



National Development Minister Lawrence Wong (fourth from left) wearing 3D glasses to look at a screen with a building scanned using a digitisation technique, after the launch of the SJ-NTU Corporate Lab yesterday. ST PHOTO: MARK CHEONG

\$61m research lab to engineer eco-friendly building solutions

A new \$61 million research laboratory has been set up to look into ways to optimise land usage, come up with eco-friendly solutions for buildings and improve productivity in the built environment sector.

Launched yesterday by Nanyang Technological University (NTU), consultancy Surbana Jurong and the National Research Foundation (NRF), the NTU-based lab will start with 11 projects focused on three themes: digitalisation, sustainability and future-proofing the built environment industry.

Successful solutions that the lab comes up with will be rolled out to Surbana Jurong projects, and eventually sold to companies and governments, especially those in the tropics.

Among them could be chilled ceiling panels suited to the tropics,

which can reduce the amount of energy needed to cool a room while removing impurities.

Another project will see better ways to store liquefied natural gas – the main energy source here – in industrial and urban areas so that the space above ground can be freed up for other uses.

The lab is also looking at how to harness the waste products of such energy.

The SJ-NTU Corporate Lab, which will be ready early next year, will house 70 professors, research staff, PhD students and engineers, and aims to change the way buildings are designed, built, maintained and decommissioned.

NTU president Subra Suresh said the corporate partnership – the sixth one for the university – has the additional benefit of being

able to implement “research output immediately into the infrastructure of Singapore”.

Surbana Jurong group chief executive Wong Heang Fine said successful technologies will be implemented in the firm’s 7,000 projects around the world.

Its 9,450ha New Clark City development in Tarlac in the northern Philippines – which aims to be the country’s first smart green and disaster-resilient city – could be the first to have these innovations when its first phase is ready in 2022, he said.

Speaking at the lab’s launch, Minister for National Development Lawrence Wong noted that the lab is the 12th supported by the NRF, but the first for the built environment.

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