



APIGBA
Asia Pacific Intelligent
Green Building Alliance

2016

APIGBA Award 2016
Excellent Intelligent Green Building
Projects and Systems Awards
亞太地區智慧綠建築聯盟智慧綠建築 2016

Hong Kong Region

Event Report

香港地區

項目報告



APIGBA
Asia Pacific Intelligent
Green Building Alliance
(Hong Kong Region)

亞太地區智慧綠建築聯盟
(香港地區)

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Acknowledgement

It gives me great pleasure to take this opportunity to express my gratitude to the APIGBA members, judging panel, supporting organizations, sponsoring organizations and event organizing committee for their support and hard work to have made these events so successful.

Professor Andrew Leung
Chairperson (2016-2018)
Asia Pacific Intelligent Green Building Alliance

1. Foreword

APIGBA (Asia Pacific Intelligent Green Building Alliance) was established in April 2014 to provide the intelligent green building technology with an academic and technology exchange platform in the Asia Pacific region, with the objective of promoting safety, health, convenience, comfort, energy efficiency and sustainable environment for people living in the region.

The “APIGBA Excellent Intelligent Green Building Project Award” and “APIGBA Excellent Intelligent Green Building System Award” are presented biennially to inspire the innovative development of building projects and systems with the advancement of information and communication technologies. Through these means, building and its associated industries in the region will move forward, commensurate with the counterparts worldwide.

The “Intelligent Green Building Forum 2016” was held on 6th June 2016 at City University of Hong Kong. All short-listed contestants of APIGBA Excellent Intelligent Green Building Project Award delivered presentations and shared their experience on intelligent green buildings. To deepen the exchanges, a formal dinner “AIIB 15th Anniversary and APIGBA Dinner” was organized at the conclusion of the Forum.

To strengthen the technical experience sharing amongst participants, the “Intelligent Green Building Technical Visit” was arranged on 7th June 2016, the next day after the Forum. The sites/buildings of the Hong Kong Entries of APIGBA Excellent Intelligent Green Building Project Award were toured during the technical visit.

2. APIGBA Award Intelligent Green Building Forum

Held on 6th June 2016 at City University of Hong Kong, the Intelligent Green Building Forum 2016 organized by the Asian Institute of Intelligent Building (AIIB) was a very successful event. The forum was a key activity attended by a wide range of academics, professionals and practitioners in the field of intelligent and green buildings from Hong Kong, Taiwan, Korea, and Mainland China in all aspects of intelligent green buildings.

The forum was officially opened by Professor Linda Li, Associate Provost of the City University of Hong Kong and Professor Show-Ling Wen, Chairperson (2014-2016) of APIGBA. Along the main theme of the “Intelligent Green Building Forum”, the forum also serves as a platform for short-listed competition presenters to earn the champion of APIGBA Award in the categories of “Design Award”, “System Award”, “Renovation Award” and “Performance Award”. With this, it allows the presenters to explore the different aspects related to the intelligent green building and present their achievement and contributions to the intelligent and green building development.

Eleven (11) high-quality technical papers were authored and presented, with the topics covering building design, building performance, building renovation, and system retrofit in intelligent green building aspects, and were published in binding proceedings for free distribution in the forum venue. A free copy of the proceedings may also be available for being downloaded from AIIB website: www.aiib.net in due course. Following the technical paper presentations, a special showcase with speakers from Hong Kong and Macau regions provided a sharing session to the audience on the latest development and technology related to intelligent green buildings. The atmosphere during the forum promoted and built upon positive achievements in the green building industry, while acknowledged the importance of the intelligent and green building development in the society.

In the closing statement, Professor Andrew Leung, President of AIIB recapped that the development of theory and practical application of intelligent and green buildings will help to improve the reputation and living standard of a city. He also thanked all the participants, supporting organizations and the event organizing committee, declaring that through their efforts there would be great prospects of advancing toward the development of the intelligent and green building in this region in the years ahead.

Professor Leung added that the next term of this Forum will be organized by the APIGBA South Korea region in 2018, and expressed warmheartedly look forward to meeting with all in Seoul in due course.

3. AIIB 15th Anniversary and APIGBA Dinner

Guests from All Walks of Life

Following the APIGBA forum at the City University of Hong Kong, the celebration dinner was held at Hong Kong JW Marriott Hotel Ballroom in the evening. Besides the AIIB team, there were over 300 distinguished guests from the APIGBA regions which include Korea, Macau, Shanghai, Taiwan and specialists from the industry and representatives from the HKSAR government like Dr. Hon David Chung Wai-keung JP, Ir Dr. Hon Lo Wai-kwok BBS, MH, JP, Ms Ada Fung Yin-suen JP, Mr. Marco Wu GBS, Mr. Tai Tak Him, JP, Ir Dr. Raymond Ho Chung-tai SBS, MBE, BS.St.J.,JP etc.

The dinner event started with the welcome noted by Dr. Edward Yiu, the Executive Committee Chairman of AIIB, followed by the opening speech of Prof. Show-Ling Wen, Chairperson (2014-2016) of APIGBA. Right after their speeches, the Principal Guest of Honour Dr. David Chung Wai-Keung, the Under Secretary for Innovation and Technology Bureau of HKSAR Government, delivered an address which demonstrated the Hong Kong Government's appreciation in intelligent green building developments.

Newly Jointed Region – Macau

To welcome the alliance's new region member – Macau, a simple but solemn signing ceremony was arranged in front of all guests. The agreement was signed between the representative of Macau Properties and Facilities Management Association Mr. Albert Chuck and the first APIGBA chairperson Prof. Show-Ling Wen, with the witness of Prof. Andrew Leung, the President of AIIB and the incoming APIGBA chairperson.

Local Awarded Projects

After the signing ceremony, the Hong Kong local APIGBA awards were presented by Prof. Show-Ling Wen, which included:

<u>Award Category</u>	<u>Project</u>	<u>Organization</u>
Design	18 King Wah Road, North Point, Hong Kong	Henderson Land Development Co. Ltd
Performance	International Commence Centre	Kai Shing Management Services Limited
Renovation	Standard Chartered Bank Building	Hang Lung Properties Ltd.
System	Holiday Inn Express Hong Kong SOHO	REC Green Technologies Co. Ltd.
	One Island East	ATAL Building Services Engineering Ltd. / Swire Properties Ltd.
	CLP Meter Online Energy Management System	CLP Power Hong Kong Limited

Final Awards

The centre of the event was on the announcement of the final competition winners. The momentum of the whole venue was pushed to the highest. With the non-stopping hooray and clapping as background, the following teams received the triumph in the final competition:

Design

Platinum	18 King Wah Road, North Point, Hong Kong
Gold	UNI's Landmark, Taiwan
Silver	Tatung Smart Manor, Taiwan

Performance

Platinum	International Commence Centre, Hong Kong
Gold	LSIS R & D Campus, Taiwan
Silver	TSMC F15 Office, Taiwan

Renovation

Gold	Standard Chartered Bank Building
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System

Platinum	Advantech Linkou Intelligent Campus, Taiwan
Gold	UNI's Landmark, Taiwan
Silver	Holiday Inn Express Hong Kong

APIGBA Presidency Handover

After the awardees have received the prizes from the dinner event's principal guest of honour Dr. David Chung Wai-keung, it was the handover ceremony of the APIGBA presidency: Prof. Andrew Leung of AIIB represented Hong Kong region to receive the office as Chairperson of APIGBA from Prof. Show-Ling Wen of TIBA. AIIB has then taken over the APIGBA task for the following two years until the next handover in Korea in year 2018.

All Become One, Amazing Night!

All the guests enjoyed a great evening with nice wine, good food, and beautiful music. During later part of the dinner, guests from different regions became one. Many of the guests initially came to the stage, sang and shared their loved songs with the guests as audiences. The atmosphere was even remarkable when the guests tried to use the LED light in the power-bank that organizing committee prepared for the attendees to beat the tempo with those who were singing on the stage. This was an incredible night. Everything was amazing. The organizing committee was so thrilling and must thank all the participants as well as the sponsors for this event.

4. Technical Visit to Participated Buildings in Hong Kong

Following the forum and amazing dinner event, on the next day 7th June 2016, AIIB organized a 1-day technical visit to four properties which obtained EIGBA Excellent Intelligent Green Building Award (Hong Kong Region).

Standard Chartered Bank Building (SCBB)

In the morning, APIGBA honorable guests, professional fellow, AIIB members and participants in total 32 persons gathering at HSBC main building at Central, Hong Kong which is closed to the 1st visit spot - Standard Chartered Bank Building (SCBB) – Renovation award for replacement of existing air-cooled chiller (ACC) by new water-cooled chiller (WCC).

Mr. Joseph Chan – Manager of Service Delivery in Leasing & Management, Hang Lung Properties Ltd., escorted us to the 34/F of SCBB - WCC plant floor. Mr. Chan introduced the background, design and earlier operation challenges that led to implementation of the WCC. SCBB has been in operation with an ACC plant for over 22 years. In order to increase the efficiency & reliability it was assessed and decided to convert the existing ACC plant to a new WCC plant so as to maintain reliable A/C supply to this Grade A office, to conserve electricity and to reduce the emission of greenhouse gases as well. The total plant capacity was upgraded from about 1,200 RT to 1,450 RT to allow for future increase in cooling demand. Mr. Chan then guided all visitors to the Chilled Water Cycle Cooling Tower, water filtration system, flexible R & M working platform and BMS operation control room at the roof floor 38/F. The guests showed great interest on the design and efficiency of the WCC system and engaged enthusiastically during the Q&A section, through which they understood the factors that have earned SCBB the “Renovation award” of EIGBA on this project spearheaded by the Hang Lung Properties team.

Holiday Inn Express Hong Kong SOHO

After the SCBB visit, we arrived at the 2nd visit spot – Holiday Inn Express Hong Kong SOHO at Sheung Wan, Hong Kong. REC Green Technologies Co. Ltd. – Ms. Sunny Hong, Marketing Executive and Mr. Vincent Lau, Manager guided the visitors to meeting room on 38/F of the hotel. They delivered the presentation for sustainable design – building orientation and intelligent fan coil unit (iFCU). During the presentation, we have the precious opportunity to learn about the green building design for the hotel, iFCU retrofit kit with demonstration.

Mr. Vincent Lau shared with us about the remarkable efficiency of iFCU operation in total of 274 guestrooms at the hotel which achieves 61,506.15 kWh (71%) energy saving comparing with the estimated consumption of traditional fan coil unit with AC motor. By replacing the AC motor, the retrofit kit of iFCU can also minimize the noise level and wasted heat from the motor while extending the motor lifespan as well. Mr Vincent Lau demonstrated a model of iFCU operation which indicates its electrical current and power consumption. APIGBA guests showed great interest in the AC motor with permanent magnet system design and a learn-and-study atmosphere was brewed during this session.

A group photo amongst all guests, visitors and REC representatives was taken at the Sky Picture Glass Corner of the meeting room where it offers a marvelous view of Victoria Harbour, whilst introducing daylight into the meeting room.

Luxurious Lunch Buffet

During the lunch time, we have glory to obtain an opportunity to enjoy a gorgeous lunch buffet at Hong Kong Football Club (HKFC) on 3 Sports Road, Happy Valley, Hong Kong. HKFC is a prestigious private club that serves members only. Thanks were given to HKFC, on the request of AIIB Hong Kong Chapter in advance, she has tailor-made to provide cocktail canapes receptions, to Western, Asian and mixed style buffets serving APIGBA visitors and participants bringing all of us a memorable moment for the lunch break between the morning and afternoon sections during the rushing technical visit.

CLP Power Hong Kong Limited, Smart Grid Centre

In the afternoon, the delegation visited the CLP Power Hong Kong Limited at Sham Shui Po, Kowloon - Smart Grid Centre. Ir Simon HC Tsui, Business Marketing & Development Manager of CLP Power Hong Kong Limited, introduced this as CLP's effort in APAC to explore new technologies to continuously make the grid' smarter, so CLP delivered new and improved services to customers in Hong Kong to meet energy challenge in an economic, sustainable and socially responsible way from one generation to the next.

In the Smart Grid Centre, the visitor can understand more about the power supply from Generation, Transmission & Distribution Network for Commercial, Industrial and Residual buildings in Hong Kong. The visit was well-received by the participants which enlightened their knowledge of the power systems in Southern China particularly the various 500 kV AC and DC transmission lines in the Southern Power Grid. The visit also enhanced their understanding of the West Electricity Goes East strategy as well as the role of nuclear power plants at Daya Bay which are of utmost importance to the adequacy and reliability of electricity supply in Southern China including Hong Kong.

Ir Simon Tsui introduced CLP's EIGBA "System Award" feature for Hong Kong Region - Meter Online design criteria, which incorporates Forecasting the occurring time of peak demand and provide 9-day regional consumption forecast. Meter Online recorded the load profile data for every half-hour, covered the key elements such as load profile download, proactive energy management, load monitoring, benchmark and providing 265x48 data points in one year for energy consumption analysis.

International Commence Centre (ICC)

After the CLP visit of Smart Grid Centre at around 4:30 P.M. we arrived at the last trip spot of EIGBA "Platinum award" in catalogue of "Performance" - International Commence Centre, Hong Kong. ICC is developed by Sun Hung Kai Properties and managed by Kai Shing Management Services Limited. Senior Technical Services Managers, Mr. Patrick Leung and Mr. Howard Yeung and their management team

greeted our arrival at main entrance at Level 8, ICC. APIGBA guests and visitors have great opportunity to take an exceptional swift double-decker high-speed elevators, which travels from the G/F to the 100th floor in just 60 seconds. We visited the sky100 Hong Kong Observation Deck which is located on the 100th floor of ICC, the tallest building in Hong Kong. At 393 m above sea level, it is the only indoor observation deck in Hong Kong offering 360-degree views of the territory and its famous Victoria Harbour of Hong Kong. The splendor harbor scenery has attracted lot of photos being taken by all in the visiting group.

After group-photo taken at observation deck, Mr. Leung and Mr. Yeung guided separate teams to visit the building services facilities at various floors in ICC such as Chiller Plant, Generator (Back-up power monitoring system), Green wall features, automatic daylight control of curtain system, etc. Apart from management team, the vertical transportation system maintenance company of ICC shared with us about the specially-designed double-decker lifts system which was applied with aims to cut down the number of lift shafts needed while coordinate lift destination control system with crowd control sensors in keeping smooth vertical movements even during rush hours and shorten the travelling time.

We then visited the Central Control Centre at Level 7, where it operates 7 x 24 hours managed by IBMS operation team, centralized security team and help-desk services team. Mr. Leung explained the daily operation of the control centre and how to integrate the several teams to achieve efficiency to perform a professional and prompt response attending to security control, client special services, facilities management operation issue. All these reflected how ICC has fulfilled an excellent performance in intelligent building & facilities operation management.

Finally, Dr. Edward Yiu, the Executive Committee Chairman of AIIB delivered a closing remark and big thank for ICC management team to have arranged the technical visit of ICC. APIGBA Chairperson Prof. Show-Ling Wen expressed an appreciation to the APIGBA Hong Kong Chapter and its members to have organized a memorable technical visit for all participants.

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For enquiry and comments, please contact activities@aiib.net

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5. Information sharing

5.1 Sponsors of the APIGBA Dinner

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5.2 Technical Papers in Proceedings

- 5.2.1 A
- 5.2.2 B
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- 5.2.11 K
- 5.2.12 L
- 5.2.13 M

(to be updated)

5.1 Photo Gallery

(to be updated)