

# CLIMATE GOVERNANCE TOWARDS NET-ZERO ENERGY AND MOBILITY IN HONG KONG:

## Engineering Challenges and Innovation Opportunities

The HKIE Environmental Division Annual Forum



THE HONG KONG  
INSTITUTION OF ENGINEERS  
香港工程師學會

Environmental Division  
環境分部



20, APRIL, 2023

9:00 – 17:00

1/F GRAND BALLROOM I-III

CROWNE PLAZA

HONG KONG KOWLOON EAST

# The HKIE Environmental Division Annual Forum 2023

## ***INTRODUCTION***

At the 27th Conference of Parties (COP27) to the United Nations Framework Convention on Climate Change in Sharm-el-Sheikh (Egypt), nations launched the Adaption Agenda and Implementation Plan, aiming to accelerate global climate action through emissions reduction, enhanced adaption efforts and flows of green and sustainable finance. Agreed salient items include strengthening efforts to establish a dedicated fund for loss & damage, maintaining a clear intention to keep the global temperature increase within 1.5oC, holding accountable businesses and institutions, mobilizing more financial support for developing countries and making the pivot toward implementation.

Regarding the complex challenges of simultaneously dealing with multiple stressors relating to climate change, the COP27 also highlighted the need of scaling-up the role of engineering knowledge in informing actions and decisions on resilience and sustainability. As such, engineering sector especially environmental professional expertise is directly invested in the outcome of COP27, not only because engineering solutions are crucial for achieving net zero targets but boosting green engineering innovation momentum is also imperative for ensuring a sustainable future.

In this context, this forum aims to discuss and share knowledge, expertise and experiences on the role of engineers in a new eco-system that could help Hong Kong's net zero transition. It will focus on Engineering challenges and innovation opportunities in three sessions: I) Driving Net-Zero Transition in Power Generation Sector; II) Scaling-up Actions for Building Energy Consumption towards Net-Zero; and III) Roadmap for Net-Zero Mobility / Road Transport System.



# The HKIE Environmental Division Annual Forum 2023

## ORGANIZING COMMITTEE

### Chairman

Ir WONG Wai Keung, Alex

### Members

Ir Dr. ZHOU Wenwen, Shelley

Ir CHOI Chung Ming

Ir Prof SHIH Kaimin

Ir Dr. CHAN Ka Lun, Raymond

Ir LO Pak Cheong

Ir CHAN Chung Tak, Thomas

Ir TANG Sher Kin, Kelvin

Ir LEONG Lai Shing, Fredrick

Ir CHOW Kwok Keung, Peter

Ir LEE Wai Tak, Vincent

Ir CHAN Mong Wah, Mannix

Ir Dr. GBAGUIDI Alex Enagnon

Ir LAM Chi Sing

Ir HO Hing Yu, Steven

Ir LEUNG Chi Fung

Ir WANG Yuan Chi, Daniel

Ms SHEA Yi Ling, Elaine

Mr. Yu Hon Chuk

Mr. LEE Wood Wei, Patrick

Ir Dr. YUNG, Kin Kwong Jeffrey

Mr. KWAN Ho Man Donald

Ir Norman CHENG

Ir Prof. Irene LO

Ir CHAN Yee Tak, Jacqueline

Mr. LAM Yau Bun, Benjamin

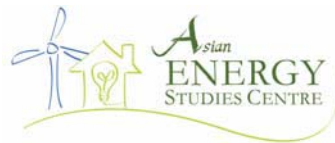
Ir Kitty LEE Wing Ki



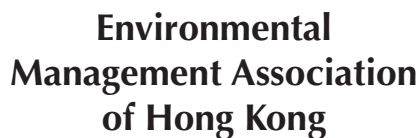
# The HKIE Environmental Division Annual Forum 2023

## SUPPORTING ORGANIZATIONS

### Academic



### Non-academic



*Climate Governance towards Net-Zero Energy and Mobility in Hong Kong:  
Engineering Challenges and Innovation Opportunities*





# The HKIE Environmental Division Annual Forum 2023

## SPONSORSHIP

### Diamond



CONSTRUCTION  
INDUSTRY COUNCIL  
建造業議會



ATAL Engineering Group  
安樂工程集團



港燈  
HK Electric



### Gold

The Hong Kong Jockey Club

Mott MacDonald  
Hong Kong Ltd

### Silver



Carewin  
Engineering Ltd



*Climate Governance towards Net-Zero Energy and Mobility in Hong Kong:  
Engineering Challenges and Innovation Opportunities*



# The HKIE Environmental Division Annual Forum 2023

## FORUM VENUE

### Crowne Plaza Hong Kong Kowloon East

3 Tong Tak Street, Tseung Kwan O, Hong Kong

3-minute walk from the Tseung Kwan O MTR Station, Exit C



Transportation information:

From	Time (min)	By
Hong Kong International Airport	45	Car
Sky100 at International Commerce Centre (ICC)	35	Car
Central	25	Car
Sai Kung Town	20	Car
Hong Kong Convention & Exhibition Centre	20	Car
Hong Kong University of Science and Technology	15	Car
Quarry Bay, North Point, Taikoo Shing, Kwun Tong	10 - 15	MTR
East Point City Shopping Mall	3	MTR
Park Central Shopping Mall	1	Walk



# The HKIE Environmental Division Annual Forum 2023

## PROGRAMME

TIME	CONTENT
08:45-09:00am	<b>Registration</b>
9:00am-9:05am	<b>Welcome Remarks</b> <i>Ir Shelley Zhou, Chairlady, EVD Division</i>
9:05am-9:10am	<b>Opening Address</b> <i>Ir Aaron Bok, President, The Hong Kong Institution of Engineers</i>
<b>Keynote Address I</b>	
9:10am-9:30am	<b>Keynote Address</b> <i>Mr. Tse Chin Wan, BBS, JP, Secretary for Environment and Ecology</i>
9:30am-9:35am	<b>Group Photo</b>
<b>Session I - Driving Net-Zero Transition in Energy Generation Sector</b> <b>Chaired by (Ir Chan Chung Tak, Thomas)</b>	
9:35am-9:55am	<b>I-1 Pathway to Net Zero(TBC)</b> <i>Speaker: Mr Rosenthal Hendrik, Director -Group Sustainability – CLP Holding</i>
9:55am-10:15am	<b>I-2 Investing in Emerging Zero Carbon Technology in Power Generation</b> <i>Speaker: Mr. Bill Ho, General Manager – Corporate Development – HK Electric</i>
10:15am-10:35am	<b>I-3 Hydrogen Economy – The Towngas Way</b> <i>Speaker: Mr. Edmond Fong, General Manager – Transmission Operation - Towngas</i>
10:35am-10:55am	<b>Discussion</b>
10:55am-11:20am	<b>Coffee Break</b>
<b>Session II - Scaling-up Actions for Building Energy Consumption towards Net-Zero</b> <b>Chaired by (Ir Leung Chi Fung)</b>	
11:20am-11:40am	<b>II-1 TBC</b> <i>Speaker: Mr Felix Tang, Director, Project &amp; Development, of Hong Kong Science &amp; Technology Park</i>
11:40am-12:00noon	<b>II-2 Developing Existing Building Retrofitting Strategy for Effective Reduction of Energy Consumption</b> <i>Speaker: Ir Dr Cary Chan, JP, Executive Director of Hong Kong Green Building Council Limited</i>
12:00noon-12:20pm	<b>II-3 TBC</b> <i>Speaker: Ir. Henry Kwok, Head of Energy and Performance Service, Smart Infrastructure, Siemens Limited</i>
12:20pm-12:40pm	<b>Discussion</b>
12:40pm-2:00pm	<b>Luncheon</b>





# The HKIE Environmental Division Annual Forum 2023

## PROGRAMME

<b>Keynote Address II</b>	
2:00 pm - 2:20 pm	<b>Keynote Address</b> <i>Ir Hon Chan Siu Hung, JP, Legislative Councillor</i>
2:20 pm - 2:30 pm	<i>Group photo</i>
2:30 pm - 2:40 pm	<b>Souvenir Presentation Ceremony (Sponsors)</b>
2:40 pm - 3:05pm	<i>Coffee Break</i>
<b>Session III - Roadmap for Net-Zero Mobility / Road Transport System</b> <b>Chaired by (Ir Leong Lai Shing, Fredrick)</b>	
3:05 pm - 3: 25pm	<b>III-1 Topic TBC</b> Speaker: Representative from the Transport and Logistics Bureau, HKSAR Government--TBC
3:25 pm - 3:45 pm	<b>III-2 Engineering Challenges and Innovation Plan for Franchises Bus Fleet Decarbonisation</b> Speaker: Mr Tony WILLIAMSON, COO, Bravo Transport
3:45 pm - 4:05 pm	<b>III-3 Driving Transportation to Different Forms of New Energy</b> Speaker: Mr Gary Leung, Head of Operational Planning Department, The Kowloon Motor Bus Company (1933) Limited
4:05 pm - 4:25 pm	<b>III-4 Hybrid Smart Digital Solutions for Vehicle Decarbonisation</b> Speaker: Mr Alex WAN, Managing Director, Smart Solutions and Advanced Engineering, WSP Asia
4:25 pm - 4:45 pm	<i>Discussion</i>
4:45 pm - 4:50 pm	<b>Closing Remarks</b> <i>Ir Alex Wong, Chairman of the Organizing Committee</i>





# REGISTRATION FORM

## The HKIE Environmental Division Annual Forum 2023

### “Climate Governance towards Net-Zero Energy and Mobility in Hong Kong: Engineering Challenges and Innovation Opportunities”

Thursday, 20 April 2023 (9:00am – 5:00pm)

Crowne Plaza Hong Kong Kowloon East, 3 Tong Tak Street, Tseung Kwan O, Hong Kong

Name : (Ir/Prof/Dr/Mr/Ms) \_\_\_\_\_  
(First Name) (Surname)

Company : \_\_\_\_\_ Position: \_\_\_\_\_

Tel : \_\_\_\_\_ Email : \_\_\_\_\_

	<b>Registration Fee</b> (Seats are limited to 200)	<b>Registration</b> (please “√” as appropriate)
Early-Bird Registration (on or before 31 Mar 2023)	Members of The HKIE and Supporting Organizations : \$980	( )
	Non-Members : \$1,080	( )
Full Registration (after 31 Mar 2023)	Members of The HKIE and Supporting Organizations : \$1,280	( )
	Non-Members : \$1,480	( )
* HKIE Graduate Members	\$500	( )

#### Remarks :

- The fee includes a copy of Forum proceedings, a lunch and two coffee breaks.
- \* Seats are limited to 50 (first-come-first-served). A copy of HKIE Membership Card must be presented together with the registration form.
- Cancellation will be accepted only in writing via email, no later than two weeks before the function commences, and only 50% of registration fee will be refunded.

#### Payment :

I enclose a crossed cheque no \_\_\_\_\_ for the amount of HK\$\_\_\_\_\_ payable to  
“The HKIE Environmental Division”.

Please complete the form and return it together with appropriate payment to the Forum Secretariat,

**c/o C & C Agency Limited**

Rm T302, 8 Fung Mat Road, Sai Ying Pun, Hong Kong  
TEL:6937 5399 ; Email: HKIEEVDAnnualForum@gmail.com  
Event website: <http://ev.hkie.org.hk/>