



Innovation & Technology, Testing & Certification

May 2011

Overview

Apart from its magnificent harbour and plentiful granite, Hong Kong does not have much natural resources. But we make up for this lack with high quality human resources, counting on their proven ability to innovate, invent and create.

In 2009, the Government identified six economic areas in which Hong Kong enjoys clear advantages for further development. These include innovation and technology as well as testing and certification. The initiatives are supported by China's National 12th Five-Year Plan.

Testing and Certification Services

The local testing and certification industry is highly acclaimed for its integrity and professionalism. There are some 200 accredited organisations in Hong Kong providing a wide range of testing, certification and inspection services, covering such areas as food, consumer goods and industrial products, and using quality management system certification standards such as ISO 9001. With Hong Kong's proximity to the giant manufacturing base in the Pearl River Delta of the Mainland and global demand for product quality and safety, there is great potential for the further growth of this industry.

In September 2009, the Hong Kong Council for Testing and Certification was established to advise the Government on the overall development strategy and

initiatives which will propel the industry's growth.

The Government is now working closely with the Council on the implementation of a three-year market-oriented industry development plan, to strengthen the competitiveness of the industry in general and explore new business opportunities in four selected trades – Chinese medicine, construction materials, food and jewellery.

The Government is stepping up the promotion of testing and certification services for goods exported to overseas markets through major trade fairs. It has also taken steps to implement Supplement VII to the Closer Economic Partnership Arrangement (CEPA), the free trade pact between the Mainland and Hong Kong.

Starting from 2011, testing laboratories in Hong Kong can undertake product testing for the China Compulsory Certification (CCC) System on a pilot basis for four types of products processed in Hong Kong – toys, circuit installations, information technology equipment and lighting apparatus.

This will make it easy for goods processed in Hong Kong to enter the Mainland market.

Innovation and Technology

The Innovation and Technology Commission (ITC) strives to create an environment conducive to innovation and technology development. The Commission administers the \$5 billion (US\$645 million) Innovation and Technology Fund (ITF), which provides funding for applied R&D projects to boost

productivity and competitiveness of our manufacturing and service industries.

At the end of 2010, some 2 300 projects had been approved, with total funding amounting to \$5.7 billion (US\$735 million).

In 2010, the Government launched a \$200 million (US\$26 million) 'R&D Cash Rebate Scheme' to strengthen the research culture among enterprises and encourage them to work with local research institutions. Under this new scheme, enterprises conducting applied R&D projects with the support of the ITF or in partnership with designated local research institutions enjoy a cash rebate equivalent to 10 per cent of their R&D investments.

The Small Entrepreneur Research Assistance Programme (SERAP), under the ITF, provides matching grants of up to \$4 million (US\$515,000) per project to help small start-up technology companies turn innovative ideas into commercially viable products, processes or services. By the end of 2010, \$363 million (US\$46 million) in financial support had been provided to 334 projects.

Hong Kong is strengthening its intermediary role to promote technological cooperation between the Mainland and the rest of the world.

In May 2007, the Hong Kong Government and the Shenzhen Municipal Government signed an agreement to foster closer technological cooperation between the two cities and promote the establishment of the Shenzhen-Hong Kong Innovation Circle.

Meanwhile, the Hong Kong Government and the Guangdong Provincial Government jointly operate the Guangdong-Hong Kong Technology Cooperation Funding Scheme to encourage collaboration among universities, research institutions and technology enterprises between the two places.

R&D

Five R&D Centres were set up in 2006 under the ITF. Harnessing Hong Kong's advantages in applied research and intellectual property protection, as well as the city's ideal location adjacent to the Pearl River Delta region, they aim to drive and coordinate applied R&D in five focus areas and to promote technology transfer to industry.

The five centres focus on: automotive parts and accessory systems; information and communications technologies; logistics and supply chain management enabling technologies; nanotechnology and advanced materials; and textiles and clothing.

Peak Innovation

Hong Kong ranked third in the 2009-2010 Global Innovation Index and first in Asia. The index, compiled by INSEAD business school in association with the Confederation of Indian Industry, also placed Hong Kong first in the pillar of Creative Output.

Science Park

The Hong Kong Science Park, established in 2001, is located in the New Territories. Its first two phases provide 20 state-of-the-art buildings offering 220 000 square metres of office space, as well as fully-equipped laboratories and engineering services.

The Park is now home to more than 340 technology companies in electronics, information technology and telecommunications, precision engineering, biotechnology and green technology industries.

To date, the Park has nurtured about 320 local technology start-ups and 90 design start-ups.

Construction of Phase 3 of the Park is underway and will be completed in stages between 2013 and 2016.

High-tech Weight-loss Coach

Intuitive Automata, a recipient of SERAP funding and a Science Park incubatee, won the inaugural Credit Suisse Technopreneur Award in the Asian Innovation Awards 2010 with a robotic weight-loss 'coach' for dieters.

Cyberport

Cyberport occupies a spectacular 24-hectare site at Telegraph Bay on Hong Kong Island. Completed in 2004, the \$15.6 billion (US\$2 billion) development has housed the regional headquarters of many IT and related companies. It has industry support centres, including the Hong Kong Wireless Development Centre and the Digital Media Centre, which spearhead the growth and development of the local IT and digital entertainment industry.

Smart Cards

Leveraging its connectivity, creativity and innovation, Hong Kong has earned world reputation for extensive and highly efficient use of smart card technology in daily life – the multi-purpose Octopus card, smart identity (ID) card and the Autotoll System are widely used for shopping, public transport and instant immigration clearance.

Introduced in 1997, the Octopus card system was the first contactless smart card system in the world and has since grown into an ubiquitous payment system for virtually all public transport in Hong Kong and for transactions in many retail outlets, restaurants, parking and other public facilities. There are now over 23 million Octopus cards in circulation

with 95 per cent of Hong Kong people between the ages of 16 and 65 using them. Octopus processes daily more than 11 million transactions valued at over \$100 million (US\$13 million).

With seven million people, Hong Kong has one of the world's largest populations using smart ID cards. Every Hong Kong resident over the age of 11 years has one. It enables faster travel through automated immigration channels, bookings at public libraries, sports and leisure facilities, and a digital certificate for various e-business transactions.

The Government's electronic service delivery, GovHK, is a one-stop portal providing around 200 online public services from about 50 government departments and public agencies, offering public and commercial services at a click.

Father of Fibre Optics

Former Vice-Chancellor of The Chinese University of Hong Kong, Professor Charles Kao, was awarded the Nobel Prize in Physics in 2009. Widely regarded as the 'Father of Fibre Optic Communications', Prof Kao has won many international awards during a long career covering photonics, fibre optic communications, teaching and research.

Best Woman Scientist

Professor Vivian Yam, professor in chemistry and energy and head of the Department of Chemistry at the University of Hong Kong, was honoured as a laureate of the 13th L'Oréal-UNESCO Women in Science Awards 2011 for her contributions in light-emitting materials and innovative ways of capturing solar energy.

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