

SMESpotlight

# New centre to support SMEs on clean energy

It will help participating firms accelerate green innovations and commercialise them

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Small and medium-sized enterprises (SMEs) and start-ups working on clean energy projects can tap test beds, research and funding offered by the first centre of innovation for the energy sector.

The EcoLabs Centre of Innovation for Energy will help participating companies accelerate their green innovations and commercialise them for the market.

It will work with corporate partners and investors to provide member companies with up to 30 public- and private-sector test-bedding sites, ranging from high-tech lab facilities to specialised test centres, to pilot projects in a controlled environment. EcoLabs is a collaboration between Nanyang Technological University (NTU), Enterprise Singapore and the Sustainable Energy Association of Singapore.

Senior Minister of State for Trade and Industry, and Education Chee Hong Tat, who launched the centre housed at NTU yesterday, noted that the rising prevalence of digital technology and data science has unlocked new solutions and business models in the energy sector.

“We want Singapore companies to innovate and capture these new opportunities, but we recognise that not all companies, especially SMEs, have the scale or the resources to embark on this journey on their own. And this is where a collaboration like EcoLabs is useful,” he said.

“The initiative will provide test bedding so that companies can easily validate their innovations and skills, and build their track record if they want to internationalise.”

Since January, 18 SMEs and start-ups have joined the centre, with 14 corporate partners pledging to support the firms and further refine their clean energy ideas.

Within EcoLabs, NTU professors from various faculties, such as material sciences and electrical engineering, will provide mentorship for the member companies.

V-Flow Tech, an SME that uses the more sustainable vanadium redox batteries to power buildings and vehicles, and store electricity, is looking to work with a few start-ups and corporate partners within EcoLabs.

Its chief executive Avishek Kumar said the SME wants to work with Involt – a company that specialises in supercapacitor technology – to incorporate supercapacitors within its batteries so the batteries can charge electric vehicles faster.

He is also in talks with DNV GL – which provides risk management and quality assurance services – on reviewing the bankability of the batteries and rolling them out for commercialisation.

Similarly, Botsync, a start-up that invents mobile robots to inject automation into the manufacturing and logistics sectors, is hoping to work with another start-up to use wireless chargers for its robots. The mobile robots now have to dock at a charging station and the charging plate attached to it must touch the power plate at the station.

Sometimes, the robots fail to dock properly at the charging station and another sensor must be installed in the robot to fix it, said Mr Nikhil Venkatesh, co-founder of Botsync.

“Such glitches can be avoided and you can reduce your overall cost. By using wireless technology, there is an 8cm gap between the plate and robot, and it will still continue charging. Wireless technology is more energy-efficient,” he added.

Botsync hopes to test the wireless charger invented by a product engineering firm on its mobile robots.

One of EcoLabs’ corporate partners, Continental, a German automotive manufacturing company, is keen to work with start-ups and SMEs to co-create innovations in the fast-moving mobility sector.

Continental president and chief executive Lo Kien Foh said: “We want to be as agile and fast as the mobility industry. Since SMEs and start-ups are agile and tend to in-

vent solutions quickly, we hope to work with them to co-create new products and solutions, and bring them into the market quickly.”

Continental will also use its venture arm to invest in promising companies, provide platforms to test inventions and help to commercialise products.

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Booths showcasing clean energy projects by various firms at the EcoLabs Centre of Innovation for Energy, which was launched yesterday. The centre, housed at Nanyang Technological University, will work with corporate partners and investors to provide member companies with test-bedding sites. ST PHOTO: TIMOTHY DAVID