

The Tenth Asia-Pacific Energy Sustainable Development Forum (APSEC10)

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Hong Kong, China's Contributions to APEC

Ir Raymond Poon, JP, Director, EMSD

Distinguished Guests, Ladies and Gentlemen, good afternoon.

It is a great honour to be here today at the APSEC 10th Anniversary Forum, where we celebrate a decade of collaboration, innovation, and commitment to sustainable energy development in the APEC region.

I would like to extend my warmest congratulations to Prof ZHU Li and the entire APSEC team for achieving this significant milestone. Your dedication to fostering dialogue and cooperation among APEC member economies and driving initiatives that promote sustainable energy practices has undoubtedly contributed to our shared vision of a sustainable future in the APEC region.

As the Director of the Electrical and Mechanical Services Department (EMSD) of Hong Kong, China, it is my distinct privilege to share our contributions to the APEC Energy Working Group.

EMSD's Continuous Efforts

EMSD has represented Hong Kong, China in the APEC Energy Working Group and its expert groups since 1991. Over the years, we have actively engaged in collaborative efforts to enhance energy efficiency and promote sustainable practices across the APEC region.

This year marks a significant milestone for us—the 30th anniversary of the Energy Efficiency Office (EEO) within EMSD. Established in 1994, the EEO has been instrumental in driving energy efficiency and conservation initiatives in Hong Kong. The Office is responsible for a wide range of energy efficiency and conservation works, which

include issuing codes of practice, establishing guidelines, managing energy databases, conducting benchmarking, exploring advanced energy efficiency technologies, and promoting the wider use of new and renewable energy sources.

Hong Kong, China recognizes the critical importance of ongoing knowledge sharing, technological advancements, and policy discussions among APEC member economies in key areas such as research and innovation, finance and investment, and public awareness. These discussions are essential for advancing APEC's mutual goals and priorities, particularly in reducing energy intensity and increasing the share of renewable energy in the fuel mix.

Thanks to the support from fellow EWG members, Hong Kong, China has successfully conducted eight APEC projects since 2019, with two additional projects currently underway. These initiatives exemplify our commitment to fostering collaboration and innovation within the APEC framework.

In addition to APEC projects, APEC meetings serve as platforms for fostering dialogue and partnerships among member economies. They promote economic collaboration, address global challenges, and advance sustainable development in the region.

Hong Kong, China has had the privilege of hosting several significant APEC meetings, including the 55th APEC Energy Working Group Meeting in 2018, the 53rd, 55th, and 60th APEC Expert Group on Energy Efficiency and Conservation Meetings in 2019, 2020, and 2023, respectively, as well as the 35th APEC Expert Group on Energy Data and Analysis Meeting in January of this year (2024). These gatherings have provided us with invaluable opportunities to engage with our APEC members and share insights on critical energy issues.

I am delighted to share a highlight video showing two recent meetings hosted by Hong Kong, China.

I hope you enjoyed the videos as much as I did and feel inspired to visit Hong Kong, China. I am excited to announce that Hong Kong, China will host the first-ever joint meeting of all APEC four expert groups under the Energy Working Group in April 2025. This unprecedented gathering will provide an invaluable opportunity for members from various fields to discuss shared interests and explore potential areas for collaboration. We look forward to welcoming everyone to join us next year, as we work together towards

advancing our collective goals in sustainable energy development.

With the support of our fellow members, we are honored that representatives from Hong Kong, China have the opportunity to serve and contribute within the APEC Energy Working Group and its sub-forums.

- Our Mr Barry CHU has served as the Deputy Lead Shepherd of the EWG since 2021.
- Our Mr VY Ek-Chin held the position of EGEEEC Chair for two consecutive terms from 2019 to 2023, and
- Our Ms Jovian CHEUNG is currently the EGEEEC Vice-chair for 2023 to 2025.
- Moreover, Mr LAI Hong Chung Harry and Professor Christopher Chao represent Hong Kong, China on the APSEC Advisory Board Committee.

Hong Kong, China is committed to collaborating with member economies, Energy Working Group and its subforums to foster sustainable energy and drive economic growth in the APEC region.

HKC's contribution to APEC Energy Goals

Combating climate change is a global responsibility shared by every APEC member economy. To promote green growth and collaboratively address the region's economic and environmental challenges while accelerating the transition to a low-carbon economy, APEC economies have established two aspirational energy goals:

- Reduce aggregate energy intensity by at least 45 percent by 2035, using 2005 as baseline year; and
- Double the share of renewable energy in the regional energy mix from 2010 levels by 2030.

These goals reflect our collective commitment to sustainable development and underscore the importance of cooperation among member economies in achieving a greener future.

Hong Kong, China has maintained our energy end-use database, leveraging this crucial

data to formulate effective policies and initiatives, develop tools, and implement measures. This ongoing effort enhances our understanding of the current energy landscape and aids in strategic planning for the future.

The latest version of the Hong Kong Energy End-use Database (HKEEUD), featuring 2022 data, was published in September 2024. Over the past 17 years, Hong Kong has successfully reduced its energy intensity by 33.5% from 2005 levels as of 2022. This achievement leaves us with an additional 11.5% reduction needed to meet the APEC goal of a 45% reduction by 2035. While we recognize that making further progress will be increasingly challenging, we committed to meet the target by embracing innovative solutions and collaborating with our APEC members, expert groups members, and research centres.

Hong Kong, China announced the Hong Kong Climate Action Plan 2050 in 3 years ago to set out our vision of “Zero-carbon Emissions - Liveable City – Sustainable Development”, and outline the strategies and targets for combating climate change and achieving carbon neutrality before 2050.

Electricity generation is the largest contributor to our carbon emission, while buildings account for approximately 90% of electricity consumption in Hong Kong China. To achieve our goal of “Net-zero electricity generation” by 2050, Hong Kong, China will phase out coal for daily electricity generation by 2035, replacing it with natural gas with lower carbon emissions and zero-carbon energy. We aim to increase the share of zero-carbon energy in the fuel mix for electricity generation to around 60% to 70% before 2035, to meet our medium-term target of reducing the total carbon emissions by half from the 2005 level before 2035. Through this comprehensive approach, we will develop a diversified fuel mix and enhance the use of zero-carbon energy, working towards our target of achieving “net-zero electricity generation” before 2050.

To reduce reliance on fossil fuels for electricity generation, Hong Kong, China is actively exploring a range of measures, including strengthening cooperation with neighbouring regions, developing a diversified fuel mix, and increasing the use of zero-carbon energy. We are committed to identifying collaborative opportunities in zero-carbon energy projects across the region to enhance the supply of zero-carbon energy and move toward deep decarbonization. We remain open to utilizing various forms of zero-carbon energy, including nuclear power and all types of renewable energy.

In alignment with the priorities set by Peru, the host of APEC 2024, we recognize that hydrogen represents a new energy source with significant potential for a wide range of applications. By embracing innovative technologies and fostering regional partnerships, we aim to accelerate our transition to a sustainable energy future.

To expedite the energy transition, the Hong Kong government has been actively developing hydrogen energy in recent years. In June 2024, we published the "Hong Kong Hydrogen Development Strategy" to create a favourable environment for the local development of hydrogen energy.

While it may be less practical for Hong Kong, China to become a manufacturing hub for green hydrogen due to limited land resources and a dense population, our status as an international city and financial center positions us uniquely. Hong Kong can serve as a demonstration platform for hydrogen technologies and provide green financing and professional services to support the development of the hydrogen economy in various regions.

To promote the development of Hong Kong, China as a demonstration hub for hydrogen technologies, we must address several key challenges:

- A. Safety: We need to strengthen our legislation framework to regulate the safe application of hydrogen as fuel.
- B. Suitable technologies: It is essential to ascertain the pathway for developing the use of hydrogen in the different sectors (e.g. transportation and construction) fitting the local environment and needs.
- C. Infrastructure: We need early planning for adequate and appropriate infrastructure, including hydrogen importation and distribution network, as well as supply facilities.
- D. Cost-effectiveness: We need to promote technological innovation and the scaling up of the supply which will enhance the cost-competitiveness of blue and green hydrogen, and conducive to the popularisation of hydrogen energy.
- E. Capacity building: We need to facilitate the development of professional and technical capacity of practitioners engaging in the development and adoption of

hydrogen technologies.

- F. Public acceptance: We need to enhance publicity and education on hydrogen as an emerging energy source, to win public support for the popularisation of hydrogen application.

To tackle these challenges, the Strategy of Hydrogen Development in Hong Kong, outlines four core strategies:

1. Improving Legislations: In 2025, we will introduce legislative amendments to provide a legal basis for regulating the use of hydrogen as fuel.
2. Establishing Standards: We will establish comprehensive safety standards and technical guidelines suitable to Hong Kong, China's urban development, ensuring the safety supply, storage and adoption of hydrogen energy. Moreover, we will explore suitable approaches for certifying low-carbon hydrogen.
3. Aligning with the Market: We will strengthen collaboration with our regional partners to explore suitable models for hydrogen fuel-cell vehicles and machineries for trial in Hong Kong, China. We will also consider importing hydrogen from other regions strategically. To support wider local application, we strive to establish a hydrogen filling network by converting existing petrol or liquefied petroleum gas filling stations into integrated energy stations. Furthermore, we will work with academic and professional institutions to provide training to practitioners and continue supporting R&D projects through government funding schemes.
4. Advancing with Prudence: Given the on-going development of hydrogen technologies and market, we will promote demonstrations of hydrogen technologies and innovations through pilot projects. While recognizing current limitations in supply and cost-competitiveness of blue and green hydrogen, we will utilize grey hydrogen in local trials while facilitating a transition to blue and green hydrogen as their market mature.

We look forward to enhanced knowledge sharing, technological collaboration and policy exchanges among member economies in key areas, such as standards and certification, value chain, research and innovation, finance and investment as well as and public

awareness initiatives.

Closing

Achieving carbon neutrality within a few decades is an ambitious and challenging goal. It requires not only robust policy support across various sectors but also cross-sectoral collaboration among the government, corporations, individuals, academics, and professional communities. Our focus must be on fostering innovation, advancing technology, and retaining talent within our policies and programs.

Hong Kong, China is eager to collaborate with APEC members. Let us address the challenges of sustainable energy development and seize the opportunities that lie ahead. By working in partnership, we can create a sustainable energy future for APEC region as well as for our whole planet.

Thank you.