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By Hand and Email at policyaddress@cepu.gov.hk

25 August 2025

The Honourable John KC Lee, GBM, SBS, PDSM, PMSM
The Chief Executive
Hong Kong Special Administrative Region
People's Republic of China
c/o Policy Address Team
Chief Executive's Policy Unit
26/F, West Wing
Central Government Offices
2 Tim Mei Avenue
Tamar, Hong Kong

Dear Mr LEE

Views from The Hong Kong Institution of Engineers to the Chief Executive for Formulation of the 2025 Policy Address

On behalf of the Institution, I am pleased to present to you our views and suggestions as set out in the enclosure for your kind consideration on the captioned subject.

With our expertise and experience, the Institution welcomes the opportunity to work with the Government on the area of concern for the benefits of the profession and the general public as a whole.

Thank you.

Yours sincerely

Alice Chow

Ir Alice CHOW
President, The HKIE

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Enclosure

Views from The Hong Kong Institution of Engineers
to the Chief Executive for the Formulation of 2025 Policy Address

Hong Kong is undergoing a profound economic restructuring that necessitates the urgent exploration of new growth areas. In this year's *Report on the Work of the Government*, the Premier of the State Council emphasised that the imperative for Hong Kong was to deepen international exchanges and cooperation. By strengthening these international linkages, Hong Kong can fully realise its potential as a "Super Connector" and serve as a powerful catalyst for sustainable economic growth and development. The Hong Kong Institution of Engineers (HKIE) recognises our vital role in supporting the Government and society in addressing longstanding challenges. We stand ready to harness our engineering expertise to fuel innovation and long-term development.

2. With over 50 years of institutional legacy, the HKIE remains steadfast in our mission to leverage our expertise and knowledge to address challenges and pave the way for a better Hong Kong. Engineers have been at the forefront of cultivating productive new forces and are instrumental to our nation's development strategy, particularly as the 15th National Five-Year Plan enters its critical planning stage. In alignment with these commitments, we would like to present our recommendations to inform the forthcoming Policy Address, focusing on areas where engineering leadership can deliver transformative outcomes.

Innovation, New Industrialisation, and Key Emerging Sectors

3. Innovation and new industrialisation are defining pillars of the global economy. As engineering expertise sits at the heart of these sectors, we recommend that the Government commission a comprehensive manpower study to align Hong Kong's talent pipeline with the demands of new industrialisation. Hong Kong engineers are uniquely positioned to leverage their professional skills to propel these initiatives and cement the city's status as a regional engineering hub. While the HKIE has been expanding mutual recognition agreements with our counterparts in the Mainland and

overseas and upholding internationally recognised qualifications and certifications, the Government's explicit endorsement and policy support will be critical to success.

4. Smart manufacturing warrants targeted incentives – both financial and non-financial – to accelerate its adoption, particularly through cross-border collaboration within the Greater Bay Area (GBA). The HKIE has set up dedicated task forces on new industrialisation and GBA standardisation to study these areas and enhance our capability as a facilitator, to equip our members, liaise with relevant parties, and make informed recommendations to promote such initiatives.

5. We suggest that enterprises seeking subsidies for new industrialisation projects be granted additional benefits, such as tax incentives or allowances, when engaging Registered Professional Engineers (RPEs) in research and development (R&D), production, quality assurance, or operational processes. In fact, consistent investment in R&D, engineering endeavours, and public works is not just crucial for upholding Hong Kong's status as a global smart city but also for fortifying the city against economic challenges.

6. Beyond industrial transformation, Hong Kong must also future proof its digital and physical infrastructure. To achieve this, a fast-track approval system for innovation and technology (I&T) initiatives, coupled with robust ecosystem support for start-ups, is essential. The Northern Metropolis could serve as a testbed, equipped with advanced I&T infrastructure, such as high-speed connectivity, secure networks, Wi-Fi 6, mesh Wi-Fi, fibre-to-the-home (FTTH), 5G, and future 6G, enabling seamless local and global data connectivity.

7. The establishment of a sandbox environment for the Low Altitude Economy (LAE) is a welcome development. But it is crucial that the regulatory framework remains flexible to adapt to short development cycles and rapid technological advancements. Given Hong Kong's position as a prominent tourist destination, there is a need to consider agile policies that can extend to recreational drone usage, thereby ensuring safe access to the city's iconic landscapes. By enabling aerial content creation, such measures will not only enhance Hong Kong's global allure, but also foster innovative applications of drone technology.

8. To bolster Hong Kong's standing as a leading global aviation hub, a comprehensive strategy is essential to attract international operators, original equipment manufacturers, and service providers. The HKIE suggests exploring the development of an aviation industrial park that would host aircraft maintenance and testing services and facilities. This initiative would strategically enhance local aviation capabilities, ultimately realising a long-term vision to elevate competitiveness, particularly within the GBA.

Talent Development for Hong Kong's Engineering Future

9. While Hong Kong has made commendable progress in nurturing and attracting talent, retaining these professionals–particularly in the burgeoning field of I&T, remains an urgent challenge. With intense regional and global competition for skilled talent, proactive measures are needed to ensure Hong Kong remains an attractive long-term destination. The HKIE recommends an increased targeted funding for local companies, research institutes, and universities to support retention programmes for high-value talent that meet defined strategic criteria.

10. Nurturing home-grown expertise is fundamental to building a sustainable and resilient engineering workforce necessary for the city's long-term prosperity. While initiatives such as the Construction Industry Council's support for young engineers are welcome, similar programmes must be extended across other engineering disciplines.

11. For decades, the HKIE's Formal Training Schemes (Scheme "A" / AM Training) have fostered generations of engineering professionals. As the industry is poised for significant growth, these training schemes are critical for rapidly supplying qualified professionals. However, stagnant subsidy levels – unchanged for decades – are undermining the ability of small and medium-sized enterprises (SMEs) to compete for trainees. We strongly urge the Government to increase the annual subsidy quota to 1,000 and to raise the monthly trainee subsidy from HK$5,610 to HK$10,000 or more, allowing companies to offer competitive starting salaries, and index future subsidies to inflation to maintain their appeal.

12. The HKIE envisions launching a new institutional mentoring scheme, leveraging our members' industry-specific knowledge and technical expertise to support mainland enterprises and practitioners in navigating international markets. The initiative aims to achieve, for our mainland colleagues, the same success as recent efforts by the Development Bureau have had in supporting Hong Kong's local construction industry. Beyond unilateral assistance, this scheme will serve as a platform for closer collaboration between local and mainland industry stakeholders, fostering mutual growth and benefits. We respectfully request the Government's support and resources to realise this initiative.

Reforming Education and Professional Development

13. To prepare Hong Kong for its transition to an innovation-led economy will require a substantial increase in the city's pool of scientists, engineers, technologists, and similar specialists. However, there are clear deficiencies in incentives within the secondary school curriculum and university admissions process to encourage students to choose STEAM subjects in their senior secondary education, particularly Extended Part of Mathematics and Physics. As such, we advocate for a prompt review of university admission weightings to better recognise STEAM disciplines and junior secondary school curriculum enhancements to highlight the societal impact and prospects of engineering careers. To enhance STEAM education, the HKIE also advocates for engineers to educate teachers and parents besides students. Government support and subsidies for training programmes is crucial in this regard. These measures aim at aligning Hong Kong's education system with future talent demands. In the HKIE, we will continue to drive outreach programmes that ignite students' interest in engineering as an aspirational profession.

14. To fully leverage local talent in the new industrialisation as well as new quality productive forces, we suggest the Government prioritise the development of a multi-tiered engineering workforce. Vocational training, in particular, should be tailored to meet the evolving needs of emerging industries. Subsidising Continuing Professional Development (CPD) courses co-designed with practitioners with a focus on innovation, digitalisation, advanced technologies in materials and control, automation and instrumentation industries, sustainability, and other future-oriented competencies is also recommended. Regular consultation with technical experts will

be essential to keep programmes at the forefront of global trends, thus allowing the upskilling of local professionals to play a part in overcoming emerging challenges while also promoting the growth of industries such as life sciences, health technologies, artificial intelligence (AI), data sciences, and green energy.

Advancing Construction Innovation and Regulatory Efficiency

15. Building on Hong Kong's success with Modular Integrated Construction (MiC) in public housing, we recommend that the Government further promote the use of a Modular Integrated Mechanical, Electrical, and Plumbing (MiMEP) system. Public housing, in particular, can capitalise on standardised designs to streamline relevant building installations. Developing customised Codes of Practice (COPs) for MiC and MiMEP, referencing existing standards, may ensure safety and quality consistency. The adoption of these construction methods can shorten project delivery time, reduce on-site labour demands, enhance construction safety, and improve overall quality control, benefiting the finances and welfare of stakeholders.

16. Guangdong Province stands out as a significant hub in the manufacturing of modules and systems for these construction methods. To capitalise on this, we propose fostering collaboration between Hong Kong and Guangdong to jointly design and certify standardised modules for local and export markets. By positioning Hong Kong as a certification hub for international MiC trade and leveraging Guangdong's manufacturing scale, the partnership has the potential to strengthen both industries and enhance the regional economy.

17. Building Information Modelling (BIM) – another innovative approach to building design and construction – has also shown significant progress in recent years. The full adoption of BIM in preparing and approving private development plans is expected to further enhance efficiency. To facilitate this, a one-stop digital platform for plan reviews, integrating cross-departmental requirements and reducing redundant approvals, could save time for project owners. Offering pre-submission consultations could also pre-empt compliance issues. As repeatedly called for, Government bureaux and departments should act as facilitators instead of merely regulators, this would enable them to proactively identify and resolve potential issues early, thus minimising delays during the later stages of projects.

18. Against the backdrop of today's volatile market conditions, the industry is inevitably experiencing instability and challenges. Despite the recent implementation of the Construction Industry Security of Payment Ordinance in August, the HKIE advocates for increased efforts in informing industry practitioners about the benefits and implications of the Ordinance to enhance their confidence in navigating the current market landscape more effectively.

Smart, Sustainable, and Resilient Infrastructure and Urban Planning

19. For Hong Kong's smart city evolution to be in sync with the global target of reduced carbon emissions, it is imperative to prioritise the development of greener transportation systems. Considering the limited public electric vehicle (EV) charging infrastructure, the HKIE recommends installing 7 kW medium-speed chargers at public parking metres. The private sector should also be encouraged to set up fast-charging stations on their commercial properties. This approach would establish a diverse network of charging options, catering to the varying needs of drivers on different occasions.

20. An extensive charging network is also essential for the successful adoption of electric public transportation and commercial EVs. The HKIE suggests prioritising the installation of quick-charging facilities for electric public light buses at all newly constructed public transport interchanges, particularly in developing areas. As public light buses serve as critical connectors between major railway stations and less accessible locations, their operational characteristics – including smaller passenger capacity enabling faster boarding and alighting – make them ideal candidates for fast charging solutions. This approach would enhance operational efficiency and accelerate the transition to sustainable urban mobility.

21. Furthermore, promoting active mobility, micro-mobility solutions, and mobility-on-demand services can foster a holistic approach to sustainable transportation in Hong Kong. Integrating these diverse mobility options can enhance accessibility, reduce congestion, and promote a greener, more efficient urban environment for all residents and visitors.

22. One way to encourage greater use of public transport to alleviate chronic traffic congestion in core business districts would be to implementing Electronic Road Pricing (ERP). This measure discourages non-essential private vehicle use in high-demand areas, reducing gridlock, lowering carbon emissions while also generating revenue that can be reinvested into enhancing green public transit infrastructure as mentioned above.

23. Hong Kong stands out as an ideal hub for the development of datacentres, AI, and supercomputing centres due to factors such as its strong telecommunications infrastructure, reliable and affordable power supply, business-friendly environment, and proximity to the Mainland. However, the demands of these advanced infrastructures will put a strain on electricity resources. This presents an opportune moment to explore innovative heat recovery systems that can transform waste heat generated by computations into usable energy. To achieve this we could draw inspiration from successful models like the datacentre at Qiandao Lake, where integrated cooling and heating recycling systems have reduced energy consumption by over 80% while also supporting surrounding infrastructure. Such practices can enhance energy efficiency and contribute to the overall sustainability and resilience of our technological ecosystem.

24. Despite Hong Kong's robust data privacy regulations, the HKIE feels it is imperative for effective overall data governance for the regulations to be supported by strong systems for storage, processing, and analytics to derive actionable insights for public service optimisation. One example of this would be to invest in a smart energy grid that integrates renewables and advanced storage, and consumption monitoring technologies to optimise energy distribution and minimise environmental impact, thus aligning with the city's sustainability objectives.

25. In light of the escalating frequency of extreme weather events, the imperative for resilient infrastructure has never been more pressing. As climate change intensifies, infrastructure vulnerabilities are laid bare, necessitating proactive measures to fortify against future disruptions. The HKIE stands poised to advocate for the integration of resilient design principles into infrastructure projects by promoting innovative engineering solutions, knowledge sharing, and collaboration between stakeholders.

26. Sustainable infrastructure also entails broader use of sustainable construction materials. The HKIE suggests that design/regulatory guidelines be developed for sustainable construction materials, such as engineered timber and ultra-high strength steel, such that they can be more readily adopted to supplement conventional materials of steel and concrete when their use is merited. A larger variety of construction materials will also add diversity to the cityscape and enhance livability.

27. To systematically track progress towards the United Nations Sustainable Development Goals (UNSDGs), the HKIE advocates for and is currently developing a standardised assessment framework for sustainable engineering practices. Such a tool would raise awareness across industries while providing measurable benchmarks to guide Hong Kong's transition to responsible development.