Hong Kong Science Park Phase 2

Opened in June 2002, Hong Kong Science Park is a three-phased project occupying a total area of 22 hectares located on the scenic Tolo Harbour in Shatin.

Officially opened in September 2007, the Hong Kong Science Park Phase 2 covers a total GFA of 105,000 sq m. The HK\$3.75 billion development is one of the largest facilities of its kind in the Pearl River Delta. Phase 2 comprises 11 high-tech buildings and more than 32,000 sq m of world-class laboratory space. In addition to its new laboratory buildings, Phase 2 boasts more than 50,000 sq m of R&D office space.



Mr SS Lee, CEO of HKSTP; Mr Donald Tsang, Chief Executive of HKSAR; Mr Frederick Ma, Secretary for Commerce and Economic Development of the HKSAR; Mr Nicholas Brooke, Chairman of HKSTP. (left to right)

Development phases

Phase 2 development can be divided into three areas. Priority has been accorded to the fast-growing biotechnology sector, underscored by two laboratory buildings designed for biotechnology research.

Area A contains two energy towers (Buildings 10, 13) and two laboratory buildings (Building 11, 12). The two energy towers will provide central air-conditioning for the entire Phase 2. The two laboratory buildings will be suitable for biotechnology usage.

Area B contains two laboratory/ R&D buildings (Buildings 14, 16) and two R&D office buildings (Buildings 15, 17). The communal supporting facilities, including retail, restaurants, auditorium, business centre, clubhouse and conference facilities will be provided in this area.

Area C contains three R&D office buildings (Buildings 18, 19 and 20). Restaurant spaces will be provided at the ground floor level of the buildings facing Tolo Harbour.



Design and planning

The design of Phase 2 has been developed to provide an environmentally friendly, campuslike setting for successful research and development activities.

The planning of Phase 2 follows the overall master planning concept developed in Phase 1. The 'zoned' approach is maintained, namely, campus zone next to Tolo Highway, core zone in the centre bound by the two arms of internal roads and corporate zone next to Tolo Harbour. The concept of continuous central spine (internal street) linking all the major supporting and retail/ restaurant facilities in the central core zone in all Phases (link to be extended to Phase 3 in future) is maintained; and lower buildings are developed on the harbourfront.

World-class auditorium

The Auditorium is designed as the icon for Science Park, centrally located in the centre of Science Park to receive VIPs entering from Forum while perceiving the graceful view









of Central Lake and Tolo Harbour beyond. The Conference Centre here comprises the zeppelin shaped Auditorium Main Hall as the epicenter of Science Park which is ideal for prestigious conferences, the flexible Auditorium Pre-function Hall suitable for conference registrations/ displays and exhibitions, and the professionally serviced Business Centre provides variously sized venues for major conventions to small grouped meetings.

Inside the Auditorium there are 288 seats including 4 allocated spaces for wheelchairs. There are provisions for 35 mm film projection with digital surround sound system in addition to the latest multimedia systems. Together with the simultaneous interpretation rooms for live broadcasting of translated contents the Auditorium is an ideal venue for holding all sorts of international conferences. The Auditorium is fully covered by Wi-Fi internet access while selected seats are also equipped with data ports for high speed data transfer. The network is also connected to HARNET (Hongkong Academic Research Network) for authorized users to acquire instant access to various academic research databases.







Open space planning

With an area up to 84 Olympic-size swimming pools, the Phase 2 has a large central lake surrounded by al fresco dining areas. Extensive landscapes form the main open space element for the enjoyment of both tenants and visitors, with which a networking as well as relaxing atmosphere is fostered in the park setting.

A hierarchical open space planning is adopted in Phase 2. Besides the central lake, the prestigious open space forum greets VIPs upon entering into the conference centre; and corporate square is another landscaped open space between the corporate buillings on the harbourfront defining a visual corridor across the site towards the harbour: and ocean square is the public plaza joining to the waterfront promenade with an amphitheatre for outdoor performance which also forms another major public entrance to Science Park from the promenade along Tolo Harbour. This lively environment is designed to inspire innovation and creativity, and to encourage the intelligent minds to meet.

Laboratory space of Phase 2 is designed with a high degree of flexibility and is constructed to a world-class standard, enabling a variety of laboratory type R&D activities in precision engineering, electronics and biotechnology to be carried out in a quality environment. Laboratory requiring high performance in vibration control and laboratory of different clean-room classes can be fitted out in the laboratory space of Phase 2.

Phase 2 is also equipped with one of the largest single-level parking area in Asia with an electronic guiding system. Underground parking allows for greater freedom for connectivity between buildings above ground and also enables a much greater percentage of soft landscape to promote a park-like atmosphere.

Sustainable R&D

An important part of HKSTP's mission is to provide quality infrastructure and support facilities for innovation and technology development. The facilities management approach is a critical differentiating factor in creating the ideal environment for high









technology innovation and keeping the sophisticated infrastructure running smoothly.

Phase 2 development consists of eleven hitech designed buildings using sophisticated highly finished industrial materials - glass, steel, aluminum that are philosophically and naturally consistent with the nature of science parks.

Through facilities management practices, HKSTP has implemented environmentally sustainable best practices in Phase 2. Some of the key features include the use of sustainable timber and environmentally friendly materials, a variety of energy conservation features, as well as the deployment of solar panel units.

The district cooling systems housed in two energy towers to supply air-conditioning for Phase 2 is one of the largest in Hong Kong. Besides this, a centralized building management office to reduce maintenance and running costs results in better level of equipment redundancy and efficiency management. A centralized Automatic Refuse Collection System (ARCS) to collect and segregate common commercial refuse and recyclable material minimizes odour and nuisance.

Building on the solid foundation of Phase 1 with over 160 technology enterprises, Phase 2 will not only offer more advanced R&D buildings and facilities to drive innovation and technology development in Hong Kong to world-class levels but will also strengthen Science Park's commitment to help technology enterprises to successfully commercialize their innovations.

Design for Phase 2 started in mid 2003. Construction started in mid 2004, and superstructure works commenced in early 2005. The buildings are completed in stages in 2007-2008.







Section across Phase 2



Area B – Ground level plan

Phase 3 development

The Hong Kong Science Park Phase 3, is in its planning stage and is targeted to provide another 105,000 sq m of gross floor areas for research and development use.

Upon completion of all phases, taking advantage of Hong Kong's world-leading logistical and communications infrastructure strengths, Hong Kong Science Park can leverage Hong Kong's advantages to add further value to Hong Kong's economy.

owner

Hong Kong Science & Technology Parks Corporation

main contractor Hsin Chong – Hsin Chong Aster Joint Venture Yau Lee Construction Co, Ltd China Resources Construction Company Ltd

project manager Maunsell Consultants Asia Ltd

lead consultant/ architect Leigh & Orange Ltd

structural engineer Meinhardt (C&S) Ltd

building services engineer Meinhardt (M&E) Ltd

quantity surveyor Davis Langdon & Seah Hong Kong Ltd

landscape design consultant **Urbis Ltd**

specialist facade consultant Meinhardt Facade Technology Ltd

environmental consultant Environmental Resources Management Ltd

special signage consultant Watermark Associates

laboratory design consultant LCE Archimed Ltd

traffic engineering consultant MVA Hong Kong Ltd

master planning/ interior design consultant **Gensler**

IT/ telecommunications consultant Shen, Milson and Wilke, Ltd

lighting design consultant Light Directions Ltd



Fast Facts (Phase 2)			
location		Pak Shek Kok, Shatin	
land area		77,320 sq m	
GFA		Total - 105,000 sq m	
	Laboratory space	– Approx 32,000 sq m	
	R&D office space	– Approx 50,000 sq m	
	Supporting facilities	– Approx 13,500 sq m	
	Building 20	– Approx 9,500 sq m	
number of buildings		Total - 11	
2 laboratory buildings (Buildings 11, 12)			
	2 laboratory/ R&D office buildings (Buildings 14, 16		
	5 R&D office buildin	gs (Buildings 15, 17, 18, 19, 20)	
	2 energy towers (Bui	ldings 10, 13)	

supporting facilities

Internal Street, retail stores, business centre, destination restaurants, caf cyber caf food court, auditorium, conference area, meeting rooms, presentation rooms, clubhouse, gymnasium, swimming pool, exhibition areas, network operation centre, central security control room, open space/ park-like environment, etc.

commencement date of construction	Mid 2004		
completion dates			
2 Energy Towers (Buildings 10, 13)	– End 2006		
2 laboratory/ office buildings (Buildings 14, 16)	– June 2007		
2 R&D office buildings (Buildings 15, 17)	– June 2007		
2 R&D office buildings (Buildings 18, 19)	– July 2007		
2 laboratory buildings (Buildings 11, 12)	– June 2008		
R&D office building (Building 20)	– July 2010		
development cost			
Approx HK\$3.75 billion			