

Technical visit to China Dynamics and Guangdong Hydrogen Energy Science & Technology Ltd. on 13 October 2018

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This visit to these 2 cutting-edge energy technology companies was co-sponsored by IMechE HK Branch. A total of 30 participants joined this event.

In the morning, at China Dynamics's New Energy Research Center in Liaobu, Dongguan, members saw first-hand their latest research into electric powered vehicles, and how they target niche market needs with special mini-buses, etc. Their management explained the cut-throat competition with batteries technology development and their philosophy of going for lightweight batteries rather than endurance. Members were later given a demonstration of their intelligent car tracking system, with real-time information of individual cars all over the country, including their driving and performance history, right at one's fingertip.



Figure 1 Jointly with HAESCO (the visit organiser), Patrick Ng presented the Certificate of Appreciation to China Dynamics on behalf of IMechE HK Branch

After an enjoyable lunch of local culinary excellence, members continued in the afternoon with a visit to the Guangdong Hydrogen Energy Science and Technology Co., Ltd. (GHEST) in Zhangmutou. This is a technology few members knew about. With their patented converter, a mixture of methanol and water is converted to hydrogen gas, which in turn powers a fuel cell to generate electricity for driving the car.

With methanol able to be sourced from a wide range of raw material, including landfill gas and other methane sources, this has the potential to become a great mitigator of greenhouse gas, consuming methane and giving off water vapor. Members all had a chance to test drive their experimental vehicle in the yard, powered by the methanol/water mixture.

All members found the two visits to eye-openers, and a lot of interactions were seen at the Q&A sessions. We would like to thank HAESCO for organizing the visits, and all members for their eager participation.



Figure 2 Presentation of Certification of Appreciation to GHEST



Figure 3 Delegation at China Dynamics



Figure 4 Delegation at Guangdong Hydrogen Energy Science and Technology