



BRT Site Visit

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In conjunction with the AFEO Energy Tour 2016, a technical visit to BRT station was successfully organized by the Electrical Engineering Technical Division, The Institution of Engineers Malaysia on 22nd September 2016. The visit started with an introduction presented by Mr. Syamsul Rizal who is the Chief Operating Officer of BRT Sunway. The BRT Sunway Line is a bus rapid transit (BRT) line that forms a part of the Klang valley Integrated Transit System. It was launched on 1st June 2015 and started operation on the next day. It was opened for free rides to the public until 31st July 2015. The BRT has a 5.4km dedicated and elevated track for its operation. In other words, this track is not shared with normal road traffic. With an ever expanding population of 500,000 in Sunway and Subang, BRT aims to alleviate the traffic congestion issue by providing this clean alternative mode of transportation. It has 7 stations, each with distinct colour to allow easy identification by the users and is surrounded by 6 higher learning institutions which contribute to the statistic of 35% ridership amongst students. The seven stations are Sunway-Setia Jaya, Mentari, Sunway Lagoon, SunMed, SunU- Monash, South Quay-USJ 1 and USJ 7. A complete end-to-end journey consumes 17 minutes with a ride available every 4 minutes on weekdays during peak hours. There are a total of fifteen electric busses running from 6am till 12am every day and can be considered as Intelligent Transport System (ITS) with features such as Central Transmission System with wifi Access Point being located at every 60m interval and GPS positioning system. The depot itself employs sustainable strategies which include maximizing the use of sunlight, deploying cast resin transformers which is maintenance-free and minimizing hazardous risk. Each bus is powered by 90kW in-wheel traction motor with re-purposable lithium iron phosphate battery weighing approximately 3 tonnes each. The bus runs with regenerative braking as a means of energy recovery mechanism and at no load, fully charged condition, it can travel up to 300km. At the end of the presentation, Mr. Syamsul expressed his wish that BRT will continue to serve the public and ultimately hoped to completely alleviate the traffic congestion issue. The figures below summarized the event.



Figure 1: The participants listening intently to the introductory presentation



Figure 2: Mr. Syamsul Rizal giving an overview of BRT



Figure 3: A view of the BRT on the elevated track



Figure 4: Group photo of all participants



Figure 5: Group photo taken with the BRT bus