



**Embargoed until after 1230 pm on 3 July 2023**

## **Trials of Singapore's first hydrogen fuel cell van to begin at JTC's Jurong Innovation District**



**Singapore, 3 July 2023** – The first hydrogen-powered light commercial vehicle designed in Singapore will be on trial for a year beginning fourth quarter 2023 at JTC's Jurong Innovation District (JID), an advanced manufacturing hub taking shape in western Singapore.

2 Spectronik, a Singapore-based fuel cell solutions specialist, today unveiled the prototype of a van powered by its hydrogen fuel cells system, which can carry up to 1 tonne of cargo. The van has a range of 500 km and can be refuelled rapidly within five minutes, presenting an environmentally friendly transport and logistics solution.

3 The vehicle is undergoing track trials at CETRAN (Centre of Excellence for Testing & Research of Autonomous Vehicles-Nanyang Technological University) to certify its safety and performance prior to road tests around JTC Cleantech Park, which are targeted to begin in the fourth quarter. Spectronik is also working on running pilots with fleet operators such as food and parcel delivery companies in a variety of real-world settings during the yearlong trial, as it eyes wider acceptance of the viability of its hydrogen fuel cell system and zero emissions hydrogen fuel technology in Singapore.

4 “The trials will provide proof of concept for the viability of hydrogen fuel in the commercial fleet vehicle space. It will enable prospective customers to experience hydrogen transport solutions first-hand and help us engage with potential customers and provide data to

inform the development and production of future vehicles,” said Jogjaman Jap, CEO of Spectronik.

5 Mr Jap added that hydrogen fuel cells provide about twice the range of battery-powered electric vehicles and is the ideal solution for driving long distances with zero emissions in use, as well as for transporting larger loads without losing time while charging the batteries. “We branched into automotive fuel cell solutions in response to demand from fleet operators who wanted to make their operations more efficient and eco-friendlier while enhancing fuel security as Singapore works towards its net-zero goals,” he explained.

6 In the next five years, Spectronik plans to bring to market a fleet of hydrogen fuel cell vehicles – such as vans and minibuses – on the public roads of Singapore, alongside a hydrogen refuelling station to serve these vehicles. The company is a member of the Hydrogen Working Group which is establishing the national standards for hydrogen refuelling stations. It also plans to expand its fuel cell R&D, advanced manufacturing and testing facilities at JTC CleanTech Three to support the company’s commercialisation efforts.

7 “CETRAN and JTC CleanTech Park within JID provide the most conducive environment for safe testing of new energy vehicles in a relevant but controlled testbed; other technologies such as autonomous vehicles are also rigorously being tested on the same roads,” said Mr Jap, adding that Spectronik also benefitted from being part of the startup ecosystem at LaunchPad@JID before moving to JTC CleanTech Three.

8 Said Anil Das, Director, Logistics and Transport Cluster, JTC, “Spectronik’s hydrogen-powered vehicle trials represent a new milestone in the path towards developing a range of sustainable mobility solutions in JID for fleet operators here and regionally. JTC remains committed to supporting companies like Spectronik who are keen on establishing novel ways to decarbonise mobility in Singapore.

9 “Spectronik joins a growing ecosystem at JID comprising companies that are tapping the conducive environment within the District developing sustainable mobility solutions, such as Shimano and Hyundai Motor Group. Spectronik’s presence in JTC CleanTech Three is in line with JTC’s vision of JID as a living lab to testbed new innovations to make the estate smart and sustainable, while pushing new boundaries to work towards net zero by 2045.”

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### **About JTC**

Since its inception in 1968, JTC has played a strategic role in ensuring Singapore stays innovative and dynamic amid global manufacturing trends.

As a government agency under Singapore’s Ministry of Trade and Industry, JTC is paving the way forward for Singapore’s industrial landscape with clean, green and smart estate masterplans such as one-north, Seletar Aerospace Park, Jurong Innovation District, and Punggol Digital District. Our estates attract new investment and foster collaborative ecosystems that strengthen Singapore’s position as an advanced manufacturing hub. We also drive innovation in the Built Environment sector by piloting new construction technologies.

For more information on JTC, visit [www.jtc.gov.sg](http://www.jtc.gov.sg).

## About Spectronik

Spectronik was set up in 2011 to develop high-power-density hydrogen fuel cells that can be equipped in relatively small applications such as industrial vehicles, robots, drones and small agricultural equipment. The company was co-founded by Jogjaman Jap, 38, and Zarli Maung Maung, 37.

Exclusively owned, patented, and 100% developed in-house by a Singapore-based team, Spectronik's fuel cell products boast higher efficiency in terms of converting hydrogen to electricity, and better energy output per unit weight compared to similar products on the market.

Spectronik has clients in 33 countries worldwide, spanning research institutions and universities, to automotive suppliers, military and industrial drone manufacturers. Customers include Boeing, China Aerospace, General Atomics and Toyota.

Spectronik was part of the startup ecosystem at LaunchPad@JID, a space where entrepreneurs, researchers and students can design, make prototypes and test their new creations.

For more information on Spectronik, visit <https://www.spectronik.com>.