



Capture business opportunities in Hong Kong's thriving INNOVATION AND TECHNOLOGY ECOSYSTEM



FOREWORD

The Innovation and Technology (I&T) industry in Hong Kong has made unprecedented strides in recent years. Backed by strong government support in line with the National 14th Five Year Plan and opportunities in the Greater Bay Area (GBA), Hong Kong has taken leaps toward building a sustainable and connected ecosystem. This conducive I&T environment has sparked increasing public and private sector collaboration, with ecosystem participants embracing a global view to innovate at speed and scale

Invest Hong Kong (InvestHK) and Deloitte are delighted to present this in-depth analysis of Hong Kong's current I&T landscape. The report highlights Hong Kong's milestones in I&T and its immense potential to transform into an international I&T hub. The report also details Hong Kong's key I&T segments: life and health sciences, artificial intelligence (AI) and robotics, smart city and information communications and technology (ICT).

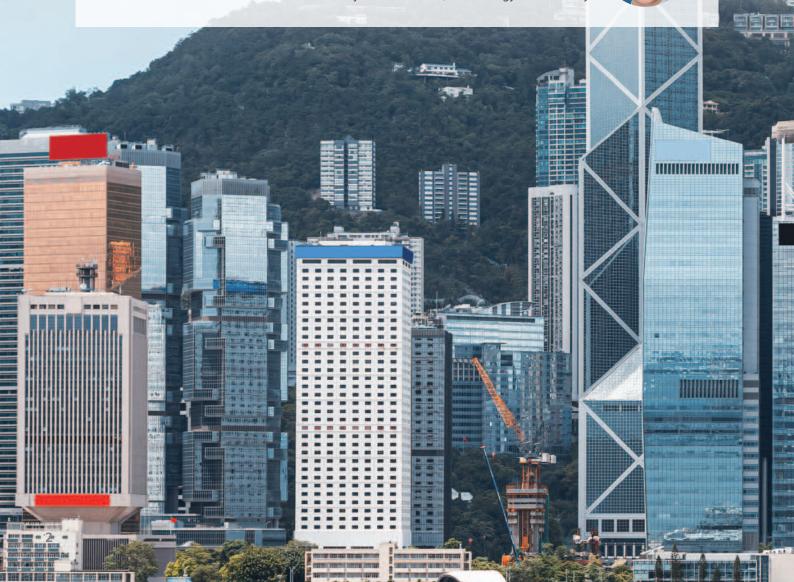
Deloitte professionals and industry experts used their deep experience and market research to form a comprehensive understanding of Hong Kong's I&T ecosystem. We are grateful for the insights and perspectives contributed by stakeholders, all of whom play vital roles in shaping Hong Kong's I&T sector.

In 2017, President Xi made an important instruction on issues raised by Hong Kong academicians of the Chinese Academy of Sciences and the Chinese Academy of Engineering, clearly indicating his support for Hong Kong to develop into an international innovation and technology (I&T) centre. With staunch support from the Central Government, Hong Kong's I&T has seen phenomenal development over the past few years, with outstanding performance in R&D investment, number of start-ups, venture capital investment, number of home-grown unicorns, and I&T-related international rankings.

President Xi's visit to the Hong Kong Science Park in this June demonstrated the importance and acknowledgement placed on Hong Kong's I&T development by the Central Government. His important speech on 1 July also injected strong impetus for Hong Kong to develop into an international I&T centre. The HKSAR Government will drive Hong Kong's I&T development at full speed. We will further enrich the I&T talent pool, build a more vibrant I&T ecosystem, and accelerate the development of smart city, with the objective to enable our people to benefit from the convenience and improvements in livelihood brought by technological advancements and to develop Hong Kong into an international I&T centre.

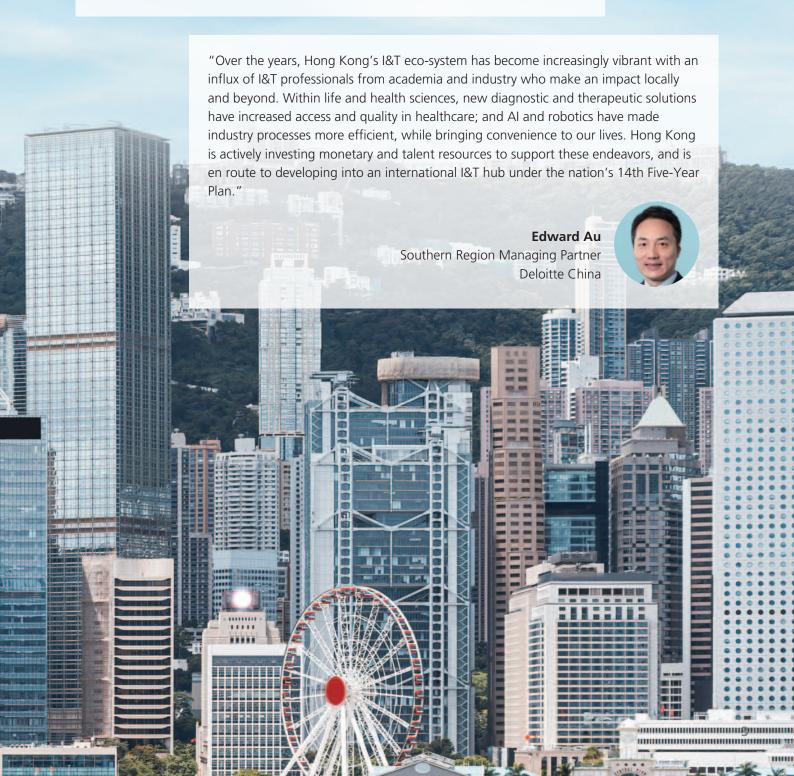
Seizing the tremendous opportunities arising from the national development, we will further deepen I&T cooperation with the Mainland, and proactively participate in developing an international I&T hub in the Greater Bay Area. We will also strive to better integrate into the national development and contribute to the country's advancement in science and technology by giving full play to Hong Kong's unique position of leveraging the motherland while engaging with the world.

Professor Dong SunSecretary for Innovation, Technology and Industry



"I&T are central to economic and business success. This is true of Hong Kong where it is in our DNA. With our strategic location at the very heart of dynamic Asia and as China's international I&T hub as set out in China's 14th Five-Year Plan, I&T opportunities abound. Hong Kong offers access to a diverse array of opportunities for foreign investors in the I&T sector, across the spectrum of operations from R&D, application, logistics, sales and trading, and advanced manufacturing. Hong Kong as the international city in the vibrant GBA is the ideal platform to connect I&T companies, talent and resources across the GBA, China and overseas. Come to Hong Kong to capture the opportunities that await you."

Stephen Phillips
Director General of Investment Promotion
Invest Hong Kong





I&T is the key to unlocking sustainable growth. The Hong Kong Government has spearheaded I&T development, with more than HKD150 billion invested since 2017¹ and introduced comprehensive I&T policies in line with the National 14th Five-Year Plan. Hong Kong has also embarked on innovations across multiple industries ranging from healthcare to advanced manufacturing in recent years. With the launch of recent initiatives including the Northern Metropolis Development Strategy, Hong Kong continues to thrive as a bustling platform that connects I&T companies not just in the Guangdong-Hong Kong-Macao GBA, but also internationally.

The I&T ecosystem in Hong Kong houses a wealth of knowledge and expertise to help international I&T companies and start-ups thrive.



¹ Chief Executive's 2021 Policy Address



SPRINGBOARD FOR GROWTH

Hong Kong is a business orchestrator and a launchpad into Mainland China and overseas markets

As a highly livable international city, Hong Kong has a mature legal system with strong patent protection and a sophisticated financial system, creating ideal conditions for businesses to thrive. The upcoming large-scale Northern Metropolis Development Strategy will further deepen cooperation between Hong Kong and Shenzhen, creating a more comprehensive I&T ecosystem.

2 INFRASTRUCTURE SUPPORT

Advanced infrastructure to support business operations

Hong Kong has well-established air, sea and land logistics infrastructure that connects the city to the rest of the world. It also offers reliable electricity and robust telecommunications facilities, topping global rankings for mobile and household broadband penetration rates. Its public healthcare system is highly efficient and plays a key role in secondary and tertiary healthcare.





3 COLLABORATIVE RESEARCH

World-class universities and talent forge I&T collaboration

Hong Kong is home to top universities with deep expertise in I&T-related teaching and research. The InnoHK initiative is a platform for international research collaboration on life and health sciences, artificial intelligence and robotics.



ADVANCED RESEARCH FACILITIES

State-of-the-art research and development (R&D) facilities

Hong Kong Science and Technology Park (HKSTP), Cyberport and the upcoming Hong Kong-Shenzhen Innovation and Technology Park (HSITP) provide labs with advanced R&D equipment. Moreover, HKSTP InnoParks at Tseung Kwan O, Yuen Long and Tai Po offer industrial spaces with more than 210 hectares of manufacturing facilities.²

5 EASE OF FUNDING ACCESS

Wide range of financial services and funding support

As Asia's financial hub, Hong Kong has a mature financial system that hosts one of the largest stock exchanges in the world. A wide range of I&T-focused funding is available from public and private stakeholders for every stage of the business lifecycle.





6 COMPREHENSIVE ECOSYSTEM

Comprehensive advisory and business support for scaling and market expansion

Businesses in Hong Kong are supported by an internationally renowned professional services industry. There are also numerous forums, events, incubators, accelerators and coworking/co-living spaces for industry players and researchers to network and collaborate.

² HKSTP – InnoPark Innofacturing Tomorrow

LIFE AND HEALTH SCIENCES

Hong Kong's comprehensive support for biotechnology-related research encompasses laboratories with state-of-the-art equipment and collaborative ecosystems through government-established research clusters, Health@InnoHK and InnoLife Healthtech. It also includes co-incubation programmes, including one launched by HKSTP in collaboration with AstraZeneca and clinical trial services whose results are recognised by overseas regulatory authorities for drug and medical device registration.³

With a well-established legal system and as home to many top Intellectual Property (IP) legal service providers, Hong Kong has a robust IP regime with strong enforcement, providing a safe and conducive environment for innovation.

Moreover, Hong Kong has emerged as Asia's largest and the world's second largest funding hub for biotechnology. Pre-revenue companies can raise funds by listing on the Main Board of the Stock Exchange of Hong Kong (SEHK). Hong Kong is also home to universities including the University of Hong Kong and the Chinese University of Hong Kong, both of which have esteemed medical schools.

CASE STUDIES

PHASE Scientific P.33 Viva Ventures Biotech Fund P.53

ARTIFICIAL INTELLIGENCE (AI) AND ROBOTICS

Hong Kong has established finance, logistics, construction and healthcare industries, which are top candidates for the adoption of AI. This makes Hong Kong an ideal launchpad for technology companies to develop and implement their solutions. With the Hong Kong Government's dedicated promotion of re-industrialisation and the increasing number of use cases available across industries, demand for AI solutions, robotics and microelectronics is expected to grow.

Hong Kong has a vibrant AI and robotics innovation scene, with some of the city's unicorns, including SmartMore, testifying to an abundance of quality talent. This AI and robotics talent pool is only set to grow with the establishment of the AIR@InnoHK research hub.

Geek+ P.18 SmartMore P.60

CASE STUDIES

³ Including the National Medical Products Administration, United States Food and Drug Administration and the European Medicines Agency

SMART CITY

The Hong Kong Government's comprehensive Smart City Blueprint 2.0 sets a clear path for Hong Kong to emerge as one of the smartest cities in the world, leveraging its status as an ideal hotbed of innovation for technologies and use cases relating to smart mobility, smart environment and smart living.

Under the Climate Action Plan, the Hong Kong Government intends for Hong Kong to achieve carbon neutrality by 2050. The Plan focuses on de-carbonisation initiatives, covering energy savings, green transportation, waste management and air and water quality.

NEC P.14 Schneider Electric P.15 Hong Kong Aerospace Technology Group P.34

CASE STUDIES

INFORMATION COMMUNICATIONS AND TECHNOLOGY (ICT)

As one of the most digitally competitive cities in the world, Hong Kong's sophisticated digital infrastructure, including 5G networks, facilitates the deployment of Industry 4.0 technologies. Its extensive network of multinational corporations provides a ready base of technology adopters.

The Hong Kong Government fully supports the development of ICT infrastructure including data centres in Hong Kong as one of the backbones of economic growth. This is reflected in HKSTP's launch of the Data Technology Hub to support ICT and data-centric businesses.

Hong Kong's mature legal system in data privacy and IP further ensures end-users have the confidence to adopt ICT solutions.

Microsoft P.43

CASE STUDIES



OPERATING WITHIN HONG KONG'S GROWING AND VIBRANT I&T ECONOMY

The Hong Kong Government has made unprecedented strides in I&T development. I&T is also one of the key emerging sectors in Hong Kong under the National 14th Five-Year Plan. The Plan also supports the development of Hong Kong into an international I&T hub and includes the Shenzhen-Hong Kong Loop as one of the key cooperation platforms of the GBA.

Top benefits of setting up an office in Hong Kong:

- 1 Established legal and IP protection framework
- 2 Proximity to China, Asian and international markets
- 3 Strong multicultural talent pool
- 4 Excellence in basic and applied research
- **5** Easy access to funding

One of the top economies for digital and innovation

- 1st in Asia Pacific and 2nd worldwide for Digital Competitiveness⁴ in the 2021 IMD World Digital report
- **14th** most innovative economy worldwide in the Global Innovation Index 2021⁵

Ready pool of multinational corporations (MNCs) and dense population for I&T adoption

- **9,000+ MNCs**, of which more 3,900 have regional headquarters or offices in Hong Kong⁶
- **High population density**, making it ideal for product trials
 - High willingness to adopt Al technology, 80% of Hong Kong people are interested in using Al to manage their health⁷

Growing investments in I&T

- More than HKD150 billion invested by the Hong Kong Government to promote I&T development over the past five years⁸
- Two-fold increase in GDP expenditure on R&D in the past decade to HKD26.6 billion in 2020, with government contributions to R&D growing at a 11% CAGR from 2017 to 20209

Thriving start-up community¹⁰

Increasingly vibrant I&T ecosystem, with a three-fold increase in number of start-ups over the past decade, reaching 3,755 in 2021¹¹

- 13,804 people employed by start-ups in Hong Kong
- 124 co-working spaces, incubators and accelerators

- ⁴ IMD World Digital Competitiveness Ranking 2021
- ⁵ Global Innovation Index 2021, World Intellectual Property Organization
- ⁶ 2021 Annual Survey of Companies in Hong Kong with Parent Companies Located outside Hong Kong, Census and Statistics Department, Hong Kong Government

of respondents agree Hong Kong has a thriving

and vibrant I&T scene

- ⁷ Inaugural Prudential Hong Kong Smart Health Action Index survey
- ⁸ Hong Kong Government Press Release
- ⁹ Gross domestic expenditure on research and development (R&D) by source of funds, Census and Statistics Department, Hong Kong Government
- ¹⁰ InvestHK's 2021 Startup Survey
- ¹¹ Support Start-ups and Technology Investments, Budget Speech, The 2022-23 Budget

ROBUST IP PROTECTION REGIME

Hong Kong has a robust IP protection regime that includes an original grant patent system. This provides convenience for companies as they are able to acquire patent protection directly in Hong Kong without prior registration elsewhere. Companies can seek IP protection through a standard patent (up to 20 years) or a short-term patent (up to 8 years).

The Intellectual Property Department provides free one-on-one IP consultation services. Furthermore, the Hong Kong Trade Development Council offers a free online platform and database called Asia IP Exchange (AsiaIPEX) which highlights IP from across the world.



FAVOURABLE FINANCIAL SYSTEM

The Hong Kong dollar is pegged to the US dollar, reducing exchange rate risk for foreign companies using dollar-pegged currencies. Hong Kong is a global financial centre for initial public offerings (IPOs) through Hong Kong Stock Exchange. Hong Kong's IPO market ranked 1st in the world in seven of the last 13 years¹², with an estimated

HKD331 billion raised in 2021.¹³ Furthermore, a regime for the listing of Special Purpose Acquisition Companies (SPACs) on the Hong Kong Stock Exchange became effective in January 2022, further cementing Hong Kong's leading position as an international financial centre.

¹² HKEX – Listing with HKEX

¹³ Mainland and Hong Kong IPO Markets to Remain Strong and Vibrant in 2022 (2021), Deloitte



HIGHLY LIVABLE CITY

English and Chinese are official languages in Hong Kong, making it easy for foreigners to live and work here. There are multiple entertainment venues, attractions and places of natural beauty for leisure and more than 50 schools following international programmes.¹⁴

LOW, SIMPLE, COMPETITIVE TAX SYSTEM

The first HKD2 million of corporate profits is taxed at only 8.25%, with the remainder taxed at 16.5%. Qualified R&D expenditures receive a super tax deduction.

Under the two-tiered, enhanced tax reduction scheme, enterprises are offered a 300% tax deduction on their first HKD2 million of R&D expenditure and a further 200% tax deduction on any remaining R&D spending.¹⁵

FREE TRADE PORT STATUS

Hong Kong is a free port and does not levy any customs tariffs on imports or exports. In addition, Free Trade Agreements (FTAs) with Mainland China (through the Mainland and Hong Kong Closer Economic Partnership Arrangement (CEPA)), New Zealand, the Member States of the European Free Trade Association, Chile, Macao, the Association of Southeast Asian Nations (ASEAN), Georgia and Australia, further lower Hong Kong's trade barriers. The CEPA agreement allows Hong Kong-made products and Hong Kong-based service companies to access the Mainland China market. This applies equally to foreign companies with a business presence in Hong Kong.

Hong Kong is also a participant in the Information Technology Agreement (ITA), under which 81 World Trade Organization members have agreed to eliminate and bind customs duties at zero for technology products, such as computers, telecommunications equipment, semiconductors, semiconductor manufacturing and testing equipment, software and scientific instruments.

¹⁴ Hong Kong Government, Hong Kong: The Facts – Education

¹⁵ Inland Revenue Department, Hong Kong Government

SMART CITY

NEC — HONG KONG AS A HOTBED OF INNOVATION

NEC is Japanese multinational information technology and electronics corporation that provides IT and network solutions. In 1984, NEC established its presence in Hong Kong through NEC Hong Kong Limited (NEC Hong Kong), a business focused primarily on distribution.

Over the past decades, NEC Hong Kong has transformed into a one-stop technology solutions and services provider, rapidly expanding offerings to meet growing customer demand in Hong Kong, Macau and Mainland China.

Its expertise includes solutions and services relating to smart city, analytics, AI, smart transport, biometric identification, cloud computing, IT platforms and networking. NEC Hong Kong also offers tailored solutions to meet the dynamic needs of customers in various industries, ranging from banking and finance, healthcare and retail to the public sector.

NEC Hong Kong actively engages in innovation and R&D. It partnered with CUHK in providing the HUMANE robot-based intervention programme through the applications of NEC Social Robots. HUMANE is designed to stimulate, engage, enable and empower individuals experiencing social isolation or requiring companionship. It is capable of communicating interactively with individuals while collecting a range of data for analysis through its cameras, microphones and sensors.

NEC Hong Kong won four Outstanding Solution Awards at the Smart Living Partnership Awards 2021 and the Leaders of Innovation Awards 2019. "The components that make Hong Kong a great destination for nurturing innovative inventions are its proximity with key global markets, abundance of talent with an international mind-set and world-leading telecommunications infrastructure. NEC Hong Kong is fortunate to have devoted resources into various R&D and innovation activities in Hong Kong, where we have successfully developed proprietary and patented products that are similarly well received in other cities."

"Hong Kong's high population density provides numerous smart city-related use cases. Moreover, the high standards of technological product users in Hong Kong makes the city an ideal environment for product trials."



Elsa WongManaging Director,
NEC Hong Kong

of respondents agree
Hong Kong society trusts
and has a high willingness
to adopt digital
solutions

of respondents agree that Hong Kong society embraces creativity and experimentation

SMART CITY

SCHNEIDER ELECTRIC — HONG KONG AS A FOCAL POINT FOR DRIVING I&T ECOSYSTEM PARTNERSHIPS

With 128,000+ employees in more than 100 countries, Schneider Electric empowers everyone to make the most of our energy and resources, with the goal of bringing progress and sustainability for all. The company drives digital transformation by integrating world-leading process and energy technologies, end-point to cloud connecting products, controls, software and services across the entire lifecycle. As "the most local of global companies", Schneider Electric's multi-hub strategy splits its headquarters into four hubs: France for Europe, Hong Kong for Asia, Boston for North America and most recently India. The Hong Kong hub delivers regional and local functions including strategy, business development, sales and marketing.

Schneider Electric has highlighted its long-standing commitment to sustainability, efficiency, digitisation and innovation by transforming its 2,500 square foot Hong Kong Innovation Hub to offer an immersive and interactive digital experience. Equipped with world-leading facilities, the hub enables customers, partners and other stakeholders to explore the latest technologies and innovations powered by EcoStruxureTM, Schneider Electric's IoT-enabled, open, interoperable architecture and platform.

Sharing the Hong Kong Government's vision to drive the popularisation of electric vehicles (EV), Schneider Electric strives to work with property owners, developers and carpark operators to strengthen the provision of charging facilities with its energy-efficient EV charging solutions. Schneider Electric has already installed more than 2,000 EV chargers covering 50+ locations in Hong Kong. Through close collaboration with all stakeholders, Schneider Electric aims to boost the EV charging network by offering 15,000 EV chargers across the territory by 2025.

"Schneider Electric's multi-hub strategy empowers our leaders and employees to make decisions that benefit the local community with a better understanding and makes us a strong enabler of innovation and collaboration in different regions. Taking Hong Kong as an example, the high concentration of property developers allows us to have first-hand knowledge of our customers' needs, customise and personalise the services and solutions that suit them the most as we recognise each customer in each of our markets is unique. The city's strategic location and world-class infrastructure also make Hong Kong highly reliable and suitable as a regional hub with strong supply chain capabilities."

"The city's sophisticated telecommunication facilities, legal services, business-friendly environment and status as an international financial centre create a conducive environment to operating an I&T business and that's why many global and China-based data centre operators have established their presences in Hong Kong with success."

"Schneider Electric collaborates closely with various I&T ecosystem players in Hong Kong, including technology partners (MNCs and start-ups), system integrators, partners and end-users like the property developers."



Jonathan Chiu President, Schneider Electric Hong Kong

STRATEGIC LOCATION FOR EXPANSION INTO MAINLAND CHINA AND OVERSEAS MARKETS

Hong Kong is strategically located next to Mainland China and Southeast Asia. Its state-of-the-art international airport makes Hong Kong highly accessible, with the city only a four-hour flight or less from all key Asian markets. ¹⁶

Close ties with the Mainland GBA cities

Businesses with a presence in Hong Kong can leverage the value chain strengths of the GBA and tap into Mainland China's huge market potential.

The Northern Metropolis Development Strategy will further fuel cross-border collaboration between Hong Kong and the Mainland GBA cities. The Plan was formulated in line with the development of the GBA and Hong Kong 2030+ (Towards a Planning Vision and Strategy Transcending 2030). This project will be built across two district administration areas (Yuen Long District and North District) and span 30,000 hectares.

Top benefits associated with the GBA recognised by respondents:

- 1 Access to a new or larger market
- 2 Access to a strong talent pool
- Business partnership opportunities with large corporations across the GBA
- 4 R&D collaboration opportunities with R&D institutes and corporations across the GBA
- Proximity to supply chain including raw materials supply and production

Northern Metropolis Development Strategy key facts:

- Hosting an array of research clusters, ecorecreation spaces, and integrated developments
- Integrating Hong Kong's world-leading talent and research resources with Shenzhen's unparalleled commercialisation and production facilities to form an integrated innovation value chain
- Transportation links will be built to physically connect Hong Kong with Shenzhen, facilitating talent transfer between the two cities
- I&T will be the main economic engine, powered by the San Tin Technopole, an area encompassing HSITP in the Loop, areas around Lok Ma Chau, and areas around San Tin. The Hong Kong government has allocated HKD32.5 billion for development of the San Tin Technopole, with the first batch of facilities to be completed between 2024 and 2027



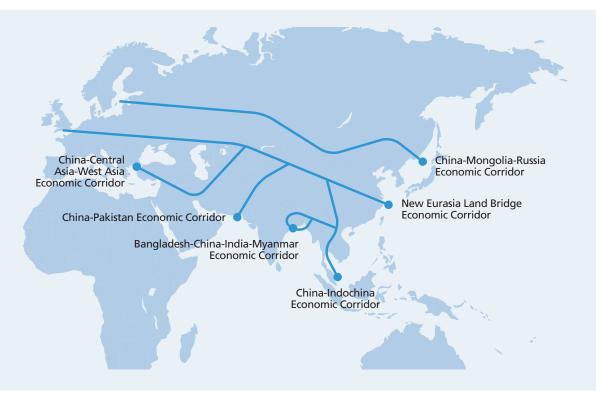
¹⁶ Meetings & Exhibitions Hong Kong (MEHK) – Strategic Location

Linked to other parts of Asia, the Middle East, Africa and Europe through the Belt and Road Initiative

The Belt and Road initiative connects Asia, the Middle East, Eastern Africa, and Eastern Europe via the Silk Road Economic Belt and 21st Century Maritime Silk Road. Spanning six economic corridors, the initiative aims to facilitate policy coordination, establish

infrastructure connectivity, promote unimpeded trade, cement financial integration, and foster people-to-people bonds. Hong Kong is a connector for companies intending to enter markets within the Belt and Road initiative.

The six economic corridors of the Belt and Road Initiative¹⁷



Close ties with Southeast Asia through trade agreements

In February 2021, Hong Kong entered into a Free Trade Agreement and an Investment Agreement with the 10 members of the Association of Southeast Asian Nations (ASEAN). Moreover, Hong Kong recently applied to join the Regional Comprehensive

Economic Partnership (RCEP) trade agreement, a free trade pact signed between China, the 10 ASEAN member states, South Korea, Japan, Australia and New Zealand. These trade agreements reduce trading costs and enhance economic ties between Hong Kong and ASEAN member states.

¹⁷ China's Belt and Road Initiative in the Global Trade, Investment and Finance Landscape (2018), OECD

AI & ROBOTICS

GEEK+ — HONG KONG THE SPRINGBOARD TO NEW MARKETS

Established in 2015 in Beijing, Geek+ has grown into a global technology company specialising in smart logistics solutions using Al and robotics technologies, with a focus on automating warehouse and factory operations. The company serves customers across the e-commerce, retail, apparel, logistics, pharmaceutical, automotive and 3C manufacturing industries.

When Geek+ decided to expand outside Beijing in 2018, the company established its Asia-Pacific regional headquarters in Hong Kong due to the city's international status as a business and financial hub, abundance of I&T talent and strategic location connecting Mainland China and international markets.

The company established a presence in Hong Kong starting with just three employees and this has grown to reach more than 100 employees today. The company's revenues have risen fivefold since it entered Hong Kong in 2018, supported by the expansion of its target market, which now covers more than 30 countries. The company is planning to further cement its business in Hong Kong and open new branches in Taiwan, Korea and Australia.

Following the success it has achieved in the city, in 2021 Geek+ established its global R&D centre in Hong Kong. The R&D centre was launched in partnership with HKSTP and provides Geek+ with the space to test and display its products and solutions.

"Hong Kong is strategically located in the centre of Asia, with superb connectivity to not only the Mainland and other APAC markets, but also many major business cities around the world. Furthermore, with Hong Kong as one of the world's preeminent trading centres, we have seen many benefits in terms of the free flow of capital and goods to and from international markets."



Lit FungVP, Managing Director of
Overseas Business,
Geek+

FAVOURABLE INDUSTRY-SPECIFIC 1&T POLICIES AND INITIATIVES

LIFE AND HEALTH SCIENCES

"Data is an important component for biotechnology companies. Hong Kong has vast amounts of data available through the Hospital Authority and these have the potential to generate immense value for healthcare-related research activities and the stimulation of ideas. Hong Kong's strong entrepreneurial spirit can also be leveraged to advance innovations in the life sciences and healthcare industry."



Daniel Thurley
President,
Hong Kong Association of the Pharmaceuticals Industry
General Manager — Hong Kong and Macau,
Roche

Established and efficient healthcare system

 Hong Kong has an efficient dual-track healthcare system, with 90% of in-patient care covered by the public healthcare system

(at time of interview)

Widely recognised clinical trial process and data

 Four Hong Kong hospitals¹⁸ are accredited for Phase 1 clinical trials by the National Medical Products Administration. Clinical trial data from Hong Kong is recognised by the US and European regulatory authorities

Access to Mainland China biosamples

 The Central People's Government has relaxed limits on exporting Mainland China human genetic resources to Hong Kong. Four Mainland China branches of Hong Kong universities have been confirmed by the Ministry of Science and Technology (MOST) as meeting the specified requirements to participate in a pilot scheme¹⁹

Support for life and health sciencesrelated research

- Establishment of the Health@InnoHK research cluster, which promotes international collaboration on healthcare-related research
- The InnoLife Healthtech Hub will be established at Hong Kong-Shenzhen Innovation and Technology Park (HSITP) and house the 16 life and healthrelated laboratories currently in the InnoHK research clusters and eight Key State Laboratories related to healthcare disciplines in Hong Kong, further accelerating cross-boundary collaboration between Hong Kong and the Mainland GBA cities

18A regulations for listing pre-revenue biotech companies

 The introduction of the Chapter 18A listing rule in 2018 allows pre-revenue and pre-profit biotech companies to list on the Stock Exchange of Hong Kong, expanding funding possibilities

Commitment of funds to develop life and health technology²⁰

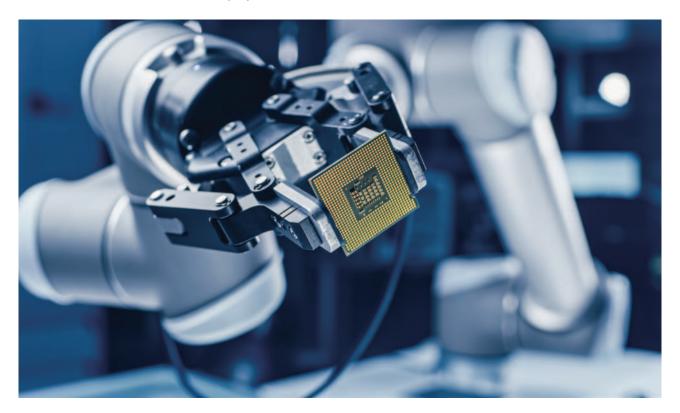
 The Hong Kong Government allocated HKD10 billion in the 2022–23 Budget to provide long-term support for hardware development, research talent, clinical trials and data applications

¹⁸ The Clinical Research Management Office at The Chinese University of Hong Kong, The Clinical Trial Centre at the University of Hong Kong, The Hong Kong Sanatorium Hospitals Oncology Department and The Hong Kong Eye Hospital

¹⁹ Hong Kong Government welcomes Ministry of Science and Technology's announcement of series of new measures benefitting Hong Kong (September 2021), Hong Kong Government Press Release

²⁰ Promote Life and Health Scientific Research, Budget Speech, 2022–23 Hong Kong Government Budget

ARTIFICIAL INTELLIGENCE (AI) AND ROBOTICS



Research collaborations in AI and robotics

 The AIR@InnoHK research cluster promotes international research collaboration on AI and robotics technologies. The target end users for these technologies include corporations involved in logistics, manufacturing and construction

81%

of respondents agree that the
Hong Kong Government has
provided sufficient support
to corporates and small and
medium-sized enterprises (SMEs)
in Hong Kong to drive I&T
development

Support for re-industrialisation and adoption across key industries

- The Hong Kong Productivity Council (HKPC) provides training, consultancy and technical support to assist businesses in their automation journey
- HKSTP's InnoParks provide facilities for the commercialisation of R&D related to Industry 4.0 technologies
- The Re-industrialisation Funding Scheme has been introduced to provide manufacturers in Hong Kong with subsidies for new smart production lines

67%

of respondents agree that the Hong Kong Government has introduced public policies (e.g., public procurement) that address the needs of corporations and SMEs

SMART CITY

Hong Kong Smart City Blueprint with 130+ smart city initiatives

Subsequent to the release of the first Smart City Blueprint for Hong Kong in December 2017, an updated Smart City Blueprint for Hong Kong 2.0 was published in 2020. This consists of more than 130 smart city initiatives. The comprehensiveness of these initiatives reflects the commitment to digitalise Hong Kong, making it a key end user of smart technologies.

Smart economy

- Supporting R&D and re-industrialisation
- Launching fintech initiatives such as eMPF and Distributed Ledger
- Adopting legal technology through launch of an online platform for dispute resolution and dealmaking
- Establishing Smart Tourism including platforms, ICT virtual images and a Wi-Fi connected city

Smart mobility

- Promoting electric vehicles and autonomous vehicles
- Establishing an intelligent transport system
- Introducing a smart airport
- Championing green transport

Smart people

- Nurturing young talent through collaboration with global universities and research institutes
- Fostering an innovative and entrepreneurial culture through initiatives like the Youth Internship Programme in I&T and the promotion of STEM education



Smart living

- Establishing a Data
 Collaboration Lab (operated by the Hospital Authority)
- Introducing an Electronic Health Record Sharing System
- Promoting telehealth and digital dispensing
- Accelerating adoption of digital payment
- Launching iAM Smart, a one-stop, personalised mobile app for accessing government services

Smart government

- Facilitating the use of open data through policies to drive public and private sector adoption
- Building Smart City infrastructure to support 5G commercialisation, Government Wide IOT (GWIN) based on LPWAN and various cybersecurity measures

Smart environment

- Implementing de-carbonisation measures covering renewable energy, energy efficiency and conservation
- Introducing green energy and environmental protection initiatives covering waste management, pollution monitoring and smart recycling
- Promoting intelligent and efficient buildings

Platform for SMEs to collaborate with the Hong Kong Government to co-create innovative solutions

The Smart Government Innovation Lab (Smart LAB) at Cyberport facilitates SMEs' product development by providing a platform for them to pitch technologies and raising awareness of potential solutions to be implemented in public services.

Smart LAB also supports government bodies and solutions providers to conduct proof-of-concept and

technology testing on proposed technological solutions.

The Hong Kong Government has also established a website where government bodies can share their challenges with SMEs and invite them to propose solutions.

Hong Kong's Climate Action Plan 2050

The Hong Kong Government introduced The Climate Action Plan 2050, setting out key initiatives to achieve carbon neutrality in Hong Kong by 2050.

Major decarbonisation strategies in Hong Kong's Climate Action Plan 2050

WASTE REDUCTION

Develop adequate waste-to-energy facilities by 2035, promote waste reduction and recycling, implement waste charging in 2023 and regulate disposable plastic tableware in phases from 2025 onwards

NET-ZERO ELECTRICITY GENERATION

Cease use of coal for daily electricity generation, increase share of renewable energy in the fuel mix, test the use of new energy and strengthen cooperation with neighbouring regions to achieve the long-term target of net-zero electricity generation by 2050

MAJOR

DE-CARBONISATION STRATEGIES

ENERGY SAVING AND GREEN BUILDINGS

Reduce the overall electricity consumption of buildings through promoting green buildings, improving building energy efficiency and promoting a low-carbon lifestyle

GREEN TRANSPORT

Electrification of vehicles and ferries, development of new-energy transport and measures to enhance traffic management, cease the registration of fuel-propelled and hybrid private cars by 2035, promote electric buses and commercial vehicles and test hydrogen fuel cell electric buses and heavy vehicles

BEAM Plus

The green building industry is being championed in Hong Kong, with the presence of an assessment standard provided by BEAM Plus to ascertain a building's sustainability performance. BEAM Plus is recognised and certified by the Hong Kong Green Building Council (HKGBC) and has been adopted by areas outside Hong Kong, including Macau, Shenzhen, Guangzhou, Shanghai and Beijing.

Green Tech Fund

The Hong Kong Government launched a Green Tech Fund to fund R&D projects related to decarbonisation and energy saving, green transport, waste management and air and water quality.

New Energy Transport Fund

The Hong Kong Government's New Energy Transport Fund provides subsidies for transport-related businesses to test and adopt innovative green transport technologies. "As one of the largest real estate markets in the world, Hong Kong is home to world-leading property developers. The Hong Kong Government's commitment on building a smart and sustainable city has ignited keen interest among property developers to strive towards green, sustainable solutions. This has had a knock-on effect on demand for green buildings and technologies. Hong Kong has further emerged as a reference platform for other leading cities in Mainland China and other countries."



Cary ChanExecutive Director,
Hong Kong Green Building Council

"The Hong Kong Government's introduction of clear and favourable policies have accelerated the development of sustainable and green technologies in Hong Kong. These include Hong Kong's Climate Action Plan 2050, Clean Air Plan for Hong Kong 2035, the Hong Kong Roadmap for Popularisation of Electric Vehicles and the Waste Blueprint for Hong Kong 2035."



Simon NgCEO,
Business Environment Council

INFORMATION COMMUNICATIONS AND TECHNOLOGY (ICT)



Favourable policies supporting data centre and 5G development

In the 2021 Policy Address, the Hong Kong Government announced it would continue to promote 5G development, including releasing more 5G spectrums for auction.

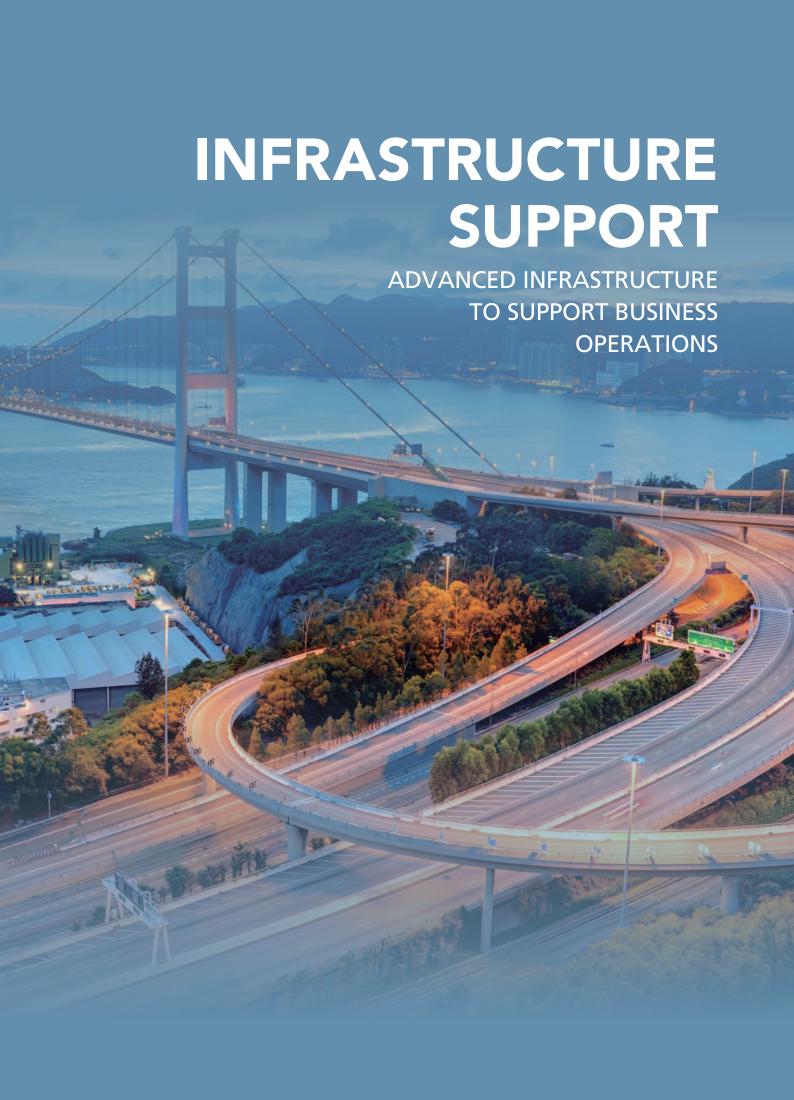
The Hong Kong Government has introduced several incentives to encourage the establishment of data centres. These include exemptions from waiver fees for converting industrial buildings into data centres, and the assessment of premiums for development of high-tier data centres on industrial lots through lease modifications based on actual use and development intensity rather than optimal use and maximum development intensity.

Hong Kong has a relatively low electricity tariff, especially compared to other cities in Asia, making the data centre business proposition attractive.

Data privacy and protection

Hong Kong has enforced a data privacy legislative framework since 1996 and this has been continuously updated. In the latest update of the Personal Data (Privacy) (Amendment) Ordinance 2021, which came into effect in October 2021, the Hong Kong Government introduced the criminalisation of doxing offences.

Having comprehensive data privacy protection is expected to increase data availability. Users will have more confidence in providing information knowing it will be handled securely and this will unlock the value of data.



ADVANCED TRANSPORTATION AND LOGISTICS INFRASTRUCTURE^{21,22}



World-leading airport and air cargo facilities

- One of the world's busiest airports for international cargo: Connected to more than 220 destinations, Hong Kong International Airport (HKIA) hosts more than 120 airlines operating over 1,100 flights per day
- The expansion of airport facilities via the Third Runway System Project is expected to increase HKIA's capacity to 100 million passengers and 9 million tonnes of cargo per year by 2030



Well-established port infrastructure

- International maritime centre with about 900 shipping-related businesses offering high value-added maritime services
- Situated on the Far East trade routes at the centre of the Asia-Pacific Basin, Hong Kong is a regional transhipment hub port. Transhipment accounts for at least 60% of total container throughput
- Hong Kong Port is one of the busiest container ports
 worldwide, with a capacity to handle 67,000 twenty-foot
 equivalent units (TEUs) a day. It has 24 berths, servicing about
 320 container vessel sailings per week to around 470
 destinations globally
- The nine privately-owned container terminals in Kwai Tsing form one of the most efficient cargo facilities worldwide, handling around 16.7 million TEUs a year



Land connectivity with Mainland China and Macao

- Ten land crossings in Hong Kong: Six road-based crossings and four rail-based crossings
- The 55km-long Hong Kong-Zhuhai-Macao Bridge (HZMB) connects Hong Kong to the Western Pearl River Delta region in less than three hours
- The Guangzhou-Shenzhen-Hong Kong Express Rail Link connects Hong Kong to multiple key cities in Mainland China.
 Trains from West Kowloon Station reach Shenzhen in less than 15 minutes

²¹ Hong Kong Logistics Development Council – Regional Logistics Hub

²² International Transportation Centre, Hong Kong Government Policy Address (October 2021)

ROBUST TELECOMMUNICATIONS AND DIGITAL INFRASTRUCTURE

Hong Kong has world-leading telecommunications and digital infrastructure.

Ranked 1st in Asia Pacific for readiness to adopt cloud computing services²³, Hong Kong leads the world in digital infrastructure readiness and offers a high

accessibility rate. Its close to 100% household broadband penetration rate fast, reliable broadband access allow citizens to connect readily to the internet. This facilitates the development of a digitalised economy as technologies advance.

Overview of digital infrastructure in Hong Kong^{24,25}

12 external submarine optical fibre cable systems, 19 overland optical fibre cables and 10 communications satellites connecting Hong Kong to the world

Mobile penetration rate of 305.4% is one of the highest worldwide (July 2021)



Household broadband penetration rate of 96.3% one of the highest worldwide (July 2021)



Mean download speed over fixed broadband of 260.35 Mbps is among the fastest worldwide



Reliable electricity power supply currently exceeds 99.999%



Free Wi-Fi service available at 39,000 hotspots in public places (December 2020)



Moreover, Hong Kong is equipped with the high connection density and bandwidth offered by 5G networks for the adoption of Industry 4.0 technologies.

At a glance:

- Hong Kong ranks 1st worldwide for 5G coverage reach, and 2nd worldwide for 5G network availability.²⁶
- Commercial 5G services cover 90% of Hong Kong's population.²⁷

With wide 5G coverage readily available, Hong Kong is an ideal location for the use of Internet of Things (IoT), AI, cloud and blockchain solutions.



²³ 2020 Cloud Readiness Index published by the Asia Cloud Computing Association

²⁴ 2021 Policy Address, Policy Initiatives of Communications and Creative Industries Branch (2021), Commerce and Economic Development

²⁵ Office of the Government Chief Information Officer (OGCIO), Hong Kong Government

²⁶ Opensignal (2021)

 $^{^{\}rm 27}$ $\,$ Office of the Communications Authority, Hong Kong Government

OUTSTANDING MEDICAL INFRASTRUCTURE AND HEALTHCARE SYSTEM

Hong Kong has a well-established dual-track healthcare system encompassing the public and private sectors. Total expenditure on healthcare in Hong Kong is one of the highest in Asia, totalling around HKD190 billion in 2019/2020.²⁸

High adoption of health technologies and research facilities

Key statistics as of end-2020







DIGITAL HEALTHCARE AND MEDICAL SYSTEM

Hong Kong's Electronic Health Record Sharing System, a territory-wide, patientoriented electronic sharing platform, enables public and private healthcare professionals to access patients' electronic health records (upon authorisation by each patient).

SMART HOSPITALS

Three hospitals, Tin Shui Wai Hospital, Tseung Kwan O Hospital and Queen Elizabeth Hospital have been identified to pilot smart hospital transformation. They are testing technological applications including Al applications for detecting chest x-ray abnormalities, telecare applications for consultation and monitoring and robots for daily hospital operations.

ACCREDITED CLINICAL TRIAL FACILITIES

Four Hong Kong hospitals²⁹ are accredited for Phase 1 clinical trials by the National Medical Products Administration. Clinical trial data from Hong Kong is recognised by the US and European regulatory authorities.

FIRST-OF-ITS-KIND CHINESE MEDICINE HOSPITAL IN HONG KONG

Hong Kong's first Chinese Medicine Hospital, equipped with smart technologies, will launch in 2024.

 $^{^{\}rm 28}$ Health Facts of Hong Kong, 2021 Edition, Department of Health, Hong Kong Government

²⁹ The Clinical Research Management Office at The Chinese University of Hong Kong, The Clinical Trial Centre at the University of Hong Kong, The Hong Kong Sanatorium Hospitals Oncology Department and The Hong Kong Eye Hospital



R&D POWERHOUSE WITH TOP-NOTCH RESEARCHERS AND TALENT

Five universities in Hong Kong are ranked among the top 100 universities worldwide.³⁰ Their positions have risen since 2019, driven by an increase in academic output.

NOTABLE RANKINGS IN 1&T

2021 QS World University Overall Ranking³¹

	Electrical & electronic engineering	Mechanical engineering	Computer science & information system	Materials science	Medicine
HKU	36	59	43	61	39
HKUST	20	28	30	16	N/A
CUHK	65	145	31	50	40
CityU	72	127	68	25	>400
PolyU	92	98	120	N/A	N/A

Hong Kong's local universities have top-notch researchers of international standard, with many receiving global recognition for their work. The number of Hong Kong researchers recognised in the list of Highly Cited Researchers by Clarivate Analytics has grown steadily to reach 79 in 2021.³²

Professor Dennis Lo,
Chairman of the Department of
Chemical Pathology at CUHK,
pioneered the development of noninvasive prenatal diagnostic tests for
multiple genetic disorders and was
awarded co-winner of the 2021
Breakthrough Prize in Life
Sciences

Professor Tony
Mok, Chairman of the
Department of Clinical
Oncology at CUHK, led
development of the globa
standard for personalised
treatment for lung

76%

of respondents agree that there is I&T and research talent readily available within Hong Kong with the right qualifications and skillsets

The University of Hong Kong (HKU), The Hong Kong University of Science and Technology (HKUST), The Chinese University of Hong Kong (CUHK), City University of Hong Kong (CityU) and The Hong Kong Polytechnic University (PolyU)

³¹ QS World University Rankings by Subject 2021

³² Annual Highly Cited Researchers List (2021), Clarivate



InnoHK

The InnoHK initiative brings top-tier international and local universities together to conduct leading-edge research at HKSTP. The initiative consists of various research clusters, each with a unique research focus. As of January 2022, there are two InnoHK clusters.

Health@InnoHK — an R&D hub dedicated to life and health sciences-related research

Health@InnoHK is involved in pharmaceutical discovery, personalised medicine, molecular diagnostics, bioengineering, chemical biology, bioinformatics, vaccine development and medical instrumentation.

AIR@InnoHK — an R&D hub dedicated to AI and robotics technologies

AIR@InnoHK develops big data analytics, machine learning, cognitive systems, intelligent agents, medical robotics and other robotics, targeting a wide range of applications across industries including financial services, smart city, and advanced manufacturing.

InnoLife@HSITP — a life and health sciences R&D hub in the Northern Metropolis

InnoLife Healthtech Hub is planned for HSITP in the Lok Ma Chau Loop. It will house the 16 life and health-related laboratories currently in the InnoHK research clusters and eight key state laboratories related to healthcare disciplines.

MULTICULTURAL, MULTILINGUAL 1&T TALENT POOL

Multilingual population

A majority of talent in Hong Kong are trilingual, with business proficiency in Cantonese, English and Putonghua. In addition, English is the main medium of instruction at the top universities, making it easy for foreign talent to study and conduct research.

Amongst the most culturally diverse universities globally

HKU ranks 1st and CUHK 3rd among the world's most international universities.³³ The multicultural environment in Hong Kong fosters a diverse, inclusive culture which is the key driver of innovation.

High talent readiness

Hong Kong's highly skilled workforce is recognised globally. In 2021, the city's talent pool ranked 1st globally in the percentage of graduates from science disciplines³⁴ and talent readiness.³⁵

Hong Kong universities produce more than 2,300 ICT graduates a year. The total pool of ICT professionals in Hong Kong was more than 95,700 in 2018, with about a third specialising in software design and development.³⁶



 $^{^{33}}$ Times Higher Education Most International Universities in the World 2021

³⁴ Scientific disciplines include ICT, Engineering, Mathematics and Natural Sciences

³⁵ IMD World Talent Ranking 2021

³⁶ Hong Kong – An ICT Hub, OGCIO



TAP INTO THE GLOBAL TALENT POOL

Hong Kong continues to attract top research talent. Through the Technology Talent Admission Scheme (TechTAS), companies in selected sectors can hire and secure R&D talent from overseas and Mainland China more quickly via fast-track visa applications. The selected sectors include Al, biotechnology, cybersecurity, robotics, 5G, IoT and microelectronics.

Furthermore, the Global STEM Professorship Scheme offers competitive remuneration and subsidies to world-renowned I&T researchers.³⁷

Hong Kong universities have a close collaborative relationship other tertiary institutions in the Mainland GBA cities. Five universities (HKUST, HKU, CUHK, CityU and PolyU) have already

established research institutes in the Mainland GBA cities. They are set to open branch campuses in cities including Shenzhen, Guangzhou, Dongguan and Foshan. This has helped promote cross-border R&D collaboration, making it easier for Hong Kong companies to tap into the talent pool in the GBA.

Scan the QR code to discover more about the Technology Talent Admission Scheme



³⁷ STEM refers to science, technology, engineering and mathematics

BIOMEDICAL & HEALTHCARE

PHASE SCIENTIFIC — HONG KONG A LEADING DESTINATION FOR HEALTHCARERELATED RESEARCH AND CLINICAL TRIALS

Established in 2015, PHASE Scientific is a high-growth biotech company with a mission to inspire a new state of health. The Company believes everyone should have access to the best knowledge about their health and endeavours to help patients and healthcare providers through the development of innovative diagnostic and data tools that enable people to better understand their health.

PHASE Scientific has developed a novel method of sample preparation to solve the problem of low-concentration target molecule detection. Through the extraction and concentration of target molecules by 10- to 100-times their original amount, this proprietary technology could transform different areas of diagnostics, making molecules easier to detect. By producing higher quality samples, the technology can also enhance the accuracy, efficiency, speed and cost of various types of diagnostic platforms.

Following the outbreak of COVID-19 in early 2020 and the commitment to provide fast and accurate COVID-19 diagnostic tests, PHASE Scientific, using its core technology, developed a line of COVID-19 diagnostic products, including sample collection, viral RNA extraction, nucleic acid detection and rapid antibody and antigen tests.

With the onset of a new wave of infection dominated by the highly transmissible Omicron variant, the world has relied on frequent rapid testing to mitigate the spread of the virus. As the first product of its kind in Greater China region to receive US FDA approval for emergency use, PHASE Scientific's INDICAID® Rapid Test Kit has been adopted widely in Hong Kong and abroad

PHASE Scientific's novel technology can be applied to liquid biopsies for early detection of cancer and point-of-care tests for infectious diseases.

As a start-up, PHASE Scientific is not limited by what is known to be possible, but constantly advances to find ways to cope with challenging situations.

"Providing good self-testing tools and self-monitoring health data for easy access can revolutionise the diagnostics industry and redefine the landscape of healthcare management, shifting the emphasis from treatment to prevention. This is our ultimate mission."

"We at PHASE Scientific always strive to provide solutions to problems by utilising our resources and technological knowhow. In the COVID-19 pandemic, for instance, we have played multiple roles, from a rapid test developer to a community testing service provider, a testing policy initiator and a telemedicine advocate. We looked at the different stages of the pandemic and anticipated the best ways to meet people's needs at the time, and think outside the box for solutions."



Ricky Chiu Chairman and CEO, PHASE Scientific

Hong Kong's openness to foreign talent and investments has contributed to the growth of innovation and technological development in the city. PHASE Scientific has benefited enormously from this environment and with our notable strengths in biotech, we will continue to excel in this strategic position and make a significant impact on shaping a new state of health, so that people can make better health decisions, empower action and engender change.

SMART CITY

HONG KONG AEROSPACE TECHNOLOGY GROUP (HKATG) — THE FIRST COMMERCIAL AEROSPACE COMPANY IN HONG KONG

Founded in 2019, Hong Kong Aerospace Technology Group (HK: 1725) is the first commercial aerospace company in Hong Kong with a focus on satellite remote sensing, satellite manufacturing, satellite navigation and satellite communications.

The company operates aerospace business through its signature Golden Bauhinia Constellation project, which involves flying a low-orbit, high-frequency satellite over the GBA to support the collection of ecological data to accelerate its smart city development. The project helps create smart cities through satellite big data applications and solutions, satellite measurement and controlling, satellite manufacturing and satellite launching. HKATG has already launched five satellites as of end-2021.

HKATG has been undertaking various R&D initiatives through collaboration with universities in Hong Kong. The company is also establishing a satellite manufacturing centre at HKSTP's Advanced Manufacturing Centre (AMC) at Tseung Kwan O Industrial Estate, spanning three floors with a total area of approximately 190,000 square feet. The centre will support monitoring and operation control, application and data centre activities for satellites, and R&D.

HKATG has been accelerating the pace of expansion of the Golden Bauhinia Constellation, with its recently announced satellite launch service confirmation agreement with China Great Wall Industry Corporation (CGWIC) through its subsidiary SZ Gang Hang Ke.

"As one of our key strategic priorities, HKATG will continue to strengthen our research and development capabilities, which will open up more business opportunities for us to explore. We have close collaborations with the top five universities in Hong Kong on topics including satellite manufacturing, satellite launching and satellite big data applications. These collaborations allow us to tap into the deep R&D expertise in Hong Kong, accelerating our innovation journey."

"Hong Kong has provided us with a variety of competitive advantages, particularly from a tax standpoint. As an international centre with free port status, Hong Kong does not impose customs tariffs on imports or exports. Moreover, there are no sales or value-added taxes and local businesses are offered a variety of incentivising profits tax treatments."



Sun Feng QuanChairman,
Hong Kong Aerospace
Technology Group



HONG KONG SCIENCE & TECHNOLOGY PARKS CORPORATION (HKSTP)

"At HKSTP, we help visionary entrepreneurs and I&T companies in our ecosystem create the future with R&D, innovation and go-to-market support.

Capitalising on Hong Kong's advantage as Asia's largest and the world's leading fundraising hub for biotech, we collaborate actively with the Hong Kong Government to elevate Hong Kong as a global R&D and innovation leader in the biotech and AI sectors. The two government-led InnoHK Research Clusters in biotech and AI, situated at Science Park driving world-class research, commercialisation and facilitating deep tech exchange for local and overseas talent, help make our I&T ecosystem bigger and stronger.

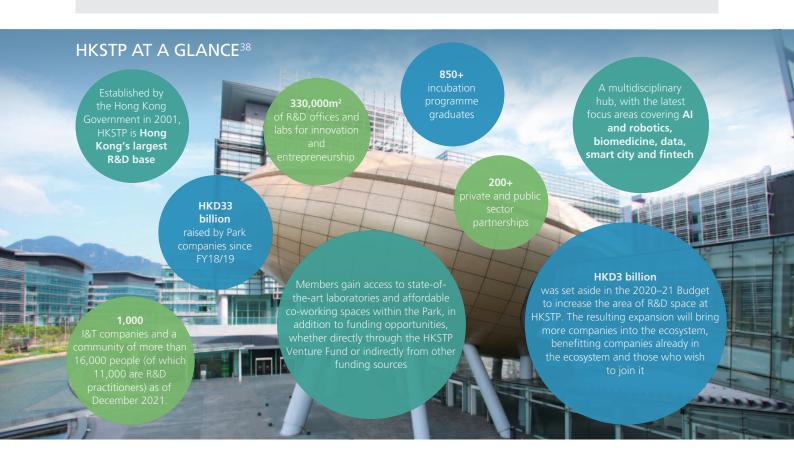
"With 20 years of propelling success for I&T companies and the ecosystem, HKSTP is proud to see more home-grown unicorns emerging, deal flows and investment for tech start-ups

multiplying and the population of R&D professionals rapidly growing. As we march towards a new decade, our ecosystem will continue to thrive from Hong Kong to GBA via the Shenzhen Branch of Hong Kong Science Park that helps local and GBA tech ventures attract investment and expand businesses.

Together, we will translate more innovation into market success from Hong Kong and beyond."



Albert Wong
CEO,
Hong Kong Science &
Technology Parks Corporation



³⁸ HKSTP – Our Impact

Hong Kong has multiple industrial centres, called InnoParks, which offer industrial spaces equipped with end-to-end manufacturing facilities to support the translation of R&D outputs into products.

InnoParks managed by HKSTP³⁹

TSEUNG KWAN O INNOPARK

(75-hectares)

Key focus:

- Marine access related projects using its waterfront area
- Heavy industries, lighter commercial manufacturing and IT/ICT-related services using birthing facilities

Key infrastructure:

- Data Technology Hub
- Advanced Manufacturing Centre

YUEN LONG INNOPARK

(67-hectares)

Key focus:

- Pharmaceutical and biomedicine production
- Cross-boundary business thanks to proximity to Shenzhen Bay Port and Lok Ma Chau Control Point

Key infrastructure:

• Microelectronics Centre

TAI PO INNOPARK

(75-hectares)

Key focus:

- Food manufacturing
- Media services
- Lifestyle goods

Key infrastructure:

- Precision Manufacturing Centre
- MARS Centre

Details of Key Infrastructure

Data Technology Hub (DT Hub)

Established in 2016, DT Hub is a base for ICT and data-centric businesses. It is strategically located among a cluster of Hong Kong's most advanced data centres, allowing members to connect and partner with successful businesses across cloud computing, hosting services, 5G and IoT. The DT Hub offers state-of-the-art infrastructure for data-centric companies and value-added services including funding support, talent acquisition capabilities and business expansion know-how.

Advanced Manufacturing Centre (AMC)

The 1.1 million square foot AMC at Tseung Kwan O Industrial Estate is due to launch in 2022. AMC will offer fully-equipped, scalable and serviced manufacturing spaces for technological innovation and high value-added, highly customised production. These advanced facilities are available for innovators of all sizes to test the translation of their ideas into products through low-volume customised production. This shortens the overall production cycle.

Microelectronics Centre (MEC)

Set to launch in 2023, the HKD2 billion MEC will be dedicated to developing and manufacturing electronics and communications products including advanced semiconductors, smart sensors, electronics and smart power devices. The two-story centre with a

gross floor area of 36,180 square meters will be fully equipped with state-of-the-art facilities, including high standard super-clean rooms, dangerous goods storage spaces and shared laboratories for testing and certification. The centre will also provide shared workspaces, offices and conference rooms to provide an integrated and self-contained ecosystem.

Precision Manufacturing Centre

The Precision Manufacturing Centre provides facilities for innovators in precise engineering and assembly, new materials manufacturing and environmentally friendly yarn production, tooling and advanced indoor hydroponics.

MARS Centre

Covering a total gross floor area of 18,629 square meters, MARS Centre provides facilities to manufacture medical accessory resilience supplies, medical equipment materials and health products that require high precision production.



³⁹ HKSTP – InnoPark Innofacturing Tomorrow

HONG KONG-SHENZHEN INNOVATION AND TECHNOLOGY PARK (HSITP)⁴⁰

"We are excited to establish the Hong Kong-Shenzhen Innovation and Technology Park at the Lok Ma Chau Loop in the Northern Metropolis, which is commissioned to strengthen collaboration between the I&T communities in Hong Kong and Shenzhen. The 87-hectare Park will host an array of R&D activities across healthcare, big data and AI robotics and many more areas. Now is an opportunistic time to establish this new park given the importance of I&T as an engine of growth in Hong Kong and the GBA; and leading global R&D institutes and technology companies see the need to establish R&D

centres in Hong Kong. Hong Kong's international business environment, high quality professional services and mature financial system provide these companies with a one-stop platform to conduct their business activities."

Patrick Siu CEO, Hong Kong-Shenzhen Innovation and Technology Park



HSITP is a new I&T-focused science park in the Northern Metropolis. It is strategically located at the Lok Ma Chau Loop, which adjoins Shenzhen, allowing businesses to tap into the large addressable market and the extensive manufacturing capabilities of the Mainland GBA cities. The key technology focus areas targeted for HSITP include healthcare technologies, big data and AI, robotics, new materials, microelectronics and fintech.

The development will comprise 67 buildings with a total of 1.2 million square meters. The first eight buildings, which spans 117,000 square meters of floor area, are currently under construction and scheduled to be completed by end-2024. They are being built in phases, with the first phase involving three buildings that house two wet laboratories, an innovative chamber and ancillary facilities. The second phase comprises three offices and dry laboratories, in addition to two wet laboratories.

⁴⁰ Shenzhen-Hong Kong Innovation and Technology Co-operation Zone (2021), Hong Kong Government Press Release

CYBERPORT

"The I&T sector in Hong Kong has huge growth potential. With Hong Kong located strategically at the heart of Asia, the city enjoys remarkable advantages through agreements including RCEP and CEPA.

Moreover, the Central Government's support for Hong Kong to become an international I&T hub as stated in the 14th Five-Year Plan cements Hong Kong's status as an ideal environment for I&T businesses to start, grow

and thrive. With its proximity to other Mainland GBA cities,
Hong Kong is a springboard for foreign businesses to tap into the huge market potential of the GBA and Mainland China."

Peter Yan CEO,

Cyberport



⁴¹ Cyberport – About Cyberport

⁴² Cyberport Expansion Project (2021), Southern District Council (SDC)

R&D CENTRES

Five government-established research centres for applied R&D.



AUTOMOTIVE PLATFORMS AND APPLICATION SYSTEMS R&D CENTRE (APAS)

Focused on automotive, in particular green transportation, smart mobility, and intelligent systems



HONG KONG APPLIED SCIENCE AND TECHNOLOGY RESEARCH INSTITUTE (ASTRI)

Focused on smart city, financial technologies, intelligent manufacturing, digital health, and application specific ICs



HONG KONG RESEARCH INSTITUTE OF TEXTILES AND APPAREL (HKRITA)

Focused on high value-added manufacturing and servicing activities for the textiles and fashion industry



LOGISTICS AND SUPPLY CHAIN MULTITECH R&D CENTRE (LSCM)

Focused on logistics, supply chain management, and e-Commerce



NANO AND ADVANCED MATERIALS INSTITUTE (NAMI)

Focused on nanotechnology and advanced materials for applications in construction, electronics, energy, environmental, and healthcare

"Hong Kong's R&D excellence and its proximity to other Mainland GBA cities make it an ideal testing ground for new, leading-edge technologies and I&T-related services. To add to this excitement, Hong Kong is also strategically located for technology businesses to expand into the Mainland China market. ASTRI is committed to delivering the most advanced innovations by collaborating with industry players and public bodies. We are also committed to advancing research activities and outcomes across smart city, fintech, intelligent manufacturing, digital health and application-specific ICs."



Lucas Hui
Chief Technology Officer,
Hong Kong Applied
Science and Technology
Research Institute

"Hong Kong has strong research capabilities in 5G/6G and smart city technologies including smart transport and logistics. Hong Kong can be positioned as a testing ground for foreign companies to validate their technology use-cases prior to entering the Mainland China market."



Simon WongCEO,
Logistics and Supply Chain
MultiTech R&D Centre

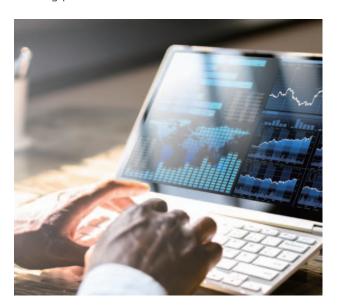
"Hong Kong has shown that researchindustry collaborations can bring about positive innovation outcomes. NAMI advocates for this and has partnered with different industry players and public bodies on joint R&D and innovation projects.

"The Hong Kong Government has further encouraged such partnerships through funding schemes. For example, under the Innovation and Technology Support Programme (ITSP) and the Partnership Research Programme (PRP), collaborating partners can be eligible for cash rebates and tax deduction."



Ivan Sham
Chief Commercial Officer,
Nano and Advanced
Materials Institute

The Hong Kong Government provides co-funding programmes to promote R&D collaboration on applied research and development projects. Through these programmes, industry players can partner with local research institutions (public research institutes or R&D centres) to conduct research. Industry players are eligible for different IP rights based on the level of funding provided.



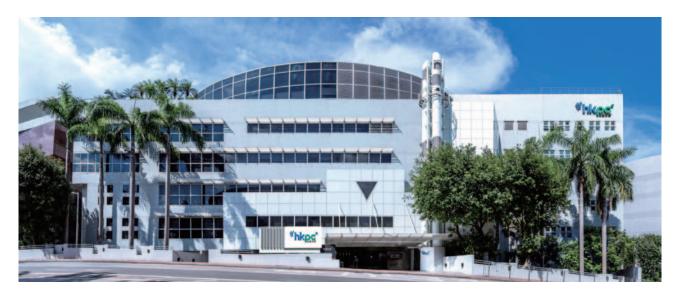
Co-funding programmes hosted by the Innovation and Technology Fund (ITF)⁴³

Project type	Funding from industry player as a % of total project cost	Benefits to industry player
Collaborative	At least 50% to a local public research institute or R&D centre	Own the resulting IP
	30-50% to R&D centre	Granted exclusive rights to use the IP for a limited time
Platform	At least 10% to a local public research institute or R&D centre	IP rights will belong to the local research institution, which will disseminate or transfer the knowledge to relevant parties

⁴³ Innovation and Technology Fund – About the Innovation and Technology Fund

HONG KONG PRODUCTIVITY COUNCIL (HKPC)

HKPC offers an array of services to support the re-industralisation of businesses by adopting advanced technologies such as IoT, big data analytics, AI and robotics.



How HKPC serves⁴⁴

SME and start-up support

Facilitate outreach activities, exhibitions and seminars, including seminars and support for SMEs on funding schemes, technology transformation, market insights and business trends

Digitalisation and cyber security

Assist local industries in utilising digital technology to improve quality and create value throughout the value chain, through events including the Information Security Summit 2021

Future Skills

Offer a range of training programmes in 14 key areas from technological knowledge to communication and management through HKPC Academy

HKPC's vision

To be the key enabler and catalyst of innovation, applied technology and value creation, delivering social, economic and environmental benefits that bolster Hong Kong as an international innovation and technology hub

Fostering re-industralisation

Support enterprises in upgrading and transforming to smart manufacturing with new technologies, Including through the launch of the Re-industralisation Theme Hall to highlight best practices and available resources in re-industralisation

Intelligent manufacturing

Assist local enterprise sand SMEs to upgrade their production lines and implement i4.0 with the adoption of the Industrial Internet of Things (IoT), real-time visualisation and other technologies

Smart and green living

Conduct technical research and consultancy projects on smart and green buildings; act as secretariat for government funding schemes including the Recycling Fund and Cleaner Production Partnership Programme

"HKPC is a trusted partner for enterprises, SMEs and start-ups. Our range of technology related services can help them become more competitive in the marketplace by achieving greater productivity and becoming more cost-efficient."



Lawrence CheungChief Innovation Officer,
Hong Kong Productivity Council

⁴⁴ HKPC Annual Report 2020-21

ICT

MICROSOFT — UNLOCKING OPPORTUNITIES IN HONG KONG

Microsoft is the global leader in software, services and solutions that help people and businesses realise their full potential. The company has been providing cloud computing services to customers through Microsoft Azure since its formal release in 2010, with coverage in multiple continents including Asia, North America and Europe.

Microsoft has had an established operating presence in Hong Kong since 1991. As part of its continued commitment to invest in Hong Kong, Microsoft became an anchor tenant in Cyberport in 2002, moving its entire operations in Hong Kong into the new space. In 2007, Microsoft further expanded its office size by 70% to a total floor area of about 80,000 square feet. Currently, Microsoft Hong Kong has more than 300 employees supporting over 2,600 software and services vendors in Hong Kong.

Microsoft's Hong Kong cloud has been available since 2010 when the company was among the first to establish a major data centre in Hong Kong. Further investments have been made in recent years to enhance cloud capabilities for local businesses, including the expansion of Azure Availability Zones in 2021. Currently, 90% of Hang Seng Index companies run on Microsoft Cloud.

During the pandemic, Microsoft Hong Kong empowered local businesses to accelerate their digital transformation through its technologies and platforms. For example, the company equipped small restaurants with online ordering and delivery capabilities and supported schools to run cloud-based classes.

The company has also had academic collaborations with universities in Hong Kong since 1999, including the CUHK MoE-Microsoft Key Lab of Human-Centric Computing and Interface Technologies, the Microsoft-HKUST joint research lab focusing on information technology, the PolyU-Microsoft Smart Computing Laboratory, the Microsoft-CityU EE Joint Lab and an MoU with HKU in 2018 focusing on AI research partnerships.

"Hong Kong's well-established legal system and robust IP protection, together with its international universities, create a comprehensive ecosystem that is dedicated to encourage the most advanced R&D activities."

"Microsoft has established deep roots in Hong Kong since 1991 and has been empowering local businesses on their digital transformations and journeys through our infrastructure and technology platforms. We see great promise in Hong Kong's I&T sector and are deeply committed to help develop Hong Kong into a world-leading digital city."



Cally Chan
General Manager,
Microsoft Hong Kong
and Macau

HONG KONG'S UNIVERSITIES ARE EQUIPPED WITH ADVANCED LABORATORIES AND EQUIPMENT AVAILABLE TO EXTERNAL USERS

An array of advanced R&D equipment at local universities is available to external users, allowing companies to conduct R&D at minimal cost.

University-based facilities and technical services available to external users

Life and Health Sciences

Centres with equipment or services available for external users:

- HKU Phase 1 Clinical Trials Centre
- CUHK Phase 1 Clinical Trial Centre
- PolyU University Research Facility in Life Sciences
- HKU LKS Faculty of Medicine Centre for PanorOmic Sciences





Al and Robotics, Smart City Centres with equipment or services available for external users:

- HKUST The NFF (CWB) Laboratory
- CUHK Micro- and Nano-Fabrication Laboratory
- PolyU University Research Facility in Materials Characterisation and Device Fabrication



WELL-ESTABLISHED FINANCIAL SYSTEM SUPPORTS FINANCING ACTIVITIES

Hong Kong — Asia's international financial hub



Governed by transparent regulations that accord with international standards



HKEX has the **3rd** largest market capitalisation in Asia and **6th** globally⁴⁵



4th most IPO funds raised in 2021, totalling HKD331 billion⁴⁶



Introduction of **SPAC listing regime**⁴⁷ to facilitate capital raising in emerging and innovative industries



Asia's largest and the world's 2nd largest funding hub for biotechnology

The new listing rule, Chapter 18A, opened doors for pre-revenue biotech companies to access international capital and investors.

Since the introduction of Chapter 18A in 2018:

	IPO funds raised
92 healthcare and biotech listings	нкр 255 bn
48 pre-revenue biotech listings (under Chapter 18A)	нкр 113 bn

As of December 2021. Source: HKEX

"From our viewpoint, there is great potential to be unlocked in Hong Kong's biomedicine and healthcare market. First, there are many top-notch researchers in Hong Kong who specialise in basic and translational healthcare. Second, Hong Kong has a well-established healthcare ecosystem that positions it as one of the best places for companies to conduct clinical trials. Last but not least, Hong Kong is strategically located close to Mainland China, enabling researchers to commercialise their technologies through Mainland China's comprehensive manufacturing capabilities."



Simone Song Founder, ORI Capital

⁴⁵ Largest Stock Exchange Operators Worldwide as of October 2021, by Market Capitalisation of Listed Companies (2021), Statista

⁴⁶ HKEX Annual Report 2021

⁴⁷ SPAC refers to Special Purpose Acquisition Companies

ACTIVE PARTICIPATION BY THE HONG KONG GOVERNMENT IN FUNDING 1&T COMPANIES

The ITF is a fund administered by the Innovation and Technology Commission of the Hong Kong Government to promote innovation and increase the technological level of businesses in Hong Kong. ITF hosts multiple funding programmes, including initiatives to support R&D activities, facilitate technology adoption and promote technology start-ups.

Within R&D support, two types of projects are structured to promote research-industry collaborations: platform projects (at least 10% industry sponsorship) and collaborative projects (at least 50% or at least 30% for R&D Centre projects industry sponsorship, with industry players receiving IP rights).

79% of respondents find ITF an attractive government funding scheme

Scan the QR code to discover more about ITF funding programmes



Available funding programmes or schemes provided by ITF

Purpose	Initiative	Key features
Supporting R&D	Innovation and Technology Support Programme (ITSP)	 Supports applied R&D projects conducted by R&D centres, universities, and other designated local public research institutes Seed projects are given maximum support of HKD2.8 million if undertaken by R&D centres and HKD1.4 million if by other applicants
	Mainland-Hong Kong Joint Funding Scheme (MHKJFS)	Supports platform and collaborative R&D projects with an element of Mainland and Hong Kong cooperation
	Guangdong-Hong Kong Technology Cooperation Funding Scheme (TCFS)	 Supports platform and collaborative R&D projects that involve cooperation between Hong Kong and Shenzhen or Guangdong
	Partnership Research Programme (PRP)	• Provides matching funding support to R&D centres or a designated local public research institute for collaborative R&D projects
	Enterprise Support Scheme (ESS)	 Provides matching funding support to local companies for R&D work Maximum funding support of HKD10 million per project
	Research and Development Cash Rebate Scheme (CRS)	 Provides a 40% cash rebate on eligible expenditure on R&D projects funded by the ITF or by projects conducted in partnerships with designated local public research institutes
Facilitating Technology Adoption	Technology Voucher Programme (TVP)	 Supports local businesses to adopt technological services and solutions to enhance their business processes Maximum funding per enterprise or organisation of HKD600,000
	Re-industrialisation Funding Scheme (RFS)	 Provides manufacturers with matching subsidies (1:2 ratio between government and companies) to establish new smart production lines Maximum funding support per project is the lower of one-third of the total approved project cost or HKD15 million

Sector-specific funding from the Hong Kong Government

Businesses can also tap into many sector-specific funds.



SUBSIDY SCHEME FOR ENCOURAGING EARLY DEPLOYMENT OF 5G

Launched by the Hong Kong's Office of the Communications Authority (OFCA) to provide entities with a 50% subsidy (capped at HKD500,000) on approved project costs related to 5G deployment.



GREEN TECH FUND

Provides funding support for R&D and the application of de-carbonisation and green technologies that expedite low-carbon transformation and enhance environmental protection in Hong Kong. Priority is given to projects focused on de-carbonisation and energy savings, green transport, waste management and air and water quality.



SMART TRAFFIC FUND

Provides funding to local organisations and enterprises researching vehicle-related technologies that enhance commuting convenience, increase transport efficiency and improve road safety. Private entities can receive funding for up to 50% of the project cost through the fund.

STRATEGIC TECH FUND UNDER THE HONG KONG GROWTH PORTFOLIO

A government-established fund that invests in technology, brings strategic value and enriches Hong Kong's I&T ecosystem. HKSTP and Cyberport were invited to identify potential I&T start-ups.⁴⁸

73% that the Hong Kong
Government has
facilitated access to
finance and funding for corporates and
SMEs



Accelerator and incubation support for startups

Hong Kong offers a wide range of accelerators and incubation programmes through HKSTP, Cyberport, universities and private organisations.

Additionally, StartmeupHK⁴⁹ provides a one-stop platform for founders of innovative and scalable startups from overseas and Mainland China to establish or expand in Hong Kong.

⁴⁸ Support Start-ups and Technology Investments, Budget Speech, The 2022–23 Budget

⁴⁹ Launched in 2013, StartmeupHK is a division of InvestHK, a Hong Kong Government Department that assists overseas companies establishing their presence in Hong Kong.

HKSTP programmes

HKSTP offers four main incubation and accelerator programmes to start-ups at various business stages. The programmes include comprehensive services such as funding, R&D support, mentorship and investor matching. Start-ups also have access to specialised labs, meeting venues and other facilities within HKSTP.

	Ideation	Incubation	Acceleration	Elite
Period	1 year	3 years (general start-ups); 4 years (biotech start-ups)	2 years	3 years
Funding and support	Up to HKD100,000	Up to HKD1.3 million (general start-ups); up to HKD6 million (biotech start-ups)	Up to HKD4.8 million	Up to HKD21.5 million
Business valuation	N/A	Up to USD5 million	USD5 million– USD50 million	USD50 million– USD100 million
Years of incorporation	2 years old or less	General start-ups, 5 years or less; biotech start-ups, 2 years or less	No limitation	2 years old or more

HKSTP also has tailored co-incubation programmes in partnership with industry players. These include the HKSTP-AstraZeneca co-incubation programme targeting oncology-focused biomedicine start-ups and the HKSTP-KingMed initiative for diagnostics and IVD start-ups.

Scan the QR code to discover more about incubation programmes at HKSTP

Cyberport programmes⁵⁰

Cyberport offers a variety of funding schemes to support start-ups at various stages of their business lifecycles. Each funding scheme includes additional benefits like access to free workspaces, training and mentorship programmes, and networking opportunities.

	Cyberport Creative Micro Fund	Cyberport Incubation Programme	Cyberport Accelerator Support Programme	Market Development Support Scheme	Cyberport Macro Fund
Period	6 months	2 years	N/A	2 years	N/A
Financial assistance	Up to HKD100,000	Up to HKD500,000	Up to HKD300,000	Up to HKD200,000	HKD1 million– HKD20 million
Further description	Additional benefits: Training, mentorship and business advice Business development and investment connections Publicity and promotion Alumni network and peer support	Additional benefits: Rent-free workspace at Cyberport Free use of shared facilities at Cyberport Networking opportunities	Financial assistance covering 75% of accelerator programme fees, office rental, interns, travel and accommodation, marketing and promotion and professional services	Financial assistance covering 75% of: Overseas or Mainland delegation mission and/or marketing exhibition or conferences Overseas or Mainland expansion (marketing, landing services)	Co-investment fund for digital technology companies



87%

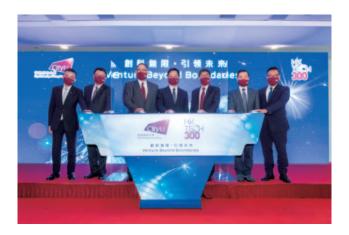
of respondents agree that Hong Kong society provides adequate and high-quality support for entrepreneurship

Scan the QR code to discover more about incubation programmes at Cyberport



⁵⁰ Cyberport – About Cyberport

CityU HK Tech 300⁵¹



CityU launched HK Tech 300, a large-scale flagship innovation and entrepreneurship programme, which aims to help students, alumni, researchers and other members of the public create 300 start-ups in three years.

Since its launch in March 2021, more than 1,000 participants have received entrepreneurial training by professional organisations. The programme has also provided over 300 teams with HKD100,000 of seed funding each. Furthermore, over 70 startups have been granted angel fund investments of up to HKD1 million each.

HK Tech 300 is supported by about 60 strategic partners, including the Innovation and Technology Commission of the HKSAR Government, InvestHK, the four major chambers of commerce, and other supporting organisations and professional services partners. In addition, teams have received guidance from 80 seasoned industrialists and entrepreneurs on their entrepreneurship journey through the HK Tech 300 Mentorship Scheme.

CityU has further expanded the reach of this programme by launching a nationwide HK Tech 300 Start-up Competition covering Hong Kong and the Mainland China. The competition aims to synergise the advantages and resources of Hong Kong and the Mainland, encourage exchange and collaboration in innovation, and promote the application of CityU's research achievements and intellectual property on the mainland.



Scan the QR code to know more about available incubation and acceleration programmes in Hong Kong



⁵¹ City University of Hong Kong, 2022

MATURE PRIVATE FUNDING IN HONG KONG

Hong Kong has an active private investment scene supported by venture capital and private equity firms. Family offices in Hong Kong are also increasingly interested in investing in technology start-ups. More than 70% of private investments in Hong Kong are focused on early and mid or expansion stage start-ups. ⁵²

Private investment appetite has been boosted by co-investment schemes including the ITVF. Since 2017, the ITVF co-investment scheme has attracted more than HKD889 million in private investments.

With a vibrant ecosystem, Hong Kong achieved record funding in 2021 of USD3.4 billion across 59 deals, according to Pregin.⁵³

Scan the QR code to discover more about private venture capitalists in Hong Kong



"We have earmarked Hong Kong as one of the key geographical focuses for our fund. We continue to be impressed with the professionalism of entrepreneurs in Hong Kong and are committed to helping them achieve success. In addition to providing funding, we transfer our know-how in sales and marketing to help investee companies expand their market reach, especially into Mainland China, where we have rich on-the-ground experience."



Andy Liu Investment Director, China Resources Enterprise

An increasing number of corporates are also establishing accelerator and incubation programmes that provide start-ups with funding and mentorship opportunities.

Examples of corporate accelerator and incubation programmes

Accelerator/Incubator	Overview
Eureka Nova	An accelerator initiated by New World Group as a platform to support the growth of businesses in Hong Kong offering innovative and disruptive technologies
HUAWEI Spark	A hybrid accelerator programme for deep tech start-ups with a presence in Asia Pacific organised by HUAWEI
92 Express	A landing programme launched by Google with CoCoon for start-ups offering innovative hardware solutions
CRE x CityU Innovation and Entrepreneurship programme	A platform with a total allocation of HKD100 million to be invested in start-ups involved in life sciences and healthcare, biomedical engineering, materials science and engineering in the GBA

Based on number of deals in Preqin 2021 data, including early, mid or expansion stage angel, series A, series, B, series C and expansion funding

⁵³ Based on disclosed deals from Preqin database; dataset extracted on 11 February 2022

Hong Kong has a growing pool of investors that are comfortable with the long-term R&D period required in sectors like life and health sciences, are willing to invest for the duration. As a result, funding for biotechnology and medical device start-ups in Hong Kong registered a triple digit CAGR between 2017 and 2021. As of 2019, Hong Kong is Asia's largest and the world's second largest fundraising hub for biotechnology companies.

VIVA VENTURES BIOTECH FUND

BIOMEDICAL & HEALTHCARE

Viva Ventures Biotech Fund is a global venture capital fund focused on biotechnology investments. The fund invests mainly in discovery-stage biotech start-ups across Hong Kong, Mainland China, Europe and the US. Its portfolio companies target diseases including cancer, cardiovascular diseases, dry eye, skin diseases, antibodies, analgesic compounds and many others.

Viva Ventures Biotech Fund's headquarters are in Hong Kong. The firm chose the city as its base for its well-established community of sophisticated investors.

In 2019, one of Viva Ventures Biotech Fund's portfolio companies, Viva Biotech, listed on the Hong Kong Stock Exchange. The deciding factors for listing in Hong Kong include the relatively low cost of maintaining a listed company, including legal and accounting costs and the Hong Kong Government's strong commitment to upholding the Hong Kong Stock Exchange standards. Viva Biotech is a leading structure based integrated drug discovery and manufacturing platform with several world-leading technologies. As of 31 December 2021, the company had delivered more than 34,391 protein structures to clients (13,134 in 2021) and conducted R&D on over 1,810 independent drug targets (226 in 2021).

"The Hong Kong Government has played a supportive role in boosting growth of the biotech industry in Hong Kong. This includes encouraging AI applications in drug discovery and establishing clinical trial centres. Moreover, with the new listing opportunities for biotech companies, we are likely to see an increasing number of high quality biotech start-ups coming into Hong Kong, which will add to the growing vibrancy in this space."



Jun MaoFounder,
Viva Ventures Biotech Fund



PROFESSIONAL SERVICES AND ADVISORY SUPPORT

Hong Kong has a highly sophisticated professional services industry that operates at international standards. This includes legal services, financial services, IP services and business advisory support.

Legal and IP consultation services

As Asia's international legal services capital, Hong Kong is home to more than 2,900 local and foreign legal services firms with more than 25,000 people engaged in the industry.⁵⁴

The city imposes no foreign ownership restrictions, allowing foreign law firms to enter the market. More than 70% of international law firms and over 50% of the Global 100 firms have a presence in Hong Kong.⁵⁵



"Hong Kong is known for its first-class financial and professional services, which are the key enablers for businesses to thrive and scale up their operations. The Federation of Hong Kong Industries (FHKI) empowers businesses through providing various services and professional support, including business certification, intellectual property and training programmes."



Steve Chuang
Executive Deputy Chairman,
Federation of Hong Kong
Industries

The Hong Kong Government and other industry associations offer IP consultation services:

- The Intellectual Property Department of Hong Kong Government, with support from the Law Society of Hong Kong, provides free one-to-one IP consultation services for SMEs
- Intellectual Property Services Centre under HKPC offers assistance to local companies and inventors to capitalise on their intellectual work through patent, trademark and industrial design protection, and IP management
- Intellectual property centre under FHKI has more than 20 years of professional experience in IP and provides free advisory services to enterprises

⁵⁴ As of September 2021, Census and Statistics Department Hong Kong Special Administrative Region

⁵⁵ Forbes, 2021



Accounting services

As an international financial hub, Hong Kong has a wealth of highly-qualified accounting firms. As of September 2021, there were 6,211 accounting, bookkeeping, auditing services and tax consultancy firms in Hong Kong. These firms engaged more than 32,950 personnel.⁵⁶

With close oversight from the Hong Kong Institute of Public Accountants (HKICPA), the quality of accounting services in Hong Kong is maintained at a high level. Each auditor must hold a practicing certificate issued by HKICPA before being eligible to practice.

Business advisory support

Hong Kong provides an array of business advisory services to support I&T companies through:

Cyberport and HKSTP

Offers promotion and development assistance including marketing support, press and media services through their accelerator and incubation programmes. HKSTP's TecOne offers guidance on funding, business collaboration, marketing and many more areas through TecFunding, TecService, TecFinance and TecMart.

HKPC

Supports Hong Kong enterprises to re-industrialise their businesses through an array of technical support and consultancy services that support the adoption of advanced technologies such as IoT, big data analytics, AI and robotics. The SME ReachOut team helps SMEs identify suitable funding schemes and responds to funding application queries.

Support and Consultation Centre for SMEs (SUCCESS)

Run by the Trade and Industry Department, SUCCESS offers free business information and consultation services in collaboration with various trade and industrial organisations, private enterprises, professional bodies and other government entities in Hong Kong.

Private Management Consultancy Service Providers

Hong Kong has an established presence of private management consultants who offer business advice on topics including strategy and operations. There are 43,484 people engaged in the sector in Hong Kong across 10,202 providers, including renowned international firms.⁵⁷

⁵⁶ As of September 2021. Census and Statistics Department Hong Kong Special Administrative Region

⁵⁷ As of September 2021, Census and Statistics Department Hong Kong Special Administrative Region

ESTABLISHED 1&T COMMUNITY FOR NETWORKING OPPORTUNITIES

Hong Kong is home to numerous international corporations and investment firms. There is a wide range of platforms and business events that connect corporates, start-ups and investors. These include I&T conferences and forums, business matching events and trade shows.



The annual Venture Capital Forum hosted by Cyberport is a premier venture forum where global venture experts and entrepreneurial leaders share insights on the latest fundraising strategies, market dynamics and value creation to capture investor attention.

The HKSTP x Global Acceleration Academy (GAA) Global Matching business and investment matching event brings corporate buyers and regional investors together with potential start-ups and technology ventures from across the world to source best fit, market-proven solutions and valuable portfolios.

82% of respondents find that there are adequate networking events for corporates and SMEs



The Cyberport Investors Network (CIN) is a dedicated platform from Cyberport that introduces investors to high-potential and high-growth start-ups to boost deal flows. CIN now boasts a membership of more than 100 global angel investors, venture capitalists, private equity funds, family offices and corporate ventures, several of which have operations in the GBA. In 2020/21, CIN connected investors to 23 projects that resulted in HKD358 million of investments.



The HKPC 5G Future Hall is a dedicated space in the HKPC Building for 5G-related businesses to present their products to potential business users. It hosts 5G base stations from all four major

telecommunications operators covering three different frequencies bands.

Hence it also serves as a 5G testing platform for applications in construction, transportation, waste management, energy, medical care and other sectors.⁵⁸

840/0
of respondents find that there are adequate investor events for corporates and SMEs in Hong Kong

⁵⁸ HKPC 5G Future Hall Spearheads the Promotion of 5G R&D and Applications in Hong Kong with New 5G Intelligent Manufacturing and Smart Living Solutions on Show (2021), Hong Kong Productivity Council

StartmeupHK

StartmeupHK is an initiative by InvestHK aimed at helping founders of innovative and scalable startups from overseas to set up or expand in Hong Kong.

Key initiatives

Startmeup.hk



A one-stop website for entrepreneurs to stay informed on the latest news within the start-up scene, check out upcoming events, share inspiring stories and access resources to support their entrepreneurial journeys. The resources available include an overview of potential funding sources and shared facilities accessible to start-ups.

StartmeupHK Festival



An annual start-up event with panel discussions, exhibitions, investor matching initiatives, hackathons and job fairs. This event is open to participants from all across the globe. In 2021, more than 39,000 attendees from 103 countries joined in.



DEDICATED OFFICE SPACES AND CO-WORKING SPACES FOR THE I&T COMMUNITY

Dedicated I&T offices spaces from Cyberport and HKSTP

Through Cyberport and HKSTP, the Hong Kong Government offers dedicated offices spaces for the I&T community. These are equipped with state-of-the-art broadband networks and leading-edge telecommunications facilities. Some of them also provide specific support services, including conference and exhibition centres, retail and entertainment facilities.

Co-working spaces for the I&T community

There are **124 co-working locations available** in Hong Kong as of 2021⁵⁹

HKSTP hosts multiple co-working spaces through its onsite campuses (Science Park, InnoCentre) and offsite locations. These co-working spaces are typically charged on a membership basis or per hot desk or workstation. Examples include the 2W co-working space, INNO2, Lion Rock 72 and Wheelock. Some of the co-working spaces are dedicated to specific sectors, which promotes the creation of a strong community of people working towards a similar cause who empower one another. Examples of these sector-focused co-working spaces include the Incu-Bio co-working space, Al Plug, the Fintech Centre and ICT co-working centre.⁶⁰

Cyberport provides eight co-working spaces across its campuses, called Smart-Spaces, which currently houses 677 I&T companies. Seven Smart-Spaces are located in Pokfulam, which spans 120,000 square feet. The latest Smart-Space is located in Tsuen Wan for entrepreneurs aged 18 to 35 and offers 60 flexispaces, 48 workstations and 34 office rooms across 20,000 square feet. Smart-Space users have access to value-added services provided by

of respondents find that there are adequate office space and co-working space provided to corporates and SMEs

Scan the QR codes to discover more about becoming a tenant at:



Cyberport (office)



Cyberport such as

access to funding

programmes, an

networking events and

the introduction to

invitation to

mentors.

HKSTP (office)



Cyberport (Smart-Spaces)



HKSTP (co-working)

⁵⁹ StartmeupHK – Shared Facilities

⁶⁰ HKSTP – Labs and co-working spaces

⁶¹ Cyberport – Smart Space

SMARTMORE — A HOMEGROWN AI & ROBOTICS UNICORN PIONEERING SMART **MANUFACTURING**

SmartMore is a rising smart technology company, focused on empowering and advancing smart manufacturing and digital innovation. SmartMore's five core capabilities of algorithm R&D, software engineering, optical design, automation and hardware optimisation have enabled the company to build a full-stack, software-hardware-solution infrastructure and ecosystem that meet the diverse needs of its customers for innovative transformation.

Founded by an IEEE Fellow and tenured professor of computer science and engineering at CUHK and two of his PhD students in 2019, SmartMore has rapidly expanded into Mainland China and other Asia Pacific locations and now has nearly 1,000 personnel.

SmartMore has established R&D and business centres in Hong Kong, Shenzhen, Shanghai, Beijing, Suzhou, Hangzhou, Chongqing, Singapore and Tokyo. The Hong Kong office remains a key R&D hub for SmartMore in industrial applications, in addition to its sales and distribution focus on overseas markets.

The company is also a graduate of the HKSTP Incu-Tech programme and a participant in the LEAP programme, an accelerator that empowers highpotential technology start-ups navigate their growth journeys locally and internationally.

In June 2021, SmartMore secured USD200 million in funding to become a unicorn company. To date, SmartMore has developed a variety of smart manufacturing solutions serving more than 100 multinational companies and large corporates across industries including automobile, consumer electronics, semiconductor and precision optics.

"Hong Kong has a wealth of R&D talent, especially in the semiconductor field, which is critical to innovation and development for SmartMore. In addition, the city enjoys proximity to key international markets and free port status, which make it a premier sales and distribution hub.

Through the Incu-Tech and the LEAP programme (now known as the Acceleration Programme), SmartMore has received tremendous support from HKSTP ranging from office space and facilities support to overseas development and promotion assistance. We also leveraged HKSTP's extensive industry network, which provides us with access to potential customers."



Tandy Tan General Manager, Global Business, SmartMore

"Hong Kong will become an international innovation and technology hub. Leveraging its unique competitive advantages including world-leading R&D infrastructures, academic excellence, a multi-cultural talent pool, friendly business environment with a simple and low tax regime and status as a global financial centre, Hong Kong is well placed to attract foreign investment and top talent from across the world. The networks and opportunities available in Hong Kong, in particular with synergies arising from the Greater Bay Area, are unique." **Andy Wong** "Riding on its competitive edge as an Head of Innovation and Technology international business and entrepreneurship Invest Hong Kong hub, Hong Kong has made remarkable progress in technology-driven innovation in recent years. This report highlights the abundant I&T resources in Hong Kong, revealing a thriving ecosystem backed by favourable government policies and incentives, the growing presence of public and private investment and collaboration between academia, start-ups and industry from the GBA and overseas. We welcome you to explore and capitalise on the spectrum of services in Hong Kong to help your business succeed." **Falcon Chan** "Hong Kong is a one-stop hub for I&T Partner, Strategy, Analytics and M&A businesses at every stage of growth. Deloitte China Established I&T businesses can leverage Hong Kong's proximity to Mainland GBA cities to expand into new markets. Start-ups can use Hong Kong's readily available research talent and infrastructure to conduct initial proof of concepts. From advanced digital infrastructure to ample funding, Hong Kong has prepared a bed of fertile soil to support the growth of your I&T business. Explore your opportunities in Hong Kong." **Robert Lui** Partner, Government Affairs Leader Deloitte China

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ABOUT INVEST HONG KONG

Invest Hong Kong (InvestHK) is the Hong Kong Government's department for attracting foreign direct investment. Our goal is to help overseas and the Mainland companies to set up and develop their businesses in Hong Kong. For those foreign companies that are already established here, we extend our services to help them expand in our city.

All of our services are free, confidential and tailored to clients' needs. Our comprehensive range of services includes:

Latest information on Hong Kong's business environment:

- Sector-specific advice and opportunities
- Business incorporation procedures
- Tax and business regulations
- Cost-of-business models
- Employment legislation
- Immigration requirements
- Business networking opportunities



• Lawyers, accountants, human resource specialists, consultancies, designers, interior specialists and real estate companies

Arranging visit programmes:

• Meetings with service providers, professional associations and government officials and departments

Business support facilitation:

- Support and assistance with business licences, visa applications, trademark registration, IP and trade regulations
- Marketing and public relations services during the launch and expansion of your company
- Advice on living and working in Hong Kong housing, healthcare, schooling and networking

InvestHK has offices in major cities around the world and industry experts across a range of business sectors. Contact us for free advice on setting up in Hong Kong or for details on how we can support your expansion in our city.

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