

Professional Association for China's Environment (PACE)

# 环球中国环境专家协会2023年会

碳中和及去全球化时代的中国环境与发展

主办单位



承办单位



会议资助



**Conference Briefing for**  
**Professional Association for China's Environment (PACE)**  
**Annual Conference 2023**

***China's Environment & Development under Carbon Neutrality & De-globalization***

**About the Conference**

China is going through fundamental environmental improvement, with traditional pollution of air, water and soil largely past the inflection point of the Environmental Kuznets Curve. Climate change has become the dominant environmental issue. Carbon neutrality has gained crucial momentum in the past three years and all major economies have set national targets for it. China's plan is to achieve carbon peaking by 2030 and carbon neutrality by 2060. The COVID-19 pandemic has come to its end after three years of rampage, but the ongoing US-China trade war and de-globalization are creating new challenges for the deploy of environmental and carbon-neutral technologies and supply chains.

In response to the new phase of China's environmental and climate issues, the PACE 2023 Annual Conference, held in The Chinese University of Hong Kong from August 18<sup>th</sup> to 19<sup>th</sup> 2023, explored (but not limit to) the era of environmental post-turning point and carbon neutral policies and implementation, development challenges and opportunities, domestic and global governance and other related topics, to serve country's need of environmental improvement and sustainable development in the new age.

**Academic Committee (in alphabetical order)**

Maoliang BU, Dan Guttman, Tao HU, Zonghuang HUANG, Zhuoqi LIU, Manhong SHEN, Hua WANG, Tao WANG, Linyu XU, Yuan XU, Xiaoling ZHANG, Da ZHANG, Da ZHU

**Organizing Committee**

Chair: XU Yuan, XU Linyu

Administrative and Logistics Support: Davis DU, ZHANG Xing, DU Yufan

**Venue:**

Yasumoto International Academic Park (YIA) 2<sup>nd</sup> Floor, Lecture Theatre 4 & 5, The Chinese University of Hong Kong, Hong Kong, China

## **Programme**

### **August 18<sup>th</sup>, 2023: Technical Tour**

Technical Tour: Sha Tin Sewage Treatment Works (STSTW) (Person-in-charge: Prof. XU Yuan, PACE President)

Time: 2:30pm - 4:00pm

### **August 19<sup>th</sup>, 2023**

8:30—9:00 On-site registration (Venue: outside of YIA LT4 & 5) (Person-in-charge: DU Yufan, Zhang Xing)

9:00—9:15 Opening (Venue: YIA LT4)

Moderator: Prof. XU Yuan, Associate Professor, The Chinese University of Hong Kong & President, Professional Association for China's Environment

Opening speech by:

Dr. HU Tao, Chairman of the Board of Directors, Professional Association for China's Environment

Prof. LAM Hon-Ming, Director, Institute of Environment, Energy and Sustainability, The Chinese University of Hong Kong

Prof. XU Linyu, Professor, Beijing Normal University

9:15—9:20 Group Photo (Person-in-charge: DU Yufan)

9:20—10:30 Planetary session 1 (Venue: YIA LT4)

Moderator: Prof. XU Linyu, Professor, Beijing Normal University & Vice President, Professional Association for China's Environment

Keynote speakers:

Prof. Dan Guttman (Online), PACE Board Member

Prof. LI Wei, Professor, Beijing Normal University

10:30—11:00 Coffee break & networking (Person-in-charge: DU Yufan)

11:00—12:30 Concurrent sessions 1A & 1B

Session 1A: Sustainability in China (Venue: YIA LT4; Chair: Prof. LIANG Sai)

Session 1B: Water and Ecosystem Management (Venue: YIA LT5; Chair: Prof. CHEN Shaoqing)

12:30—14:00 Lunch & networking (Person-in-charge: DU Yufan)

14:15—15:25 Planetary session 2 (Venue: YIA LT4)

Moderator: Prof. ZHANG Xiaoling, Professor, City University of Hong Kong; PACE Board Member

Dr. HU Tao, PACE Chairman

Prof. LIANG Sai, Professor, Guangdong University of Technology

15:25—16:55 Concurrent sessions 2A & 2B

Session 2A: Energy Transition (Venue: YIA LT4; Chair: Prof. ZHANG Lin)

Session 2B: Environmental Policy and Impacts (Venue: YIA LT5; Chair: Prof. LI Wei)

## PACE 2023 Hong Kong

16:55—17:25 Coffee break (Person-in-charge: DU Yufan)

17:30—18:00 Closing & PACE AGM (Venue: YIA LT4; Chair: Prof. XU Yuan, PACE President)

Panel:

Prof. HU Tao, PACE Chairman

Prof. XU Yuan, PACE President

Prof. XU Linyu, PACE Vice President

Prof. ZHANG Xiaoling, PACE Board Member

18:30—20:00 Conference Dinner (Venue: Chung Chi Staff Club)

**August 20<sup>th</sup>, 2023: Departure**

**Technical Tour: Sha Tin Sewage Treatment Works (STSTW)**

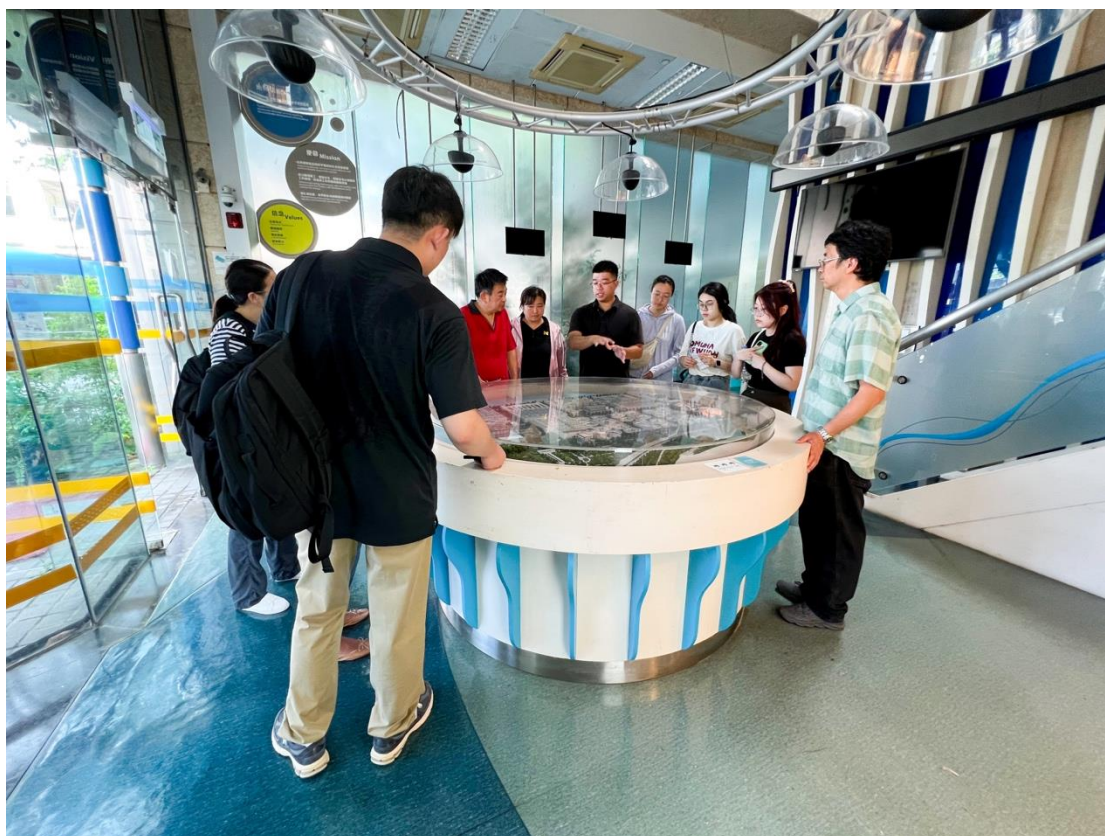
The PACE 2023 annual conference started with a technical tour to the Sha Tin Sewage Treatment Works, the largest secondary sewage treatment works in Hong Kong. A guided tour with Prof. XU Yuan from The Chinese University of Hong Kong and Mr. David Pun from the Hong Kong Drainage Services Department was carried out on August 18<sup>th</sup> 2023 with a group of participants of the PACE 2023 annual conference.

The technical tour covered introduction and discussion on the scale, technology, geographical characteristics, environmental standards, economic cost, and challenges of the current operation of STSTW. The incompatibility between Hong Kong's limited land resources and its increasing demand for sewage and other waste treatment was especially emphasized during the discussion.

In addition to the introduction and discussion, an on-site visit of the wastewater treatment facilities and laboratories was also conducted during the technical tour. Discussions between the PACE conference participants and Mr. Pun were constantly taking place regarding topics on the prospect and solutions of waste management in Hong Kong under carbon neutrality targets and environmental goals.







### **Opening speech**

The keynote speech and concurrent sessions of the PACE 2023 annual conference were held on August 19<sup>th</sup> 2023 after the technical tour on the previous day. The opening speech of this year's PACE conference was given by Dr. HU Tao (Chairman of the Board of Directors, Professional Association for China's Environment), Prof. LAM Hon-Ming (Director, Institute of Environment, Energy and Sustainability, The Chinese University of Hong Kong), and Prof. XU Linyu (Professor, Beijing Normal University), respectively.



### **Keynote speech of Planetary session 1**

Prof. Dan Guttman (PACE Board Member) started the day's speeches and presentations by giving a keynote speech titled "*Climate change impacts: what can be learned from comparative study of how countries and localities are adapting to the governance challenge?*", focusing on how differences among governance systems would lead to the adoption of country specific adaptation strategies and how effective will the strategies, including reliance on traditional natural disaster preparation and response, be.



Following Prof. Guttman's speech, Prof. LI Wei (Professor, Beijing Normal University) shared his research of *"To Build-Up a Green One-Belt & One-Road by Mainstreaming Environmental Governance in Overseas Development"*, emphasizing the importance of improving environmental management in overseas cooperation by strengthening the EIA/SEA system, especially in transboundary impact assessment, biodiversity conservation and compensation, climate change adoption, and low-carbon development.





### **Concurrent sessions 1A & 1B**

After the keynote speech of Planetary session 1, two concurrent sessions were conducted simultaneously. The concurrent session 1A focused on sustainability in China, with presenters sharing their recent research on China's carbon market resilience, sustainable phosphorus management in the Greater Bay area of China, drivers for cost reduction of offshore wind, and the economic policy uncertainty of co-control of air pollutants and CO<sub>2</sub> in China.

Concurrent session 1B covered research related to water and ecosystem management, including water uses in India affected by hotspots of global supply chains, the boundary effect and management of water pollution in China, carbon metabolic processes and ecological resilience in the Pearl River Delta cities, forage-livestock conflicts mitigation in China, and carbon fixation by mangrove. The presentations were followed by active discussions between the speakers and session participants.



### **Keynote speech for Planetary session 2**

The afternoon session of the PACE 2023 annual conference kicked off by a keynote speech by Dr. HU Tao (PACE Chairman). Dr. Hu shared his findings on the reasons behind EU's implementation of the Carbon Border Adjustment Mechanism (CBAM) under the background of carbon neutrality and de-globalization, as well as possible strategies China could take to cope with CBAM.



The second keynote speech of the afternoon session was presented by Prof. LIANG Sai (Professor, Guangdong University of Technology) on the impact of global trade on the net emissions of greenhouse gases by different countries.



### **Concurrent sessions 2A & 2B**

Two concurrent sessions were also arranged in the afternoon session after the keynote speech of Planetary session 2. Concurrent session 2A focused on energy transition, with presenters sharing their research on transboundary distribution of carbon reduction responsibilities within China's Greater Bay area, critical materials demand for China's solar photovoltaics towards 2060, industrial decarbonization with clean hydrogen towards carbon neutrality in China, and urban agglomeration energy-related carbon emission.

Concurrent session 2B mainly covered research topics in environmental policy and impacts, including machine learning for data verification in emissions trading system, environmental ethical in the use of contingent valuation method, heterogeneous roles of income groups in the synergistic control of atmospheric mercury and CO<sub>2</sub> emissions in China, and the impact of changes of production and consumption structures in coastal regions on mercury emission control in China.



### **Closing session & PACE annual general meeting**

After the tea break of the afternoon session, the closing session and the PACE annual general meeting were held by Dr. HU Tao (PACE Chairman), Prof. XU Yuan (PACE President), and Prof. ZHANG Xiaoling (PACE Board Member).



The three PACE members in the panel congratulated all the presenters of the PACE 2023 annual conference on their excellent presentations. Future development strategies of PACE were actively discussed between the panel and the PACE conference participants this year on how PACE could better contribute to the career development of young researchers devoted in environmental issues of China and how PACE could play a more important role in resolving China's environmental challenges. Valuable advice on these questions was also provided by the audience. In addition, the panel encouraged more young scholars to attend upcoming PACE activities in the future and become PACE membership holders if requirements are met.

The PACE 2023 annual conference came to a close with a conference dinner and the PACE 2024 conference and other PACE activities await more participants to join in the future.