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 is promoting innovation and technology (I&T) development along eight major areas: increasing resources for R&D, pooling technology talent, providing investment funding and I&T infrastructure, reviewing existing legislation and regulations, opening up government data, leading changes to procurement arrangements, and popularising science education. So far, we have committed over $100 billion (US$12.8 billion) for different initiatives in these eight areas.

On-going efforts
- Develop Lok Ma Chau Loop into the Hong Kong-Shenzhen Innovation and Technology Park (HSITP).
- Support, and participate in, the development of the Guangdong-Hong Kong-Macao Greater Bay Area into an international innovation and technology hub.
- Hong Kong and Shenzhen jointly develop the Shenzhen-Hong Kong Innovation and Technology Co-operation Zone, which comprises the Shenzhen Innovation and Technology Zone and the HSITP at the Lok Ma Chau Loop, to establish “one zone, two parks” at “one river, two banks” under the auspices of “One Country, Two Systems.”
- Universities and research institutions in Hong Kong can apply for Mainland science and technology funding for use in Hong Kong. This policy allowing cross-boundary remittance of research funding will inject further impetus into Hong Kong’s research sector.
- 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 11 satellites for external communications. Several submarine cable systems will be ready in the coming two to three years, enhancing the city’s connectivity with other parts of the world.
- Implement the $2 billion Re-industrialisation Funding Scheme which was launched in 2020 to subsidise manufacturers, on a matching basis, to set up smart production lines in Hong Kong. Another $2 billion has been provided to the Hong Kong Science and Technology Parks Corporation (HKSTPC) to develop a Microelectronics Centre in the Yuen Long Industrial Estate.
- $5.5 billion earmarked for Cyberport to expand its campus to provide additional space for technology companies and start-ups.
- Earmark $3 billion for Phase 2 of the Hong Kong Science Park Expansion Programme.
- Establish two InnoHK research clusters at the Hong Kong Science Park. These two clusters are Health@InnoHK focusing on healthcare technologies and AIR@InnoHK on artificial intelligence (AI) and robotics technologies. The first batch of R&D centres is expected to commence operation progressively in the first quarter of 2021.
- A Global STEM Professorship Scheme, at an estimated cost of about $2 billion, will be launched in the first half of 2021 to attract more world renowned scholars to engage in I&T-related teaching and research activities in Hong Kong.
Launch a $500 million **IT Innovation Lab in Secondary Schools Programme** to provide funding support for all publicly funded secondary schools.

Launch the **GBA Youth Employment Scheme**, under which 700 places will be set aside for Hong Kong youth who aspire to the I&T sector to assist them in developing their career in GBA.

Local R&D innovations have made a substantial contribution to the battle against COVID-19, address livelihood needs and commercialise efforts.

Organise the annual **City I&T Grand Challenge** from 2020 onwards, inviting I&T solutions to tackle problems facing the city and people in their daily lives as well as creating a fervid I&T atmosphere in Hong Kong.

**Innovation and technology stakeholders**

- **Hong Kong Science Park** is home to about 900 technology companies.
- **Cyberport** is a creative digital community with around 1,600 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).
- The **Hong Kong Academy of Sciences** and the **Hong Kong Young Academy of Sciences** advise 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 State Key Laboratories in Hong Kong and 6 Hong Kong branches of the Chinese National Engineering Research Centres.
- 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 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**

- **3,360 start-ups** in Hong Kong in 2020 (+51% over 2017), and **10,688 start-up jobs** (up 69% over 2017) according to the 2020 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.
- The **Research Talent Hub** provides funding support to each eligible company or organisation to engage up to four I&T talents to conduct R&D work.
- The **Public Sector Trial Scheme** provides funding support to assist eligible local technology companies and organisations in realising and commercialising their R&D outcomes and encourages public sector organisations to utilise more local R&D outcomes.
- **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.

The InnoCell, which is adjacent to Hong Kong Science Park, has been completed. It will start operation in the first half of 2021 to provide residential units with ancillary facilities to foster the development of the I&T ecosystem in Hong Kong.

Technology Talent Admission Scheme extended to cover all companies conducting R&D activities in the 13 designated technology areas in Hong Kong.

Technology Voucher Programme provides funding support to assist local enterprises and organisations in using technological services and solutions to improve productivity, or upgrade or transform their business processes.

Smart city

Hong Kong Smart City Blueprint: more than 130 initiatives in the Smart City Blueprint for Hong Kong 2.0 categorised under major areas, namely "Smart Mobility", "Smart Living", "Smart Environment", "Smart People", "Smart Government", "Smart Economy", "Use of I&T in Combating COVID-19" and "Smart Village Pilots", to bring benefits and convenience to members of the public in their daily lives.

Smart City key infrastructure projects: iAM Smart” platform (offering over 20 commonly used public services initially); smart lampposts; Next Generation GovCloud; and Big Data Analytics Platform.

Budget 2020-21 initiative to earmark around $1 billion for the Smart Traffic Fund to provide funding support for research and application on vehicle-related I&T.

The Budget 2020-21 proposes to allocate $100 million to develop an integrated digital platform for data integration and information exchange of all public works projects.

Budget 2020-21 initiative to earmark $60 million to establish the first Geospatial Lab to promote the application of spatial data.

Wi-Fi Connected City programme: to further expand common brand Wi-Fi.HK coverage in Hong Kong. There are over 39,000 "Wi-Fi.HK" hotspots in the territory as at November 2020.

Asia's No.2 and World's No. 5 in IMD World Digital Competitiveness Ranking 2020, which rates the ability of an economy to adopt new digital technology.

Asia-Pacific’s No.2 and World No.3 for digital intelligence (Digital Intelligence Index 2020 compiled by US-based The Fletcher School at Tufts University and Mastercard)

South East Asia & Oceania’s No.3 and World’s No.11 in World Intellectual Property Organization’s Global Innovation Index 2020, which rates the innovation performance of 131 economies worldwide.

Fintech

Over 600 Fintech companies operating in Hong Kong; around HK$11.7 billion (US$1.5 billion) raised in the past six years (2014-2019).

Major Fintech infrastructure includes the Faster Payment System (6.54 million registrations as at November 2020, with total real-time transaction volume exceeding 160 million and amounting to around HK$1,900 billion and RMB 34 billion) and a blockchain-based “eTradeConnet” trade finance platform.
8 virtual banks, 4 virtual insurers and 15 stored value facilities/e-wallets granted licenses. An Open Application Programming Interface (Open API) Framework for the banking sector being implemented in phases.

Regulatory sandboxes available in the Hong Kong Monetary Authority, the Securities and Futures Commission and the Insurance Authority.

InvestHK’s dedicated Fintech team provides one-stop service for overseas and Mainland Fintech companies to set up in Hong Kong; and a series of Fintech events over the year, including the annual flagship Hong Kong Fintech Week.

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