

ENVIRONMENTAL DIVISION ANNUAL REPORT FOR SESSION 2013/2014

Chairman's Message

I am honored to serve as the Chairman of the HKIE Environmental Division to HKIE members since July 2013. With the strong and solid foundation laid by the predecessors, an organization structure well established under their chairmanships enabled me to operate the Division in a highly efficient way. The outcomes of the two strategic workshops served as the blueprint with which the Environmental Division continues to nurture young engineers, enhance members' network & professionalism and provide excellent services for members.



The theme of Environmental Division for the session 2013-2014 is "Environmental Technologies for Excellence and Change", which is well to echo with HKIE's theme this year. Green building and green economy, municipal solid waste issues, fuel mix for the energy sector, IPCC Fifth Assessment Report and implementation of proposed new Air Quality Objectives are the highlights of the year. With these in mind, we successfully organized activities for HKIE members, focusing on how technologies and their integrated technology solution can help simplify our day-to-day operation in achieving environmental targets. One full-day workshop on building Information Modeling to be held in June 2014 well demonstrates our enthusiasm to train the members in new technology and practices.

It is my great privilege to closely work with a good team of committed committee members. With their unflinching support, we arranged a diversified programs and activities for various stakeholders. For kindergartens and primary schools, we worked with a power company to conduct schools talks to promote renewable energy. We also organized the job shadowing program & environmental engineering workshop and environmental project competition for secondary school students and undergraduates respectively. This session is fruitful in terms of both quality and quantity, similar to previous years. We trust that these events were beneficial to our members and the community at large. Apart from the above, we often work with other associations in supporting their activities. This form of co-operation has proved to be a synergy for mutual benefits of our members. Please refer to the "Activities" Section for the highlights of our events.

Last but not least, I would like to express my heartfelt thanks again to all committee members, our collaborating associations and the HKIE Secretariat, without which this session would not be successful. As we embark on the next stage of Environmental Division's journey under a new Chairman, I look forward to your continued support to our activities. I would certainly value any points you raise for betterment of the profession of environmental engineering.

Ir T.Y. Ip
Chairman of the HKIE Environmental Division (2013-2014)

The Committee

The Committee of the Environmental Division includes the following members who have greatly contributed to discussions and organizing various activities for the Division in this Session. A number of young helpers also sit in at regular meetings.

Committee Members

Ir IP Tat Yan	Chairman, LSB Representative
Ir Kenny WONG Siu Wai	Immediate Past Chairman
Ir Prof Irene LO Man Chi	Deputy Chairman, Annual Reception Coordinator
Ir LEE Ping Kuen	Honorary Secretary
Ir Flora MOK Yee Ting	Honorary Treasurer

Ir LAM Chi Sing	Committee Member, CSC Representative
Ir Herman AU Tak Ki	Committee Member, CPDC Representative, Coordinator job Shadowing Program
Ir Andrew YUEN Ngau Yin	Committee Member, PRC Representative, Program convener
Ir Dr. Simon HO Shek On	Committee Member
Ir Stephen LEE Ming Ching	Committee Member
Ir Dr Frank LEE Shun Cheng	Committee Member
Ir LO Pak Cheong	Committee Member, Chairman of the OC
Ir Dr. Louis LOCK Fat Shing	Committee Member
Ms. Catherine LEUNG Wai Man	Committee Member
Ir Anthony KWAN Lok Fong	Committee Member
Ir Elvis AU Wai Kwong	Committee Member, Climate Change Corner Coordinator
Mr. Benjamin LAM Yau Bun	Committee Member, Deputy Program convener

Ex-officio and Co-opted Members

Ir Prof POON Chi Sun	Ex-officio Member – Discipline Representative
Ir LAM Cheuk Fung	Ex-officio Member – Council Member (Division)
Mr. Patrick LEE Wei Wood	Ex-officio Member – AMC Representative
Mr. Ambrose CHEN Hao Ting	Ex-officio Member – YMC Representative
Ir Dr. Shelley ZHOU Wenwen	Co-opted Member, Webpage Manager
Ir Dr. Michael LEUNG Kwok Hi	Co-opted Member
Ms. Jacqueline CHAN Yee Tak	Co-opted Member, Deputy Webpage Manager

Helpers

Ir C.M. CHOI	Helper
Mr. Ted YEUNG Tit Yu	Helper
Mr. Eddie WONG Chung Yin	Helper
Ir Samuel LIP	Helper
Mr. Tahoe CHOW	Helper
Ir Dr. Alex Enagnon GBAGUIDI	Helper
Ms Mandy WONG Sze Man	Helper
Mr. Isaac KWAN Kwok Yin	Helper
Miss Nikita CHAN Ho Hoi	Helper
Ms. Trista LAU Tai	Helper
Ms. Alice HSU Ping Ping	Helper
Mr. Kevin CHAN Wai Kit	Helper
Ms Nesta LE Lai Sheung	Helper
Mr. Flex TAI	Helper
Ms Carman LAI	Helper
Mr Chris KWOK	Helper

Publication in HKIE Monthly Journal

We continue to act as a coordinator which works closely with potential writers for preparation of articles related to climate change issues from different perspectives for publication in Climate Change Corner under the HKIE monthly journal. Apart from these, we also achieved the target of preparing two articles about the activities organised by us for the HKIE monthly journal with a view to promoting sharing and communication among members. Young members are awarded with a book prize coupon if their article is selected for the publication. We also contributed an article about the solution to solve the municipal solid waste problem in Hong Kong to a weekly magazine.

HKIE Environmental Division Website

The HKIE Environmental website (<http://ev.hkie.org.hk/>) has performed an excellent function in keeping members up-to-date with major and important events. These include the activities for which we are the supporting organization. The PPT file presented in the seminars can be downloaded from the website for sharing among members. The photos stored in the photo gallery help bring back wonderful

memories and joyful moment in the various event and activities, The icon “Facebook”, the first of this kind under HKIE, was erected in our website for members to share their thoughts as well.

Finance

The Environmental Division Committee began the 2013/2014 financial year with a balance of HK\$348,095.51 and received a total allocation of HK\$119,383.00 from the HKIE Headquarters. The Division's account held a total of HK\$337,498.70 at the end of March 2014. According to the Rules for Division Accounts, after the Division has received its “End of Year Account” for the 2013/2014 financial year from the HKIE Headquarters, two assigned Corporate Members will audit the account. After the audit, the account will be available for inspection.

Activities

In addition to organizing high quality technical meetings and visits, in this session we are actively involving in other activities, such as attending and responding to consultations, receiving overseas delegation, making presentations to professionals and general public, and representing HKIE on external committees / panel so as to further boost up the professional standing of HKIE Environmental Division. The activities organized / participated by the Committee are summarized in the **Annex** of the report. Some signature activities of this session are highlighted below:

The Annual Reception was held on 11 October 2013 at Craigengower Cricket Club with Mr. LAM Chiu Ying, the ex-Director of Hong Kong Observatory as the Guest of Honour. Ir Dr the Hon LO Wai Kwok, Member (Engineering Functional Constituency) of the Legislative Council gave musical performance at the reception. There were over 120 participants attending the reception to share their experience and views on environmental issues in a casual atmosphere.

In line with the Government's policy on sustainable solid waste management and implementation of a new AQO in 2014, the Division has jointly organized with Hong Kong Waste Management Association and the Institution of Mechanical Engineers – Hong Kong Branch (IMechE-HKB) a conference on 22 November 2013 at Hong Kong Productivity Council with Mr. K. S. Wong, Secretary for the Environment, Ir Raymond Chan, the President of HKIE, Dr Colin Brown, Director of Engineering, Institution of Mechanical Engineers and Ir the Hon Dr. W. K. Lo as the Guests of Honour. Following the conference, the joint organizations with YMC organized Waste Management Seminar Series – Implementation of Waste Charging Scheme in Hong Kong: Go or Not Go on 15 January 2014 and Hong Kong's comprehensive waste management strategy for coming 10 years on 27 February, World Trend in Food waste treatment by Anaerobic Digestion on 3 March 2014 and Waste-to-energy for municipal solid waste treatment on 24 March 2014. The Division together with individual Committee Members also joined the Alliance for promoting sustainable waste management for Hong Kong which was launched on 21 November 2013.

The Annual Seminar titled as “Hong Kong Energy challenges & Solutions” was held at Theatre II of the Hong Kong Convention and Exhibition Centre on 9 April 2014. The seminar was timely organized three weeks after the Government announced the Future Fuel Mix for Electricity Generation Consultation Document regarding planning ahead for a better fuel mix in Hong Kong. At the opening of the seminar, Ir Raymond Chan, the President of the HKIE presented the Opening Address while Mr. K. S. Wong, Secretary for the Environment and Ir the Hon Dr. W. K. Lo, Member (Engineering Functional Constituency) of the Legislative Council delivered Keynote Addresses. The one-day seminar was well received with over 300 participants. A technical report for this seminar will be posted on the website of HKIE Environmental Division for sharing among the community at large.

We arranged a total of eleven site visits for the members to obtain in-depth information about the facilities. We also co-organised with the Hong Kong Environmental Industry Association an overseas study mission to Kawasaki, Japan between 13 and 15 February 2014 on the latest waste management practices and technologies. A debriefing would be organized in June 2014. We would support the HKIE by setting up a booth in its HKIE Fiesta 2014 to be held on 8 June 2014.

The Environmental Project competition was held to stimulate the interest and cultivate a green culture amongst undergraduate students on environmental protection and conservation. Oral presentation of

participants was held on 12 April 2014. The awards would be announced after the 27th Annual General Meeting of the Division, which would be held on 29 April 2014. For secondary school students, we co-organized with Thei an environmental engineering workshop on 12 April 2014. We have also organized the Job Shadowing Programme which helped young people explore first-hand skills needed to succeed in today's and future job markets, enhance their environmental awareness and contribute to the sustainable development of the city. With the support from two host organizations/companies, namely CLP Power Hong Kong Limited and the Hong Kong Jockey Club, over 40 students from 2 secondary schools had taken part in the programme. The programme was welcomed by the students who expressed strong interest in the environmental engineering profession. They recognized the knowledge and ability required to develop their career as environmental engineers in the programme.

Apart from actively participating in the international/two straits and four places conferences, our delegations also presented technical papers in WFEO Energy Conference ESEDC 2013 in Guangzhou and 第11屆兩岸四地工程師(澳門)論壇. The one "亞太城市建設實務論壇" will be held in Taiwan in May of this year.

Public Consultation

We offered views and comments to the following consultations

- Hung Shui Kiu New Development Area Planning and Engineering Study (Stage 2 Community Engagement)
- Environmental Issues of the 2014 Chief Executive Policy Address
- Mandatory Energy Efficiency Labelling Scheme – Review of Grading Standards for Room Air Conditioners, Refrigerating Appliances and Washing Machines
- Guidelines on Indoor Air Temperature, Humidity and Air Movement
- North East New Territories New Development Areas Project
- Upgrading the Diesel Standard for Local Vessels
- Air Pollution Control (Amendment)(No.2) Bill 2013
- Air Pollution Control (Air Pollutant Emission) (Controlled Vehicles) Regulation
- Public Engagement on Municipal Solid Waste Charging
- Air Pollution Control (Marine Light Diesel) Regulation
- Public Engagement on Municipal Solid Waste Charging
- Environmental infrastructure projects – Extension of three landfill sites and Integrated Waste Management Facilities Phase 1 (Environmental Division represented HKIE to present its views in LegCo EA panel meeting on 28 March 2014)

Environmental Discipline Advisory Panel

This was a fruitful year for the Discipline Advisory Panel (DAP) in terms of membership which grew to 283 as at 21 February 2014. The panel held five meetings in this session. Apart from processing various qualification and training matters and degree programmes accreditation, the panel also worked on several key issues including:

- Contributing to the HKIE Working Group on the Implementation of Competence Based Approach in Assessment of Experience and Professional Competence;
- Working on the accreditation of the new 3-3-4 engineering degree curricula; and
- Organizing a briefing to assessors on professional assessment criteria on 15 February 2014.

Annex – Schedule of Activities including technical meetings, visits, seminars, programmes, competitions, training course and study mission organized / participated by Environmental Division in 2013/2014

Date	Title
5 July 2013	Seminar on Energy Efficiency in Data Centres – Lessons Learned at the Lawrence Berkeley National Laboratory
6 July 2013	Visit to Visitor Centre and Yan Oi Tong Plastic Resource Recycle Centre at Eco-park in Tuen Mun.
13 July 2013	Lecture Series – Water Quality and Health
19-20 July 2013	Delegation 廣州市智慧綠建築及節能技術參觀交流團
23 July 2013	Seminar on Source Tagging Modeling Assessment of Regional Trans-boundary Air Pollution Impact over China: Application to Acid Rain Arising over Liaoning
27 July 2013	The 3 rd Hong Kong Environmental Industry Summit
31 July 2013	Seminar on Carbon Footprint Management for Sustainable Low-carbon Living
10 August 2013	Technical visit to Daya Bay Nuclear Power Station
19 August 2013	Seminar on How an Opportunity of Carbon Exchange and Finance Development in Hong Kong
21 August 2013	Seminar on Sustainability Solution Unlimited – Housing Department's Reforming Marine Mud Waste to Building Materials
27 August 2013	Seminar on Tuen Mun Water Treatment Hydropower Plant
2 September 2013	Seminar on How Should Unrecoverable Municipal Solid Waste be Treated? A Life Cycle Analysis of Proposed Landfill Extension and Advanced Incineration Facilities in Hong Kong
6-8 September 2013	WFEO Energy Conference ESEDC 2013
10 September 2013	Seminar on Young or ready series – Route to become a professional environmental engineer
27-28 September 2013	The Shanghai and Hong Kong Symposium on Science & Technology
28 September 2013	Technical visit to Holiday Inn Express SoHo
30 September 2013	Seminar on rail damper latest development – reduction of noise radiation and corrugation growth
3 October 2013	Seminar on A Review of Measurement Techniques for Ambient Air Pollutants
5 October 2013	Technical visit to Town Island Renewable Energy Supply Project of CLP Power and Operation Dawn
11 October 2013	Environmental Division Annual Reception
12 October 2013	Technical visit to Stanley Waste Treatment Facilities
17 October 2013	Seminar on Bird Survey at Lamma Power Station
18 October 2013	Seminar on Sustainable Energy for Future – How to Make the Best Choices?
23 October 2013	Seminar on Holyland unmasked I
24 October 2013	Seminar on Carbon Footprint and Reduction Opportunities in Hong Kong Construction Sector
29 October 2013	Seminar on Overview of Testing and Certification Industry in Hong Kong
29 October 2013	Seminar on Canadian Environments & Green Building Business Partnering
1-2 November 2013	第 11 屆兩岸四地工程師(澳門)論壇
6 November 2013	Public Engagement Exercise on Municipal Solid Waste Charging Scheme
9 November 2013	Technical visit to Hong Kong Wetland Park
11 November 2013	Technical seminar on Game Changing Energy and Climate Trends – Latest Energy News from Al Gore with Permission
22 November 2013	Conference on “Novel Insights in Waste Management and Clean Air” cum the 7 th Two Coast Forum on Sustainable Waste Management 2013
23 November 2013	Eco Tour to Hong Kong Geopark
26 November 2013	Seminar on Going-Green in Construction – A contractor's viewpoint
5 December 2013	Seminar on A Realistic Environmental Protection Stance from Science and Spiritual Inspirations

Date	Title
11 December 2013	Seminar on Super-capacitor Based Trackside Energy Storage System for the South Island Land (East)
12 December 2013	The 4 th Greater Pearl River Delta Conference on Building Operation and Maintenance
13 December 2013	Seminar on Holyland unmasked II
14 December 2013	Visit to “Go Green exhibition Centre” at Eco Home at CLP Power Mongkok Centre
19 December 2013	Seminar on EIA Study on the Three-Runway System Project
20 December 2013	Seminar on Zero-Liquid-Discharge, a new trend of national projects in PRC
23 December 2013	Job Shadowing Programme (Host Organization: Hong Kong Jockey Club)
11 January 2014	Technical visit to Future Development of Hong Kong International Airport and its Green Initiatives
15 January 2014	Seminar on Building harmony – the Hong Kong Wetland Park experience
15 January 2014	Waste Management Seminar Series – Implementation of Waste Charging Scheme in Hong Kong: Go or Not Go.
18 January 2014	Technical visit to Stonecutters Island Sewage Treatment Works (Harbour Area Treatment Scheme (HATS) Stage 2A)
21 January 2014	Seminar on Planning with Building Information Model
21 January 2014	Forum on “Moving the construction sector towards sustainable development”
13 February 2014	Seminar on What Hong Kong can learn from Korea and Japan’s waste management experience
13-16 February 2014	Overseas Study Mission – Hong Kong Environmental Industry Mission
15 February 2014	Briefing on Professional Assessment Criteria for Environmental Discipline
18 February 2014	Job Shadowing Programme (Host Organization: CLP Power Hong Kong Limited)
19 February 2014	Seminar on Road to Low Carbon Construction – Introduction to Construction Industry Council Carbon Labelling Scheme for Construction Materials
22 February 2014	Technical visit to MaterialLab
25 February 2014	Seminar on ISO 50001 Energy Management System (EnMS) and Certification
25 February 2014	Seminar on Regulatory Compliance for Environmental Legislation of Hong Kong
27 February 2014	Seminar on Landscape and Visual Impact Assessment
3 March 2014	Seminar on World Trend in Food Waste Treatment by Anaerobic Digestion
8 March 2014	Technical visit to Lamma East Store Building and the largest solar power system at Lamma Power Station
10 March 2014	Seminar on the environmental fate and ecological impacts of endocrine disrupting chemicals (EDCs) in wastewater and marine waters of Hong Kong
21 March 2014	Seminar on the regulation of Shenzhen River over the past 30 years
24 March 2014	Waste Management Seminar Series – Waste-to-energy for municipal solid waste (MSE) treatment
27 March 2014	Seminar on “Climate Change is the New Norm”
9 April 2014	Environmental Division Annual Seminar – Hong Kong Energy Challenges and Solutions
29 April 2014	27th Annual General Meeting cum a technical seminar on IAQ
2 May 2014	2014 亞太城市建設實務論壇
21 May 2014	Seminar on “Climate Change: Is CO₂ the main cause?”
8 June 2014	Set up a booth for HKIE fiesta 2014
11 June 2014	Debriefing of the overseas study mission
20 June 2014	Training Workshop on BIM and its application in Environmental Protection

For more updated information, please visit homepage for the Division, <http://ev.hkie.org.hk> managed by Ir Dr Shelley Zhou.