

For discussion  
On 20 March 2012

**Legislative Council Panel on Commerce and Industry**

**Budget Initiatives on Promotion of  
Innovation & Technology and Testing & Certification**

**PURPOSE**

This paper briefs Members on Government's latest initiatives in promoting innovation & technology and testing & certification as announced in the 2012-13 Budget Speech.

**BACKGROUND**

2. In 2009, the Government identified innovation & technology and testing & certification as two of the six industries which Hong Kong enjoys clear advantages and should be further promoted. In the 2012-13 Budget Speech, the Government has announced new initiatives to facilitate the further development of these two economic areas.

**INNOVATION & TECHNOLOGY**

**Policy Statement and Strategies**

3. The Steering Committee on Innovation and Technology, chaired by the Financial Secretary, has recently endorsed a policy statement which depicts our belief, commitment and direction in promoting the development of I&T in Hong Kong. The policy statement is as follows -

“The Government firmly believes that I&T is a key driver for economic development. We are committed to developing Hong Kong into a knowledge-based economy that thrives as an innovation hub in the region. In meeting such commitment, we will enhance collaboration among Government, the industry, academia and the research sector to promote research and development as well as technology transfer. A multi-pronged approach will be adopted, comprising the provision of infrastructure and financial support, human resource development, collaboration with economies outside Hong Kong and fostering an innovation culture in the community.”

4. In line with our policy, we have established five core strategies with a view to creating a vibrant ecosystem characterised with software and hardware support for all key stakeholders to interact-

- (a) promoting world-class technology infrastructure;
- (b) offering financial support to research and development (R&D) and technology transfer;
- (c) nurturing human resource development;
- (d) strengthening Mainland and international collaboration in science and technology; and
- (e) fostering a vibrant innovation culture in the community.

#### **New Initiatives in the 2012-13 Budget Speech**

5. In the 2012-13 Budget Speech, the Financial Secretary announced several new initiatives for promoting I&T –

(a) *Providing World-Class Technology Infrastructure*

6. The Hong Kong Science Park is the flagship technological infrastructure in Hong Kong. It provides facilities, services and a dynamic environment that enable companies to innovate. With the success of Science Park Phases 1 and 2 now housing more than 350 companies at a 90% occupancy rate, we have commenced the development of Phase 3 at an estimated cost of \$4.9 billion. The development is in good progress and will be completed in stages from early 2014 to 2016.

7. The Hong Kong Science and Technology Parks Corporation (HKSTPC) also manages three Industrial Estates (IEs) in Tai Po, Yuen Long and Tseung Kwan O which provide land for industries that cannot be operated in multi-storey industrial buildings and will upgrade our manufacturing base. Land in IEs is leased to grantees until 2047. As at February 2012, around 95% of the total 217 hectares of greenfield sites were granted. To ensure the good use of valuable land resources, HKSTPC has been encouraging grantees which have not fully utilised the land to transfer their sites to companies that meet the admission criteria of IEs by way of assignment. Since 2007, 20 hectares of land have been revitalised through assignment.

8. While HKSTPC will continue to revitalise the three IEs that can release some land for new projects, we need new sites to capture opportunities in high-tech industries in the longer run. We have invited HKSTPC to explore the feasibility of expanding the Yuen Long Industrial Estate by about 16 hectares.

9. The feasibility study is targeted to commence in mid 2012 and the findings from technical assessments are expected to be available in mid 2014 for consideration of the next step forward. The study will be conducted jointly with the Transport and Housing Bureau for a potential public housing site is located immediately south of the proposed industrial site. A map showing the location of the site is at Annex I.

*(b) Offering Financial Support to R&D and Technology Transfer*

10. On provision of financial support, we set up the Innovation and Technology fund (ITF) in 1999 to finance projects that will boost our I&T capability. In April 2010, we also launched the \$200 million-R&D Cash Rebate Scheme to reinforce the research culture among business enterprises and encourage them to establish stronger partnership with local research institutions. Up to end of February 2012, we approved a total of 377 applications and \$16.15 million of cash rebate.

11. To induce companies to invest more in R&D, we have increased the level of cash rebate under the R&D Cash Rate Scheme by three-fold, from 10% to 30%. The enhanced level of rebate is applicable to applications approved on or after 1 February 2012.

12. Amongst the various funding programmes under the ITF, the Small Entrepreneur Research Assistance Programme (SERAP) is specifically designed to support our small and medium sized enterprises (SMEs) in pursuing R&D activities. It provides pre-venture capital funding in the form of matching grant to local technology-based SMEs. Since its inception in 1999, SERAP has supported over 350 projects involving a total funding of about \$400 million.

13. Last year, we conducted a review on SERAP. Having considered the views from fund recipients, trade associations and assessors of the programme, we will implement the following enhancements in April 2012 –

- (a) increasing the funding ceiling for each project from \$4 million to \$6 million;
- (b) extending the programme to cover companies with venture capital investment; and
- (c) expanding the funding scope to facilitate commercialisation, including industrial designs, testing and certification of prototypes, pre-clinical trials and etc.

(c) *Nurturing Human Resource Development*

14. As the success of a knowledge-intensive I&T sector hinges on the availability of talents, we have placed increasing emphasis on human resource development. We aim to provide more exposure and incentives to our young generation to explore their interest and career in R&D. The Internship Programme under the ITF provides financial support for each ITF project to engage up to two interns not exceeding 24 months to take part in R&D projects, thereby allowing more graduates to gain first-hand research experience and stimulating their interest in the R&D or industrial path. In the past three years, we funded more than 850 intern positions with an average annual expenditure of about \$30 million.

15. To reinforce this drive, we have increased the monthly allowances under the Internship Programme by 20%. With effect from February 2012, the monthly allowance for interns who possess a Bachelor degree has been increased from \$10,000 to \$12,000, and for those with a Master or higher degree, this has been raised from \$12,000 to \$14,000. The new rates are applicable to both new recruits as well as serving interns.

(d) *Strengthening Mainland and International Collaboration in Science and Technology*

16. Providing means and motivation for researchers to collaborate effectively with other economies would create synergies to advance science and technology. Mainland is our most important partner. Over the years, Hong Kong has established technological co-operation frameworks with the Mainland at the central, provincial and municipal levels. With the Central Government's emphasis on science and technology development in the National 12<sup>th</sup> Five-Year Plan, we have been working closely with the Ministry of Science and Technology (MOST) through the Mainland/Hong Kong Science and Technology Co-operation Committee to identify and implement initiatives to dovetail with the Plan.

17. As mentioned in the 2012-13 Budget Speech, we will foster closer collaboration with the Mainland by encouraging more local R&D

institutions and research personnel to take part in national science and technology programmes. We will organise a forum in Hong Kong in the latter half of 2012 to offer the local research community an opportunity for in-depth exchanges with MOST on national research programmes. We will also encourage local universities to make best use of their R&D bases in Nanshan, Shenzhen to strengthen knowledge transfer and dovetail with the National Plan. Universities are also encouraged to make use of ITF for such purpose, as up to 50% of project expenditure can be incurred outside Hong Kong.

18. For further integration of Hong Kong's science and technology resources into the national innovation system, the MOST approved 56 Hong Kong experts for joining the "National Science and Technology Programmes Expert Database" in February 2012. These Hong Kong experts will participate in policy formulation and project assessment for national science and technology programmes, and put forward views and proposals for managing the programmes.

19. There are currently 12 Partner State Key Laboratories (SKLs) in Hong Kong. With effect from 1 April 2011, ITF will provide funding support of \$2 million per year initially for a maximum of five years to each of the Partner SKL. On 1 March 2012, we also launched a new round of applications for Partner SKL in Hong Kong. The increase of Partner SKLs will help step up Hong Kong laboratories' cooperation with their Mainland partners, as well as foster their participation in the mainland science and technology programmes.

20. Snapshots of some recent developments and activities on the promotion of I&T are at Annex II.

## **TESTING & CERTIFICATION**

### **General Strategies**

21. The Hong Kong Council for Testing and Certification (HKCTC)

was established in September 2009 to advise the Government on the overall development strategy and initiatives for promoting the growth of the testing and certification industry. In April 2010, the Government endorsed the three-year market-oriented development plan by the HKCTC. Our vision is to develop Hong Kong into a testing and certification hub in the region by reinforcing the branding of 'Tested in Hong Kong, Certified in Hong Kong'. We have been working closely with HKCTC to vigorously implement the plan through the following strategies-

- (a) making improvements to enhance the industry's competitiveness;
- (b) targeting efforts at specific trades; and
- (c) promoting Hong Kong's services and exploring the Mainland market.

22. We will assist HKCTC to conduct a review on the progress made in the three-year development plan and formulate a new plan to support further development of the industry by March 2013.

### **New Initiatives in the 2012-13 Budget**

#### *(a) Enhance the Industry's Competitiveness*

23. Our improvement measures focus on two major aspects - accreditation service and factors of production for the testing and certification industry.

24. We have been continuously enhancing the services of the Hong Kong Accreditation Service (HKAS), which is of high standard and has good reputation internationally. This is one of the strengths of Hong Kong in developing the testing and certification industry.

25. Since April 2010, HKAS has introduced 13 new accreditation services, including testing for the "ENERGY STAR" product certification program of the United States, certification of occupational health and safety

management system and testing for phthalate plasticizers. HKAS will continue to introduce new accreditation services to meet changing market needs. New services being developed include accreditation for energy management system certification and green house gas validation and verification.

26. Separately, we have been working with HKCTC in coordinating and implementing various measures in enhancing the factors of production for the testing and certification industry. For example, to assist the industry to attract talents, we will continue to coordinate career talks and internship opportunities for students of universities and the Vocational Training Council (VTC) so as to increase students' awareness and understanding of the industry. We have also been coordinating relevant government departments and public bodies in organising technical seminars/workshops with a view to raising the professionalism and technical expertise of practitioners. On financial support, the ITF provided about \$7.3 million to support the R&D of new testing and certification services in 2011-12. We will continue to work with HKCTC to encourage wider use of ITF by the testing and certification industry.

*(b) Targeting Efforts at Specific Trades*

27. We are promoting new testing and certification services in four selected trades, namely Chinese medicine, construction materials, food and jewellery.

28. For Chinese medicine, we are helping testing laboratories to raise their standard in testing Chinese herbal medicines. To enable testing laboratories to better assess their technical capability, we are now coordinating an inter-laboratory comparison. We are also arranging a short course to equip practitioners with skills to authenticate Chinese herbal medicines according to the Hong Kong Chinese Materia Medica Standards. This will facilitate testing laboratories to introduce authentication services for Chinese herbal medicines, which will also form the basis for future development of a certification service that will benefit both the Chinese medicine trade and consumers at large.



29. There have been rapid developments in the introduction of new product certification schemes for construction materials in the recent years. As at February 2012, nine local product certification schemes for construction materials were available for accredited certification bodies to provide services. To encourage wider use of the certification services, we shall make greater efforts to publicise the merits of product certification to the construction industry.

30. In respect of the food trade, the ITF has been funding the industry to develop a new certification scheme on food hygiene management for meeting the operational needs of the local catering industry. The scheme will be introduced in 2013 and will create business opportunities for certification services. Separately, the ITF has also supported a project to develop authentication of high-valued food through DNA sequences analysis. Upon the completion of the project in end 2012, a DNA database will be developed. Laboratories with DNA sequencing equipment and technique will be able to provide authentication services based on DNA information in the database.

31. For the jewellery trade, the industry has worked out standard testing methods for jadeite jade which are being widely used. Apart from jadeite jade, there are two other types of Fei Cui, namely kosmochlor and omphacite. We have been supporting the Gemmological Association of Hong Kong to develop a consolidated set of standard testing methods for both kosmochlor and omphacite. Pilot testing will be conducted later this year and the standard testing methods will be finalised for launching in 2013. Training will be organised for practitioners to familiarize with the standard methods.

32. Apart from the four selected trades, we will also support HKCTC to set up two new panels to explore with the industry new business opportunities in environmental protection and information and communications technology sectors.

(c) *Promoting Hong Kong's Services and Exploring the Mainland Market*

33. We have formulated an extensive programme to promote the branding of "Tested in Hong Kong, Certified in Hong Kong" to potential service users with the Hong Kong Trade Development Council (HKTDC). In 2012-13, HKAS and HKCTC will set up promotional booths in about 15 major local trade fairs to promote our testing and certification services. We will also arrange experts to speak on testing and certification at selected seminars held during the trade fairs. Moreover, HKTDC will help display promotional materials in about 20 trade fairs outside Hong Kong.

34. To further raise the international profile of HKAS and Hong Kong's testing and certification services, HKAS will host the 2012 Plenary Meetings of the Pacific Accreditation Co-operation in Hong Kong in June 2012. Delegates from about 24 economies, including Hong Kong's major trading partners such as the Mainland, United States and Japan, are expected to attend.

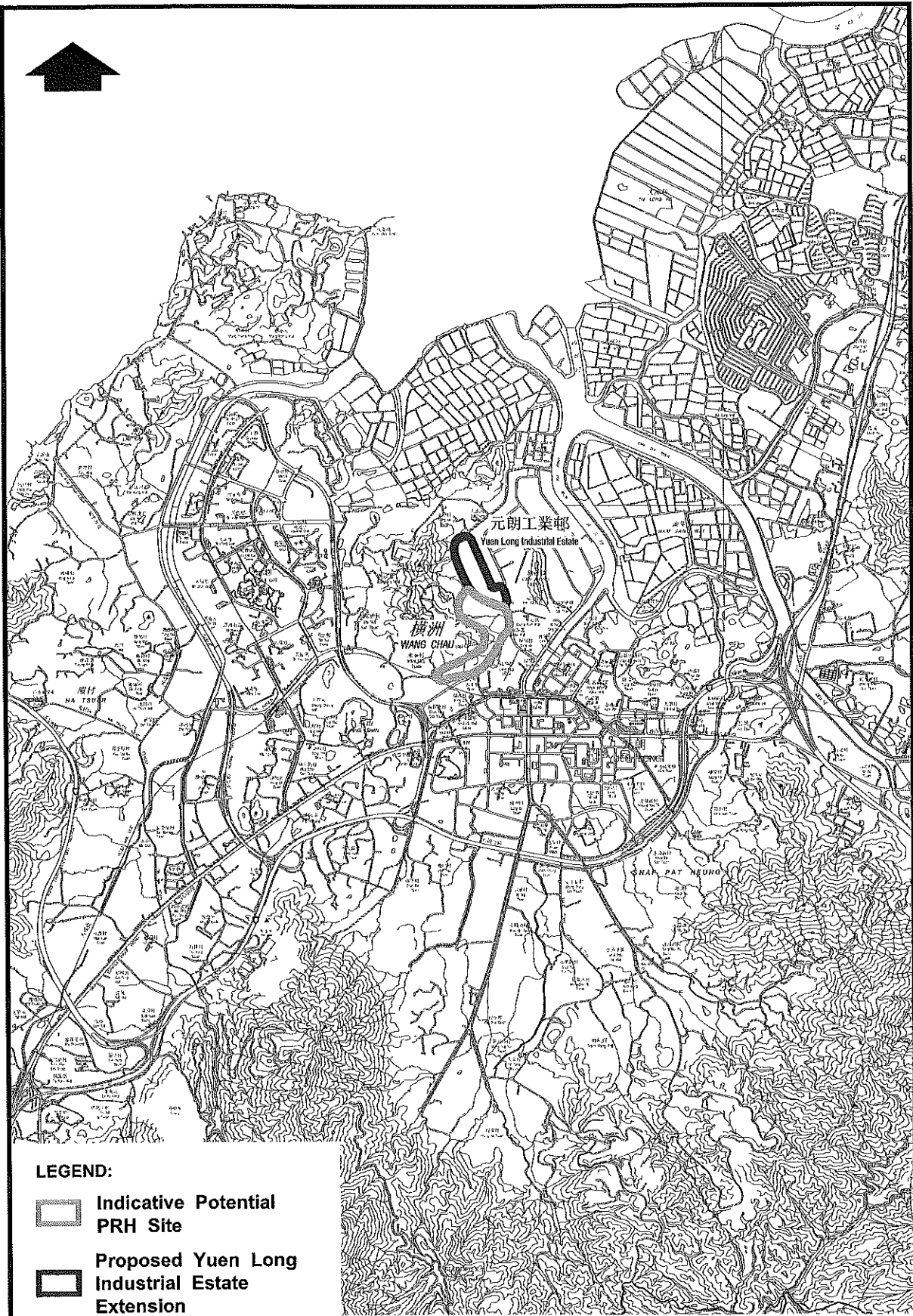
35. As to the Mainland market, accredited testing laboratories in Hong Kong have been allowed to perform testing of four types of products (i.e. toys, circuit installation, information technology equipment and lighting apparatus) processed in Hong Kong for the China Compulsory Certification (CCC) System in cooperation with designated Mainland certification bodies since 2011. So far, six testing laboratories have been accredited by HKAS for performing CCC testing. They are now in different stages of concluding cooperation agreements with designated certification bodies in the Mainland. Under Supplement VIII to CEPA, this pilot scheme will be further extended later this year to all products under CCC and processed in Hong Kong. This offers local testing laboratories new opportunities to undertake testing work in the Mainland. To assist our testing laboratories to explore the opportunities, we will help them acquire the necessary technical knowhow and link them up with designated certification bodies in the Mainland to facilitate cooperation. HKAS will also accord priority to process applications from laboratories seeking accreditation to perform CCC testing.

36. Snapshots of some recent developments and activities on the promotion of testing & certification are at Annex III.



### **ADVICE SOUGHT**

37. Members are invited to note Government's latest initiatives in the promotion of innovation & technology and testing and certification in Hong Kong.

Innovation and Technology Commission  
March 2012



LEGEND:

-  Indicative Potential PRH Site
-  Proposed Yuen Long Industrial Estate Extension

WANG CHAU

Scale 1:50 000

**Recent Developments and Activities on  
the Promotion of Innovation and Technology**



High-end data centre  
operating in  
Tseung Kwan O IE

Pharmatuetical  
manufacturing company  
in Yuen Long IE





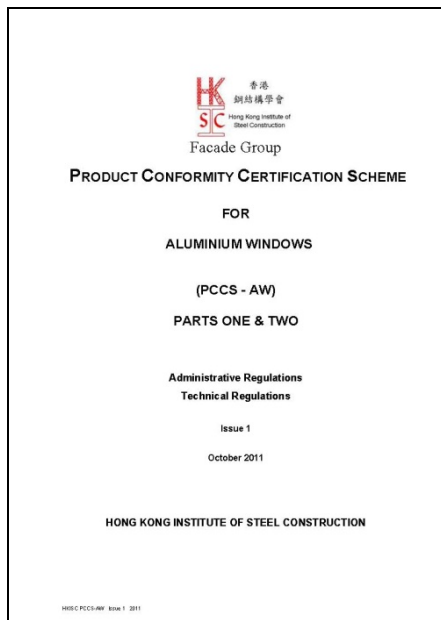
Piling work started in  
Hong Kong Science  
Park Phase 3

(From left)  
Professors Xue Quan,  
Chan Chi-hou, Luk  
Kwai-man and Dr  
Wong Hang of the  
City University of  
Hong Kong receiving  
the 2011 State  
Technological  
Invention Award 2nd  
class award in Beijing





## Recent Developments and Activities on the Promotion of Testing & Certification



A product certification scheme developed for aluminium windows



Mainland officials and technical experts were invited to brief the testing and certification industry on new initiative under CEPA VIII

