NTU, BlueSG launch fast-charging, all-electric shuttle

Test run for the shuttle between NTU and CleanTech Park to start in second-half of the year

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A FULLY-electric, 22-seat shuttle that takes only 20 seconds to recharge will ply between Nanyang Technological University (NTU) and neighbouring CleanTech Park in a test run from the second-half of this year.

The vehicle, dubbed the NTU-Blue Solutions Flash Shuttle, was launched on Jan 22 by the university and electric vehicle-sharing firm BlueSG, a subsidiary of Blue Solutions under the Bolloré Group.

The vehicle will run a 1km test route with two stops – one at NTU’s Halls of Residence at North Hill in Jalan Bahar, and the other at JTC’s CleanTech One building, part of the Jurong Innovation District.

There will be a charging station at each stop. The vehicle will recharge while passengers board and alight.

It is able to travel 2km on a single charge, with back-up power that provides for an additional 30km of travel.

The operating cost is about five to 10 times lower than traditional tram systems as the shuttle does not require infrastructure such as rails or overhead power cables.

The shuttle is modelled on the Bolloré Group’s BlueTram vehicle, which operated along the Champs-Élysées in Paris during the United Nations Climate Change Conference in 2015.

NTU president Subra Suresh said the introduction of the fast-charging electric shuttle is in line with the university’s smart campus vision, noting that NTU is already acting as a test-bed for various sustainable and energy-efficient technologies.

Earlier this month, NTU and Volvo Buses signed an agreement to develop driverless, electricity-powered buses that will begin testing here early next year.

On the test of the electric shuttle, Prof Suresh said: "We expect that the insights and innovations developed from this research programme will benefit Singapore eventually by enhancing the first mile-last mile transportation options for everyone.”

Blue Solutions managing director Marie Bolloré said the use of the shuttle by NTU validates the technology and expertise of the Bolloré Group in the field of electric batteries.

The shuttle is part of a two-year research partnership between NTU and BlueSG, supported by the Economic Development Board. It is also one of the initiatives under the France-Singapore Year of Innovation, which aims to intensify cooperation in innovation between the two countries this year.

A joint research team comprising scientists from NTU’s Energy Research Institute and BlueSG will study the actual on-road performance of the vehicle in Singapore’s tropical climate, including the user behaviour of passengers.

"Having worked with leading industry players such as Volvo and BMW Group in similar areas, we look forward to working closely with Bolloré to testbed the new electric shuttle at NTU, under Singapore’s climate and traffic conditions,” said NTU’s research vice-president Lam Khin Yong.

The university is also in talks with BlueSG to install the firm’s electric car-sharing stations on campus as part of the company’s expansion of its charging stations island-wide.