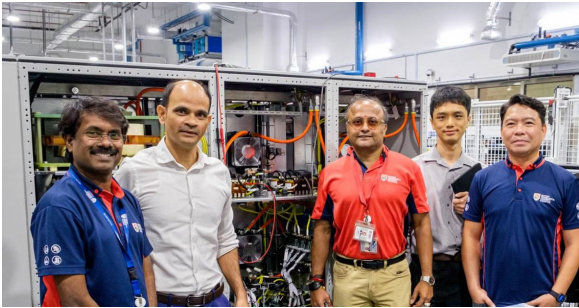


# NTU launches first deep tech spin-out under S\$75 million pilot programme with Temasek, NUS



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Members of deep tech spin-off Amperesand with the solid state transformer prototype developed at NTU's Energy Research Institute.  
PHOTO: NTU

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NANYANG Technological University's (NTU) Amperesand was launched as the first deep tech spin-out company under a [S\\$75 million pilot programme](#) between NTU, the National University of Singapore (NUS) and Temasek.

Further deep tech spin-outs from NUS, in areas such as energy transition and microelectronics, will be launched in 2024.

This was announced by Deputy Prime Minister Heng Swee Keat at Temasek's annual event, RIE Industry Day, on Wednesday (Nov 1).

Amperesand, which has been part of the National Research Foundation (NRF) Energy Grid 2.0 programme since 2017, aims to commercialise solid state transformers (SST) technologies

that are based on over a dozen patents developed by NTU scientists.

As a startup, the company's goal is to be the first in the world to commercialise a modular and highly scalable SST for multi-megawatt fast charging of electric vehicles.

It is slated to deliver the first systems to customers globally by 2025.

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Amperesand's novel solid-state technology is expected to enable efficient, intelligent and resilient electrification for the adoption of energy transition systems such as electric vehicles, renewable energy, energy storage and green hydrogen.

The technology is also said to offer a more compact form factor and capability to manage bidirectional power flow, such as in the case of distributed renewable power generation.

Amperesand's commercialisation plan was developed over six months under guidance from Temasek's early-stage deep tech investing platform Xora Innovation and its network of global advisers.

This comes as part of the pilot programme launched between Temasek, NTU and NUS on Sep 12, with an aim to accelerate the creation of successful deep tech startups from the pipeline of research at the two universities.

Under the S\$75 million programme, Temasek and Xora will collaborate with the two universities to launch and build globally competitive ventures with potential to address large global market opportunities.

At the RIE Industry Day event, DPM Heng also announced that a venture fellowship programme will be launched among NTU, NUS and Xora in 2024, with its first intake in the same year.

The venture fellowship will involve researchers from both universities as they work with Xora venture builders on a full-time basis to develop their technologies and ventures.

NTU and NUS will also develop a new common intellectual property (IP) licensing framework and platform by December 2023, including a joint IP marketplace for potential licensors to identify and select IPs from both universities.

This is expected to simplify, harmonise and accelerate IP licensing while reducing the licensing process time taken from a few months to a few weeks.

The platform is expected to start out with a database of about 500 IPs.