

For discussion
on 17 March 2020

**Legislative Council
Panel on Commerce and Industry**

**Latest Development of the Hong Kong Science Park
and Industrial Estates**

Purpose

This paper briefs Members on the latest development of the Hong Kong Science Park (“Science Park”) and the Industrial Estates (“IEs”).

Background

2. Established in 2001, the Hong Kong Science and Technology Parks Corporation (“HKSTPC”) is a statutory body wholly-owned by the Government. It provides one-stop infrastructural facilities and support services to the innovation and technology (“I&T”) sector. HKSTPC manages and operates the Science Park, three IEs, and the InnoCentre at Kowloon Tong.

3. The Science Park is Hong Kong’s flagship technology infrastructure. It plays an important role in encouraging R&D, supporting the development of local technology enterprises and fostering a vibrant I&T ecosystem. Together with the two new buildings completed in April 2019 under Stage 1 of the Science Park Expansion Programme (“SPX1”), the Science Park currently has 23 buildings with a gross floor area (“GFA”) of 400 000 square metres (“sq. m.”). The Science Park focuses on the development of five technology clusters, namely biomedical technology, electronics, green technology, information and communications technology, and material and precision engineering. As at end-January 2020, the occupancy rate of Phases 1 to 3 of the Science Park was about 84%¹. Currently, there are around 800 local, Mainland and overseas research and development (“R&D”) companies operating in the Science Park with a working population of around 12 200.

¹ Since some buildings/storeys of the Science Park will undergo renovation/alteration works or are reserved for the *InnoHK* Research Clusters, around 41 000 sq. m. of leasable floor area is unavailable for lease. Excluding such area which is unavailable for lease, the overall occupancy rate of the Science Park was around 88%.

4. The three IEs at Tai Po, Yuen Long and Tseung Kwan O, which occupy a total of 217 hectares (“ha”) of land, provide land and facilities for the manufacturing industries. To optimise the use of land in the IEs, the Government and HKSTPC revised the IE policy in 2015, under which specialised, highly efficient multi-storey industrial buildings would be developed to attract advanced manufacturing industries suitable for Hong Kong to set up production lines and foster smart production locally. The current occupancy rate of the three IEs is around 91%.

5. HKSTPC has been nurturing start-ups and facilitating the growth of technology enterprises by providing infrastructural facilities and a range of professional and financial support, as well as organising various programmes and events, so as to accelerate technology application and promote I&T development in Hong Kong. The ensuing paragraphs highlight the latest development and work of the Science Park and IEs.

Latest Development of the Science Park and IEs

Infrastructure

6. HKSTPC is committed to providing the I&T sector with more laboratories and research work spaces. For the two new buildings completed and commissioned under SPX1, apart from being leased to I&T enterprises, some floors have been reserved for use by the two *InnoHK* Research Clusters, i.e. the “*Health@InnoHK*” focusing on healthcare technologies and the “*AIR@InnoHK*” focusing on artificial intelligence (“AI”) and robotics technologies, the Incubation Centre and the Robotics Catalysing Centre (“RCC”), etc.

7. In addition, HKSTPC is constructing the InnoCell adjacent to the Science Park. Upon completion, the InnoCell will provide around 500 spaces with flexible design and such ancillary facilities as shared work spaces for leasing at an affordable rental rate to principals of the tenants and incubatees in the Science Park as well as their overseas or Mainland employees and visiting researchers. With the adoption of the new modular integrated construction technology for the InnoCell, the completion of the entire project is expected to be advanced to the end of this year. Before the InnoCell is available for lease, HKSTPC has launched the Accommodation Support Scheme to provide accommodation subsidy of up to \$10,000 per month to eligible overseas or Mainland employees of the tenants/incubatees in the Science Park for a duration of six to 12 months.

8. In order to promote “re-industrialisation”, HKSTPC is developing two pilot projects in the Tseung Kwan O IE, namely the Data Technology Hub (“DT Hub”) and the Advanced Manufacturing Centre, for completion in the first half of this year and 2022 respectively with GFA of 27 015 sq. m. and 108 588 sq. m. HKSTPC has started inviting proposals for leasing of these two buildings.

9. In light of the industry’s demand for the development of microelectronics manufacturing facilities, HKSTPC plans to convert an existing factory in the Yuen Long IE into the Microelectronics Centre. With a GFA of about 36 180 sq. m, the Microelectronics Centre will be equipped with dedicated facilities such as clean rooms, dangerous goods storage and waste treatment, etc., as well as other shared ancillary facilities such as shared laboratories for product quality and reliability testing analysis, offices, conference rooms, shared work spaces, etc. The estimated cost of this conversion project is around \$2 billion. We consulted the Panel on 21 May 2019, and are now seeking approval from the Finance Committee (“FC”) for the relevant funding.

10. In order to further reinforce Hong Kong’s capabilities in technological R&D, the Government announced in the 2018-19 Budget that \$3 billion would be allocated to HKSTPC for developing research-related facilities. The funding was subsequently approved by the FC in July 2018. Good progress has been made. For example, HKSTPC has expanded the existing RCC from about 40 sq. m. to over 2 000 sq. m. to provide prototyping-related services for the tenants. The expanded RCC has commenced operation in January this year.

Providing Support for Technology Enterprises and Start-ups

11. The Government announced in the 2018-19 Budget that \$7 billion would be allocated to HKSTPC to enhance technical and funding support for the tenants and start-ups in the Science Park through different schemes. The funding was subsequently approved by the FC in July 2018. HKSTPC is actively implementing various initiatives with progress as follows -

Nurturing Start-ups

12. Through three incubation programmes, namely Incu-App, Incu-Tech and Incu-Bio, HKSTPC provides support on various fronts for start-ups in the Science Park that focus on web and smartphone-based apps, technology, and biotechnology. The incubation period ranges from two to four years. As at end-January 2020, 684 technology companies had graduated from the incubation programmes. The programmes have currently enrolled 309 incubatees, creating around 1 330 employment opportunities.

13. HKSTPC expanded its three existing incubation programmes in October 2018. Under these three programmes, the funding ceilings for incubatees have been increased from \$60,000, \$180,000 and \$240,000 to \$860,000, \$1.29 million and \$4 million respectively. The scope of funding includes rental subsidy, grant, and targeted funding for technology and business development. In addition, in view of the relatively complex regulatory procedures involved in biotechnology researches, Incu-Bio also offers a specific grant of up to \$2 million for incubatees engaging in biotechnology to conduct regulatory activities required for certification or investigational new drug application, etc. Since the expansion of the Incubation Programmes, a total of 364 incubatees have benefitted from the new financial assistance and support services.

14. Besides, HKSTPC launched the Science and Technology Entrepreneur Programme in January 2019 to provide pre-incubation support for entrepreneurial technology talent, including \$100,000 seed funding to help them apply their innovative ideas and start their own businesses, etc. As at end-January 2020, a total of 70 applications were approved for joining the Programme.

15. Local universities have strong and internationally recognised R&D capabilities. In recent years, many scientific research teams of universities have started businesses and devoted efforts in applied researches. In order to assist these start-ups established by university teams and entrepreneurs, HKSTPC proactively enhances its collaboration with local universities in implementing incubation programmes. Leveraging HKSTPC's start-up incubation experience and investment/business networks, the programmes help the start-ups and entrepreneurs establish linkage with the industry and provide incubation services with a view to promoting technology transfer and commercialisation of R&D results. In this respect, the HKSTPC Western District Hub jointly set up by HKSTPC and the University of Hong Kong has commenced operation this February. HKSTPC is also discussing with other local universities similar collaboration.

Promoting Venture Capital

16. HKSTPC established a Corporate Venture Fund ("CVF") in 2015 to co-invest, on a matching basis, with private funds in its tenants/incubatees. The CVF's first \$50 million has been fully committed to nine enterprises engaging in the areas of biotechnology, AI, robotics and information technology, attracting over \$683million from 22 co-investors. In early 2019, HKSTPC injected \$200 million to expand the CVF, with a view to supporting more technology enterprises. Since its expansion, the CVF has completed investments in

five technology enterprises with a total investment of about \$28.5 million, attracting around \$581.7 million from the co-investors.

17. Besides, through its investment matching network, HKSTPC collaborates with the industry to enable technology companies in the Science Park to connect with investors from around the world, thereby accessing more investment channels and funding sources. In 2018-19 and the first nine months of 2019-20, the technology enterprises in the Science Park raised a total funding of some \$21.3 billion.

Providing Support for Technology Enterprises

18. HKSTPC provides financial support for its tenants, with a view to attracting local, overseas and Mainland technology enterprises with development potential to set up operation or expand research activities in the Science Park or IEs. HKSTPC will, having regard to the needs of individual enterprises and the discussions with them, determine the most appropriate means of support. In this regard, HKSTPC launched the ELITE pilot programme in the second half of 2019 to finance, on a matching basis, technology enterprises with growth potential and proactive R&D investment in Hong Kong which are admitted/to be admitted to the Science Park. In addition, HKSTPC has provided existing and to-be-admitted tenants of the Science Park with a rent-free concession for up to three months, which is capped at 10 000 sq. ft. of rental space. A total of around 260 tenants have enjoyed the rent-free concession since its introduction.

19. To support the industry and enterprises amidst the tough economic environment at present, HKSTPC has provided its tenants and start-ups with a 50% rental concession for six months starting from October 2019, benefitting office or laboratory tenants, incubatees, co-working space users, partner enterprises, retail as well as food and beverage operators, and professional services companies in the Science Park, InnoCentre and IEs. The rental concession amount is capped at 10 000 sq. ft. of rental space. It is estimated that the total rent forgone is around \$116 million.

20. Besides, the FC approved on 21 February 2020 for the Government to set up the Anti-epidemic Fund to provide assistance to enterprises and members of the public affected by the present coronavirus epidemic. One of the initiatives under the fund is to provide full rental waiver to tenants of the HKSTPC for six months so as to alleviate the operational burden of the industry. The rental waiver amount is similarly capped at 10 000 sq. ft. of rental space. The initiative will take effect from 1 April 2020 to 30 September 2020 upon the end of the aforementioned 50% rental concession. The estimated rent involved under the rental waiver is \$280 million.

Facilitating Technology Adoption

21. HKSTPC has been committed to fostering technology adoption, assisting technology enterprises in commercialising their R&D results, and encouraging manufacturers in the IEs to adopt new technologies. Besides, to tie in with the smart city development, HKSTPC is progressively building up the Smart Campus to encourage technology enterprises to conduct trials of R&D results in the Science Park. Since the introduction of the Smart Campus programme, HKSTPC has driven over 20 technology adoption projects under four themes, namely smart mobility, smart environment, smart living and smart people. Examples include an unmanned store which adopts technology from multiple Science Park tenants and applies technologies such as radio-frequency identification and finger vein payment; a smart bus stop which provides information such as real-time queue status, number of vehicles and expected arrival time; and Hong Kong's first ice-cream serving robot, etc. In addition, HKSTPC provides venues for local telecommunications providers to test 5G communications application within the 26 gigahertz ("GHz") and 28GHz frequency bands.

Fostering Closer Ties with the Industry

22. HKSTPC has worked with the industry in a proactive manner to jointly promote I&T collaboration and development. In the past year, HKSTPC entered into seven co-operation agreements with a number of leading or renowned local, overseas and Mainland enterprises (including banks, financial institutions and technology enterprises, etc.) to commence collaboration such as new technology and talent training, business and investment matching, joint incubation programmes, setting up of technology and programme testing platforms, etc., in areas including financial technology and smart city.

23. On the promotion of popular science, HKSTPC co-operates with different organisations and educational bodies to organise various large-scale popular science competitions and events, with a view to deepening students' interest in science and technology. In 2019-20, HKSTPC organised/co-organised 11 I&T competitions, attracting the participation of more than 1 200 young people and students.

Planning for the Future

24. With the progressive development of the local I&T ecosystem, there is a keen demand for R&D facilities and relevant supporting services by I&T enterprises and institutions. HKSTPC has commissioned a consultant to conduct a master planning study on Science Park's expansion, and will kick-start

its Phase II expansion programme to explore on-site and off-site development options. The 2020-21 Budget has also announced to earmark \$3 billion for the expansion programme with a view to sustaining the momentum in building Hong Kong's I&T ecosystem. HKSTPC has preliminarily proposed to build in the Science Park two laboratory annex buildings and specialised laboratories at podiums, involving a GFA of about 28 000 sq. m.

25. The Government has reserved a site of about 56 ha near the Liantang/Heung Yuen Wai Boundary Control Point for the development of IEs. The preliminary planning study results indicate that the development is technically feasible. HKSTPC is carrying out a study on the development vision in order to formulate an appropriate land use proposal and will commence the engineering and technical feasibility study in due course.

26. In 2012, HKSTPC commissioned a consultant to explore the feasibility to expand the IEs at the surroundings of the Yuen Long IE. The consultancy report, which was completed in late 2013, proposed to expand the IEs on a site of about 15 ha to the southwest of the Yuen Long IE. HKSTPC commenced a study on the engineering and technical feasibility in 2019 to explore the mode of development of the site so as to cater for the admission of high technology industries.

Advice Sought

27. Members are invited to note and provide views on the latest development of the Science Park and the IEs.

Innovation and Technology Bureau
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