keppel completed a study with the National Environment Agency on integrating carbon capture technology into WTE plants in Singapore. Following the completion of the study, a demonstration facility is

expected to be developed at a selected WTE plant.

Sustainability Solutions

Keppel continues to play a pioneering role in the development of pathfinder energy transition projects. In collaboration with Ayala Group's listed energy platform and GenZero, Keppel is exploring the early retirement and replacement of a coal-fired power plant (CFPP) with a clean energy despatch facility in the Philippines. This project aims to set a precedent for the early retirement of CFPPs across Southeast Asia by utilising high-quality transition credits.

As part of wider efforts to mobilise private investments for clean energy transition and environmental projects, Keppel is also partnering the Asian Development Bank and Enterprise Singapore to explore US\$800 million worth of such projects in Asia Pacific. The Company is also exploring new initiatives with international partners to jointly pursue decarbonisation and clean energy business opportunities in the Asia Pacific.

An Engineering Marvel

Hong Kong Integrated Waste Management Facility

The Hong Kong IWMF showcases Keppel's engineering and project management prowess for executing complex infrastructure assets. In December 2017, Keppel and its civil construction partner, Zhen Hua Engineering, secured a \$5.3 billion contract to design, build and operate Hong Kong's first large-scale IWMF on an artificial island off the coast of Shek Kwu Chau.

Harnessing Keppel's proprietary WTE technology, the IWMF can process 3,000 tonnes of municipal waste daily and generate 480 million kWh of electricity annually — enough to power 100,000 homes in Hong Kong, while cutting 0.44 million tonnes of carbon dioxide each year. With Keppel's advanced flue gas cleaning system, the IWMF will also meet stringent international emission standards.

While Zhen Hua Engineering handled the reclamation of the artificial island, Keppel fabricated the plant and process equipment offsite in large-scale modules. Weighing over 50,000 tonnes in total and with the largest module approximately 50 metres tall, the modules were then towed by sea and further integrated into the facilities on the island.

This modular construction method reduced build time and improved the project's overall build quality. The IWMF was 89% constructed as at end-2024 and is expected to commence waste treatment by end-2025.

As part of the project, Keppel will also operate and maintain the IWMF over 15 years, thus ensuring stable, recurring income for the Company over the long term.

