

when they have surplus, which they should, given the massive solar farm that they're putting in with help from KOICA. So that's just a start and basically, these systems can be rolled out anywhere and we look forward to doing it," Reddaway said.

The EV charger was launched by UNDP's Deputy Resident Representative, Yemesrach Workie, who described the project as "transformative" and one that could be replicated in any country across the Pacific.

"We envisage that this project is going to be very catalytic for a strong e-mobility uptake in Fiji," she said.

"It is setting the scene for us and has a positive spill over effect, we believe, in the maritime transport sector as well, not only in land transport. We hope that in the very near future, these charging systems we see here will be part of the makeup of port site charging infrastructure, helping power electric boats around Fiji. So, we really have huge ambition for this project to move forward," Workie added.

EVs are expected to soon become serious contenders to fossil fuel-based vehicles, with the availability now of charging facilities complementing relevant government subsidies such as zero rate VAT and duty free for all EV imports, plus

F\$10,000 cash rebate per electric vehicle purchased by local businesses and individuals.

A prevailing high cost of fossil fuels may also force many to switch.

"I charge EVs all the time and still get F\$200 monthly bill. Here, you spend \$200 a week on fuel alone," said Reddaway.

EVs come with different battery sizes but a fully charged battery, according to Reddaway, is enough to drive for up to 150km.

"In reality, these chargers are not actually for daily use. They're for when you've done 150km or 120km and you're coming in to charge. You get 6km every two minutes, so full charge will depend on the battery size. So basically the takeaway is, in this car, if you drive to Nadi, you stopped in Sigatoka and charge for 25 minutes, it will get you to Nadi and will cost you \$12," Reddaway said.

Switch Network plans to have five chargers installed on Viti Levu by December, and to become an EV import dealer and work with tourism companies to help them switch to EV-based fleet. [B](#)

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DECARBONISING TRANSPORT

HYDROGEN FUELLED VEHICLES ARE NEXT



By Samantha Magick

While electric vehicles are only just entering Pacific Island markets, Tokyo is working towards an ambitious plan that would see a decarbonised society with net zero CO2 emissions by 2050. Increasing the number of vehicles powered through green hydrogen energy is key to its success.

Tokyo's strategy is a response to climate change and the need to stabilise energy supplies. If it remains on deadline, it will see the Tokyo Metropolitan Government (TMG) halve its 2020 level of greenhouse gas emissions by 2030.

There are 93 hydrogen fuel cell buses already operating in the city. They look like conventional buses apart from the special branding they bear. However, these buses must be filled at specific fuel stations by trained operators. And while hydrogen itself is light, sophisticated machinery makes these buses two tonnes heavier than conventional ones, and many times more expensive to build.

TMG's transport bureau, Toei, is leasing the hydrogen fuel cell buses, which are being built by Toyota. As hydrogen energy is an emerging industry, Japan's national government is heavily subsidising the cost of developing the related technology and applications, with TMG also providing top-up subsidies to companies. It has budgeted ¥17.17 billion (US\$115 million) for the next four years for fuelling stations subsidies alone.

Beyond buses, TMG wants to see hydrogen-powered cars, trucks, ships and aircraft by 2050, and its use in homes, commercial and industrial settings.