

Technical Visit to Solar Farm (Malaysia Airports Training Centre (MATC))

by Ir. Amir Hussein bin Jaafar and Dr Siow Chun Lim

Ir. Amir Hussein is currently a co-opted member in Electrical Engineering Technical Division (EETD).



Dr Siow Chun Lim obtained his Bachelor of Electrical & Electronic Engineering and Ph. D in Electrical Power Engineering from University Putra Malaysia, Selangor. His research interests include electrical grounding systems, high voltage experiments and engineering education. He is currently the Associate Editor of Journal of Engineering Science and Technology.

A technical visit to Solar Farm (Malaysia Airports Training Center (MATC)) was organized by Electrical Engineering Technical Division (EETD) on 9 March 2016. A total of 34 participants first gathered at IEM at 8am before travelling to MATC.

A solar farm is basically a large-scale photovoltaic system designed and installed to supply power to the electricity grid. By large-scale it means that the supply power could be at the utility level instead of at the level of localized domestic users.

The solar farm has a total capacity of 19MW DC and aimed to power up the Kuala Lumpur International Airport at a total investment of RM200mil. It was launched back in 2014 by the Malaysia Airports Holdings Berhad (MAHB). By far it is the largest in Malaysia interconnecting ground-mounted, parking canopy and rooftop systems to maximize electricity savings at minimal usage of space.

The installation capacity of PV systems at ground-mounted, parking canopy and roof top are 5MW, 10MW and 4MW respectively, totalling up to 19MW.

Note that these systems were installed at three significantly different locations. The ground mounted system is the first solar farm in Malaysia to have tracker system which enables the panels to follow the sun's path hence maximizing sunlight capture. Although the participants only managed to visit the ground mounted system and those installed at the parking canopy, the visit met its objective as all gained fruitful exposure to the technologies installed at one of the largest solar farms in Malaysia.



Participants arrived at the location



Some of the installed solar panels



Group photo of all participants at the end of the visit