

Sembcorp and NUS set up corporate lab

By Grace So

graceso@sph.com.sg

Singapore

SEMBCORP Industries has tied up with the National University of Singapore (NUS) to establish a corporate laboratory that will develop new, competitive and sustainable solutions in the areas of energy, water and waste-to-resource.

The corporate lab, set up with a jointly-funded investment of S\$60 million, is supported by National Research Foundation Singapore under its Corporate Laboratory@University Scheme, which supports the setting up of key corporate laboratories via public-private partnerships.

Sembcorp's move ties in with CEO Tang Kin Fei's recent mention of the group's shift to focus on its utilities segment, to gain a bigger share of overseas utilities markets, particularly in India and China, where there is growing demand for solutions like renewable power.

The research and development partnership between Sembcorp and NUS will develop new solutions that reduce emissions, enhance water and wastewater treatment systems and extract resources from waste.

In the area of energy solutions, researchers will work on projects related to power generation, including evaluating risks, supporting planning of maintenance activities, and developing predictive maintenance technologies that improve the resilience of systems through identifying the root causes of issues.

Researchers will also look into developing an advanced platform that will improve plant performance and reduce emissions.

Additionally, the lab will be used for projects related to industrial wastewater treatment and water reuse, including the development of a cost-effective solution that will not only reduce the harmful effects of discharging wastewater on the environment, but also help to conserve pre-

cious water resources. The lab also aims to optimise current and upcoming wastewater treatment plants to minimise environmental impact.

Besides energy and water, researchers will also work to convert residues from thermal power and incineration plants into high-value products. This not only mitigates the environmental impact of disposing such residues, but also enables the extraction of value from waste.

Speaking as guest of honour at the lab's launch, Deputy Prime Minister Teo Chee Hean, who is also chairman of NRF Singapore, said that he is happy to see that the collaboration will create 45 new positions for research fellows and engineers, and train 24 PhD students in five years.

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"This will add to the pool of industry-ready research manpower in Singapore, to help companies innovate and create new value through science and technology," Mr Teo added.

Through its Corporate Laboratory@University scheme, the National Research Foundation supports the establishment of collaborative corporate laboratories in Singapore's universities.

It seeks to strengthen Singapore's innovation system by encouraging public-private R&D collaboration between universities and companies.

The latest Sembcorp-NUS Corporate Lab is the sixth such lab supported by this scheme.