**EMSD Symposium 2024**

**Welcome Remarks**

**16 December 2024 (Monday)**

**Ir Raymond Poon, JP, Director, EMSD**

Ladies and gentlemen,

Good morning. It is a great honor to welcome you all today. We are privileged to have with us, Mr Tse Chin-wan, the Secretary for Environment and Ecology who just bring us an inspiring opening speech,

在這里我要特別感謝中央人民政府駐香港特別行政區聯絡辦公室教育科技部副部長葉部長，國家能源局科技司邊司長，國家鐵路局規劃與標準研究院謝院長

, and also, Mr David Lam, the Under Secretary for Development and Prof. LIN Borong from Tsinghua University to join our event. Please allow me to extend a warm welcome to all our distinguished speakers for the coming parallel sessions.

A heartfelt thank you to all of your support and also special thank goes out to our generous sponsors who are CLP Group, The Hong Kong and China Gas Company Limited (Towngas), Hongkong Electric Company, and MTR. Your support has made this event possible, and we are deeply grateful for your contributions.

For celebration of the significant milestone - the 75th anniversary of the founding of the People's Republic of China, EMSD has organized the EMSD Symposium as the highlight event to demonstrate the collaboration with Greater Bay Area and innovation development in how to "**Empowering High-quality, Development for a Green Future**"

***Theme: Empowering High-quality, Development for a Green Future***

The concept of "**new quality productive forces**" (新質生產力), emphasized by President Xi Jinping last year, is being actively implemented through the directives outlined in our 2024 Policy Address. The Policy Address calls for the advancement of the third InnoHK research cluster, focusing on critical areas such as advanced

manufacturing, materials, energy, and sustainable development. Aligned with these goals, we are endeavouring to achieve the targets of Hong Kong Climate Action Plan 2050 which aims of achieving carbon neutrality by 2050. These commitments are encapsulated in our theme today: “Empowering High-quality, Development for a Green Future.”

***4 Parallel Sessions***

Some of you may be curious on why are we seating on the Grand Stair at M+ today instead of a theater or a hall. “The Grand Stair is a unique architectural feature of the M+, which overlooking Victoria Harbour is much more than a stairway to art nirvana.” I would like to clarify it's not me making it up, but it comes from official description. But I have to be honest that as an engineer, a stairway is a stairway. And it is exactly the reason to host our Symposium here. As we believe that our Symposium is one of the steps of the stairway which leading us to “High-quality” and “Green Future”.

And now I would introduce to you the four “stairways” which would parallel run this afternoon: New Energy, Green Mobility, High-Performance Buildings and Intelligent E&M.

The latest development of the two topics “New Energy” and “Green Mobility” for the mainland and Hong Kong have just introduced by Mr TSE (SEE). And I would just quickly go through again for imprinting these key terms in your mindset.

The **first** one is **New Energy**. It includes solar technologies like Building-Integrated Photovoltaics (BIPV), hydrogen, nuclear power, and various other renewable technologies, are foundational for empowering high-quality development. These innovations help reduce reliance on fossil fuels, lower greenhouse gas emissions, and promote energy independence.

The **second** one is **Green Mobility** which encompasses a range of green and sustainable transportation options, including electric vehicles, biofuels, and hydrogen-powered vehicles, as well as enhanced public transit systems like express rail links. These aims to significantly reduce urban congestion and air pollution, thereby fostering a sustainable urban ecosystem.

The **third** one is **High-performance Buildings**. They are designed to be energy-efficient, sustainable, and resilient, incorporating advanced materials and

technologies that minimize energy consumption and environmental impact. Examples such as Modular Integrated Construction (MiC) and Modular Integrated Mechanical, Electrical, and Plumbing (MiMEP) illustrate how innovative design and construction methods can optimize resource use while enhancing building performance. By prefabricating building modules within factories and then transporting them to the site for assembly, the technology significantly shortens construction time, minimizing project delays caused by weather and other uncontrollable factors.

Last month, our Government introduced the MiC Manufacturer Certification Scheme by the newly established Building Technology Research Institute (BTRi). The Scheme is a strategic initiative aimed at elevating the standards and reliability of MiC modules. It ensures that participating manufacturers adhere to rigorous production processes and quality benchmarks, reinforcing trust and professionalism within the industry.

By leveraging Mainland China's robust manufacturing base, it promotes strong collaboration and synergy between Hong Kong and regional stakeholders and facilitates the use of high-quality, cost-effective building materials and aligns with both international and national standards.

The **fourth** and last topic is **Intelligent E&M**. It leverages advanced technologies to optimize energy use, improve system efficiency, and reduce time consumption tasks. For instance, AI technologies are able to conduct predictive analytics and machine learning, allowing us to implement safety measures that protect our workers and minimize risks. The famous example, Smart Site Safety System (4S), which supported by Construction Industry Council (CIC) is practical use of intelligence to boost construction industrial safety.

Each of these topics supports the others, creating a synergistic effect that leads to more sustainable urban environments. Together, they would bring our development not only economically viable but also environmentally responsible, so we can create a sustainable future with high “Quality” and “Productivity”.

***Multi-collaboration with Greater Bay Area, private sector, academic institution***

Hong Kong has always played an important role in national development, serving as a "**Super Connector**" and "**Super Value Adder**" between the mainland and the

world. It plays a crucial role in both "going global" and "bringing in." EMSD has actively aligned with this policy, strengthening connections between the mainland and international partners to enhance innovation and technology exchanges in the E&M sectors.

In addition to sharing experiences with the mainland, EMSD continually deepens cooperation to achieve greater connectivity. In recent years, it has signed numerous memoranda of understanding with local and mainland institutions, including collaborations on innovation technology and the development of artificial intelligence data standards.

Besides, EMSD is following DevB's call on the formulation of GBA Standards such as "One Examination, Multiple Certification" arrangement and evaluation mechanism of "Professional Title" qualification. We have EMSD colleagues on the first batch of engineers who have passed the evaluation of professional titles in the GBA and we are boosting the next batch participation. It thus enabling Hong Kong to share our treasurable talents with our Motherland for boosting the "Quality" and "Productivity".

***Closing***

This year marks a significant milestone in the development of our Motherland. In recent years, our country has astonished the world with its outstanding capabilities in areas such as I&T and green development.

Hong Kong is poised to fully leverage its unique advantages and seize the opportunities arising from national development, the Greater Bay Area development, and the "Belt and Road Initiative"

EMSD is fully dedicated to promoting the transformation of traditional industries into higher-end, smarter, and greener practices.

We look forward to the collaboration between all of us. Last but not least, hope to see you in the District Cooling System Open Day at Kai Tak and the site visit to the Daya Bay Nuclear Power Science and Technology Museum which will be held on tomorrow and the day after.

Thank you!