

NTU, Alibaba set up corporate lab to help firms go greener

Up to 200 scientists, engineers in public and private sectors to work together

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More technology-based solutions will be unlocked to solve real-world problems and help companies be more sustainable with the launch of a new corporate lab that will bring together up to 200 scientists and engineers from the public and private sectors.

The project by Nanyang Technological University (NTU) and Alibaba Group aims to drive collaboration between industry and public sector researchers.

Called the Alibaba-NTU Global e-Sustainability CorpLab, or Angel, it was launched on Sept 12 by Deputy Prime Minister and National Research Foundation (NRF) chairman Heng Swee Keat. NRF is also supporting the new corporate lab.

DPM Heng said in his speech at the launch: "Corporate labs like this one have an important role in Singapore's research, innovation and enterprise ecosystem.

"By bringing like-minded research and enterprise partners together, they develop new breakthroughs and actionable solutions that can be brought to market."

He added: "The work done at the Angel corporate lab sits at the intersection of two of the biggest transformations of our time – the digital revolution and the green transition. Just as the future of sustainability will be artificial intelligence (AI)-driven, the future of computing must also be greener."



Deputy Prime Minister Heng Swee Keat, chairman of the National Research Foundation, with Ms Selina Yuan (left), president of Alibaba Cloud Intelligence International, at the launch of the Alibaba-NTU Global e-Sustainability CorpLab, or Angel, on Sept 12. NRF is supporting the new corporate lab. ST PHOTO: NG SOR LUAN

He noted that AI technologies can help reduce emissions from optimising energy grids to developing sustainable supply chains. AI models can also analyse environmental data, identify areas for improvement, and enable more efficient, data-driven decision making.

However, digitalisation itself could leave a significant carbon footprint, he said.

Hence, Angel will look into developing and trialling new digital technologies that prioritise sustainable ecosystems and lifestyles. This is especially vital as the global use of AI technologies is expected to increase and drive up the power

demand of data centres.

Projects will include tackling key environmental issues such as reducing carbon emissions in supply chains, promoting environmentally friendly behaviour and advancing healthcare models for an ageing population, NTU and Alibaba said in a statement.

The collaboration between the two organisations will span over five years, and will see a joint team of up to 200 scientists and engineers working together to advance global research efforts in 10 areas.

These areas include energy-efficient AI algorithms, green cloud computing, sustainability stan-

dards and metrics, sustainable living and digital technologies for ageing and health.

NTU president Professor Ho Teck Hua said: "Our new corporate lab will pave the way for users to gain access and benefit from AI-powered applications at lower costs while ensuring sustainable computing growth for future generations."

He noted that NTU has also set up joint labs with global powerhouses like Rolls-Royce, Continental and Delta Electronics, including leading Singapore multinationals like Singtel and ST Engineering.

Mr Wu Zeming, Alibaba Group's

chief technology officer, said: "Global demand for green technologies provides ample business opportunities. Looking ahead, Angel will play a pivotal role in driving technological breakthroughs for sustainable digital innovations and unlocking commercialisation opportunities with innovative business models, bringing value beyond business – ultimately contributing to a better, more sustainable world."

Angel will have two key research pillars in green technologies and sustainable lifestyles.

Under green technologies, it will focus on developing technologies

that are more sustainable and make smart digital technologies readily available to businesses, including small and medium-sized enterprises (SMEs).

For sustainable lifestyles, Angel will use digital technologies to empower consumers and SMEs to adopt more sustainable options.

For example, e-commerce platforms can promote eco-conscious behaviours by suggesting energy-efficient appliances, reusable products, or green delivery options, NTU and Alibaba said.

The corporate lab will also focus on nurturing a pipeline of talents for Singapore by developing trained staff who will be proficient in technical skills and in good sustainable development practices.

NTU's vice-president for industry, Professor Lam Khin Yong, added: "Industry-academia collaborations are vital for driving innovation, and sustainable development.

"This collaboration prepares our students to tackle 21st-century challenges. We are excited to combine our strengths in research and technology, with a particular focus on green technologies and the promotion of sustainable lifestyles, all aimed at fostering a healthier, greener society."

Mr Chris Tung, Alibaba Group president for strategic development, said: "Together, we aim to enhance our smart technology solutions and collaboratively create innovative, future-ready solutions that will make a significant impact."

The new lab also aligns with the university's sustainability goals. NTU aims to develop sustainable innovations and achieve carbon neutrality by 2035.

Singapore currently has more than 20 corporate labs across institutions, DPM Heng noted.

He said: "Singapore hopes to serve as a pathfinder, enabling partners from all over the world to leverage our ecosystem and develop solutions that can be scaled regionally and globally."

He also encouraged more companies to deepen collaborations with universities and research institutions, especially in critical areas like the digital economy and sustainability.

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