Innovation & Technology

Overview

With opportunities brought by the National 13th Five-Year Plan and the Guangdong-Hong Kong-Macao Greater Bay Area development, Hong Kong can capitalise on its advantages in R&D capabilities, technology infrastructure, legal system and intellectual property to act as a strategic bridge for innovative companies looking to access the Mainland market.

The Government has committed over $100 billion to promote innovation and technology (I&T) development, including developing I&T infrastructure, promoting R&D, nurturing local talent and attracting international expertise, supporting technology enterprises and promoting re-industrialisation, etc.

New initiatives

➢ Key measures in the 2019-2020 Budget include:
- $5.5 billion earmarked for **Cyberport** to expand its campus for providing additional space for technology companies and start-ups.
- Earmark $500 million to implement the **IT Innovation Lab in Secondary Schools Programme** to provide funding support for all publicly funded secondary schools.
- Set aside $16 billion for universities to enhance or refurbish campus facilities, in those for R&D.
- Inject $20 billion into the **Research Endowment Fund of the Research Grants Council** under the University Grants Committee to provide research funding.
- Establish **InnoHK research innovative clusters** at Hong Kong Science Park with the first two focusing on AI and robotics technologies and healthcare technologies.
- Implement a $2 billion **Re-industrialisation Funding Scheme** within 2019 to subsidise manufacturers, on a matching basis, to set up smart production lines in Hong Kong. Another $2 billion will also be provided to the Hong Kong Science and Technology Parks Corporation (HKSTPC) for developing dedicated facilities required by the advanced manufacturing sector in the industrial estates.
- Expand the **Corporate Venture Fund** of the HKSTPC to $200 million.
- An additional sum of not less than $800 million will be provided over five years for **Technology Transfer Offices** of designated universities, the **Technology Start-up Support Scheme for Universities**, **State Key Laboratories** and **Hong Kong branches of the Chinese National Engineering Research Centre** to support more R&D work and the realisation of R&D results.
- Increase the monthly allowance for researchers under the **Researcher Programme** to attract local graduates to join the I&T sector.
- The maximum engagement period of both **Researcher Programme** and **Postdoctoral Hub** has been extended from two years to three years.
- Regularise the **Technology Voucher Programme** and introduce enhancement measures including doubling the funding ceiling to $400,000, expanding the eligibility criteria, increasing the maximum number of approved projects from three to four, and streamlining application and monitoring procedures. These measures will incentivise more local companies and institutions to use technology to improve efficiency and services.

➢ Universities and research institutions in Hong Kong can apply for **science and technology funding of the Central Government** for use in Hong Kong. This policy allowing cross-boundary remittance of research funding will inject further impetus into Hong Kong's research sector.

On-going efforts
- Develop Lok Ma Chau Loop into the **Hong Kong-Shenzhen Innovation and Technology Park**.
- Support and participate in the development of the **Guangdong-Hong Kong-Macao Greater Bay Area** into an international innovation and technology hub.
- Hong Kong is a leading digital economy, consistently achieving top rankings in digital readiness and Internet access capabilities. Hong Kong has 11 **submarine cable systems** and operates 12 **satellites** for external communications. Facebook and Google are jointly laying a submarine fibre-optic cable with a capacity of 144 terabits per second (Tbps) which targets for completion in late 2019, making it the highest capacity route between Asia and the US. Meanwhile, several submarine cable systems will be ready in the coming two to three years, including one connecting the Guangdong-Hong Kong-Macao Greater Bay Area and San Francisco Bay Area, one connecting Hong Kong and California, and one connecting Hong Kong and Guam.

Innovation and technology stakeholders
- **Hong Kong Science Park** is home to over 710 technology companies.
- **Cyberport** is a creative digital community with over 1,300 companies.
- **Hong Kong Science and Technology Parks Corporation** has set up a subsidiary company – Hong Kong-Shenzhen Innovation and Technology Park Limited – to build, operate, maintain and manage the Hong Kong-Shenzhen Innovation and Technology Park in Lok Ma Chau Loop.
- **The Hong Kong Applied Science and Technology Research Institute** focuses on applied research (fintech, intelligent manufacturing, next generation network, health technologies and smart city).
- **Academy of Sciences of Hong Kong** advises the Government on research and technology-related policies.
- The **Massachusetts Institute of Technology** set up its first overseas Innovation Node in Hong Kong in 2016.
- **Karolinska Institutet** (Sweden) opened a research facility at Science Park in 2016 to strengthen research in regenerative medicine.
- **Guangzhou Institutes of Biomedicine and Health** under the Chinese Academy of Sciences (CAS) set up a stem cell and regenerative medicine research centre at Science Park in 2017.
- **Hong Kong-Mainland collaboration**: There are currently 16 Partner State Key Laboratories in Hong Kong and 6 Hong Kong branches of the Chinese National Engineering Research Centres.
- A number of leading universities like **Harvard University**, **Stanford University**, **Imperial College London**, **University College London** and **Johns Hopkins University** have expressed interest in joining the two research clusters and collaborating with local universities.
- The **Ministry of Science and Technology (MOST)** and the Hong Kong Special Administrative Region Government (HKSAR Government) signed the "Arrangement on Enhancing Innovation and Technology Cooperation between the Mainland and Hong Kong" and the "Agreement on Commencing Jointly Funded Projects between the MOST and the Innovation and Technology Bureau of the HKSAR Government" in September 2018.
- The **Chinese Academy of Sciences (CAS)** and the HKSAR Government signed the "Memorandum of Understanding on Establishing Affiliated Institution by the CAS in Hong Kong" in November 2018.

Supporting start-ups
- **2,625 start-ups** in Hong Kong in 2018 (+18% over 2017), and nearly **9,550 start-up jobs** (up 51%) according to the 2018 start-up survey by InvestHK.
- **$2 billion Innovation and Technology Venture Fund** set up by the Government to co-invest on a matching basis with selected private venture capital funds in Hong Kong.

- **Private sector**: Alibaba Group launched a $1 billion Hong Kong Entrepreneurs Fund; Sequoia Capital initiated the Hong Kong X-Tech Startup Platform.
- **Cyberport**: **Cyberport Incubation Programme** and $200 million Cyberport Macro Fund to provide initial venture capital funding support for start-ups to scale up and accelerate their progress. In 2018, the Government injected $200 million for Cyberport to strengthen support to its tenants and start-ups.
- **Hong Kong Science and Technology Parks Corporation**: Incubation programmes and Corporate Venture Fund.
- **InnoCell** is being built adjacent to Hong Kong Science Park to provide residential units with flexible design, ancillary facilities and shared working spaces to foster the development of the I&T ecosystem in Hong Kong. It is expected for completion by end 2020.

Smart city

- **Hong Kong Smart City Blueprint**: sets out a vision to establish Hong Kong as a world-class smart city. Major areas are "Smart Mobility", "Smart Living", "Smart Environment", "Smart People", "Smart Government" and "Smart Economy".
- **Smart City key infrastructure projects**: electronic identity (eID), smart lampposts, Next Generation GovCloud and Big Data Analytics Platform.
- **Wi-Fi Connected City** programme: to further expand common brand Wi-Fi.HK coverage in Hong Kong, the number of free Wi-Fi hotspots will increase to 34,000 in 2019.
- **Asia's No.2 and World's No. 11 in IMD World Digital Competitiveness Ranking 2018**, which rates the ability of an economy to adopt new digital technology.
- **South East Asia & Oceania's No.4 and World No.14 in World Intellectual Property Organization's Global Innovation Index 2018**, which rates the innovation performance of 126 economies worldwide.

Fintech

- **Fintech development** complemented by Hong Kong's highly-developed financial services and ICT sectors.
- Hong Kong has over **550 fintech companies**, according to InvestHK's 2018 FinTech Study.
- **Supervisory Sandboxes** launched by the Hong Kong Monetary Authority (HKMA), Securities and Futures Commission and Insurance Authority.
- **Faster Payment System** and **Common QR code standard for retail payments** launched by HKMA in September 2018.
- **Distributed ledger technology (DLT)** being deployed in eTradeConnect, a trade finance platform launched by a consortium of 12 banks in Hong Kong in October 2018. **Open Application Programming Interface (Open API) Framework** for the banking sector published in July 2018. Phase I Open APIs launched in January 2019, with over 500 Open APIs provided by 20 retail banks; Phase II to be launched in October 2019.
- **First batch of Virtual Banking licences** issued by HKMA in March 2019.