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Immediate Past President S.K. Ho

# **Annual Report for 2021/2022**

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The fifth wave of COVID-19 swept over Hong Kong starting in January 2022 and seriously impacted all social and physical activities. Although we are still in the pandemic period, HKAEE has organized various technical visits and webinars to engage our members and other professionals effectively. We also continued our contributions to various institutional and government energy-related matters. The Board of Directors (BoD) held five (5) numbers of meetings in this term. I am pleased to report the key activities below.

# 1. Membership

As of September 2022, our membership has total 113 members including 52 Life Members, 3 Fellow Members, 43 Ordinary Members, and 15 Corporate Members. Our full membership is recognized by the Hong Kong Green Building Council (HKGBC) as one of the qualifications eligible for applying their RCx Professional.

#### 2. Technical Visits and Webinars

In order to let our members and building professionals to appreciate the latest technology adoption and building development, we organized the technical visit to M+ Building and District Cooling System for the West Kowloon Cultural District (WKCD) as well as the Central Monitoring Centre for Hong Kong Land developments and their central chiller plant at Exchange Square. In particular, for the Hong Kong Land visit, all our directors and members entered the heart of their control centre. They understood and looked closely on how the AI technology was applied to their chiller plant optimization for energy saving. We have also coordinated with HKIE BSD to co-organize a technical visit to the EMSD Regional Digital Control Centre in November 2022.

HKAEE recognized one of the rising trends of energy saving is the application of Artificial Intelligence (AI) and Big Data Analysis. So we have organized a series of five (5) technical talks on this aspect given by various technical experts and scholar. The webinar topics are:-

- Application of Artificial Intelligence Control system on Chiller Plant Operations presented by Ir Dr Kelvin Mak of JEC;
- Understanding Your Building From the Inside Out: Unlock its Green Potential presented by Ir Charles Chu of CLP Innovation Enterprises Ltd;
- AI Cooling Control for Green Data Center presented by Mr Daniel Kwok of Schneider Electric;



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- Energy Management of Chiller System with Association Rule Mining presented by Dr. Yu Fu Wing of Division of Science, Engineering and Health Studies, The Hong Kon Polytechnic University; and
- Deploying Artificial Intelligence into Action for Driving Energy Optimisation presented by Dr. Pan Lee, Ir Franco Mok and Mr. Darren Wong of ATAL Building Services Engineering Limited.

All those webinars had received overwhelming responses with nearly 100 professionals' attendance in each webinar and most of them showed very interested in learning more about the application of AI and Big Data analysis.

Apart from the above webinars, we also supported over twenty-seven (27) numbers of technical webinars, conferences, and other activities organized by our long-term partnering engineering institutions.

# 3. Training & Education

HKAEE has started coordination with Efficiency Valuation Organization (EVO) to plan for organizing the Energy Efficiency Performance Measurement and Verification Analyst (PVMA) training and certification course. We conducted a seminar of introducing this training and certification course to the building professionals in July 2022. We are now at the stage for finalizing the terms and conditions of the agreement with EVO. Upon the agreement is signed, HKAEE will organize the first PMVA training course before end of 2022 and this course may also attract the engineers and energy professionals in Macau to participate. By then, HKAEE will be one of the engineering institutions to promote actively the Measurement and Verification to the building industry with an internationally recognized training and certification course.

#### 4. Participation in related Government Committees and Energy Events

The Association has actively contributed views and inputs on various energy-related affairs launched by the HKSAR Government.

As invited by different Bureaus / Departments of the HKSAR Government, I have attended the following meetings to provide the technical views for consideration.

- 2022/23 Budget Consultation Session: Environmental Protection Sector;
- Working Group for the Handbooks on Solar Photovoltaic (PV) Systems and Solar Water Heating (SWH) Systems;



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The Building Energy Code (BEC) and Energy Audit Code (EAC) Review for 2021 Edition have been enacted by end of 2021. HKAEE has been a member of the Taskforce and various Working Groups over ten years. Our representations are as follows:

- Taskforce: Eric Lau
- Lighting Working Group: HW Yu
- Air-conditioning Working Group: Eric Lau
- Lift Working Group: Ringo Shea
- Performance Based Working Group: Julie Wong
- Energy Audit Working Group: Colin Chung

I also represented HKAEE to attend the REA Briefing on BEC and EAC 2021, and the Energy Saving and Decarbonization for All 2022 Launching Ceremony organized by the EMSD.

The Association continues as one of the Registration Committee members of Retro-Commissioning of HKGBC. Together with other engineering institutions, we have been providing our professional views and advice to HKGBC. Our AI and Big Data Analysis webinars have also been certified by HKGBC as their CPD events.

In respect of the collaboration with utility companies, I was invited by China Light and Power (CLP) to join the Judging Panel of the CLP Smart Energy Award 2022 and the assessment was conducted in July 2022.

Finally, it was my honour to receive the invitation from the HKSAR government to represent HKAEE to attend the ceremony of celebrating 25<sup>th</sup> Anniversary of the Establishment of the HKSAR on 1<sup>st</sup> July 2022.

## 5. AEE HKC Liaison

The strategic alliance with the Association of Energy Engineers (AEE) – Hong Kong Chapter (HKC) was continued. In this term, HKAEE and AEE (HKC) have jointly organized the technical visit to WKCD. I thank you for their committee member, Gary Chu as our guest speaker for hosting the webinar of Introductory Talk for the PMVA Training and Certification.

Like our past collaborations, HKAEE had supported and promoted all their Certified Energy Manager (CEM), Carbon Audit Professional (CAP) and Certified Measurement and Verification Professional (CMVP) courses held in 2021. HKAEE will continue to have more and close collaborations with AEE HKC to promote more energy and training related activities in the future.



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### 6. Concluding Remark

Looking ahead, I believe that the Association will continue to contribute our effort by advocating and promoting the latest technologies in energy saving, renewable energy application and decarbonization. We will also keep the close collaboration and partnership with the HKSAR government, utility companies, green organizations and other allied engineering institutions in moving towards the mission of carbon neutrality as pledged by the HKSAR government and our country.

With an expectation of further relaxing social distancing measures soon, the Association can plan for more physical activities, such as Spring Dinner to connect our members and other building professionals more closely and effectively. Furthermore, the Association can consider promoting more sophisticated technology such as AI and Big Data analysis for energy saving.

Last but not least, I will close my term of Presidency service to the Association after this AGM. I would like to express my heartfelt gratitude to our Board of Directors for their guidance, support and contributions in this term. In particular, I would like to thank the Activity Committee Chair, Mike Cheng and the Secretary, Leo Chan, for their valuable time and hard work. Both supported me a lot in organizing various technical visits and webinars and managing the Association's affairs during these two pandemic years. I sincerely look forward to receiving all the directors' continued support to work hands-in-hands in the coming term towards HKAEE's mission and the betterment of Hong Kong.

Eric KW Lau

President (2020 – 2022)

**HKAEE** 

19 September 2022