



Mazli: The KUTS project will change the urban transportation landscape and help mitigate climate change.



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• Mazli Mustaffa

Powering the urban transport system

Task to lead the Kuching Urban Transportation System which would utilise hydrogen fuel cell technology in the region has been awarded to Sarawak Metro

BY RITA JONG

SARAWAK Metro Sdn Bhd, a subsidiary of Sarawak Economic Development Corporation (SEDC), has been given the responsibility to transform the public transport system in the State, starting with Kuching. Sarawak Metro's chief executive officer (CEO) Mazli Mustaffa said hydrogen technology would advertently change the landscape of urban transportation while addressing climate change, especially with the implementation of the Kuching Urban Transportation System (KUTS) project, which will rely heavily on hydrogen-powered vehicles. "Although we are a new company, we have some of the most experienced minds in the Malaysian rail and public transport industry and each day we are continuously building on our strengths," said Mazli.

"The opportunity to adopt one of the cleanest technologies to power our vehicles has been one of the most exciting aspects of our endeavour as it means we are contributing significantly towards decarbonisation in our public transport system." Sarawak also hoped to see the Automated Rapid Transit (ART) public transport system on the streets by 2025. Chief Minister Datuk Patinggi Abang Johari Openg had said there was a need to have the ART transport system, especially in Kuching, due to increasing traffic on major roads. "The ART should be ready by 2025. From there, we move towards 2050 because when the Kuching-Samarahan line is completed, our public transport will have been improved," said Abang Johari. "Our target is to be a developed State in 2050." For Phase 1 of the KUTS project, Sarawak Metro will build the Samarahan Line concurrently with the Serian Line.

There are, of course, a unique set of challenges for being the first to adopt such technology for public transport in Southeast Asia. He said: "Introducing new technology inherently comes with challenges, but we view these challenges as a learning opportunity, especially since the implementation of the hydrogen fuel cell bus service is still part of the trial project to gain as much knowledge and experience in running a viable and sustainable zero-emission bus service soon. "Since the start of the operational trials in January this year, we did experience and overcome technical issues related to the vehicles' hydrogen fuel cells, but by far the biggest challenge was the Movement Control Order (MCO) imposed by the Federal government. "This is because it limited the movement of people and affected the scheduled maintenance of the buses as well as the training schedule for our local technicians who will eventually take over the maintenance responsibilities from the bus manufacturer." Mazli said as of September, strict travel restrictions were still in place, and technicians who were obliged to perform the scheduled maintenance service and provide training to our locals were still unable to come to Kuching. They, however, have been able to overcome some of the challenges by leveraging on online platforms to allow the experts in China to guide their local technicians to perform the scheduled maintenance service. "Naturally, being the first to adopt such technology for public transport in Southeast Asia means facing unique sets of challenges. "However, it is encouraging to see the hydrogen economy and hydrogen society growing stronger, especially in 2020. This development will undoubtedly benefit our initiatives moving forward in terms of utilising hydrogen fuel cell technology," he said. He also said the opportunity given to Sarawak Metro to

- 1: Kuching Integrated Transit Map
- 2: One of the hydrogen fuel cell buses at the bus stop. The hydrogen buses have been on trial operation since launched in January 2020. The passenger can ride the bus for free along the designated route.
- 3: The Chief Minister of Sarawak Datuk Patinggi (Dr) Abang Abdul Rahman Zohari Openg and his entourage visit to the Automated Rapid Transit (ART) project in Nanchang, P.R. China in July 2019.
- 4: Mazli (2nd left) with Minister of Transport Sarawak Datuk Lee Khim Shin (2nd right) about to board the hydrogen bus, in conjunction with the resumption of the trial operations in September.

implement the trial operations of the hydrogen buses had allowed them to gain the much-needed knowledge in running a public transport system based on fuel cell electric vehicles. Through the training provided by Foshan Feichi Automobile Manufacturing Co Ltd, a leading hydrogen fuel cell vehicle manufacturer in China, it has allowed local technicians to have hands-on experience in maintaining and repairing hydrogen buses. "There are currently three hydrogen fuel cell buses on the road in Kuching. Generally, the response towards the initiative has been positive, and people are genuinely excited to have the first hydrogen buses in Southeast Asia on the roads here. "At Sarawak Metro, the buses are for us to learn as much as possible about the potential of adopting this technology in our public transport through our trial operations. "However, we also look at these vehicles as a great opportunity to showcase a real-life working example of the applications of hydrogen technology," he said. "Sarawak is fortunate to have leaders who are far-sighted to realise the significance of this technology both in terms of the impact on the environment and the potential benefits it can bring to the economy as a whole. "As such, we believe the application of this technology in urban transport will benefit society at large through the decarbonisation of our public transportation system. "We also foresee the application of hydrogen technology will also create more job and business opportunities from the overall hydrogen economy and ecosystem that is being developed now in Sarawak. "With the technology improving at a greater pace, we expect that the impact will truly be felt when the economics of producing green energy through hydrogen fuel cells is comparable to that of current fossil fuels," Mazli added. - @green



Mazli Mustaffa