

**ENVIRONMENTAL DIVISION
ANNUAL REPORT FOR SESSION 2012/2013**

Chairman's Message

This is a special year for the Hong Kong Institution of Engineers (HKIE) Environmental Division as we are celebrating our 25th Anniversary. The interest from HKIE members on environmental related issues has been fast increasing in the past decade, and we now have around 5,300 divisional members from a wide range of disciplines. Without the outstanding leadership of our past chairmen, whole heartedly devotion of Committee Members as well as the support of our fellow members, the Environmental Division would not be growing as healthy as today. So I would like to thank all of our colleagues who contributed to the successful development of our environmental community.

The Environmental Division has been very active in organizing learned society events by providing updated information about the environmental related fields to members. We have also been proactive in providing our professional comments to government consultation, contributing technical articles, attending and presenting in major conferences, as well as working along with the Environmental Disciplinary Advisory Panel to promote the Environmental Discipline aiming to further boost up the number of environmental professionals in Hong Kong.

In this session, the Environmental Division has endorsed "Environmental Excellence and Innovation" as our theme. With more and more concern on various aspects of environmental qualities and sustainability, I believe we have to achieve environmental excellence in order to overcome the ever rising challenges ahead. I also trust a good way to achieve environmental excellence is through innovation, such as the research and development of sound environmental technologies, adoption of innovative approaches towards environmental issues.

In addition to our usual events of high quality technical meetings and visits, we have organized a series of signature events in this session, of which some of them are first of this kind for the division. Please refer to the "Activities" Section for the highlights of our events.

Together with my enthusiastic team of the Committee Members, I would like to express my heartfelt gratitude again to all fellow members and our collaborating parties, without which this session would not be successful. I look forward to receiving your continued support to cultivate a sustainable engineering profession.

Ir Kenny Wong BEng, MSc, CEng, CSci, CEnv, C.WEM, R.P.E., FHKIE, FCIWEM, MIMechE
Chairman, The HKIE Environmental Division 2012/2013 Session



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 Kenny WONG Siu Wai	Chairman, LSB Representative
Ir Dr. Louis LOCK Fat Shing	Immediate Past Chairman
Ir IP Tat Yan	Deputy Chairman
Ir LEE Ping Kuen	Honorary Secretary

Ir Prof. Frank LEE Shun Cheng	Honorary Treasurer
Ir LAM Chi Sing	Committee Member, CSC Representative
Ir Herman AU Tak Ki	Committee Member, CPDC Representative
Ir Andrew YUEN Ngau Yin	Committee Member, PRC Representative
Ir Richard CHAN Sou Tung	Committee Member
Ir Johnson LEE Kwun Chung	Committee Member
Ir Dr. Simon HO Shek On	Committee Member
Ir Prof Irene LO Man Chi	Committee Member
Ir LO Pak Cheung	Committee Member
Ir Stephen LEE Ming Ching	Committee Member
Ir Emily HUNG Wai Shan	Committee Member
Ir LAM Cheuk Fung	Committee Member
Ir Flora MOK Yee Ting	Committee Member

Ex-officio and Co-opted Members

Ir Prof POON Chi Sun	Ex-officio Member - Discipline
Ir Dr. TSO Che Wah	Ex-officio Member – Council Member (Environmental)
Mr. Benjamin LAM Yau Bun	Ex-officio Member – AMC Representative
Ms Candy FUNG Man Yui	Ex-officio Member – YMC Representative
Ms Catherine LEUNG Wai Man	Co-opted Member
Mr. Eddie LOCK Hung Kei	Co-opted Member
Ir Anthony KWAN Lok Fong	Co-opted Member

Helpers

Mr. James LAU Kar Kin	Helper
Ms Jacqueline CHAN	Helper
Ir Samuel LIP	Helper
Mr. Tahoe CHOW	Helper
Ir Dr. Alex Enagnon GBAGUIDI	Helper
Mr. Kenny MAK Ying Hong	Helper
Mr. Ambrose CHAN	Helper
Mr. Ted YEUNG Tit Yu	Graduate Representative
Miss Nikita CHAN Ho Hoi	Student Representative
Miss Mandy WONG Sze Man	Student Representative
Mr. Eddie WONG Chung Yin	Student Representative

Finance

The Environmental Division Committee began the 2012/2013 financial year with a balance of HK\$420,812.65 and received a total allocation of HK\$111,913.00 from the HKIE Headquarters. The Division's account held a total of HK\$341,749.51 at the end of March 2013. According to the Rules for Division Accounts, after the Division has

received its “End of Year Account” for the 2012/2013 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 21 September 2012 at Zero Carbon Building with Mr. K. S. Wong, the Secretary for Environment as the Guest of Honour. This is the first HKIE activity that was arranged in the first and newly built “zero carbon” building in Hong Kong. There were over 150 participants attending the reception to share their experience and views on environmental issues in a casual and “low carbon” atmosphere.

With the concerted efforts of the HKIE headquarters and other divisions, we have participated in the organization of the Guangzhou/Hong Kong/Macau/Taiwan Forum in Hong Kong on 23-24 November 2012, and the Sustainable Development Forum in Macao on 7-8 December 2012. Around 400 participants from Hong Kong, Mainland China and Taiwan exchanged their views and expertise in these 2 high level regional events.

The Forum on Challenges and Opportunities with Food Waste Management was held on 6 December 2012 at HKPC Building with Mr. K. S. Wong, the Secretary for Environment as the Guest of Honour who delivered a keynote speech on government’s strategies towards effective food waste management. There were 9 other speakers (of which 7 of them are from Germany, Korea, Japan, Mainland China and Taiwan) sharing their expertise on food waste policy, technologies and management aspects with over 200 participants.

To celebrate the 25th anniversary of the Environmental Division, a celebration dinner was held on 18 March 2013 at Craigengower Cricket Club with Ms Anissa Wong, the Permanent Secretary for the Environment / Director for Environmental Protection as the Guest of Honour. At the celebration, the prizes of the 1st Young Green Leader Award organized by the Environmental Division were also presented. About 150 guests attended this function.

The Annual Seminar titled as “Green Building and Construction Materials – Challenges for Innovation and Excellence” was held at Theatre II of the Hong Kong Convention and Exhibition Centre on 22 March 2013. Ir Prof. K. K. Choy, the President of the HKIE presented the Opening Address while Mr. K. S. Wong, the 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.

We have organized our biannual Environmental Paper Award in this session with the theme of Green Building Development. We have received a total of 8 high quality papers from government, utilities, consultants & academia.

We have organized a professional course on Waste and Environmental Management from April to June 2013, aiming to provide the updated knowledge for those who wish to pursue their careers in the direction of waste and environmental management and pollution control, and for industry professionals who need to formulate company environmental policy or improve the environmental performance of their companies.

We are actively planning for a study mission to Korea in April 2013 with the objective of learning the latest waste management practices and technologies in Korea, which we hope to bring in new insights and practices for tackling Hong Kong’s waste management problems.

We have organized the first Job Shadowing Programme in this Session, with the participation of over 50 students from 6 secondary schools. With the support from three host organizations/companies, namely CLP Power Limited, Environmental Protection Department and Hong Kong Productivity Council, the programme helped young people explore first-hand skills needed to succeed in today’s and future job markets and enhances their environmental awareness, contributing to the sustainable development of the city.

We offered comments to the following consultations

- Proposed Water Conservation Measures (Grey Water Reuse System & Rainwater Harvesting System and Water Saving Devices in Developments)
- Environmental Issues of the 2013 Chief Executive Policy Address
- Mandating Fuel Switch at Berth
- Public Consultation on a New Producer Responsibility Scheme on Glass Beverage Bottles

We represent HKIE on the following external committee/Panels

- Member of Buildings Energy Efficiency Appeal Board Panel for HKSAR Government under the Buildings Energy Efficiency Ordinance (Cap. 610)
- Member of the EIA Technical Briefing Group on Noise for Three-Runway System at Hong Kong International Airport
- Member of the EIA Technical Briefing Group on Air Quality for Three-Runway System at Hong Kong International Airport
- Member of the Education Fund Advisory Committee of the China Light and Power Co., Limited
- Member of Task Force on Green Construction Process and Construction and Demolition Waste of the Hong Kong Green Building Council
- Member of Advisory Committee on Civil and Environmental Engineering of Hong Kong Polytechnic University
- Member of EcoPark Advisory Committee

Environmental Discipline Advisory Panel

This was a fruitful year for the Discipline Advisory Panel (DAP) in terms of membership which grew to 275. The panel held four 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:

- Securing the endorsement of Q&M Board on making the Special Route (formerly known as Emerging Discipline Route) for Environmental Discipline a permanent arrangement;
- Contributing to the HKIE Working Group on the Implementation of Competence Based Approach in Assessment of Experience and Professional Competence; and
- Working on the accreditation of the new 3-3-4 engineering degree curricula.

To further extend our membership, a proactive membership drive programme was launched with talks given to major corporations including CLP Power HK Ltd., Towngas China Co. Ltd, and MTR Corporation Ltd. The panel also took part in the HKIE InnoCamp 2013 to map out the strategies for enhancing the professional image of engineers.

Annex – Schedule of Activities organized / participated by Environmental Division in 2012/2013

Date	Title
	Activities - technical meetings, visits, seminars, programmes, competitions, training course and study mission
28 June 2012	Seminar on Switching off idling engine automatically – an innovative solution to save fuel and reduce emission
July 2012	Job Shadowing Programme
July 2012	Green Campus Competition
7 July 2012	Technical Visit to Chemical Waste Treatment Centre, Tsing Yi
12 July 2012	Seminar on Green Opportunities under National 12 th Five-Year Plan
14 July 2012	Energizing Kowloon East – Conceptual Master Plan 2.0
23 July 2012	Mega Earthquakes – Impacts, cause and predictions
27 July 2012	Technical Seminar on Energy Audit & Assessment in Buildings
28 July 2012	Technical Visit to Tai O Heritage Hotel
1 August 2012	Projection of World Oil Prices Up to 2030
4 August 2012	Hong Kong Eco-Business Summit 2012
8 August 2012	Seminar on Sustainable Building Index (SBI)
19 August 2012	Beach Cleanup Action
31 August 2012	Seminar on Mega Earthquakes – Impacts, Cause and Prediction
6 September 2012	Technical Seminar: CIC Zero Carbon Building – from Concept to Practice
12 September 2012	Seminar to Mechanical Filtration – A low cost and space saving process for industrial wastewater treatment
13 September 2012	Seminar on Mechanical Filtration – A proven primary treatment process for municipal wastewater treatment which can save 50% cost and 90% space requirement
20-21 September 2012	4th International Conference on Energy
21 September 2012	Annual Reception
10 October 2012	Technical Seminar: Integrated Whole Building Energy Design
29 September 2012	Site Visit to Zero Carbon Building in Hong Kong
10 October 2012	Technical Seminar: Integrated Whole Building Energy Design
13 October 2013	Technical Visit to Hong Kong Sludge Treatment Facility
15 October 2012	Technical Talk on How food waste could be handled appropriately - by Centralized or Decentralized Approach?
16 October 2012	Energy Saving for Energy Saving and Eco-friendly refrigerant
27 October 2012	Technical Talk on Odour Pollution Study in HK
31 October 2012	探討香港發電燃料組合的制訂及燃料對電價的影響
7 November 2012	Carbon Smart Building Study Launch
13 November 2012	Completely Demountable and Minimal Maintenance Vertical Green Wall System
20 November 2012	Unified Satellite Image Fusion for Sustainable Urban Environment

Date	Title
23–24 November 2012	The 10th Cross Strait Two Coasts and Four Places Engineers (Hong Kong) Forum
6 December 2012	Forum on Challenges and Opportunities with Food Waste Management
7-9 December 2012	第六屆粵港澳可持續發展
10 December 2012	An Overview of the Hong Kong Sludge Treatment Facility – A Sustainable Waste-to-energy Approach of Alleviating Sludge Disposal Problem
11 December 2012	Talk on Bioplastics on Biodegradable and Compostable "Plant Based" Technology
14 December 2012	Forum on new energy and their future application in the region
17 December 2012	Managing Carbon Footprint through ISO14064 - an experience sharing
18 December 2012	The Five key elements to note in selecting your high definition video surveillance system
5 January 2013	Site Visit to Zero Carbon Building in Hong Kong – Tour A & B
20 January 2013	Micro carbon Operation (MCO)
25 January 2013	Seminar on Granular Activated Sludge Technology - A Novel low Cost and Space Saving Sewage Treatment Process
26 January 2013	Technical Visit to HK Electric's Smart Power Centre and Electric Domestic Kitchen Centre
2 February 2013	Engineers work on facts
6 February 2013	Seminar on Corporate Social Responsibility and Sustainability Reporting for Corporations
20 February 2013	Seminar on Importance of Water Vapour in Climate change
21 February 2013	Carbon-smart Building Study Briefing
22 February 2013	Seminar on Preparation for Energy Management in Your Organization
22 February 2013	堪輿學與環境學之二
2 March 2013	Technical Visit: Turning Hong Kong Waste (Used Cooking Oil & Grease Trap Waste) into transport fuel-Biodiesel
14 March 2013	單車風旅
15 March 2013	What do the engineers need to know about the media
15 March 2013	Environmental Risk Analysis Seminar
18 March 2013	HKIE Environmental Division 25th Anniversary Dinner cum Young Green Leader Award Presentation Ceremony
20 March 2013	"Go Green Chopsticks" Campaign and Hong Kong Environmental Industry Summit 2013
22 March 2013	Hong Kong IAQ Certification and Macau Casino Smoking Area IAQ Testing
22 March 2013	Annual Seminar on Green Building and Construction Materials - Challenges for Innovation and Excellence
22 March 2013	Seminar on Becoming Green Building Professionals, what and how?
23 March 2013	Review of the Environmental Impact Assessment (EIA) Practices of Major Construction Works in Hong Kong – The Next Step
25 March 2013	Public Consultation on a New Producer Responsibility Scheme on Glass Beverage Bottles
28 March 2013	Possible Waste Management Solutions for Hong Kong
13 April 2013	Lecture Series – Science of Water
16 April 2012	HKIE Environmental Division Annual General Meeting cum Seminar on "Innovative

Date	Title
	Building Designs for Noise Mitigation”
Apr – Jun 2013	Professional Course on Waste and Environmental Management
29 April – 3 May 2013	Study Mission to Korea on Waste Management
5-9 May 2013	The 2nd International Conference on Solid Waste - Innovation in Technology and Management Hong Kong
15 May 2013	JCI Peninsula "Go Green Chopsticks" Campaign - 環保急口令創作比賽 & 分享環保家居小貼士 - 短片比賽
18 May 2013	Lecture Series – Water Resources in China and Hong Kong
11 June 2013	Seminar on waste management cum inauguration ceremony of the Hong Kong Green Strategy Alliance
15 June 2013	Lecture Series: the Challenges of Water Resources in China
18 June 2013	Seminar on High-Resolution Characterization of Contaminated Sites using Innovative In Situ Sensor and Direct Push Methodologies
Other activities – attend consultations, receive overseas delegation, make presentations, contribute articles	
2 November 2012	Attended the consultation session about environmental protection issue of the 2013 Policy Address with the Chief Secretary for Administration
20 November 2012	Met Drainage Services Department on its Feasibility Study on Relocation of Sha Tin Sewage Treatment Works to Caverns
28 November 2013	Attended the engagement meeting for expert on transforming HK's Waste Management organized by the Environment Bureau
3 December 2013	Attended the engagement meeting for public on transforming HK's Waste Management organized by the Environment Bureau
13 December 2012	Attended interview organized by AES on its HKCA EIA Review Project
15 December 2012.	Delivered a talk on “Air Quality in Hong Kong” under the program “Science in the Public Service” organized by the Hong Kong Observatory
19-20 January 2013	Participated in the HKIE Retreat 2013
29 January 2013	Received Environmental Delegation from Scotland
22 February 2013	Attended and chaired the focus group meeting on energy efficiency under HK-Malmo Sustainability Charter
26 February 2013	Attended engagement meeting on the Reduction of Construction and Demolition Waste organized by the Environment Bureau
4 March 2013	Delivered a talk at Towngas to promote Environmental Discipline
14 March 2013	Delivered a talk at MTR to promote Environmental Discipline
15 March 2013	Attended engagement meeting on Green Building organized by the Environment Bureau
July 2012 - now	Contribution of Climate Change Corners to the HKIE Engineers magazine
July 2012 - now	Provision of support for the HK Electric Clean Energy Fund by delivering talks to local schools on renewable energy