

By hand, by email at budget@fstb.gov.hk and by fax at 2147 5770

9 February 2021

Mr Paul M P CHAN GBM GBS MH JP
Financial Secretary
25/F, Central Government Offices
2 Tim Mei Avenue, Tamar, Hong Kong
Tamar Hong Kong

Dear Mr CHAN

2021-22 Budget

On behalf of the Institution, I am pleased to submit herewith our views and suggestions as set out in the enclosure for your consideration in the preparation of the 2021-22 Budget.

For the development of the profession as well as the welfare of the community as a whole, the HKIE is looking forward to cooperating with the Government on all areas of concern by offering our expertise and professional experiences.

Thank you.

Yours sincerely



Ir Prof P L YUEN
President

The Hong Kong Institution of Engineers

Enc

PLY/SW

Cc: Mr Edward YAU GBS JP, Secretary for Commerce and Economic Development
By Fax Mr Michael WONG JP, Secretary for Development
Mr Kevin YEUNG JP, Secretary for Education
Mr WONG Kam Sing GBS JP, Secretary for the Environment
Mr Christopher HUI JP, Secretary for Financial Services and the Treasury
Mr Caspar TSUI JP, Secretary for Home Affairs
Ir Alfred SIT JP, Secretary for Innovation and Technology
Dr LAW Chi Kwong GBS JP, Secretary for Labour and Welfare
Ir Frank CHAN JP, Secretary for Transport and Housing



相信·可·看見
創新·成·蛻變
Believing is Seeing
Innovation for Transformation

Enclosure

**Views from the Hong Kong Institution of Engineers
to the Financial Secretary for the Formulation of the 2021-22 Budget**

The Hong Kong Institution of Engineers (HKIE) embraces our mission to strive for the sustainable advancement of the engineering profession and thus the enhancement of the livelihood for the society of Hong Kong. Amidst the severe impacts of COVID-19 pandemic and global economic instability, the HKIE supports the Administration's objective in the 2020 Policy Address of restoring Hong Kong's constitutional order, consolidating and enhancing Hong Kong's strengths and diversifying its economic development, and building on our past efforts to continue improving people's well-being. To this end, the HKIE would like to submit our views and suggestions for the formulation of the 2021-22 Budget so as to promptly, pertinently, and effectively counteract the adversity and to take immediate measures on economy recovery, livelihood improvement, forward-looking policies on Innovation and Technology (I&T) as well as long-term development of Hong Kong.

Land, Housing and Transportation

2. Land shortage remains to be one of the most severe challenges on the developmental pathway of Hong Kong. The HKIE fully recognises the urgency of land searching and therefore offers the following suggestions on the implementation of land and housing policies.
3. The HKIE supports the multi-pronged approach of land searching and welcomes the Administration's identification of the 330 hectares of land as stated in Long Term Housing Strategy Annual Progress Report 2020, which mainly come from reclamation in Tung Chung, the agricultural land and brownfield sites in New Development Areas (NDAs), for providing 316,000 public housing to meet the housing demand in the coming 10 years. The HKIE urges the Administration to allocate resources to study other land supply options, e.g. three-dimensional land-use planning to unlock the potential of underground space to enhance the capacity of land development.
4. The HKIE supports studies related to Artificial Islands in the Central Water to be conducted as to offer scientific and objective information for public consumption and deliberation. We are pleased to note the approval of \$550 million funding for the concerned studies on the Lantau Tomorrow Vision on 4 December 2020 to ascertain the feasibility and better equip all concerned for communicating with the public on environmental, financial, and social risks and benefits of the Vision and attain consensus of the community as soon as possible.
5. The HKIE welcomes the prevailing policy of developing brownfield sites in NDAs, e.g. Kwu Tung North/Fanling North and Hung Shui Kiu/Ha Tsuen, and the Administration is suggested to reserve resources to assist the eligible brownfield operators through comprehensive planning and arrangements to ensure their business operation and development. Whilst it is noted that 44% of all brownfield sites have not been covered by development projects¹, the HKIE suggests the Administration to extend effort and resources to study these remaining scattered sites as to promptly identify their possible

¹ Development Bureau, *Policy Address 2020 – Housing and Land Supply*. Retrieved from https://gia.info.gov.hk/general/202011/26/P2020112600567_355155_1_1606385774693.pdf.

development potential.

6. Apart from land supplies for meeting the thriving housing demand, a well-planned and efficiently implemented urban renewal and housing policies serve equal importance on the betterment of living standards in Hong Kong. The HKIE welcomes the implementation of the Kwun Tong Town Centre Project as the largest single project undertaken by the Urban Renewal Authority (URA) for revitalising the old district with new initiatives in terms of economic development and other infrastructural needs. The Administration may take the Kwun Tong Town Project as a valuable reference in applying experiences to the other redevelopment projects and the Administration is urged to allocate sufficient fund in investing comprehensive infrastructure projects to support communities and build business opportunities in old districts such as Kowloon City, To Kwa Wan, Yau Ma Tei and Mong Kok. Under the threat of COVID-19 pandemic, there is widespread concern of the hygienic conditions of aged buildings, especially for those in old districts with the building's pipes in a disrepair state, that may lead to higher risk of transmission of virus. As such, the HKIE urges the Administration to inject more resources to repair buildings' drainage system, e.g. increasing the funding for Integrated Building Rehabilitation Assistance Scheme. Additionally, it is encouraging to observe the endeavours put by the Administration on providing Starter Homes (SHs) to enrich the housing ladder and it is suggested that the Administration should inject capital to embark more SHs in redevelopment projects.

7. Regarding the initiative to revitalise industrial buildings, the Institution welcomes the introduction of the pilot scheme for charging land premium at "standard rate" which is targeted to launch in early 2021 as announced in 2020 Policy Address. The Administration is advised to reserve funding to conduct sufficient researches and consultations to formulate the "standard rate" and the comprehensive plan for implementing the scheme effectively.

8. Regarding privately-owned land, the Administration should have sufficient financial preparation for the Land Sharing Pilot Scheme which complements government-led planning of private land for specific public purpose and the set up of Development Projects Facilitation Office (DPFO) to expedite the processing of development approvals of large-scale private residential sites.

9. Transitional housing is one of the efficient ways to alleviate the financial stress faced by families awaiting public rental housing. The HKIE welcomes the Administration's support on the transitional housing projects, which was announced in 2020 Policy Address that an additional \$3.3 billion would be injected into the relevant funding scheme, and the land for the provision of 13,200 units of transitional housing in total for the coming three years has been identified. The Administration is urged to provide more resources to non-government organisations (NGOs) in order to explore innovative construction technologies and technical solutions to expedite the construction of transitional housing.

10. It is a widely accepted fact that the top priority of public rental housing policy is to shorten the average waiting time for the general applications, which was 5.6 years as at end-September 2020², being 0.1 year more than the average waiting time in the last quarter

² Hong Kong Housing Authority, *Number of Applications and Average Waiting Time for Public Rental Housing*. Retrieved from <https://www.housingauthority.gov.hk/en/about-us/publications-and-statistics/prh-applications-average-waiting-time/index.html>.

(i.e. end-June 2020). The HKIE supports the unprecedented trial scheme of providing cash allowance for grassroots families which have waited for public rental housing allocation for a prolonged period of time and it is suggested to reserve sufficient resources for the cash allowances and to review the trial scheme.

11. An effective transport system is instrumental to achieving functional community space. In this regard, the HKIE welcomes the Administration to allocate resources to carry out a comprehensive traffic and transport strategy study and the "Strategic Studies on Railway and Major Roads beyond 2030" to further improve the planning of large-scale transportation infrastructure and prepare for the long-term land development of Hong Kong. The HKIE is pleased to note that the Administration targets to push forward with the implementation of transport infrastructure projects, including the Tung Chung Line Extension, the Tuen Mun South Extension, the South Island Line (West) and the Northern Link. On major road links, the HKIE is of the view that the Administration should accelerate the planning of the fourth road tunnels linking the Northern New Territories and Kowloon, as well as Kowloon and the Hong Kong Island, so as to early relieve the severe traffic congestions already prevailing over the existing links between these areas. The HKIE supports the Administration's initiative to form a new Railway Department so as to provide an enhanced quality control and monitoring strategies for the implementation of new railway projects and the establishment of a more comprehensive safety regulatory regime for railway operations. The HKIE acknowledges the study on the Environmentally Friendly Linkage System for Kowloon East and we suggest speeding up the release of the details for public consultation.

Economy & Innovation

12. Under the economic downturn resulted from the global trade disputes and the COVID-19 pandemic, an emphasis on economic policy is essential to maintain a cutting edge for Hong Kong in terms of the financial competitiveness to attract foreign capital and investments. Hence, the HKIE offers the following suggestions on the economic development as well as the proposed direction for I&T development.

13. The HKIE welcomes the Administration to set aside an estimated annual expenditure of over \$100 billion on average in the next few years to invest in infrastructure and to raise the expenditure ceiling for each minor works project funded under the block vote from the current \$30 million to \$50 million to expedite the implementation of projects that are closely related to the daily lives of the people. It is believed that the continual investments in infrastructural projects and district-based livelihood projects, which are vital for increasing the competitiveness and beneficial for long-term development of Hong Kong are crucial to fulfil the purpose of restoring the economic momentum dampened by COVID-19 and offering a significant number of job opportunities.

14. Amid the pandemic situation, the Administration is recommended to take the lead and inject capital investment to develop technologies to meet the trend of work from home environment and to conduct research on the enhancement of digital readiness of various walks of life in Hong Kong and set aside significant proportion of Technology Voucher Programme for enterprises to set up technologies for supporting remote work, e.g. virtual private networks (VPNs), virtual meetings, and cloud technologies in order to assist the business sector to better adopt to the new normal under COVID-19.

15. Impacted by the economic downturn, the HKIE appreciates the Administration's efforts on seizing opportunities in the Greater Bay Area (GBA) by supporting the co-operation between Hong Kong and Shenzhen in developing an international I&T hub, bringing about the joint-development of Shenzhen/Hong Kong Innovation and Technology Co-operation Zone and actively exploring the feasibility of allowing the Hong Kong Science and Technology Parks Corporation to deepen the regional cooperation on I&T development. The Administration is urged to set up more similar funds akin to the Dedicated Fund on Branding, Upgrading and Domestic Sales so as to facilitate the business expansion of local companies in Hong Kong into the Mainland market.

16. The HKIE supports the Funding Scheme for Youth Entrepreneurship in the Guangdong-Hong Kong-Macao GBA under the Youth Development Fund to render better entrepreneurial support and incubation services to Hong Kong young people who intend to start their businesses in Hong Kong and the GBA. It is pleased that the Administration would subsidise about \$100 million over 10 NGOs to implement youth entrepreneurship projects when the epidemic situation has become stable. The Administration is urged to continue liaising with the Mainland authorities to provide support for individual or group of inventors in addition to the youth entrepreneurs and help realise innovative ideas from engineering profession and in turn contributing to the sustainable development of the industry in Hong Kong and the GBA.

17. The HKIE welcomes the proactive implementation of the "Construction 2.0" initiative to facilitate the professionalisation and revitalisation of the traditional construction industry and the Administration is suggested to allocate more resources to promote wider adoption of I&T in the construction industry and conduct review regularly so as to synchronise with the recent developments in international building codes and standards to assure high engineering quality and safety. The Administration is recommended to create a similar initiative to outline the vision for the future of manufacturing industry and the timetable for adopting advanced technologies for smart manufacturing and provide incentives for the industry to invest in the development of high-end production lines in Hong Kong.

18. With the roll out of Anti-epidemic Fund (AEF), the HKIE supports the Administration to create more sector-specific job opportunities, covering environmental protection, construction and engineering, I&T, property management, etc., which are particularly suitable for young people graduating in recent years.

Education & Research

19. An effective and functional education system and research platform offers the sustainable supply of talents and innovative ideas for a healthy long-term development of Hong Kong. For self-education, the HKIE is pleased to observe the introduction of Deduction for Expenses of Self-Education which increases the amount of allowable deduction of tuition fee and the related examination fee for prescribed courses and suggests the Administration to extend the range of prescribed courses. In addition, the Administration is suggested to allocate resources to broaden the course coverage under Continuing Education Fund (CEF) by including more courses relating to engineering and construction industry in order to offer more diversified choices in terms of qualification levels, subjects and disciplines. Furthermore, we urge the Administration to inject capital investment to develop technologies for e-learning and support the provision of ancillary facilities to education institutions by providing subsidies.

20. With the aim to facilitate the research efforts, the HKIE is delighted to note the Administration's investment in R&D initiatives and introduction of various schemes such as Mainland Hong Kong Joint Funding Scheme and Partnership Research Programme in order to engage regional collaborations on I&T development.

21. Noting the rapid I&T development in Hong Kong, we concur with the Administration to allocate \$2 billion for the proposal of launching Global STEM Professorship Scheme for a period of five years in order to seize the opportunity to attract more I&T talents from overseas to engage in R&D work in Hong Kong.

22. For the purpose of promoting lifelong learning, the HKIE urges the Administration to encourage and assist the private sector in upgrading its technological level by financially supporting their employees to participate in relevant training schemes, including but not limited to engineering graduate training scheme, apprenticeship training scheme, etc. Apart from technological education, resources should be allocated for the training to engineers regarding dispute resolution skills that can offer well informed personnel with both legal and engineering knowledge so as to resolve dispute involving construction projects more efficiently.

23. For the support to employees who are affected by the economic downturn, the HKIE welcomes the Employees Retraining Board's new tranche of the Love Upgrading Special Scheme to provide 20,000 trainees to receive retraining with training allowance from January to June 2021, which assists the affected employees to rejoin the employment market.

Quality and Smart City

24. Like all other developed economies, the healthcare system of Hong Kong is confronted with great challenges from the growing medical needs of the aging population who are more likely to suffer from chronic illnesses. In view of preparing the healthcare system for the increasing burden, the HKIE supports the two 10-year Hospital Development Plan (HDP) and welcomes the Administration to set aside \$200 billion and \$300 billion for the implementation of first 10-year HDP and second 10-year HDP respectively, which amounting to about \$500 billion in total for the development and enhancement of healthcare and public health services including the increase of hospital bed capacity, additional hospital facilities and manpower training to meet the projected service demand up to 2036.

25. The healthcare system can be promptly strengthened by the adoption of high-end construction technologies of hospital projects. The HKIE recognises the promotion of Modular Integrated Construction (MiC) to hospital projects to enhance construction efficiency and the Administration is urged to provide more resources for further development so as to cope with possible abrupt demand for negative pressure system in isolation wards for COVID-19 confirmed/probable cases. At the operation phase, the Administration is recommended to explore a broader application of smart health technologies to the healthcare facilities, e.g. the application of cloud computing, virtual and augmented reality solutions, artificial intelligence, and utilisation of predictive analytics, to provide sufficient healthcare manpower, and related teaching facilities for training.

26. Smart City initiative is an all-rounded approach to enhance but not limited to the quality of government and business decision-making, citizen and government engagement,

security, environmental protection, and transportation of a city. Therefore, the HKIE is delighted to recognise the Administration's positive response to this global trend and the commitment to developing Hong Kong into a smart city by using I&T to build a world famed Smart Hong Kong characterised by a strong economy and high quality of living. Noting that the Administration has set out more than 130 smart city initiatives in the Smart City Blueprint for Hong Kong 2.0, the Administration is recommended to provide more financial incentive to encourage R&D and applications related to the new initiatives.

27. The HKIE is delighted to recognise the Administration's effort of promoting Smart Government and the digital transformation of the whole society. We support the launch of "iAM Smart" which offers over 20 frequently used public services. The Administration is suggested to provide incentives to encourage public utilities and companies from private sector to offer services on the platform. Moreover, the Administration should regularly review and monitor the security of electronic data submission in response to privacy concerns.

28. The HKIE supports the development of Common Spatial Data Infrastructure (CSDI) which underpins the smart city development for the enhancement of the use, management, discovery and sharing of spatial data for public and private organisations. We urge the Administration to devote sufficient resources including financial and human resources to expedite CSDI implementation and the development of common standards and guidelines for compliance by bureaux and departments to release data onto the CSDI portal as the standards and guidelines are critical to assure the quality of sharing spatial data being up-to-date, transparent and highly accessible for consumption and further analysis.

29. In light of the emergence of big data and its growing employment on various aspects in public and private sectors, the HKIE suggests that a regular review on the regulations on big data usage are needed to alleviate the privacy concern and ensure data securities being well protected with the most up-to-date legislation.

Environment

30. Environmental protection as the very core of sustainable development also requires public as well as the Administration's attention amongst other policy consideration. The HKIE notes that the views collected from the public on the long-term decarbonisation strategy study conducted by the Council for Sustainable Development last year have been thoroughly considered by the Administration and it will strive to achieve carbon neutrality before 2050 and updating the "Hong Kong's Climate Action Plan" in 2021. This requires collaborative efforts across the Government, businesses, non-profit sector and individuals, the Administration is suggested to provide incentives to encourage the stakeholders to take feasible actions proactively, such as the participation in the Feed-in-Tariff Scheme, energy saving projects of existing buildings, water and sewage treatment plants, etc. The HKIE supports the introduction of the \$200 million Green Tech Fund to fund R&D projects that help Hong Kong decarbonise and enhance environmental protection. Furthermore, the Administration is recommended to invest in the advancement of renewable energy technologies such as sewage sludge and food waste co-digestion, and review the effectiveness of the projects.

31. The Administration is suggested to consider the embedment of the concept of sustainable development goals (SDGs) promulgated by the United Nations into the policy-making process by conducting feasibility study on the applicability of the SDGs on

various kinds of public-funded projects as well as to encourage project implementation of SDGs by offering subsidies to private business with quantifiable and measurable adoption of SDGs in their projects.

32. The HKIE appreciates the Administration's efforts on promotion of green transportation such as electric vehicle (EV), which is one of the most persuasive means for encouraging the private market to attempt alternative energy usage so as to reduce air pollution by setting a timetable in phasing out fossil fuel vehicles to go all electric over next 20 years in the local market, providing financial incentives for EVs purchase, constructing additional EV charging stations, and unifying charging standard among EVs in public and commercial use. The Administration is recommended to matching the growing number of EVs in Hong Kong with sufficient availability of charging station in urban and sub-urban areas as to ensure a high coverage of EV rechargeability all over Hong Kong.

33. Regarding waste treatment and waste reduction, the HKIE recommends the Administration to set aside sufficient resources for making the charging for Municipal Solid Waste (MSW) legitimate in the future so as to promote behavioural change to reduce waste generation and to ultimately achieve source reduction. In order to meet the growing demand of recycling infrastructure, sufficient resources should be reserved for the construction of related facilities and creation of the green jobs. In a like manner, the Administration is suggested to allocate resources to implement waste paper collection and recycling services programme and provide incentive for development of modern pulping facility in EcoPark, Tuen Mun, and waste paper pulping technology.