NTU launches two new labs to help green start-ups and SMEs commercialise products

The EcoLabs programme is part of Singapore's larger strategy to support start-ups and SMEs. ST PHOTO: NG SOR LUAN

Ng Wei Kai
UPDATED
41 MINS AGO
SINGAPORE - Start-ups focusing on green technology will get help to make the leap from research and development to commercial viability from two new labs set up by Nanyang Technological University (NTU).

The EcoLabs Digital Twin Co-Innovation Lab and the NTU-Arrow Invent Joint Lab are located in the JTC Cleantech One building in Jurong.

They will help start-ups as well as small and medium-sized enterprises (SMEs) refine and test their technology and connect them to larger companies to help them scale up, said NTU in a statement on Thursday (April 21).

The two labs began work last year and were launched at an event on Thursday morning under the EcoLabs Centre of Innovation for Energy programme - a collaboration by NTU, Enterprise Singapore and the Sustainable Energy Association of Singapore.

Mr Stanislav Borisov, the centre's innovation manager for sustainability and decarbonisation, told The Straits Times on the sidelines of Thursday's event that the EcoLabs Digital Twin Co-Innovation Lab is working on about 30 projects and is already in contact with more than 100 start-ups and SMEs.

While the two labs are located in the same building, they serve different purposes.

The EcoLabs Digital Twin Co-Innovation Lab is a collaborative and creative space to help energy start-ups and SMEs innovate in Singapore's energy sector, NTU said.

How to grow your money and career

Get a Head Start with ST's new weekly newsletter
The second lab, NTU-Arrow Invent Joint Lab, is a tie-up between NTU and United States technology company Arrow Electronics.

There, companies can use equipment which may be too expensive for them to buy themselves, as well as tap hardware for their projects.

Some of the companies which use the lab spaces were at the launch to present on their projects.

One of them is Resync Technologies, a start-up which uses machine learning to help reduce energy costs for consumers.

Resync chief executive Emir Nurov said: "We deployed our solutions in a few Housing Board and condominium flats, and after two months, (households) saw energy savings of up to 35 per cent."

His company produces a software which analyses how households use electricity and tells them what appliances they may be overusing.
Minister of State for Trade and Industry Low Yen Ling at the opening of the EcoLabs programme on April 21, 2022. ST PHOTO: NG SOR LUAN

Start-ups like Airo have been using the EcoLabs Digital Twin Co-Innovation Lab to refine their product.

Airo has developed an app which uses machine learning to optimise the temperature and efficiency of air-conditioning units.

HDB residents can key their postal code in the app and select their flat's floor plan. The app will then suggest the best location and settings for an air-con unit.

Airo chief executive and co-founder Vernon Low said he splits his time between his own office and the lab, where he taps the staff's expertise to work on the app.

Speaking at the launch, Minister of State for Trade and Industry Low Yen Ling said the EcoLabs programme is part of Singapore's larger strategy to support start-ups and SMEs as they translate their technology into products on a commercial scale.
Ms Low, who is also Minister of State for Culture, Community and Youth, added that recent events such as the war in Ukraine causing oil prices to spike have highlighted the need for Singapore to seek alternative sources of energy, including renewables.

NTU president Subra Suresh, who also spoke at the launch, said Singapore faces an energy trilemma - attempting to maintain a balance between affordability, reliability and sustainability - compounded by the growing need for energy solutions to be environmentally friendly.

He added that growing interest in using technology to reach sustainability goals has led to huge demand for innovation from start-ups and SMEs.