

# Webinar

Talk on Moving towards an Electric Mobility Future: An Integrated Urban-Transport Planning and Implementation Perspective

## 21 JULY 2021 | 2:30PM -4:30PM

BEM Approved CDP: 2 Hours Ref. No.: IEM21/HQ/232/T(w)

Registration fee Student Member: Free IEM Member: RM15.00 Non-Member: RM70.00



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## <u>SYNOPSIS</u>

Urban cities around the world are now facing technological disruptions, the need to reduce carbon emission and ensure that cities are climate-resilient, and to transform to meet emerging aspirations of their residents in terms of employment, living, and quality of life. In recent years, many have touted electric mobility to be one potential solution that can be adopted for sustainable future urban mobility, and this includes electric cars, electric buses and first-and-lastmile solutions such as shared electric scooters or shared electric (or nonelectric) bicycles. This lecture presents a compelling case for the need to reduce reliance on conventional diesel and petroleum in urban cities, especially in the light of combating climate change and reducing carbon emissions. In particular, the lecture will focus on several aspects of planning urban and transport spaces for electric urban mobility, including (1) understanding the range of electric mobility and how it affects urban planning for living and quality of life, (2) how electric mobility affects the planning of transport infrastructures, (3) the relationship between energy considerations and mobility design, and (4) moving from electric mobility to autonomous mobility. Case studies will be shared to understand how such planning and implementation might be done and the challenges and opportunities that may arise.

### SPEAKER BIODATA

Dr. Ong Ghim Ping Raymond is currently an associate professor and the Associate Head (Research) at the Department of Civil and Environmental Engineering in the National University of Singapore. A/Prof Ong obtained his Bachelor of Engineering (Civil) with first class honors and PhD in Civil Engineering from the National University of Singapore. He received his postdoctoral training from Purdue University, USA. He is currently the associate editor for Asian Transportation Studies and Cleaner Materials (both from Elsevier), and is serving as an editorial board member for the International Journal of Transportation Science and Technology (Elsevier). A/Prof Ong's research expertise is in pavement engineering and multimodal transport infrastructures and operations, and he has published over 65 internationally refereed journal papers and more than 90 conference papers/posters in these areas. He is also actively involved in the translational research and development of critical mega-infrastructures and car-lite towns in Singapore. A/Prof Ong is also the winner of several international research awards including the ASCE Alfred Noble Prize, the IAME Hanjin Prize, the OCDI Takeuchi Yoshio Award and the iSMARTi Early Career Award.