

立法會
Legislative Council

LC Paper No. CB(1)1238/17-18(05)

Ref. : CB1/PL/CI

Panel on Commerce and Industry

Meeting on 17 July 2018

**Updated background brief on the development of Hong Kong Science Park
and Industrial Estates, and the policy on re-industrialization**

Purpose

This paper provides updated background information and a summary of views and concerns expressed by Members on the following subjects: (a) development of Hong Kong Science Park ("HKSP") (paragraphs 3 to 18) and Industrial Estates ("IEs") (paragraphs 19 to 36); and (b) policy on re-industrialization (paragraphs 37 to 52).

Background

2. In 2014, the Administration, in conjunction with Hong Kong Science and Technology Parks Corporation ("HKSTPC"),¹ conducted a review on the utilization and long-term development direction of HKSP and IEs² ("the Review"). The Review recommended, among other things, that HKSTPC should maximize the development potentials of the existing HKSP site by constructing new buildings; and use the land in the three IEs more efficiently to support science, innovation and technology ("I&T") based industries. In 2015, the Administration announced to implement the Review's recommendations, including strengthening the role of HKSTPC in developing the I&T ecosystem;

¹ Hong Kong Science and Technology Parks Corporation ("HKSTPC"), being a statutory body set up by the Government in 2001, is tasked with the objectives to establish or develop premises in support of technology-based companies and activities; to facilitate research and development and application of technologies; and to support the development, transfer and use of new or advanced technologies in Hong Kong. The Government, as the sole shareholder of HKSTPC, appoints a Board of Directors to oversee the work of HKSTPC. HKSTPC manages and operates the Hong Kong Science Park ("HKSP"), three Industrial Estates ("IEs") as well as the InnoCentre at Kowloon Tong.

² The three IEs are Tai Po IE, Yuen Long IE and Tseung Kwan O IE with area of 75 hectares, 67 hectares and 75 hectares respectively.

suitably raising the development density of HKSP to optimize land use in the park; and proceeding with the formulation of a new IE policy to enhance the value chain of the I&T industries in Hong Kong.

Hong Kong Science Park

3. HKSP is Hong Kong's flagship technology infrastructure which provides facilities, services and a dynamic environment that enable companies to nurture ideas, innovate and develop. HKSP has been offering its facilities and support services through a clustering strategy since its establishment. The five technology clusters are biomedical technology, electronics, green technology, information and communications technology, and material and precision engineering. Consisting of three phases, HKSP occupies a 22-hectare site with a gross floor area ("GFA") of about 330 000 sq m with an occupancy rate of approximately 87% as at end April 2018.³ As at end February 2018, HKSP houses a total of 659 research and development ("R&D") companies (73% local, 11% Mainland and Taiwan and 16% overseas companies) employing over 13 800 persons (among which about 9 800 persons are involved in R&D related activities).

Stage 1 of the Science Park Expansion Programme

4. To meet the strong demand for space for R&D activities, HKSTPC commenced in August 2016 the construction of two building blocks in Phase 3 of HKSP, which is known as the Stage 1 of the Science Park Expansion Programme ("SPX1").⁴ Upon completion of SPX1 which is expected for 2020, the total GFA of HKSP and direct employment will increase to approximately 400 000 sq m and 17 200 persons respectively.

InnoCell

5. The Chief Executive ("CE") announced in the 2017 Policy Address the Government's support for HKSTPC to construct an InnoCell adjacent to HKSP.⁵ According to the Administration, the InnoCell will provide about 500 residential

³ Phase 1 of HKSP has a gross floor area ("GFA") of 120 000 sq m; Phases 2 and 3 each has a GFA of 105 000 sq m.

⁴ The proposed Science Park Expansion Programme is to be conducted in three stages. Stages 2 and 3 are under planning. Estimated development cost for the Stage 1 is \$4,428 million, which includes the government equity of \$2,878 million (65%), commercial loan guaranteed by Government of \$1,107 million (25%) and internal resources of HKSTPC of \$443 million (10%). The Finance Committee ("FC") approved the financing arrangement on 28 May 2016.

⁵ The estimated development cost for developing an InnoCell is \$800 million, which includes the government equity of \$560 million (70%) and commercial loan guaranteed by Government of \$240 million (30%). FC approved the financing arrangement on 2 February 2018.

units with flexible design and ancillary facilities such as shared working spaces for leasing to principals of tenants/incubatees in HKSP and their Mainland/overseas employees as well as Mainland/overseas visiting scientists/researchers at affordable rents.⁶ InnoCell is one of the pilot projects for Modular Integrated Construction⁷ under planning and design, and is expected to be completed by 2021. In the interim, HKSTPC will explore providing other accommodation support.

Establishment of research clusters

6. The Financial Secretary ("FS") announced in his 2018-2019 Budget to earmark \$10 billion to establish two research clusters in HKSP on healthcare technologies and on artificial intelligence ("AI")/robotics technologies. According to the Administration, the two proposed research clusters aim at attracting world class scientific research institutions and technology enterprises to Hong Kong for conducting more midstream and downstream R&D projects in collaboration with local research institutions. The proposed \$10 billion in funding will support the capital/operation costs⁸ of the research centres/laboratories operated by non-profit-making scientific research institutions that will establish their presence in these two clusters. The Administration has envisaged that such funding should be sufficient to sustain the operation of the two research clusters for 10 to 15 years. In its initial planning, the Administration will admit around four to five research centres/laboratories in each cluster in the first year,⁹ gradually increasing to around 10 in the following few years.

Additional resources for Hong Kong Science Park

7. To reinforce the role of HKSP as Hong Kong's flagship technology infrastructure, FS proposed in the 2018-2019 Budget to provide a funding of

⁶ Applicants for the InnoCell need to comply with a set of pre-determined admission criteria with a scoring system that covers both "Merit" and "Need" considerations.

⁷ Promotion and leading the adoption of Modular Integrated Construction in the construction industry is one of the initiatives in the 2017 Policy Agenda. Modular Integrated Construction refers to a construction whereby free-standing integrated modules (completed with finishes, fixtures and fittings) are manufactured in a prefabrication factory and then transported to site for installation in a building.

⁸ Research projects undertaken by research centres/laboratories within the clusters will be funded by the Innovation and Technology Fund.

⁹ HKSTPC signed a Memorandum of Understanding in June 2018 with The University of Hong Kong and Institut Pasteur (a non-profit private foundation in Paris with a mission to contribute to the prevention and treatment of diseases through research, education, and public health activities) to set up a joint biomedical research centre. According to HKSTPC, the parties aimed to establish an interdisciplinary research centre for immunology, infection and personalized medicine within the research cluster on healthcare technologies.

\$10 billion to HKSTPC. Of the proposed \$10 billion, the Administration suggested that around \$3 billion be used to make available a range of facilities to foster research work in healthcare and AI/robotics technologies, including the provision of laboratory and work spaces for research (e.g. converting a building in HKSP to make available of laboratory space for healthcare research, as well as identifying laboratory space with higher loading for setting up robotics laboratories). The Administration will also provide "one-stop" core research facilities for the research work in healthcare and AI/robotics technologies in HKSP, including Pilot Batch Production Facilities, Bio Bank and Medical Informatics, Robo Standard Testing Laboratory, etc.

8. The remaining proposed \$7 billion will be used for HKSTPC to enhance support for its tenants and incubatees (e.g. expanding HKSTPC's Corporate Venture Fund and Incubation Programme as well as providing accommodation support), and to set up a Smart Campus in HKSP for trying out innovative products and solutions that come under four themes, namely, smart mobility, smart environment, smart living and smart people.

Previous discussions on Hong Kong Science Park and other relevant initiatives

9. The Administration briefed the Panel on Commerce and Industry ("the Panel") on 15 December 2015 on the plan to expand the existing HKSP and sought approval of the Finance Committee ("FC") on 28 May 2016 for the proposed financing arrangements for SPX1. The Panel was briefed on the work of HKSTPC as well as the latest development of HKSP on 21 March 2017. The Panel was consulted on the proposed setting up of an InnoCell on 18 July and 21 November 2017 respectively. The Administration also sought the Panel's support for the relevant funding proposals for the measures announced in the 2018-2019 Budget on 15 May 2018.

The work of Hong Kong Science and Technology Parks Corporation and Hong Kong Science Park

10. At the Panel meeting on 21 March 2017, some members suggested that the Administration should consider making reference to the Singaporean Government's practice of providing certification for local technology companies so as to facilitate them, which were mostly start-ups with limited customer references, to gain access to the public sector market. Other members considered that the Administration should formulate a more comprehensive policy to foster the development of I&T start-ups, and enquired whether the Administration could get hold of the needs of the entire start-up sector, including those start-ups operating outside HKSP and Cyberport and the focus areas of their R&D work.

11. The Administration advised that Invest Hong Kong conducted annual surveys on start-ups in Hong Kong covering those operating in private

incubators and accelerators. The survey conducted in 2016 revealed that there were about 2 000 I&T start-ups in Hong Kong. HKSP would join hands with private incubators and accelerators in hosting events to promote I&T development and R&D outcomes of Hong Kong.

12. Noting that the Government of the Shenzhen Municipality had promulgated the "Measures on Improving the Talents Housing System" in order to make Shenzhen a more attractive place for talents, some members enquired if the Administration would make reference to the Shenzhen Government's practice by formulating an overall policy to address the housing needs of I&T talents. The Administration advised that Shenzhen had traditionally maintained a policy on providing housing for immigrants as it had a high proportion of migrant population. In comparison, Hong Kong's housing policy was not so much focused on addressing the housing needs of overseas/Mainland talents.

Setting up of an InnoCell

13. At the Panel meeting on 18 July 2017, some members asked about the proportion of overseas and Mainland employees who would benefit from the InnoCell which was expected to provide 500 cubicles only. The Administration said that due to the size of the site and the height restriction, 500 would be the maximum number of cubicles to be provided at the InnoCell. Although this might not be adequate to meet all the demand for accommodation of HKSP tenants, it would allow HKSTPC some flexibility in addressing the short-to-medium accommodation needs of technology talents.

14. At the Panel meeting on 21 November 2017, the Panel passed a motion urging the Government, when setting the rent for the InnoCell, to take into account the income of relevant talent in the market, and the financial capability of young entrepreneurs and their employees, so as to avoid losing the attractiveness of the InnoCell and retain talent in I&T. The Administration advised that miscellaneous charges, including water and electricity charges as well as government rates, would be covered by the monthly rental of the InnoCell.

15. In response to the motion, the Administration advised, via a follow-up paper, that the policy objective was to set the monthly rental of the InnoCell at about 60% of the market rent of unfurnished property of similar quality in the nearby area which was considered to be affordable by the applicants. The InnoCell, apart from being furnished, would also provide other common facilities as well as shared working space to facilitate tenants' interaction and collaboration, thereby creating an atmosphere favourable to the development of I&T.

Stage 1 of the Science Park Expansion Programme

16. At the Panel meeting on 15 December 2015, some members enquired

whether the Administration had any fallback financing arrangements in the case of cost overrunning of SPX1. The Administration advised that HKSTPC was expected to resort to its own means to identify project cost savings and seek extra funding means in such case.

17. At the FC meeting on 28 May 2016, members enquired how the Administration would monitor SPX1 to ensure that the project would not experience cost overruns and delays. The Administration advised that while the Government's representative in the Board of Directors of HKSTPC would oversee the project, the Projects and Facilities Committee established under HKSTPC was tasked with the monitoring of the expansion programme. After the meeting, the Administration submitted a follow-up paper (LC Paper No. FC243/15-16(01)) to explain how it would effectively monitor the project.

18. At the same FC meeting, some members enquired why the Administration had to provide additional guarantee for the borrowing made by HKSTPC while direct funding had been provided at the same time, and why the option of capital injection in full by the Administration was not chosen instead. The Administration advised that HKSTPC considered it difficult to raise funds in full for SPX1 by way of commercial borrowing after taking into account its financial situation. Furthermore, in preparing the financial arrangements, the Administration had considered various options such as direct borrowing by HKSTPC, provision of loan guarantee by the Government to HKSTPC, or capital injection by the Administration.

Industrial Estates

New admission criteria and leasing arrangement

19. Pursuant to the recommendation of the Review that HKSTPC should use the land in the three IEs more efficiently to support science and I&T based industries, the Government revised the IE policy to accommodate I&T industries, encourage smart production, and attract high value-added technology industries.¹⁰ HKSTPC will focus its resources on selected industries that can bring the most benefits to Hong Kong and complement the development of its three over-arching technology platforms of Smart City, Healthy Aging and Robotics. According to the Administration, the new admission criteria for IEs will be flexible enough to cater for the fast-changing market trends in I&T sector and capable of accommodating the entire value chain covering R&D, prototyping, product design, production, testing and distribution, administration to marketing and branding, so that a "through-train" service can be provided.

20. Under the revised IE policy, instead of building their own factories, most tenants would be leasing specialized multi-storey industrial buildings built by

¹⁰ Examples include pharmaceutical, healthcare, biomedical and advanced machinery.

HKSTPC.¹¹ The first lease would normally last up to six years and, subject to no breach of lease conditions, there would be an option to renew for three years at a time. To tighten control and monitoring against under-utilization and abuse of facilities, HKSTPC would carry out on-site inspections by prior appointment/notice, as well as requiring tenants to submit business updates every three years under the lease terms. The rental charges would be competitively priced, having regard to prevailing market conditions and other relevant factors, instead of linking to the historical land development costs.

Two pilot projects in Tseung Kwan O Industrial Estate

21. To promote smart production, attract high value-added technology industries and manufacturing processes, HKSTPC is developing a Data Technology Hub ("DT Hub") with GFA of about 27 015 sq m and an Advanced Manufacturing Centre ("AMC") with GFA of about 108 588 sq m in Tseung Kwan O IE ("TKOIE").¹²

22. DT Hub aims to accommodate uses ancillary or complementary to the data transfer operations and global telecommunications at the data centres and switching centres at TKOIE¹³ and Hong Kong. Special features will be designed to cater for data centre support, multi-media processing, submarine cable landing related needs as well as R&D activities in these fields. Besides, general supporting facilities will also be provided to more than 10 000 employees at TKOIE, including a business centre, showcase arena and offices, etc. The Administration expected to complete the project in 2020.

23. AMC will focus on five major areas, namely, (a) medical, healthcare, and hospital devices and apparatus; (b) biomedical engineering devices, implants and apparatus; (c) intelligent electronic and optical apparatus; (d) intelligent sensors and advanced assembly of semiconductors; and (e) robot electronics and intelligent power devices that dovetail with smart city development. The Administration expected to complete the project in 2022.

Efficient use of existing Industrial Estate sites

24. According to the Administration, over 90% of the land in the three IEs

¹¹ Except under exceptional circumstances, HKSTPC will not grant sites to single users to build their own factories.

¹² The total estimated development cost of \$8,248 million (including \$6,633 million for Advanced Manufacturing Centre and \$1,615 million for Data Technology Hub) includes the government equity of \$6,598 million (80%) and government loan of \$1,650 million (20%). FC approved the financing arrangement on 28 May 2016.

¹³ According to the Office of the Government Chief Information Officer in April 2018, Tseung Kwan O IE, which houses a total of 11 high-tier data centres, is the largest data centre cluster in Asia Pacific.

have been utilized.¹⁴ Yet, the three IEs have only been developed to about 53% of the overall maximum plot ratio of 2.5, as at March 2017. HKSTPC has been negotiating with the factory operators of the IE sites, encouraging them to surrender unused plot ratio or premises which have not been fully utilized. Up to July 2017, HKSTPC has successfully repossessed nine sites (with existing buildings on five of them) with an area of about nine hectares through enforcement of the relevant lease terms and provision of other incentives. HKSTPC will identify suitable premises from the surrendered factories and refurbish them for leasing to the technology industry.

25. HKSTPC had completed refurbishing a four-storey factory (with GFA of about 7 800 sq m) in the Tai Po IE into the Precision Manufacturing Centre in March 2017 with a view to fostering smart production. As at end March 2018, HKSTPC had approved seven admission applications¹⁵ engaging in industries such as precision engineering and assembling, new material manufacturing, and advanced indoor hydroponic, etc. According to the Administration, the rent of upstairs units was similar to, or even slightly lower than, privately-run multi-storey factory buildings in the same district.

Planning for new industrial estates

26. CE pointed out in the 2016 Policy Address that there would be an anticipated increase in the demand for sites for scientific research and new industrial use. The Administration has preliminarily identified a site of about 56 hectares near the Liantang/Heung Yuen Wai Boundary Control Point for the development of a new IE. The preliminary planning study has demonstrated that such proposal is technically feasible. The consultant of the planning study will identify suitable target industries and conduct a demand study to ascertain the land use requirements on their operation and production facilities so as to formulate an appropriate land use proposal for the new IE.

27. Moreover, according to Stage 1 Preliminary Planning and Engineering Study completed by HKSTPC in February 2014, the development of another site of about 15 hectares at Wang Chau for the extension of the Yuen Long IE is considered technically feasible. HKSTPC has included this site in its medium-term development for new IEs and is preparing for the detailed planning and design in the next stage.

Previous discussions on the development of industrial estates

28. The Administration briefed the Panel on 17 May 2016 on its plan to develop AMC and DT Hub, and updated the Panel on IEs' latest development on

¹⁴ A total of 159 enterprises were operating in the three IEs, as at end April 2018.

¹⁵ Among the seven approved applications, four enterprises have already moved in, occupying 75% of GFA of the building, and the other three eventually did not set up operation due to various commercial considerations.

21 March 2017.

29. Given the rising demand for data centres worldwide, some members enquired at the Panel meeting on 17 May 2016 whether the Administration had assessed if the existing total floor area available for the development of data centres would be sufficient in the next 5 to 10 years. The Administration advised that GFA of local data centres had exceeded 460 000 sq m. It had reserved three pieces of land in Tseung Kwan O Area 85 for the development of high-tier data centres. It was expected that an additional floor area of around 160 000 sq m could be provided in the coming few years to meet market demand.

30. Referring to HKSTPC's plan to identify suitable premises from surrendered factories for leasing to the technology industry after the refurbishment, some members opined at the Panel meeting on 21 March 2017 that a few target industries should be selected for focused development pursuant to the re-industrialization policy. Members asked whether HKSTPC would encourage industries relevant to a particular industrial chain to apply for admission to IEs and accommodate relevant upstream and downstream enterprises under one roof. The Administration advised that the specialized multi-storey industrial buildings to be built in IEs would attract the admission of enterprises in both the upstream and downstream of an industrial chain through clustering effect. For instance, the first project at Tai Po IE would target at high-end electronic production.

Data Technology Hub and Advanced Manufacturing Centre

31. At the Panel meeting on 21 March 2017, some members enquired whether emphasis should be put on software, data analysis capability and the related infrastructures pursuant to the Administration's strategy for promoting re-industrialization. They also urged the Administration to have effective communication with relevant downstream stakeholders, such as operators of data centres and software companies, to enhance their understanding on the functions of DT Hub and seek their views on the design of DT Hub to ensure that the industry's needs were met.

32. The Administration advised that apart from high-value added production processes, the development of high-value added software, big data and AI were also relevant to the process of Hong Kong's re-industrialization. HKSTPC had consulted stakeholders' views during the design stage of DT Hub. DT Hub would accommodate uses ancillary or complementary to the data transfer operations and global communications at data centres and switching centres in TKOIE and Hong Kong. Special features would be designed to cater for data centre support, multi-media processing, submarine cable landing related needs and R&D activities in these fields.

33. In respect of the implementation progress of AMC, the Administration advised that an industrial planning consultant was conducting a detailed study

on the latest technological and operational requirements for the targeted industries so as to set out the preliminary design standards, including ceiling height, floor loading, mechanical vibration standard, electrical and mechanical facilities, Internet security, communal facilities (e.g. automated storage and 3D printing) and clean room environment, etc., in order to cater for the needs of advanced automated production.

34. At the same Panel meeting, some members asked about the number of employment opportunities that would be created upon the completion of AMC and DT Hub and whether non-skilled workers would benefit from the projects. They considered that given the Government's substantial investment in I&T, priority should be accorded to local residents for the jobs created in large-scale I&T infrastructural projects. The Administration advised that AMC and DT Hub would provide a total of about 3 400 employment opportunities upon completion. Most of the jobs to be created under these projects were expected to be taken up by local residents in the light of actual operating experience of HKSP and the five R&D Centres where locals had accounted for about 70% to 80% of the working population.

Council question

35. At the Council meeting on 16 May 2018, Hon CHUNG Kwok-pan asked a written question about the Administration's support for Hong Kong enterprises to operate in IEs, in particular the measures to facilitate enterprises' relocation of their production lines back to Hong Kong and their admission to IEs, and to support and encourage the use of "Hong Kong-made" high-quality brands for the development of the relevant industries in Hong Kong.

36. The Administration advised that it had been working closely with HKSTPC to provide related infrastructure and facilities to encourage enterprises to relocate their production lines back to Hong Kong and re-build the "Made in Hong Kong" brand. The Administration provided funding support through the Innovation and Technology Fund for projects that contributed to technology upgrading in manufacturing and services industries and promotion of innovation. It would also launch the Re-industrialization and Technology Training Programme in the third quarter of 2018 to subsidize local enterprises for training staff in advanced technologies. Moreover, the Hong Kong Productivity Council ("HKPC") had been dedicating efforts to promoting re-industrialization to facilitate enterprises in moving towards high value-added production and gradually upgrading towards Industry 4.0.

Re-industrialization policy

37. In the 2016 Policy Address, CE first introduced the initiative of re-industrialization and announced that it was a potential new area of economic growth for Hong Kong. To grasp the opportunities brought about by the fast development in information and communications technology and Internet of

Things ("IoT") technologies, the Government hoped to attract high value-added industries that were suitable to be based in Hong Kong so that traditional labour-intensive industry could migrate to smart production. Given Hong Kong's traditional manufacturing knowhow and quality standards, Hong Kong had potential in moving towards high-end, highly-customized and high-growth technology areas such as robotics, medical and health-related industries, environmental solutions, as well as the new generation of consumer products embedded with IoT technologies.

38. To promote re-industrialization, CE announced that apart from implementing the revised IE Policy (more details in paragraphs 19 and 20), HKPC would also facilitate industrial upgrading and transformation, enabling enterprises to embrace re-industrialization and move towards high value-added production.

39. According to the Administration, one of the most important elements of re-industrialization is to assist existing manufacturing industries in adopting smart and clean production, increasing their efficiency, reducing reliance on labour and minimising impact on the environment. HKPC has been assisting the manufacturing sector to move towards high value-added production and gradually into Industry 4.0.

40. In 2016, HKPC was officially accredited as an Industry 4.0 Expert by the Fraunhofer Institute for Production Technology, Germany ("Fraunhofer IPT"), and proceeded to organize a series of value-added activities for enhancing the industry's understanding of Industry 4.0. These included organizing international conferences and seminars on industrial innovation strategy, and establishing the Industry 4.0 Upgrade and Recognition Programme with Fraunhofer IPT to help the industry gradually upgrade its operation towards Industry 4.0. HKPC inaugurated the Industry 4.0 technology demonstration centre in 2017 to showcase and promote information exchange on the concept and smart features of Industry 4.0.

41. The Administration had also commissioned HKPC to set up an Inno Space to provide workspace and technical support to assist users in developing their innovative ideas into industrial design, which may subsequently be translated into products through prototyping. Inno Space commenced operation in October 2017. The Massachusetts Institute of Technology ("MIT") Hong Kong Innovation Node was also opened at HKPC Building in September 2017 to provide various technology and entrepreneurial education and training to MIT and Hong Kong undergraduates, academics and researchers. HKPC leverages MIT's expertise in the areas of smart manufacturing, makerspace and technology entrepreneurship, which will bring value to the local manufacturing industry and create more business opportunities.

42. In order to satisfy long-term demands for R&D infrastructures, the Administration has been developing the Hong Kong-Shenzhen Innovation and Technology Park ("the Park") at the Lok Ma Chau Loop ("the Loop") to set up a

key base for cooperation in scientific research, which would complement the industrial strength of Shenzhen, thereby promoting commercialization and industrialization of R&D outcomes. The 2018-2019 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 Park. With the support of the Panel, 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.

Previous discussions on re-industrialization policy

43. At the Panel meeting on 21 March 2017, the Administration updated the Panel on Government's policy and related measures to promote re-industrialization. Members' major views and concerns are set out in the ensuing paragraphs.

44. In order to drive the success of re-industrialization, some members suggested that the Administration should encourage suppliers of manufacturing components, whose factories were currently located in the Pearl River Delta region, to relocate their production base to Hong Kong to enrich the industrial chain. The Administration advised that it would strive to attract the manufacturing of high-value added manufacturing components to Hong Kong to complement the production of high-value added products, thus building the necessary clusters to facilitate the progression of the local manufacturing industry towards Industry 4.0.

Development of overseas markets for local research and development outcomes

45. Some members considered that development of overseas markets for local R&D outcomes was crucial to the success of re-industrialization. These members urged the Administration to enhance publicity and promotion of locally developed technologies and technology products in the international arena. The Administration advised that HKSP and individual R&D centres had participated in international promotion events to publicize the new technologies developed by local R&D institutions. In respect of promotion of R&D outcomes which had been commercialized and rolled out as products in the market, the Trade and Industry Department, through the SME Export Marketing Fund, provided funding to support the export promotion work of small and medium enterprises to help them explore and develop overseas markets for their products. In addition, the enterprises concerned could take part in export promotion programmes of the Hong Kong Trade Development Council to promote their technology products to overseas buyers. The Administration added that it would consider the inclusion of "market promotion" as one of the key areas to support re-industrialization in Hong Kong.

46. Some members were of the view that the Administration should take the lead in adopting local technology products to support re-industrialization, and enquired how the Administration could enhance procurement of technology products from local technology companies on the condition of not violating the Government Procurement Agreement of the World Trade Organization ("WTO GPA"). The Administration said that measures to facilitate procurement of local information and communications technology products and professional services by government departments with no violation of WTO GPA had been enhanced. Details were set out in the Administration's follow up paper (LC Paper No. CB(1)1222/16-17(01)).

Nurturing of talents

47. Some members enquired whether the Administration would put in place any specific measures to support the grooming of talents for the I&T industry and, in particular, whether more resources would be allocated to local universities to enhance the training of R&D personnel. The Administration advised that it had taken a multi-pronged approach to further encourage the development of the I&T ecosystem in order to achieve re-industrialization. Apart from providing land and suitable infrastructural facilities, quality R&D capabilities and talents were necessary to support re-industrialization. Measures for nurturing trans-industry and trans-sector talents highly adaptable to changes to support the long-term development of the I&T industry would be considered.

48. On enhancing support for local universities, the Administration advised that the \$2 billion Midstream Research Programme for Universities ("MRP") had been launched in December 2016 to strengthen support for University Grants Committee-funded institutions in conducting theme-based midstream research in key technology areas. MRP would facilitate more collaborative efforts among local and overseas universities and research institutions, build up the R&D talent pool and foster an I&T culture and ecosystem.

Member's motion passed by the Council

49. At the Council meeting on 21 March 2018, the Council passed a motion on "Establishing a comprehensive re-industrialization policy regime". In response to the motion, the Administration stated in its progress report that it would 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 value-added industries.¹⁶

Council question

50. At the Council meeting on 13 June 2018, Hon WU Chi-wai asked an

¹⁶ See the motion passed and the Administration's progress report (<http://www.legco.gov.hk/yr17-18/english/counmtg/motion/cm20180321m-nwk-prpt-e.pdf>)

oral question on the measures to boost development of industries that enjoyed advantages in process of Hong Kong's re-industrialization. He enquired whether the Administration would allocate land in the Loop or other suitable locations for constructing a superb scientific research base that would bring together the scientific research strengths of various universities in Hong Kong, and for the construction of a business start-up institution to boost the development of industries enjoying advantages in the process of Hong Kong's re-industrialization.

51. The Administration advised that in accordance with the Memorandum of Understanding on Jointly Developing the Lok Ma Chau Loop by Hong Kong and Shenzhen, both sides had agreed to set up an integrated advanced training platform in the Park, with a focus on the provision of postgraduate programmes and professional training courses on new or advanced technology, aiming to nurture talents, and engender synergy and clustering effects with the facilities in the Park. With reference to the overall development plan of the Park, the Education Bureau would commence discussion and study on the details of establishing higher education facilities in the Park in due course.

52. As for the setting up of a superior scientific research base, the Administration advised that it had proposed to establish two research clusters in HKSP. The Administration would consider whether to expand the scale of the two clusters and whether to establish new clusters having regard to the experience of the implementation of the two research clusters and the global technology development, etc.

Latest position

53. The Administration will brief the Panel on 17 July 2018 on the latest development of HKSP and IEs, and the Administration's measures to support re-industrialization. The Panel will also receive deputations' views on the subject at the meeting.

Relevant papers

54. A list of relevant papers is in the **Appendix**.

List of relevant papers

Date of meeting	Meeting	Paper
15/12/2015	Panel on Commerce and Industry	<p>Administration's paper on "Further development of Hong Kong Science Park" (LC Paper No. CB(1)279/15-16(05))</p> <p>Background brief on the development of the Hong Kong Science Park prepared by the Legislative Council Secretariat (LC Paper No. CB(1)279/15-16(06))</p> <p>Minutes of meeting (LC Paper No. CB(1)548/15-16)</p>
17/5/2016	Panel on Commerce and Industry	<p>Administration's paper on "Implementation of pilot projects according to the Revised Industrial Estate Policy" (LC Paper No. CB(1)901/15-16(03))</p> <p>Background brief on the implementation of the revised Industrial Estate Programme prepared by the Legislative Council Secretariat (LC Paper No. CB(1)901/15-16(04))</p> <p>Administration's follow-up paper on "Implementation of pilot projects according to the Revised Industrial Estate Policy" (LC Paper No. CB(1)1024/15-16(01))</p> <p>Minutes of meeting (LC Paper No. CB(1)1186/15-16)</p>

Date of meeting	Meeting	Paper
28/5/2016	Finance Committee	<p>Administration's paper on "Stage 1 of the Science Park Expansion Programme" (FCR(2016-17)30)</p> <p>Administration's paper on "Developing an Advanced Manufacturing Centre and a Data Technology Hub under the Revised Industrial Estate Policy" (FCR(2016-17)31)</p> <p>Administration's follow-up paper on "the funding proposals relating to the Hong Kong Science and Technology Parks Corporation" (LC Paper No. FC243/15-16(01))</p> <p>Minutes of meeting (LC Paper No. FC312/15-16) (LC Paper No. FC313/15-16)</p>
21/3/2017	Panel on Commerce and Industry	<p>Administration's paper on "Policy on "re-industrialisation" and the latest development of the Industrial Estates and Hong Kong Science Park" (LC Paper No. CB(1)677/16-17(04))</p> <p>Background brief on policy on re-industrialisation and the development of the Industrial Estates and Hong Kong Science Park prepared by the Legislative Council Secretariat (LC Paper No. CB(1)677/16-17(05))</p> <p>Administration's follow-up paper on "Promotion of research and development outcomes of Hong Kong; sites reserved for innovation and technology development and the procurement of local information and communications technology products by the Government" (LC Paper No. CB(1)1222/16-17(01))</p> <p>Minutes of meeting (LC Paper No. CB(1)917/16-17)</p>

Date of meeting	Meeting	Paper
18/7/2017	Panel on Commerce and Industry	<p>Administration's paper on "Development of the InnoCell adjacent to Hong Kong Science Park" (LC Paper No. CB(1)1293/16-17(03))</p> <p>Background brief on the development of InnoCell prepared by the Legislative Council Secretariat (LC Paper No. CB(1)1293/16-17(04))</p> <p>Minutes of meeting (LC Paper No. CB(1)1454/16-17)</p>
21/11/2017	Panel on Commerce and Industry	<p>Administration's supplementary information to the paper on "Development of the InnoCell adjacent to Hong Kong Science Park" (LC Paper No. CB(1)212/17-18(03))</p> <p>Background brief on the development of InnoCell prepared by the Legislative Council Secretariat (LC Paper No. CB(1)212/17-18(04))</p> <p>Administration's follow-up papers on "Development of the InnoCell adjacent to Hong Kong Science Park" (LC Paper No. CB(1)438/17-18(01)) (LC Paper No. CB(1)477/17-18(01))</p> <p>Minutes of meeting (LC Paper No. CB(1)450/17-18)</p>
26/1/2018 & 2/2/2018	Finance Committee	<p>Administration's paper on "Development of the InnoCell" (FCR(2017-18)54)</p> <p>Administration's follow-up papers on "equity in the Hong Kong Science and Technology Parks Corporation for an InnoCell" (LC Paper No. FC274/17-18(01))</p>

Date of meeting	Meeting	Paper
15/5/2018	Panel on Commerce and Industry	<p>Administration's paper on "Proposals to Strengthen the Research and Technological Capabilities of Hong Kong" (LC Paper No. CB(1)921/17-18(05))</p> <p>Background brief on the Hong Kong Science and Technology Parks Corporation prepared by the Legislative Council Secretariat (LC Paper No. CB(1)921/17-18(06))</p>
16/5/2018	Council	<p>Question No. 8 on "Supporting Hong Kong enterprises to operate in industrial estates" raised by Hon CHUNG Kwok-pan (Hansard) (page 10207 – 10212)</p>
13/6/2018	Council	<p>Question No. 4 on "Boosting development of industries that enjoy advantages in process of Hong Kong's re-industrialization" raised by Hon WU Chi-wai (Government press release)</p>