

Organisers:



School of Energy and Environment  
香港城市大學  
City University of Hong Kong



THE HONG KONG  
POLYTECHNIC UNIVERSITY  
香港理工大學

# 7<sup>th</sup> INTERNATIONAL CONFERENCE HYDROGEN AND CLEAN ENERGY TO NET ZERO

**Date:**

**1-2 December 2022**  
(Thursday & Friday)

**Language:** English

**Venue:**

**City University of Hong Kong**  
• Wong Cheung Lo Hui Yuet Hall

5/F, Lau Ming Wai Academic Building,  
83 Tat Chee Avenue, Kowloon Tong,  
Kowloon, Hong Kong, China

**Registration Fee:**

Regular Rate

HK\$1,200

Members of Supporting Organisations / Students

HK\$1,100

Members of Organisers / Co-organisers

HK\$1,000

**The fee covers:**

- 1.5-day conference presentations
- Conference materials
- Tea breaks & lunch (if situation allows)

**CPD:** Attendance certificates will be issued upon request.

**Registration & Payment:**

Registration is accepted on a first-come, first-served basis. Please register through the online system at the link <https://bit.ly/eihk-7th-int-conf>

An acknowledgement e-mail together with payment instructions will be issued upon registration. Enrolment will be confirmed only after receipt of payment.



**Registration Deadline:**

**14 November 2022**  
(Monday)

**Enquiries:**

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# Background

The Sixth IPCC Assessment Report "The Physical Science Base of Climate Change" released on 9th August 2021 warns that it is only possible to avoid global warming of 1.5°C or 2°C if massive and immediate cut in greenhouse gas emissions is made. In this part of the world China promises to strive to achieve carbon peak by 2030 and carbon neutrality by 2060, while Hong Kong being the foremost internationalised city of China also vows to achieve carbon neutrality by 2050.

To achieve these challenging goals, researchers and technical experts are exploring various zero carbon energy resources, among which hydrogen utilisation is one of the promising alternatives. Yet, there are many challenges ahead in the policies and technological development, safety precaution and infrastructure need for generation, distribution, storage and utilisation of hydrogen.

This international conference will bring together policy makers, scientists, researchers, academia, engineers, green groups and other stakeholders for knowledge and experience sharing of their recent advancement in these areas. Policy makers, in particular, are invited to chart the policy directives in carbon neutrality in the region as well.

## Objectives

- To update knowledge on recent advancement in technological development, safety precaution and infrastructural need for generation, distribution, storage and utilisation of hydrogen and clean energy in order to achieve net zero;
- To promote academic and professional exchange in net zero policies, technology development research, applications, future challenges and developments.

## Target Audience

Energy professionals, engineers, consultants, government officials, policymakers, scientists, researchers and academics.

## Programme

1 December 2022 (Day 1)

## 7<sup>th</sup> INTERNATIONAL CONFERENCE HYDROGEN AND CLEAN ENERGY TO NET ZERO

13:30 – 14:00 **Registration**

14:00 – 14:05 **Welcome Speech**

Prof. Way KUO, JP, President,  
City University of Hong Kong

14:05 – 14:20 **Group Photo Taking**

14:20 – 14:45 **Keynote Speech: Global Megatrends and the Energy Transition**

President, Energy Institute, UK (TBC)

14:45 – 15:15 **Keynote Address**

The Hon TSE Chin Wan, BBS, JP, Secretary for  
Environment and Ecology, Hong Kong Special  
Administrative Region

15:15 – 15:20 **Gratitude Speech**

Ir Edmund LEUNG, SBS, OBE, JP, Chairman,  
Conference Steering Committee, Hong Kong

15:20 – 15:50 **Tea Break**

### Keynote Session

Moderator: Ir Chris CHONG, Veolia Hong Kong /  
Chairman, Energy Institute Hong Kong

15:50 – 16:15 **Acceleration to Net Zero – Powering a Carbon Neutral Hong Kong**  
Ir T K CHIANG, Managing Director, CLP Power Hong Kong Limited

16:15 – 16:40 **Hydrogen Economy – The Towngas Way**  
Ir Simon NGO Siu Hing, Head of Engineering - H.K. Utilities,  
The Hong Kong and China Gas Company Limited

16:40 – 17:05 **Energy Transition – from Turbulence to Resilience**  
Ir Bill HO, General Manager (Corporate Development),  
The Hongkong Electric Company, Limited

17:05 – 17:30 **Decarbonisation Strategy for Beijing to Achieve Carbon Neutral by 2050**  
Mr Yong LI, Director of Zero Committee, Western Returned  
Scholars Association / Expert of CCICED Chief Advisor's  
Supporting Team, China Council for International Cooperation on  
Environment and Development, PRC





# Programme

**2 December 2022 (Day 2)**

## 7<sup>th</sup> INTERNATIONAL CONFERENCE HYDROGEN AND CLEAN ENERGY TO NET ZERO

**8:30 – 9:00 Registration**

### Theme: Safety and Policy

*Moderator: Ir Prof. Dennis LEUNG, The University of Hong Kong / Past Chairman, Energy Institute Hong Kong*

- 9:00 – 9:25** Hong Kong Roadmap for Decarbonisation  
Dr Kenneth KM LEUNG, Assistant Director (Air Policy), Environmental Protection Department, Hong Kong SAR Government
- 9:25 – 9:50** Hydrogen Safety and Regulations, Codes and Standards  
Dr Jinyang ZHENG, Academician, Chinese Academy of Engineering / President, IAHE Codes and Standards Division / Vice Chair, SAC/TC 309 Hydrogen Energy
- 9:50 – 10:15** Guidelines and Policies for Safety Operation of Hydrogen Refueling Stations in China  
Mr FENG YU, Manager, New Cosmos Electric (Shanghai) Co., Limited
- 10:15 – 10:30 Q & A session & Souvenir Presentation**
- 10:30 – 10:45 Tea Break**

### Theme: Production, Conversion, Transmission and Transportation

*Moderator: Ir Prof. Michael LEUNG, City University of Hong Kong / Board of Directors (China Representative), International Solar Energy Society*

- 10:45 – 11:10** Research Trend and Development of Hydrogen Power and Ammonia  
Prof. XUAN Jin, Head, Department of Chemical Engineering, Loughborough University
- 11:10 – 11:35** Role of Gas Networks in Developing Australia's Hydrogen Industry  
Mr Craig de LAINE, Chief Executive Officer, Australian Gas Infrastructure Group (AGIG)
- 11:35 – 12:00** The Manufacturing and Distribution of Hydrogen, Towngas' Innovative Way  
Ir Stephen CHAN, General Manager - Gas Production, The Hong Kong and China Gas Company Limited
- 12:00 – 12:25** Hong Kong International Airport's Pathway to Net Zero Carbon  
Mr Peter LEE, General Manager – Sustainability, Airport Authority Hong Kong
- 12:25 – 12:40 Q & A session & Souvenir Presentation**
- 12:40 – 14:10 LUNCH**

### Theme: Storage, Utilisation and Application #1

*Moderator: Ir Colin CHUNG, WSP (Asia) Limited / Past Chairman, Energy Institute Hong Kong*

- 14:10 – 14:35** Bringing Hydrogen Home for Our Customers  
Mr Mark HORSLEY, Chief Executive Officer, Northern Gas Networks
- 14:35 – 15:00** Our Efforts to Realise a Hydrogen Society  
Mr Takeshi OKUTANI, Industrial Gases Dept. General Manager, Guangzhou Iwatani Trading Co. Ltd.
- 15:00 – 15:25** Stationary Fuel Cell Application in Residential and Commercial in Japan  
Mr Max FUJITA, Overseas Sales and Marketing Manager, Fuel Cell, Smart Energy System Business Division, Panasonic Corporation, Electric Works Company
- 15:25 – 15:40 Q & A session & Souvenir Presentation**
- 15:40 – 15:55 Tea Break**

### Theme: Storage, Utilisation and Application #2

*Moderator: Ir Prof. Vivien LU, The Hong Kong Polytechnic University / Vice Chairman, Energy Institute Hong Kong*

- 15:55 – 16:20** MTR's Journey Towards Carbon-neutral  
Ir Dr Tony LEE, Operations Director, MTR Corporation
- 16:20 – 16:45** Presentation topic to be confirmed  
Citybus Limited
- 16:45 – 17:10** Hong Kong's Transition to Green Public Transport  
Mr Martin CADMAN, Deputy Operations Director (Planning and Support), The Kowloon Motor Bus Company (1933) Limited
- 17:10 – 17:35** From Low Carbon to No-carbon Power Generation  
Mr Thomas LUI, Associate Director - Decarbonisation Architecture, CLP Power Hong Kong Limited
- 17:35 – 17:50 Q & A session & Souvenir Presentation**
- 17:50 – 17:55 Closing Speech by Ir Dr HF CHAN, BBS**

# 7<sup>th</sup> INTERNATIONAL CONFERENCE HYDROGEN AND CLEAN ENERGY TO **NET ZERO**

## Co-organisers:

**AEE** AEE Hong Kong Chapter  
美國能源工程師學會香港分會

**HKAEE**  
香港能源工程師學會  
Hong Kong Association of Energy Engineers

**IGEM**  
Institution of Gas Engineers & Managers  
Far East District Section

**HKIE** THE HONG KONG  
INSTITUTION OF ENGINEERS  
香港工程師學會  
Gas & Energy Division  
燃氣及能源分部

**Institution of MECHANICAL ENGINEERS**  
Hong Kong Branch

## Diamond Sponsors:

**CLP** 中電

**煤氣**  
Towngas

**160<sup>th</sup>**  
ANNIVERSARY

**港燈**  
HK Electric

**130<sup>+</sup>** 推動永續未來  
Powering  
for Sustainability

## Gold Sponsors:

**CITYBUS** 城巴

**KMB**

**MTR**

## Silver Sponsor:

**ATAL** ATAL Engineering Group  
安樂工程集團

## Supporting Organisations:

**環境保護署**  
Environmental Protection Department

**機電工程署**  
EMSD



**AEEMM**  
澳門機電工程師學會  
Associação dos Engenheiros de Electromecânica de Macau

**ASHRAE** Hong Kong Chapter

**BEAM**  
建築環保評估協會

**BUSINESS ENVIRONMENT COUNCIL**  
商界環保協會

**BSOMES**  
Building Services Operation and Maintenance Executives Society  
屋宇設備運行及維修行政人員學會

**CIBSE** Hong Kong

**思匯**  
CIVIC EXCHANGE

**CIWEM** 35 Years  
Hong Kong branch  
The Chartered Institution of Water and Environmental Management

**ENGINEERS AUSTRALIA**  
Hong Kong Chapter

**GREEN COUNCIL**  
環保促進會

**HKFEMC**  
香港機電工程師學會

**香港燃料電池及氫能學會**  
HONG KONG FUEL CELL AND HYDROGEN ENERGY ASSOCIATION

**HKGBC**  
香港綠色建築議會

**HKGSA**  
香港綠色策略聯盟  
Hong Kong Green Strategy Alliance



**香港公路學會**  
Hong Kong Institution of Highways and Transportation



**Department of MECHANICAL ENGINEERING**  
機械工程學系

**HKIE** THE HONG KONG  
INSTITUTION OF ENGINEERS  
香港工程師學會  
Building Services Division  
屋宇設備分部

**HKIE** THE HONG KONG  
INSTITUTION OF ENGINEERS  
香港工程師學會  
Environmental Division  
環境分部

**ice**  
Hong Kong

**IET** The Institution of  
Engineering and Technology

**IFMA** Hong Kong Chapter  
International Facility Management Association

**ISES**  
International Solar Energy Society

**soe**  
engineering success  
soe hong kong region  
香港工程師學會 香港分會

## Conference Steering Committee

### Chairman:

Ir Edmund KH LEUNG, SBS, OBE, JP, Past Chairman, Energy Advisory Committee, Hong Kong Special Administrative Region / Honorary Fellow, Energy Institute

### Members:

- Ir Dr HF CHAN, BBS, Cinotech Consultants Limited / Honorary Fellow, Energy Institute
- Prof. Chak K CHAN, City University of Hong Kong
- Ir T K CHIANG, CLP Power Hong Kong Limited
- Ir Chris CHONG, Veolia Environmental Services China Limited / Chairman, Energy Institute Hong Kong
- Ir Dr Jacob KAM, MTR Corporation
- Ir Prof. Dennis LEUNG, The University of Hong Kong / Past Chairman, Energy Institute Hong Kong
- Ir Dr Otto POON, ATAL Engineering Group / Honorary Fellow, Energy Institute
- Prof. Asif USMANI, The Hong Kong Polytechnic University
- Ir CT WAN, The Hongkong Electric Company, Limited / Honorary Fellow, Energy Institute
- Dr WAN Yufeng, Citybus Limited
- Mr Peter WONG Wai Yee, The Hong Kong and China Gas Company Limited
- Mr Steve HUI, The Kowloon Motor Bus Company (1933) Limited

## Conference Organising Committee

### Convenor:

Ir Dr HF CHAN, BBS, Cinotech Consultants Limited / Honorary Fellow, Energy Institute

### Members:

- Ir Joseph CHAN, Energy Institute Hong Kong / Past Chairman, Energy Institute Hong Kong
- Ir Don CHENG, The Hong Kong and China Gas Company Limited
- Ir Gary CHIANG, CLP Power Hong Kong Limited / Past Chairman, Energy Institute Hong Kong
- Ir Chris CHONG, Veolia Environmental Services China Limited / Chairman, Energy Institute Hong Kong
- Ir Colin CHUNG, WSP (Asia) Limited / Past Chairman, Energy Institute Hong Kong
- Ir Raymond FONG, Past Chairman, Energy Institute Hong Kong
- Ir Jeffrey KWOK, Power Assets Holdings Limited
- Ir Paul KWONG, Green Island Cement Company Limited / Past Chairman, Energy Institute Hong Kong
- Ir Paul LEE, Energy Institute Hong Kong / Past Chairman, Energy Institute Hong Kong
- Ir Prof. Dennis LEUNG, The University of Hong Kong / Past Chairman, Energy Institute Hong Kong
- Ir Prof. Michael LEUNG, City University of Hong Kong / Board of Directors (China Representative), International Solar Energy Society
- Ir Prof. Vivien LU, The Hong Kong Polytechnic University / Vice Chairman, Energy Institute Hong Kong
- Ir KF YEE, Energy Institute Hong Kong / Immediate Past Chairman, Energy Institute Hong Kong