

**Technical Seminar/Webinar on Implementation of Advanced Metering
Infrastructure by Water Supplies Department in Hong Kong**

Dr Lisa SHAM

Ir Charles LAW, Senior Electrical and Mechanical Engineer of Technical Development, Water Supplies Department (WSD), was cordially invited for a presentation of the captioned at the HKIE on 23rd January 2025 from 6:30pm. The seminar was chaired by Ir Louis YIU and conducted in hybrid mode and there were around 400 participants.

Ir LAW briefed the status of Water Supplies in Hong Kong and introduced Automated Meter Reading (AMR) with its benefit. He emphasized that the wired AMR had been used for both new private and public/government developments since 2018. The figures of wired AMR installation and locations of the installation were referred to support his elaboration. As there is a large workload for both WSD and the developers to handle the submission, it is the intention of WSD to streamline the application process to improve the efficiency. Thus, the AMR design is likely to be simplified and standardized to enhance clarity and minimize redundancy.

Ir LAW elaborated the pros and cons of applying wired AMR and compared various types of wireless technologies for AMR installation. Wired AMR is unlikely to be installed in the existing premises due to various constraints, it is encouraged to install wireless AMR; however, the key challenges of the installation have to be faced. i.e., signal penetration could be hindered by high density reinforced concrete structures of the buildings, citizens are unwilling to pay more money for wireless AMR installation, etc. The significance of AMR installation in real time monitoring has been identified by two water leakage cases.

Ir LAW highlighted that the installation strategy of Advanced Metering Infrastructure (AMI) with the support of an IoT data platform was going to be developed, i.e., smart master meters installed at estate level for monitoring overall water consumption in a development zone, smart building block meters installed in each building to provide consumption data of the building, and individual smart customers meters installed in each unit to record consumption.

Ir Prof Louis LOCK, CAD Chairman delivered the “Vote of Thanks” and presented the CAD souvenir to the Speaker.



Photo (Left to Right): Ir Giselle YIP (L1), Ir Louis YIU (L2), Mr. Charles LAW (Middle), Ir Prof Louis LOCK (R2), Ir Victor LO (R1)