

**For information**

**LEGISLATIVE COUNCIL  
PANEL ON ENVIRONMENTAL AFFAIRS**

**Promoting Green Economy**

**Introduction**

The Administration issued an information paper on 23 May 2011 highlighting our measures to promote green economy and the way forward. This paper provides supplementary information to the follow-up questions raised by Members.

**Follow-up questions**

2. Follow-up questions raised by Members are as follows:
  - the number of local environmental establishments, their classification and activities covered by them;
  - when promoting the six industries with good potential, the details of direct support by the Government on local environmental industries;
  - the roles and work of CEDB in promoting the environmental industry;
  - room of collaborating with Guangdong province's planned environmental industries (such as environmentally-friendly vehicles and lighting industries);
  - discussion with the Mainland authorities on customs clearance arrangements for "waste identification" and progress of enabling Hong Kong recycling companies to obtain "special certificates"
  - promotion of green construction industry;
  - sustainable development value in relation to bamboo; and
  - the reasons for not legislating to mandate source separation of waste.

## **Supplementary information**

### Statistics of local environmental establishments

3. According to information of the Census and Statistics Department, the number of establishments related to environmental industries in 2009 was 2 780. The coverage of activities for environmental industries mainly includes sewerage and waste management, environmental engineering and consultancy services as well as import/export and wholesale trading of waste and scrap.

### Support by the Government to promote environmental industries

4. The Government will continue to support Hong Kong's environmental industries on different fronts, including encouraging the industry to take heed to and leverage the opportunities arising from development of environmental industry in the Mainland, supporting local industry to participate in the international green platform and promoting the development of green technology, thereby creating jobs and business opportunities for the environmental and engineering industries. Details are at the information paper issued on 23 May 2011 regarding promotion of environmental industries.

### The roles and work of CEDB in promoting the environmental industry

5. Under the purview of CEDB, the Innovation and Technology Commission (ITC) promotes the development of the environmental technologies through provision of research funding and infrastructure support. These work includes –

- (i) ITC has been providing funding to R&D centres, academic institutions and private companies to conduct applied R&D projects related to green manufacturing, clean energy, wastewater treatment, air quality improvement, energy saving and waste recycling, etc that could benefit the upgrading of the environmental technology industry. For example:

- (a) ITC has provided over \$40 million to the Automotive Parts and Accessory Systems (APAS) R & D Centre to carry out 16 projects relating to hybrid or electric vehicle; and
  - (b) The Nano and Advanced Materials Institute is developing two key photovoltaic technologies and has achieved the targeted conversion efficiency for large area solar panels.
- (ii) In order to strengthen technology collaboration between Hong Kong and Guangdong, ITC together with Guangdong Province jointly set up the Guangdong-Hong Kong Technology Cooperation Funding Scheme in 2004 to encourage collaboration among universities, research institutes and technology enterprises in the two places. Projects already implemented include those in the development of LED light controller, LED materials and packaging manufacturing technologies, automotive illumination and high power LED encapsulation.
- (iii) To better align the technological needs of the environmental industry and research focus of the universities, ITC has taken an active step to organize networking events to bring together relevant parties for exchange of research ideas with market needs and social importance.
- (iv) The green technology cluster is one of the five key technology clusters in the Hong Kong Science Park (the Science Park). The Science Park has all along been devoted to attracting new tenancy from different green technology enterprises, with a view to enhancing the leading-edge of Hong Kong in relevant innovation and technologies. Recently the BYD Company Limited announced its plan of setting up a research and development office in the Science Park, and its collaboration with the APAS R&D Centre and the Hong Kong Productivity Council to promote the development of electric vehicles. Also, the

Science Park is developing its third phase, which will focus on the development of green technology cluster, so as to provide further opportunities to nurture green enterprises.

### Collaborating with Guangdong authorities on developing environmental industries

6. The “Outline of the Twelfth Five-Year Plan for the National Economic and Social Development of the People’s Republic of China” (the National 12-5 Plan) was promulgated on 16 March this year. It places special emphasis on environmental protection and sets out a vision of transforming China into a society that is environment-friendly and strives to conserve resources. The green development strategy sets out in the National 12-5 Plan will bring about massive business opportunities. The Ministry of Environmental Protection expects that the investment on environmental industries during the National 12-5 Plan would be up to RMB\$3,000 billion. The investment will span across a wide range of environmental initiatives to be taken forward under the National 12th Five-Year Plan, which include:

- energy conservation;
- conservation of water resources;
- cleaner production;
- resource recycling and reuse system;
- green consumerism; and
- air and water pollution control and management, etc.

7. We believe Hong Kong and Guangdong can both usefully draw on their respective competitive edge under the policy set out in the National 12-5 Plan for developing environmental industries and explore green business opportunities in the Pearl River Delta (PRD) region. Hong Kong’s environmental service sector could also make the best use of the Closer Economic Partnership Arrangement (CEPA) to tap the PRD market.

### *Environmentally-friendly vehicles*

8. To promote the wider use of electric vehicles (EV) in Hong Kong, the Hong Kong Special Administrative Region Government has

been cooperating with different EV manufacturers (including mainland manufacturers) to introduce their EVs into Hong Kong. For example, we conducted a trial on BYD Plug-in hybrid vehicle “F3DM” from July to October 2009. BYD also introduced its EV “e6” into Shenzhen’s taxi fleet for trial in June 2010 and invited the taxi trade in Hong Kong to visit their operations.

9. We expect that Guangdong and Hong Kong can continue to exchange technologies and experience on the adoption of EV. Apart from the Government level, the private sectors in the two regions can enhance their exchange and explore possible cooperation opportunities. The Pilot Green Transport Fund set up by the Government can facilitate this kind of cooperation between the corporations in Guangdong and Hong Kong.

#### *Progress of cross-boundary recycling*

10. Currently, in respect of waste management, Hong Kong and Guangdong are actively exploring how the cross-boundary cooperation could be strengthened within the relevant regulatory framework such that a viable mechanism could be put in place to allow recyclables generated in Hong Kong to be transported to the Mainland for reuse. This not only could make the best use of our resources, but could also foster the development of the recycling industries and thus create more business opportunities.

11. We have already secured Guangdong’s support to jointly explore possible cooperation regarding the use of detoxified recyclables with a view to fostering development of the recovery and recycling industries on both sides. Such initiative has been included in the 2011 Work Plan of the Framework Agreement on Hong Kong/Guangdong Co-operation.

#### *Promotion of green construction industry*

12. As an effective measure to promote green buildings in Hong Kong, certification by “Building Environmental Assessment Method (BEAM) Plus” conferred by the Hong Kong Green Building Council (HKGBC) as well as estimation of energy consumption of building will become additional prerequisites for the granting of gross floor area

concessions for certain green and amenity features in building developments. The Buildings Department will publicise the grading of “BEAM Plus” conferred by the HKGBC and estimated energy consumption of the developments concerned upon their completion. “BEAM Plus” is the locally devised mechanism for comprehensive green building assessment and certification. Furthermore, we have been promoting the wider use of energy efficient devices and adoption of renewable energy system in public works projects.

13. In April 2009, we promulgated a comprehensive target-based environmental performance framework for new and existing government buildings, which sets targets in various environmental aspects, such as energy efficiency, renewable energy, indoor air quality and greenhouse gas emissions. Furthermore, all newly-built government buildings with construction floor areas of more than 10 000 square metres are required to obtain the second highest grade or above under the “BEAM Plus” green building rating system conferred by the HKGBC.

14. In January 2011, we promulgated a circular to encourage the use of recycled and other green materials in public works projects. When the technical performance of a new green material is proved satisfactory, with adequate supplies and reasonable price, the new green material will be proposed for wider application in public works projects. For example, after successful trials, concrete paving blocks with recycled glass have been specified for priority use in roadwork maintenance projects.

#### Sustainable development value in relation to bamboo

15. Because of their easy propagation, vigorous regeneration and fast growth, bamboos are widely cultivated for various uses. Bamboo is also an important material in modern industry. Culm splits are used to reinforce concrete as a substitute for steel in some constructions. Bamboo can be cut and laminated into sheets and planks like plywood. Besides, there are studies on the use of bamboos as an ingredient in biofuel.

16. We understand that the Federation of Hong Kong Industries signed a Memorandum of Understanding in October 2009 with the International Network for Bamboo and Rattan and the International

Centre for Bamboo and Rattan to work together on the industrial application of bamboo and rattan. The Government will keep a close eye on the development on this front and provide assistance if needed.

### Source separation and recycling of waste

17. The Administration announced a waste management strategy and action plan with an objective of “Reduce, Recycle and Proper Waste Management” in January 2011 to tackle the imminent waste problem facing Hong Kong in a holistic and timely manner. Through three core strategies including: (i) strengthening efforts in promoting waste reduction at source and recycling; (ii) introducing modern facilities for waste treatment; and (iii) extending the existing landfills in a timely manner, the action plan will provide a comprehensive waste management solution for our city in the long run. In particular, the Administration considers that we must encourage source separation of waste in order to promote waste reduction and recycling. But the question of whether to introduce mandatory source separation requirements by legislative means involve changes to the operation of prevalent model of domestic waste collection and processing in Hong Kong, as well as details of implementation and enforcement. We would engage the public for discussion at a later stage on feasible options for introducing the municipal solid waste (MSW) charging scheme, with a view to encouraging waste reduction at source through direct economic incentive.

18. The Government has been promoting source separation of waste taking account of the local situations. In recent years, we have strived to make available domestic waste separation facilities in different locations of Hong Kong and this initiative is achieving results. At present, over 80% of the population has access to waste separation facilities in the proximity of their home and the recovery rate of domestic waste increased from 16% in 2005 to 35% in 2009. This contributed to the increase of overall recovery rate of MSW to 49% in 2009 and a decrease in the amount of waste being landfilled. We will continue with our efforts on promoting waste reduction and recycling and are committed to raising the recovery target to 55% by 2015.

19. On mandatory measures, starting from December 2008, every new domestic building or the domestic part of a new composite building must provide a refuse storage and material recovery room on every floor to facilitate source separation of waste. We will, on the other hand,

expedite legislative proposals to introduce new producer responsibility scheme and extend the current scheme to encourage the reduction of waste at source.

20. Members are invited to note the content of this information paper.

**Environment Bureau**  
**August 2011**