Motion on

"Establishing a comprehensive 're-industrialisation' policy regime" at the Legislative Council sitting of 21 March 2018

Progress Report

Purpose

At the Legislative Council ("LegCo") meeting of 21 March 2018, the motion on "Establishing a comprehensive 're-industrialisation' policy regime" moved by Hon Jimmy NG, and amended by Hon HO Kai-ming, Dr Hon CHIANG Lai-wan, Hon WU Chi-wai, Ir Dr Hon LO Wai-kwok and Hon Charles Peter MOK was passed. The full text of the motion is at <u>Annex</u>. After consulting the relevant policy bureaux, the Innovation and Technology Bureau ("ITB") reports to Members the progress of relevant work.

Policy Support

- 2. The Government is committed promoting to "re-industrialisation", i.e. developing high-end manufacturing that is based on new technologies and smart production but does not occupy much land, with a view to identifying a new area of economic growth for and creating quality and diversified employment In terms of policy and infrastructure, we support and opportunities. encourage Hong Kong's industries to adopt new technologies such as automated equipment and smart production planning, so that traditional industries can upgrade and transform.
- 3. Committee The on Innovation. **Technology** Re-industrialisation ("the Committee"), chaired by the Financial Secretary, is a high-level advisory body which collects opinions and suggestions from various innovation and technology ("I&T") industries on the development of Hong Kong's I&T and "re-industrialisation". Since its establishment in April 2017, the Committee has held five meetings to discuss the latest scene of I&T development in Hong Kong, its work focuses and a range of I&T-related topics, including enhanced tax deduction for expenditure on research and development ("R&D"), nurturing I&T talent, attracting overseas R&D institutions to Hong Kong, supporting the development of local start-ups, electronic payment, development of the e-sports industry, the Smart City Blueprint of Hong Kong and the Technology Talent Admission Scheme, providing policy

directions on supporting and implementing specific measures to promote "re-industrialisation". The Committee will continue to advise the Government on matters pertaining to the promotion of I&T development and "re-industrialisation" in Hong Kong.

- The Hong Kong Science Park ("HKSP") has all along been the 4. I&T flagship infrastructure in Hong Kong. It currently has around 260 incubatees, and incubated over 500 I&T start-ups in the past. working population of 13 200 persons in HKSP, over 70% of which (around 9 300 persons) are engaged directly in R&D. It is announced in the recent Budget that the Government would allocate \$10 billion to the Hong Kong Science and Technology Parks Corporation ("HKSTPC"). Of this, \$3 billion will be used to construct research-related infrastructure and facilities, so as to further reinforce and develop Hong Kong's R&D capabilities. The remaining \$7 billion will be used to enhance support for its tenants and incubatees. In addition, the Government proposes to establish two research clusters at the HKSP to attract the world's top scientific research institutions in the fields of healthcare technologies and on artificial intelligence ("AI") / robotics technologies for conducting more R&D projects locally. In May this year, we consulted the LegCo Panel on Commerce and Industry ("C&I Panel") on the funding proposal and received members' support in general. We will seek funding approval from the LegCo Finance Committee ("FC") within this legislative year, with a view to implementing the relevant measures the soonest possible. We believe that these measures will attract overseas and Mainland I&T enterprises to operate in Hong Kong and encourage more local R&D activities, thereby driving R&D and the development of industrial technologies.
- Furthermore, the Office of the Government Chief Information 5. ("OGCIO") Officer continues to promote bureaux/departments to release more data in digital format through the Government's "data.gov.hk" portal to boost scientific research, innovation and big data analytics. In addition, the Government will continue to liaise with public and private organisations, let them understand how open data can add value to their organisations and businesses; as well as encourage them to support the Government's overall policy on open data and release their data on the "data.gov.hk" portal to promote a wider application. Additional resources have been earmarked for 2018-19 to create a permanent Chief Systems Manager (D1) and 9 non-directorate permanent posts in OGCIO for promoting and supporting B/Ds to open data and apply big data analytics.

Infrastructure

- 6. On the hardware side, Stage 1 of the Science Park Expansion Programme is underway. Upon completion of relevant construction works, the gross floor area of HKSP will increase from the existing 330 000 m² to around 400 000 m² to provide more R&D infrastructure for the industry. The construction works has already commenced and is scheduled for completion in 2020.
- 7. Besides, HKSTPC revised the Industrial Estate ("IE") policy in 2015 to facilitate the better use of industrial land, encourage smart production, and attract high value-added technology industries as well as high value-added manufacturing processes. Under the revised IE policy, HKSTPC will build and manage specialised multi-storey industrial buildings for lease to multiple users from different sectors. exceptional cases would the HKSTPC grant sites on long-term lease to meritorious applicants for building standalone factories. As for development of multi-storey specialised industrial buildings, HKSTPC completed the refurbishment of a four-storey factory (with a total gross floor area of 84 000 ft²) in the Taipo IE into the Precision Manufacturing Centre ("PMC") in March 2017 for leasing to multiple advanced manufacturers. HKSTPC is developing the Data Technology Hub and the Advanced Manufacturing Centre in the Tseung Kwan O IE, which are expected for completion in 2020 and 2022 respectively.
- 8. In order to satisfy long-term demands for R&D infrastructures,, we are developing the Hong Kong-Shenzhen Innovation and Technology Park ("the I&T Park") in the Lok Ma Chau Loop ("the Loop") to set up a key base for cooperation in scientific research. To this end, the newly announced Budget proposed to set aside \$20 billion for the site formation and infrastructure works under the Main Works Package 1 ("MWP1") of the Loop, as well as the superstructure and initial operation of the I&T Park. The LegCo FC approved the funding proposal for the Loop's ground decontamination work and Advance Works, as well as detailed design and site investigation of MWP1 on 18 May 2018. The works will commence by stages in mid-2018.
- 9. To further foster the development of IEs, we have tentatively identified an area near the Liantang/Heung Yuen Wai Boundary Control Point for the development of a new IE. We are also conducting relevant initial planning study to explore the feasibility of developing these lands, which will form the basis of considering the scale of development,

detailed planning and engineering study. Moreover, according to Stage 1 Preliminary Planning and Engineering Study completed by the HKSTPC in February 2014, the development of a site of about 15 hectares in Wang Chau for the extension of the Yuen Long IE was considered technically feasible. HKSTPC has included this site in its medium-term development plan for new IEs and is now preparing the ground work for the detailed planning and design in the next stage. All these will provide more rooms for the sustainable development of I&T and "re-industrialisation" in Hong Kong, enabling Hong Kong to keep up with developments of the Belt and Road Initiative and the Guangdong-Hong Kong-Macao Bay Area ("the Bay Area").

Assisting Enterprises in Upgrading and Transforming, and Promoting R&D

- 10. The Hong Kong Productivity Council ("HKPC") has been dedicating efforts to promoting "re-industrialisation" to facilitate the migration of enterprises to high value-added production and gradually upgrading towards Industry 4.0. In the coming year, the relevant work of HKPC includes operating the Smart Industry One Consortium as a platform to facilitate the industry to exchange information on smart industry; establishing an Invention Centre jointly with the Fraunhofer Institute for Production Technology of Germany to assist the industry in accelerating adoption of Industry 4.0-related technologies; and setting up the HKPC Institute of Innovation & Technology (Shenzhen) to provide Hong Kong entrepreneurs in the Bay Area with solutions on intelligent manufacturing, AI, big data, environmental technology, etc.
- 11. The five R&D Centres established by the Government (i.e. the Hong Kong Applied Science and Technology Research Institute, the Logistics and Supply Chain MultiTech R&D Centre¹, the Nano and Advanced Materials Institute, the Hong Kong Research Institute of Textiles and Apparel, and the Automotive Parts and Accessory Systems R&D Centre) have also been actively engaging in R&D related to "re-industrialisation" in recent years, covering various areas such as big data, Internet of Things, robotics, new materials, smart mobility and environmental technology etc., thereby assisting the industry to capture business opportunities.

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¹ Formerly known as Hong Kong R&D Center for Logistics and Supply Chain Management Enabling Technologies.

Financial Support

- 12. Through the Innovation and Technology Fund ("ITF"), the Government finances projects that can contribute to technology upgrading in manufacturing and services industries and promotion of As at February 2018, the ITF has funded over 7 200 are various funding projects with some \$13.8 billion. There programmes under the ITF, including the Innovation and Technology Support Programme, the University-Industry Collaboration Programme, the Enterprise Support Scheme and the Patent Application Grant, etc. One of the aims of ITF is to encourage more local R&D work, so as to promote "re-industrialisation" and build the brand of "Made in Hong Kong". It is announced in the recent Budget that the Government will inject \$10 billion into the ITF to continue supporting applied R&D work in Hong Kong. In March this year, the Government consulted the LegCo C&I Panel on the proposed injection and received favourable responses from Members. We will seek approval for funding from the LegCo FC within this legislative year.
- 13. To encourage enterprises to carry out more R&D projects locally, the Policy Address delivered in October 2017 announced the introduction enhanced tax deduction for qualifying domestic R&D expenditure by The first \$2 million of qualifying R&D expenditure incurred by enterprises will be eligible for a 300% tax deduction, and a 200% deduction will be provided for the remaining balance. There is no cap on the amount of the enhanced tax deduction. The LegCo is currently scrutinising the relevant Inland Revenue (Amendment) Bill. the legislative process goes smoothly, the enhanced tax deduction will be applicable for qualifying domestic R&D expenditure incurred on or after 1 April 2018. On the other hand, in view of the economic integration that may be brought about by the development of the Bay Area, the Government is reviewing the Inland Revenue Ordinance in respect of tax deduction arrangements for capital expenditure relating to intellectual property and machinery and equipment deployed across the border by Hong Kong businesses. We will explore viable options while abiding by such principles as "tax symmetry" and transfer pricing rules. Through various financial arrangements, we also hope to attract international innovative companies to operate their businesses in Hong Kong, with a view to upgrading the standards of R&D and industrial technologies in Hong Kong.

Nurturing Talent

- 14. To nurture and bring together more technology talents, we have earmarked \$500 million under the ITF to launch a Technology Talent Scheme in the third quarter of this year. This includes a Postdoctoral Hub Programme to provide funding support for enterprises to recruit postdoctoral talent, as well as a Re-industrialisation and Technology Training Programme to subsidise local enterprises for training staff in advanced technologies, especially those related to Industry 4.0, with a view to giving new impetus to the promotion of "re-industrialisation". In addition, we have enhanced the Internship Programme by increasing the monthly allowances of interns since October 2017 and extended the Programme to cover all I&T tenants of HKSTPC and Cyberport in The Programme will be further extended to cover local December 2017. technology start-ups to be funded by the Innovation and Technology Venture Fund so as to benefit more enterprises and science, technology, engineering and mathematics (i.e. STEM) graduates.
- 15. We are making every effort to nurture talent with cross-industry and cross-sector capability through such measures as the Innovation and Technology Scholarship Award Scheme and incubation programmes offered by HKSP and the Cyberport, with a view to identifying and nurturing young people's potentials early and providing them with opportunities to bring their strengths into full play. In the recent Budget, the Government announced the allocation of \$200 million to the Cyberport to enhance support for start-ups and promote the development of digital technology ecosystem in Cyberport, which includes an increase of financial assistance available to individual start-ups from \$330,000 to \$500,000 under the Cyberport's incubation programme.
- 16. With a view to enhancing vocational and professional education and training, as well as nurturing talent for the industries, the Vocational Training Council ("VTC") launched the Higher Diploma in Data Science and Analytics in 2017 and will launch a new Higher Diploma in Financial Technology in September 2018. Both programmes feature an AI and machine learning module in their curricula. Where resources permit, the VTC plans to set up a Robotics and AI Laboratory, a Big Data Laboratory, a Cyber Security Experimental Centre, and an Innovation and Technology Collaboration Centre to support students of the higher diploma programmes to learn and master technologies such as Internet of Things, industrial digitalisation, AI and machine learning, and to facilitate students' participation in cross-disciplinary projects in

collaboration with the industries, with an aim to nurture talents with the relevant vocational and professional skills.

17. In terms of post-secondary education, the Government launched the Study Subsidy Scheme for Designated Professions/Sectors ("SSSDP") in 2015/16 academic year on a pilot basis to subsidise about 1 000 students per cohort to pursue designated full-time locally accredited self-financing undergraduate programmes in selected disciplines, with a view to nurturing talents in support of specific industries with keen manpower demand. The SSSDP will be regularised in the 2018-19 academic year with the number of subsidised places increased to about 3 000 per cohort. Current students of the designated programmes will also receive the subsidy starting from that academic year. The selected disciplines of the SSSDP include those related to "re-industrialisation", covering computer science, financial technology and logistics.

Conclusion

To successfully promote "re-industrialisation", the Government will continue to assume the role of an active promoter and facilitator in providing comprehensive policy support in terms of land, technology, capital and talent to assist the existing industries in upgrading and transforming, as well as supporting the development of emerging high Policy bureaux will, having regard to value-added industries. technological development, assess whether it is necessary to revise policies and legislation, SO to jointly as "re-industrialisation" for sustainable the economic development of Hong Kong.

Innovation and Technology Bureau Innovation and Technology Commission June 2018

Motion on

"Establishing a comprehensive 're-industrialisation' policy regime" moved by Hon Jimmy NG at the Legislative Council meeting of 21 March 2018

Motion as amended by Hon HO Kai-ming, Dr Hon CHIANG Lai-wan, Hon WU Chi-wai, Ir Dr Hon LO Wai-kwok and Hon Charles Peter MOK

That given the global economic restructuring, coupled with the new opportunities brought about by reforms in industrial technologies, many countries or places are proactively promoting Industry 4.0 for developing high value-added advanced manufacturing industries, and Hong Kong is no exception; the Government has already made it clear that "re-industrialisation" is a potential new area of economic growth for Hong Kong, and announced the establishment of a committee on innovation, technology and "re-industrialisation"; in this connection, this Council urges the Government to conduct a review and elevate the positioning of the "re-industrialisation" policy, with a view to upgrading the existing industrial policy regime led by innovation and technology to a comprehensive and employment-oriented industrial policy regime which is more independent, forward-looking and systematic, and increasing funding to boost relevant research and development efforts in promoting "re-industrialisation"; the Government should also examine the role of industries in local employment, economic structure and societal development, adopt appropriate measures to revive the brand name of "made in Hong Kong", provide support for manufacturing industries still having a competitive edge, such as textile and clothing, jewellery, clocks and watches, and pharmaceutical products, and study the "external development" feature of Hong Kong's industries, with the aim of providing tax support for those offshore Hong Kong manufacturers engaging in manufacturing and production industries, thereby consolidating the economic foundation of Hong Kong, promoting the diversification of industries, and creating employment opportunities for the benefit of different sectors of society; in the light of demand changes in the global market, competitiveness in technology and cost, quantity and quality of talent, and capitalising on the development trend of "One Belt One Road" and the resources advantages of the Guangdong-Hong Kong-Macao Bay Area, the Government must also strategies formulate and major focuses for promoting "re-industrialisation"; the Government should also study the provision of tax support for local high-technology manufacturers to increase their investment incentive; at the same time, the Government should:

- (1) provide technology and policy support to encourage Hong Kong's industries to adopt new technologies (such as automated equipment and intelligent production planning), so that traditional industries can undergo upgrading and restructuring;
- (2) remove various restrictions and regulations in legislative provisions that obstruct the development and application of creativity and technology; put forward specific ways and indicators for opening government data and encouraging enterprises in the public and private sectors and various types of organisations to open their data, and promote the application of big data, with a view to facilitating development of new types of industries;
- in addition to encouraging local innovative companies to conduct product design and research and development in Hong Kong, also motivating them to manufacture products in Hong Kong, with a view to forming an industry chain to further promote "re-industrialisation":
- (4) attract international innovative companies to operate their business in Hong Kong to drive the development of technological research and industrial technologies, and build a pool of talents familiar with technological research and industrial production to upgrade the standards of technological research and industries in Hong Kong; and
- (5) request the Committee on Innovation, Technology and Re-industrialisation to expeditiously draw up its work targets, conduct a study on corresponding tax support and implement specific measures for promoting "re-industrialisation";
- (6) dovetail with the planning of the Guangdong-Hong Kong-Macao Bay Area, and explore and formulate a direction for technology and innovation, so as to expand the room for developing Hong Kong's industries;
- (7) formulate a dedicated, long-term and clear macro industrial policy with regular reviews, so as to provide a set of satisfactory integrated ancillary measures for manufacturing and related industries;

- (8) actively increase the supply of industrial and commercial sites, and relax the plot ratio of sites and adjust the compliance requirements, so as to promote "re-industrialisation" and revitalise old industrial districts;
- (9) provide tax concessions, including providing tax deductions for research and development and design activities, so as to encourage industrial enterprises to apply and develop innovation and technology;
- (10) encourage Hong Kong business operators to develop different modes of intelligent manufacturing and management, and strengthen and improve existing financial and technical support schemes, so as to further assist industrial enterprises in enhancing their operation efficiency;
- (11) improve vocational and professional education and allocate resources for fostering industrial talents; and
- (12) enhance training of technology talents required by "re-industrialisation", provide support for enterprises to upgrade their capabilities of data consolidation and analysis.