

For information

**LEGISLATIVE COUNCIL
PANEL ON ENVIRONMENTAL AFFAIRS**

**Progress Report on the Cleaner Production
Partnership Programme (2010/2011)**

PURPOSE

This paper reports on the progress of the five-year Cleaner Production Partnership Programme covering the period from 1 April 2010 to 31 March 2011.

BACKGROUND

2. The Cleaner Production Partnership Programme (the Programme) was launched by the Environmental Protection Department (EPD) in collaboration with the Economic and Information Commission of Guangdong Province (GDEIC)¹ (formerly known as the Economic and Trade Commission of Guangdong Province) in April 2008. With a funding commitment of HK\$93.06 million from Government, the Programme aims at promoting cleaner production (CP) technologies and practices² amongst Hong Kong-owned factories in the Pearl River Delta (PRD) region.

3. The Programme, which is implemented by the Hong Kong Productivity Council (HKPC), comprises four key initiatives, namely –

- (a) awareness promotion activities;
- (b) on-site improvement assessment for participating factories;

¹ GDEIC is the lead department of the Guangdong Provincial Government for promoting voluntary cleaner production to enterprises in Guangdong. The Environment Bureau signed a Co-operation Agreement to Promote Energy Efficiency, Cleaner Production and Comprehensive Utilisation of Resources to Enterprises in Hong Kong and Guangdong with GDEIC in August 2007.

² Cleaner production approach is a preventive, integrated strategy that applies to the entire production cycle to increase productivity by promoting a more efficient use of raw materials, energy and water, and to enhance environmental performance through reduction of waste and emissions at source.

- (c) demonstration projects on CP technologies and practices; and
- (d) third party verification service on improvement projects implemented by participating factories.

Annex Details of the key initiatives are at **Annex**.

4. The Programme was intended to encourage and facilitate Hong Kong-owned factories in the PRD region to adopt CP technologies and practices to reduce air pollutant emissions and energy consumption. In the light of feedback collected from the trades and support given by this Panel on 21 January 2010, the coverage of the Programme has been widened to also provide professional advice and technical support in the treatment and reduction of effluent discharges to these factories to facilitate reduction, reuse, recycling and treatment of wastewater arising from their operations.

5. The Administration undertook to report annually to the LegCo Panel on Environmental Affairs on the progress of the Programme. This is the third annual report submitted to this Panel.

INSTITUTIONAL ARRANGEMENTS FOR MANAGING THE PROGRAMME

6. To oversee the implementation of the Programme, we have set up a Project Management Committee (PMC) comprising representatives from the four major trade and industry associations, namely, the Hong Kong General Chamber of Commerce (HKGCC), Federation of Hong Kong Industries (FHKI), Chinese Manufacturers' Association of Hong Kong (CMA) and Chinese General Chamber of Commerce (CGCC), EPD, Trade and Industry Department as well as an academic. During the report period, the PMC held four meetings to provide steer to the operation of the Programme and scrutinise funding applications.

7. The HKPC has established a programme management team and a programme quality assurance team to coordinate and ensure effective implementation of the Programme. In addition, two support teams based in PRD (one in Shenzhen and the other in Dongguan) have been set up for local liaison work and co-ordination of programme activities.

PROGRESS OF THE PROGRAMME FOR 2010/2011

8. To arouse and sustain interests of Hong Kong-owned factories in the benefits of cleaner production and joining the Programme, we carried out in conjunction with trade and industry associations and local authorities in the PRD cities extensive awareness promotion and publicity activities in the past year, including seminars, workshops, briefings, factory visits, etc.

9. During the report period, we organised a total of 71 awareness promotion activities with the participation of some 3 700 factory owners and personnel. In addition, we took part in two trade exhibitions on environmental technology to introduce the Programme to some 1 200 visitors. The cumulative number of awareness promotion activities organised since the launch of the Programme in 2008 reached 211 with some 20 800 participants. We also publicised the Programme widely through various channels including interviews and reports by the press media, posting event notices and promotional advertisements on newspapers. In addition, we operate a dedicated CP website which was revamped in July 2010 to include a dedicated section for showcasing success stories and a resources area for downloading CP related materials. We also operate an enquiry hotline to enhance information dissemination on Programme activities and sharing of CP related experience. To widely share CP technologies adopted by participating CP factories, 21 site visits to these factories in the PRD cities were organised for factory owners and personnel. We continued to collaborate with the relevant trade associations, PRD cities and environmental technology (ET) services providers under the Programme to encourage factories to adopt CP technologies and practices with a view to cultivating a cleaner production culture in the region.

10. During the report period, a total of 511 funding applications were approved. The cumulative number of funding applications approved since the launch of the Programme reached 1 107 by 31 March 2011. Details of the applications are as follows -

	Applications as at 31 March 2011			
	Approved (2008/09)	Approved (2009/10)	Approved (2010/11)	Cumulative Total
On-site Assessments	113	227	319	659
Demonstration Projects	25	25	38	88
Verification Services	28	178	154	360

11. The majority of the participating factories came from metal and metal product³, textile, chemical product, and printing and publishing industries. Among the 88 demonstration projects approved, 54 involved energy saving technologies and 24 involved technologies to abate air pollution while the other 10 were on effluent control and reduction. Specifically, the types of technologies so tested in these demonstration projects include waste heat recovery, VOC reduction through solvent recovery and use of water-based adhesive to replace solvent-based one, flue gas treatment, alternate design of furnace and boilers to enhance fuel combustion efficiency and reduce air pollutant emissions, application of renewable energy, recycling of industrial effluent, etchant recovery and reuse, etc. In many cases, application of these cleaner technologies would not only help reduce emissions but also bring about economic benefits in terms of cost reduction as a result of enhanced energy efficiency and reduced material consumption. The participating factories will share their knowledge and experience gained from these demonstration projects with other factories with a view to encouraging them to follow suit.

12. We conducted a mid-term review in the second quarter of 2010 to evaluate the management, outreaching strategies and resource deployment of the Programme with a view to encouraging more Hong Kong-owned factories to take part. Feedback was sought from the participating factories on the Programme activities and their awareness level on adopting effective CP technologies. Based on the review feedback, we would continue to organise awareness promotion and publicity activities in order to maintain the momentum of the Programme and encourage greater participation by Hong Kong-owned factories.

³ The metal and metal products manufacturing industry covers a wide range of trades including electroplating, electronics and electrical products, fabricated metal products manufacturing, etc.

Partnership with Environmental Technology Service Providers

13. ET service providers play an important role in providing the much needed professional advice and technical services to the participating factories for conducting on-site assessments and demonstration projects under the Programme. During the report period, 27 ET service providers joined the Programme. As at 31 March 2011, the total number of ET service providers registered under the Programme reached 155. Amongst them, 86 were Hong Kong-based while 63 were based in PRD cities and six from other regions. HKPC has organised briefings and experience sharing workshops to facilitate capacity building amongst the ET service providers. It has also conducted quality checks on the work of the ET service providers to ensure quality services are provided to the participating factories.

Collaboration with Mainland Authorities

14. We continued to work closely with the GDEIC and local authorities in PRD cities to conduct promotional activities to publicise the Programme and reach out to the Hong Kong-owned factories there. We have also developed joint action plans for taking forward the Programme taking account of the CP measures being spearheaded by the PRD cities.

15. To further encourage participation of Hong Kong-owned factories in the Programme and give recognition to those participating factories which have adopted CP technologies and practices, we launched the Hong Kong-Guangdong Cleaner Production Partners Recognition Scheme jointly with the GDEIC in August 2009. A total of 91 Hong Kong-owned manufacturing enterprises, 20 environmental technology service providers and four sourcing enterprises were recognised as "Hong Kong - Guangdong Cleaner Production Partners" in 2010. We will continue to provide similar recognition to eligible factories and enterprises on an annual basis.

WAY FORWARD

16. To sustain the interest of Hong Kong-owned factories in the Programme, we will continue to mount extensive awareness promotion and publicity activities to broaden our reach to them in the PRD region, with particular focus on industries and places with relatively low participation in

the Programme. The positive results and experiences gained from the on-site assessments and demonstration projects will be publicised through collaboration activities with the trade and industry associations, the PRD municipal cities and the ET service providers.

17. Members are invited to note the progress in the implementation of the Programme.

**Environmental Protection Department
August 2011**

Key Initiatives under the Cleaner Production Partnership Programme

The overall objective of the Programme is to encourage and facilitate Hong Kong-owned factories in the Pearl River Delta (PRD) region to adopt cleaner production technologies and practices, thereby making a positive contribution to a cleaner environment by reducing pollutants and energy consumption. The Programme targets at eight industry sectors^{Note} of Hong Kong-owned factories which contribute to pollutions in the PRD region and are most likely to yield positive improvements.

Key Initiatives

2. The key initiatives of the Programme include –
 - (a) *awareness promotion* – this comprises structured briefings, study missions, training seminars and workshops, conferences and exhibitions, in Hong Kong and cities in PRD region. Participation in the awareness promotion activities is normally free of charge;
 - (b) *on-site improvement assessment for about 800 to 1 000 factories (subject to response)* – the Hong Kong Productivity Council (HKPC), in conjunction with other environmental technology (ET) service providers, provide guidance and conduct on-site assessment for participating factories to identify and analyse the problems they face and propose practical improvement solutions. The Government will sponsor 50% of the assessment cost, subject to a ceiling of \$15,000. Any cost exceeding the ceiling has to be met by the participating factories;
 - (c) *demonstration projects* – HKPC will work closely with ET service providers to conduct some 120 demonstration projects

^{Note} The eight industry sectors include textiles, non-metallic mineral products, metal and metal products, food and beverage, chemical products, printing and publishing, furniture and paper/paper product manufacturing.

through installation of equipment and/or modification of production processes. The cost is shared between participating factories and Government on a fifty-fifty basis. The average contribution of Government funding is estimated to be around \$160,000 per project; and

- (d) *verification of the effectiveness of 500 to 1 000 improvement projects (subject to response)* – for those factories which have implemented improvement measures, HKPC will provide an independent third-party service to verify the effectiveness of the improvement projects. This service is provided free of charge to participants, capped to a ceiling of \$15,000 per project.