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Developing Hong Kong into an International Innovation and Technology Hub: Leveraging Global Experience

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Developing Hong Kong into an international innovation and technology (I&T) hub is both a clear directive from the Central Government and a crucial step for the city's sustainable development. In late 2021, the HKSAR Government put forward the Northern Metropolis Development Strategy, which fully aligns with the development strategies and positioning outlined in the National 14th Five-Year Plan, the Greater Bay Area Development Plan, and the Qianhai Plan. This strategy aims to foster the growth of the I&T industry and establish a "South-North dual engine" industry pattern that combines finance and I&T. Hong Kong can draw upon the experiences of renowned international innovation hubs such as New York, London, Silicon Valley, Tokyo, Singapore, the Guangdong-Hong Kong-Macao Greater Bay Area, and the Yangtze River Delta to guide the Northern Metropolis's development. By leveraging these experiences, Hong Kong can innovate its approach and expedite progress in various aspects, including planning, investment promotion, construction, financing and management.

I. Create a Master Plan

When examining various countries and regions, it becomes evident that thorough planning plays a critical role in the successful development of innovation parks. The establishment of these parks relies on proactive planning and government support. Therefore, it is essential for the HKSAR Government to actively formulate comprehensive development blueprints and plans that take into account the latest global industrial and economic trends, as well as Hong Kong's unique strengths and characteristics. These plans should encompass top-level designs that outline goals, strategic layouts, key tasks, and policy measures to facilitate the synergistic development of the regional I&T sector. For instance, the New York Bay Area has emerged as the second-largest innovation hub in the United States, following Silicon Valley. This achievement is primarily attributed to the planning and promotion efforts of the New York City Government. In 2009, the New York City Government released "Diverse City: New York's

Economic Diversification Project”, followed by the unveiling of “A New New York City: 2014-2025”, a ten-year development plan in 2015. The government’s proactive planning has successfully attracted a diverse range of high-tech enterprises, including incubators, startups and venture capitalists, to operate in New York. As a result, a flourishing entrepreneurial ecosystem has emerged, spanning industries such as media, fashion and healthcare.

In light of these considerations, it is crucial for the newly established Northern Metropolis Co-ordination Office by the HKSAR Government to announce a comprehensive action agenda and specific plans for the Northern Metropolis. This should encompass aspects such as land development, industry introduction, and the establishment of effective mechanisms to foster collaboration between the government, industry, academia, and research sectors. By doing so, it will provide sufficient time for stakeholders to thoroughly study the details and optimize the construction timetable. Regarding land development, it is important to conduct a careful evaluation of adopting higher plot ratios in urban planning. Additionally, a review of the policy on green belt areas should be undertaken, along with active efforts to develop brownfield sites and relax restrictions on the use of industrial buildings. These will help increase land supply on multiple fronts and prevent issues such as delays in land development, excessive project costs, and protracted processes. In terms of industrial development, long-term plans spanning five years or more should be formulated. These plans should establish clear targets and outline development strategies and support policies, with an objective to enhance the attractiveness of Hong Kong as an investment destination for relevant enterprises.

II. Attract Investment

The development of the I&T industry is increasingly characterized by its unique rules and needs. These include the clustering of industries on a larger scale, sharing of entrepreneurial spaces to reduce costs, special land development and facility requirements, flexible financing solutions throughout the entire process from start-up and pilot production, to mass production and product marketing, as well as tax incentives and financial support policies. Fulfilling these conditions requires the government’s willingness, planning and implementation capabilities, which are vital factors and important considerations for manufacturers and entrepreneurs. Therefore, after confirming the plan for I&T development, the government will need to proactively promote its policies to specific groups. This will enhance the attractiveness of its investment policies and demonstrate its determination that will ultimately improve investment promotion efficiency. The successful construction of Singapore’s Innovation Park is closely tied to its investment promotion efforts. Specifically, Singapore has established the Economic Development Board (EDB) to carry out investment promotion. The EDB helps match overseas investors with local suppliers, partners, and relevant talent. It also provides a comprehensive range of supporting policies for investment promotion, such as the Pioneer Certificate Incentive (PC), the Development and Expansion Incentive (DEI) and the Intellectual Property Development Incentive (IDI), which offer special tax incentives for technology and R&D enterprises.

Similarly, the HKSAR Government has established several entities such as the “Office for Attracting Strategic Enterprises”, the “Advisory Committee on Attracting Strategic Enterprises” and the “Dedicated Teams for Attracting Businesses and Talents” to drive the promotion of Hong Kong’s policies and initiatives worldwide and attract businesses to set up or expand in the city. By maintaining a proactive attitude, the government can further pursue opportunities for cooperation with high-end enterprises around the world, further enhancing industrial cooperation, mechanism interface and talent exchange with Mainland cities in the Greater Bay Area. Additionally, the government should analyse difficulties, pain points and bottlenecks in the investment promotion process, and propose solutions and measures to enhance investment promotion efforts.

III. Improve Policy Support

Overseas experience has demonstrated that the construction of innovation parks is mostly government-led, with an active “visible hand” throughout the entire process. This involvement includes preliminary planning, land development, attracting enterprises and talent, providing tax exemptions and financial assistance, facilitating living accommodations, establishing industry-academia-research collaborative mechanisms, and ensuring intellectual property protection. This approach is beneficial for implementing established industrial policies and leveraging the government’s leadership to cultivate an ecological environment for the I&T industry. Moreover, it improves resource allocation efficiency and accelerates the realisation of planned visions. For example, Silicon Valley in California, USA, has implemented a comprehensive policy package to promote innovation industry development. Taking the development of high-tech companies into consideration, the government formulated land plan specifically for the technology industry, initiated infrastructure construction to accommodate high-tech companies, and created favourable conditions for their development through innovative policies and improved legal requirements. These efforts include providing commercial loan guarantees for qualified companies, tax exemptions, special services for small enterprises, and assistance in their establishment. The Government also introduced regulations and policies to expedite the establishment of a regionally unified factor market system to facilitate the efficient flow of capital, talents, technologies and property rights; and established a comprehensive mechanism for collaborative cooperation and benefit sharing.

In developing the I&T industry, the HKSAR Government can assume a leading role in formulating medium- and long-term industrial policies that are tailored to the advantageous sectors. It can also introduce targeted preferential policies to enable the Northern Metropolis to rejuvenate itself and maintain competitiveness in the rapidly evolving field of I&T. Hong Kong possesses many core elements of the I&T industry, including five “top 100 universities in the world”, remarkable research capability, a developed and mature capital market, international regulatory connectivity, and proximity to the vast Mainland market. In promoting the development of the Northern Metropolis, we should integrate these elements of strength and maximise their effectiveness; and we can formulate a more efficient strategic policy on talents, and gradually build up a more comprehensive talent cultivation, competition and exchanges mechanism. A preferential financial and tax policy on I&T should be formulated to provide reasonable subsidies and tax exemptions for I&T enterprises. Building upon the existing robust intellectual property protection system, mechanisms such as arbitration and mediation for intellectual property rights can be introduced to meet development needs, keep pace with emerging trends, and continuously enhance the intellectual property rights protection system in alignment with global standards and the specific needs of Hong Kong.

IV. Multi-Channel Financing Support

The successful construction of innovation parks worldwide requires substantial financial support, which is closely tied to the nature of the I&T’s development. In the process of high-tech research and development, it is often necessary for multiple regions, departments, fields, and industries to work together to make progress, and the availability of capital is particularly critical. Investment is required for various aspects, including research and development, pilot production, and mass production, and the process involves long cycles and high risks. Therefore, a variety of financing forms is needed to match these requirements, along with a stable and efficient financing environment and long-term, reliable financing support to foster a sustainable and healthy development environment. Generally speaking, various countries have different financing schemes designed to meet the financing needs of different parts of the development of the I&T industry. These schemes may target development of land in parks, basic research, technology transfer as well as different entities within the I&T industry, such as academic institutes, start-ups, and small, medium, and large-sized enterprises. Singapore, as an international financial centre, provides a noteworthy reference for Hong Kong. The Singaporean Government has directly

invested in the establishment of various risk funds, such as the Technology Venture Capital Fund and the Government Investment Fund, and has introduced a basket of financing assistance schemes and complementary financing products to provide enterprises with a full range of life-cycle financing services at various stages, from start-up to growth to internationalisation. The Singapore Government has also joined hands with Temasek to set up a new co-investment fund called Anchor Fund@65, which supports high-growth enterprises and market leaders with good development prospects to raise public funds on Singapore's stock market.

The HKSAR Government has established the Hong Kong Investment Corporation Limited (HKIC) as a wholly owned entity to strategically promote the development of target industries, improve the industrial structure and strengthen the momentum of economic development. Looking ahead, the HKSAR Government should focus on developing and improving the financing environment to support the growth of the I&T industry through various channels such as government investment and social financing. For example, the HKSAR Government should introduce more measures to attract international funds and family offices to operate in Hong Kong. These may involve further opening up the financial market, relaxing investment scope requirements for Mandatory Provident Fund (MPF) schemes, and undertaking reforms and improvements to the regulatory system. Additionally, a mechanism should be established to facilitate connections and transactions between private sector investors and startups. Cooperation with social capital can be pursued to establish seed investment funds, angel investment funds, venture capital funds, and industrial investment funds that support startup companies. Furthermore, diversification of the financial services system should be prioritized, encouraging financial institutions such as commercial banks, securities firms, financial leasing institutions, and insurance institutions to innovate their services and support the development of the I&T industries.

V. Public Services

A comprehensive public service system has proven to be crucial for the success of an innovation park. The public services provided in an innovation park should encompass a wide range of ideas and perspectives. In terms of service providers, the government and industry associations should leverage their respective strengths and provide efficient services with the goal of achieving results. In terms of service content, the main focus should be on meeting the needs for technology development, financing, professional services and living support. Services for technology development needs can be provided through the construction of technology transfer centres and cooperative research centres, as well as upstream and downstream matching services along the industrial chain. Financing needs services should strengthen the leading role of government funds, leveraging social capital alongside government capital to enhance the efficiency of financial funds utilization. In addition, a wide range of services such as policy consultation, integrated business support, legal advice, financial consultation, human resources services, transportation, housing, education and healthcare are also essential. For example, in respect of public services, the Hsinchu Science Park in Taiwan, China, has adopted the approach of combining the local government and organisations such as trade associations to jointly promote the synergistic development of industries in the Science Park, which has contributed to the success of the Hsinchu Science Park. The Taiwanese authorities, through regulations such as the Regulations on the Establishment of the Hsinchu Science Park, the Regulations on the Administration of Foreign Exchange, and the Regulations on Trade Administration, have played the roles of guide, supporter, motivator, and service provider in the development of industries within the park. Trade associations in the Hsinchu Science Park, such as "The Allied Association for Science Park Industries" and the "Taiwan Power Electronics Association" have made significant contributions to promoting the collaborative development of manufacturers and businesses. The success of the Hsinchu Science Park can be attributed to the combined efforts of enterprises and the support and guidance provided by the Taiwanese authorities.

In the future, the Northern Metropolis will be developed into a complex of different types of areas, such as an I&T park, a living and leisure area and a green eco-conservation area. It will serve multiple objectives, such as industrial development, work-life balance, and environmental protection. As a result, the provision of public services will face more complicated situations and necessitate higher standards. The HKSAR Government should effectively manage its relationship with industry associations and stakeholders in the development of the Northern Metropolis. It should strive to provide comprehensive services that fully and efficiently meet the needs for technological development, financing, professional services, and supporting facilities. By doing so, the government can stimulate the park's self-development and innovation, fostering an environment that encourages constant improvement and innovation. The goal should be to enhance the capacity and level of services offered to enterprises and talents, ensuring continuous improvement. Service management should focus on promoting investment attraction, innovation, and development, with the aim of creating the most favorable environment for innovation to thrive. Ultimately, the Northern Metropolis should strive to become the most conducive and nurturing ground for the growth of startup companies.

VI. Accelerate I&T Development by Complementing Strengths

While Hong Kong has achieved remarkable success as a global trade and financial centre, it faces challenges such as an imbalanced industrial structure and a lack of sustained economic growth. Developing the I&T industry is considered a crucial solution to these problems. In comparison to other innovation and technology parks, Hong Kong possesses certain advantages but also exhibits weaknesses in its development. Hong Kong has notable strengths in technological innovation, including world-class basic research, robust intellectual property rights protection, and excellent financial support services. However, when compared to successful innovation parks elsewhere, Hong Kong's innovation industry still faces some shortcomings. One major constraint is the insufficient investment in research and development (R&D), which could impede the pace of innovation. In 2021, the ratio of total local R&D expenditure to GDP was 0.97%, falling short of the 1.5% target set in the 2017 Policy Address and lower than the global average of 2.63%. Another area of concern is the incomplete I&T industry chain, resulting in some scientific research outcomes being commercialized outside of Hong Kong. The commercialization of research results is vital for the development of the innovation industry. However, the scarcity of early-stage angel investment funds in Hong Kong has led to many research outcomes struggling to secure funding in the city. Furthermore, the high cost of starting a business poses a challenge. While Hong Kong's ranking in ECA International's "World's Highest Cost of Living Cities 2023" has slightly dropped, it remains the second highest globally. This contributes to the financial burden faced by entrepreneurs. Lastly, there is a shortage of entrepreneurial talent. Hong Kong's tertiary institutions have a relatively small number of students in science and technology disciplines, resulting in an insufficient pool of creative talents. According to the World Economic Forum's Global Competitiveness Report, Hong Kong ranks relatively low in terms of the availability of technology talents.

In the tide of I&T development of our country, Hong Kong has embraced a historic opportunity to establish itself as a world-class I&T centre. However, to excel in the intense international competition, Hong Kong must not only leverage its strengths but also confront its weaknesses and relative shortcomings. It is crucial to tackle these challenges with innovative thinking. In the future, Hong Kong's I&T industry will face formidable challenges, experiencing a "two-way squeeze" from both developed and developing economies. Therefore, when formulating strategic plans and implementation programs, the HKSAR Government should thoroughly assess its own strengths and weaknesses. It should also learn from successful experiences worldwide, drawing insights from science parks in different regions and adopting common development practices observed in advanced areas. By doing so, Hong Kong can "enhance our strengths, make up for our shortcomings, and build up our strengths". This approach will accelerate the development of Hong Kong's I&T sector.

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主要經濟指標 (Key Economic Indicators)

	2021	2022	2023/Q1	2023/Q2
一. 本地生產總值 GDP				
總量 (億元) GDP(\$100 Million)	28,677	28,180	7,166	7,010
升幅 (%) Change(%)	6.4	-3.5	2.9	1.5
二. 對外貿易 External Trade			2023/08	2023/01-08
外貿總值 (億元) Total trade(\$100 Million)				
總出口 Total exports	52,360	48,138	3,583	26,510
進口 Total imports	52,113	48,586	3,839	29,375
貿易差額 Trade balance	247	-448	-256	-2,865
年增長率 (%) YOY Growth(%)				
總出口 Total exports	18.7	-13.9	-3.7	-13.2
進口 Imports	17.2	-13.2	-0.3	-11.0
三. 消費物價 Consumer Price				
綜合消費物價升幅 (%) Change in Composite CPI(%)	1.6	1.9	1.8	1.9
四. 樓宇買賣 Sale & Purchase of Building Units				
合約宗數 (宗) No. of agreements	96,133	59,619	4,660	43,908
年升幅 (%) Change(%)	31.1	-38.0	-11.0	2.0
五. 勞動就業 Employment			2023/05-2023/07	2023/06-2023/08
失業人數 (萬人) Unemployed(ten thousands)	20.3	16.3	11.2	11.2
失業率 (%) Unemployment rate(%)	5.2	4.3	2.9	2.9
就業不足率 (%) Underemployment rate(%)	2.6	2.3	1.1	1.0
六. 零售市場 Retail Market			2023/08	2023/01-08
零售額升幅 (%) Change in value of total sales(%)	8.1	-0.9	13.7	19.3
零售量升幅 (%) Change in volume of total sales(%)	6.5	-3.4	11.0	17.3
七. 訪港遊客 Visitors				
總人數 (萬人次) arrivals (ten thousands)	9.1	60.5	407.8	2,055.0
年升幅 (%) Change(%)	-97.4	561.5	6,740.7	11,089.1
八. 金融市場 Financial Market			2023/07	2023/08
港幣匯價 (US\$100=HK\$)				
H.K. Dollar Exchange Rate (US\$100 = HK\$)	779.8	780.8	780.2	784.7
貨幣供應量升幅 (%) change in Money Supply(%)				
M1	8.0	-20.7	-19.5	-18.5
M2	4.3	1.6	0.3	1.4
M3	4.3	1.6	0.3	1.4
存款升幅 (%) Change in deposits(%)				
總存款 Total deposits	4.6	1.7	1.2	0.6
港元存款 In HK\$	1.4	0.7	-0.2	0.4
外幣存款 In foreign currency	7.9	2.6	2.7	0.8
放款升幅 (%) in loans & advances(%)				
總放款 Total loans & advances	3.8	-3.0	-1.0	-0.3
當地放款 use in HK	4.7	-0.2	-1.1	-0.2
海外放款 use outside HK	1.7	-10.0	-0.6	-0.5
最優惠貸款利率 (%) Best lending rate (%)	5.0000	5.6250	5.8750	5.8750
恒生指數 Hang Seng index	23,398	19,781	20,079	18,382