

## Hydrogen - A Green and Safe Way Forward

**Monday, 28 June 2021, Kuching** – Each year, it gets harder and harder to stay comfortable without an air conditioning unit – a sign that our planet is ailing. One of the biggest challenges of the 20th century is keeping the Earth healthy as we strive for development.

The Kuching Urban Transport System (KUTS) seeks to address this by decarbonizing Kuching's urban transportation system by deploying Hydrogen Fuel Cell Technology (HFCT). This technology runs on the simplest and most abundant element in the universe: Hydrogen

Similar to a battery, HFCT works by converting chemical energy into electrical energy by moving hydrogen ions across the electrolyte membrane to generate a current. Apart from electricity, this reaction produces water and hot air.

The International Consortium for Food Safety, Health, and the Environment lists two concerns about HFCT: electrical shock and fuel flammability.

These concerns are addressed by the design of Automated Rapid Transit (ART) vehicles. Produced by China, the world's leading hydrogen producer, and pioneer, the ART vehicles will provide the highest of standards to quash any qualms about safety. **More on this will be shared in upcoming MConnects!**

Moreover, the ART vehicles will be monitored in real time via a Signalling System where most of the control is managed with a computer software at a Control Centre. In addition to stringent testing before launch, this system ensures that ART vehicles will be safe locally and remotely.

Hydrogen-powered vehicles have begun hitting the streets and skies across the globe. A hydrogen-powered six-seater Piper M-Class aircraft took to the skies in April 2021, completing a test flight which lasted eight minutes and recorded an altitude of 1,000 feet with a top speed of 100 knots.

As PMC to KUTS, Maltimur is at the forefront of modernizing Sarawak. This provides us with the privilege of realizing Sarawak's aim to convert Kuching into a Smart City.

**Stay tuned for our next MConnects to learn more about the challenges and risks associated with KUTS!**



*Hydrogen-powered six-seater Piper M-Class aircraft took to the skies in 2021.*



*Hydrogen-powered Toyota Mirae debuted in the United States of America in 2015.*



*The Energy Observer which is Hydrogen-powered sailed for the world in 2018.*



*Hydrogen Powered Automated Rapid Transit vehicle will provide sustainable transportation in Kuching by 2025.*