

ITEM FOR FINANCE COMMITTEE

HEAD 44 – ENVIRONMENTAL PROTECTION DEPARTMENT Subhead 700 General non-recurrent New Item “Extension of the Cleaner Production Partnership Programme”

Members are invited to approve the creation of a new commitment of \$50 million for extending the Cleaner Production Partnership Programme for two years.

PROBLEM

The Cleaner Production Partnership Programme (the Programme) facilitates the adoption of cleaner production (CP) technologies and practices¹ by Hong Kong-owned factories in the Pearl River Delta (PRD) region. We need to extend the Programme so as to sustain the momentum in promotion of CP in the region.

PROPOSAL

2. The Director of Environmental Protection, with the support of the Secretary for the Environment, proposes to create a new commitment of \$50 million to extend the Programme for two years to further promote CP in Hong Kong and Guangdong. Subject to the approval of this Committee, we plan to launch the extension programme in April 2013.

/JUSTIFICATION

¹ Cleaner production 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.

JUSTIFICATION

The Existing Programme

3. The Programme was launched in April 2008. It has been making good progress in engaging Hong Kong-owned factories to adopt CP technologies and practices. We have generally met or exceeded the targets for the Programme -

Key initiatives	Targets	Approved applications as at 31 October 2012
On-site Assessment	800 - 1 000	1 144
Demonstration Project	120	151
Verification Service	500 – 1 000	761
		Total: 2 056

The beneficiaries involved about 1 260 Hong Kong-owned factories, mostly small to medium-sized enterprises.

4. We have also received positive feedback from the trades, chambers of commerce, environmental technology (ET) services providers and participating factories that the Programme has helped introduce the CP concept to both the management and staff of the Hong Kong-owned factories in the PRD region. In addition, the Programme has fostered regional collaboration with relevant Mainland authorities in reducing pollution arising from industrial production and facilitated local ET services providers to gain access to the growing environmental market in Guangdong.

5. While the current Programme is primarily an awareness promotion and technical support initiative, the demonstration projects sponsored by the Programme as well as follow-up investment made by enterprises have brought about significant environmental and economic benefits to the PRD region. The demonstration projects (which include the use of Volatile Organic Compounds (VOC) reduction technologies by applying alternative production materials, the use of energy recovery devices for boilers, etc.), together with other CP improvement measures implemented by the enterprises, have brought about reduction of emissions/discharges in the following order -

/Pollutants

Pollutants	Emission/Discharges Reduction (tonne)
Volatile Organic Compounds (VOC)	3 400
Sulphur Dioxide (SO ₂)	4 400
Nitrogen Oxides (NO _x)	2 500
Carbon Dioxide (CO ₂)	660 000
Effluent discharges	10 000 000

6. The funding earmarked for the Programme, i.e. \$93.06 million will be fully expended by January 2013.

The Extension Programme

7. In the light of the environmental benefits brought by the Programme and the positive feedback from the industries, we propose to extend the Programme for two years from 1 April 2013 to 31 March 2015. This will tie in with the National 12th Five-Year Plan ending in 2015, which inter alia, promotes CP and strengthens pollution control measures. It will also help reinforce Hong Kong-Guangdong cooperation efforts in improving regional air quality.

Key Initiatives

8. We propose that the extension programme should continue to focus on the four key initiatives of the Programme as set out below –

- (a) *technology promotion* – We plan to organise around 60 – 80 activities during the two-year period, mainly to facilitate sharing of knowledge and successful experiences in adoption of CP technologies and practices. The dedicated CP website together with the three enquiry hotlines set up under the current Programme will also be maintained.
- (b) *on-site improvement assessment for about 250 factories* – Hong Kong Productivity Council (HKPC), in conjunction with other ET services providers, will continue to provide technical guidance and conduct on-site assessment for participating enterprises to identify and analyse the problems they face and propose practical improvement solutions. The assessment costs will continue to be shared between the Government and the participating enterprises on a 50:50 basis. The funding ceiling for each on-site assessment will be raised from \$15,000 to \$25,000. Any cost exceeding the ceiling will be met by the participating enterprises.

/(c)

- (c) *demonstration projects* – We propose to support around 90 projects in the two-year period. The participating enterprises will be required to share their experience with other enterprises. The project cost will continue to be shared between the Government and participating enterprises on a 50:50 basis. The funding ceiling will be raised from \$160,000 to \$300,000 per project.
- (d) *verification services* – HKPC will continue to provide professional advisory service to verify the effectiveness of 80 – 120 improvement projects carried out by participating enterprises. This service aims to help reinforce participating enterprises' confidence in investing in CP technologies and stimulate other enterprises to follow suit. The participants will not need to pay for the verification service. The funding ceiling for the service will be raised from \$15,000 to \$20,000 per project, payable to HKPC as implementation agent.

Encl. A detailed cost breakdown of the above key programme initiatives is provided at Enclosure.

9. We intend to raise the “funding cap” for on-site improvement assessments, demonstration projects, and verification services under the extension programme mainly to meet the cost increases over the past five years, and encourage the use of more advanced CP technologies.

Other Adjustments

10. While the extension programme will continue to provide technical support on energy efficiency, and air pollutant and effluent reduction, we propose to place a greater focus on encouraging the use of VOC and NO_x reduction technologies/processes. Ozone pollution and haze problem are major regional air pollution problems, and VOC and NO_x are the culprits. Reducing their emission would help relieve the smog problem of the region.

11. We also propose to widen the geographical coverage of the extension programme from the nine municipalities in Guangdong² to the entire Guangdong Province. With the “relocation” of factories from the PRD region to other Guangdong municipalities in recent years, this relaxation will enable enterprises operating in Guangdong Province to join the programme, although our outreaching work will still focus in the PRD region.

/12.

² The nine municipalities in the PRD region are Guangzhou, Shenzhen, Dongguan, Foshan, Huizhou, Zhaoqing, Jiangman, Zhongshan and Zhuhai.

12. We propose to allow workshop type enterprises which involve polluting processes in Hong Kong to apply for demonstration projects. Such processes could be paint-spraying and curing, solvent cleaning of metal parts and components, and vehicle engine testing, etc. The proposed relaxation will help reduce local air pollution.

Implementation of the Extension Programme

13. HKPC is the implementation agent of the current Programme. Having regard to the need for ensuring continuity and smooth implementation of the extension programme, we will continue to engage HKPC as the implementation agent of the extension programme.

14. As the implementation agent, HKPC will be responsible for administration of the approved funding (including receiving and vetting applications), reaching out to potential applicants, monitoring progress of approved projects, drawing up annual implementation plans, planning and organising publicity and technology promotion activities, etc. The Environmental Protection Department (EPD) will also actively support the extension programme by closely liaising with the relevant Guangdong authorities, including the Economic and Information Commission of Guangdong Province (GDEIC)³, to seek their continued support and policy advice, as well as their active participation in related publicity and technology promotion activities.

Control and Review Mechanism

15. A Project Management Committee (PMC) will continue to oversee the implementation of the extension programme. It will be chaired by the Under Secretary for the Environment and comprise representatives from the Trade and Industry Department, HKPC and four major trade and industry associations, namely, the Hong Kong General Chamber of Commerce, the Federation of Hong Kong Industries, the Chinese Manufacturers' Association of Hong Kong and the Chinese General Chamber of Commerce. Other departments such as the Innovation and Technology Commission, related organisations and/or experts will also be invited to join as co-opt members as appropriate.

/16.

³ 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.

16. The PMC will, inter alia, draw up project administration guidelines and application selection criteria; consider applications and monitor the implementation of approved projects; and review and monitor the overall progress of the Programme. HKPC will draw up an annual implementation plan and submit regular progress reports to the PMC.

17. HKPC will submit annual and final audited accounts for the operation of the programme audited by an independent auditor. EPD will continue to provide progress reports to the Legislative Council Panel on Environmental Affairs (the Panel) on an annual basis to ensure transparency and public accountability. The latest progress report submitted to the Panel in July 2012 is at <http://www.legco.gov.hk/yr11-12/english/panels/ea/papers/eacb1-2327-1-e.pdf>.

Expected Benefits

18. The extension programme is expected to deliver the following benefits -

- (a) providing a dedicated CP portal on practical guidance and case examples of CP technologies and process options to facilitate sharing of experience and good practices amongst factories;
- (b) providing on-site assessment services for some 250 participating factories to assist them in identifying measures to reduce energy consumption and pollutant emissions, as well as related resource and cost saving opportunities;
- (c) sponsoring some 90 demonstration projects to showcase practicable CP technologies and process options;
- (d) providing independent evaluation for 80 – 120 CP applications to verify their effectiveness which should help reinforce and bring further CP investments;
- (e) inspiring participating factories to reduce air pollution emissions and effluent discharges, thus making a positive contribution to improving the regional environment; and
- (f) reducing energy, water and resources consumption at participating factories, thereby resulting in productivity gain and cost reduction.

19. The extension programme will create business and job opportunities for the local ET services providers. Some 50 full-time jobs will be created for Hong Kong through the implementation of the extension programme. The extension programme will also help open up business opportunities for ET services providers in the Guangdong market.

FINANCIAL IMPLICATIONS

20. The extension programme will continue to be financed on a cost-sharing basis, which seeks to maintain a balance between Government support and the commitment from participating enterprises. The total estimated cost of the proposed two-year extension programme is \$89.45 million. Of this total, the required Government funding is \$50 million, including \$9.57 million as project management fee for HKPC. HKPC will separately contribute another \$6.2 million towards the programme – in the form of manpower support, office rentals and other technical and support services. The participating enterprises will contribute at least \$33.25 million for on-site improvement assessments and demonstration projects based on the above-mentioned cost-sharing arrangement (see paragraph 8). A detailed breakdown is at the Enclosure.

21. The estimated cash flow of the Government funding of \$50 million is as follows –

Financial year	(\$ million)
2013 – 14	25
2014 – 15	25
Total	50

22. The proposal has no additional recurrent financial implications. EPD will continue to deploy a dedicated professional team led by a Senior Environmental Protection Officer to render support to the extension programme and will absorb the associated costs from within its existing resources.

PUBLIC CONSULTATION

23. We held exchange sessions with the trades and chambers of commerce which gave firm support to extend the Programme beyond 2012. They find the Programme very helpful in helping Hong Kong-owned enterprises in Guangdong to apply CP technologies and practices.

24. We consulted the Panel on the proposal on 26 November 2012. The Panel expressed support for the proposed extension programme. In response to some Members' enquiries on the long term plan for the Programme upon completion of the two-year extension, we advised the Panel that the Administration would review the achievements of the extension programme and feedback from the stakeholders nearer the time when considering the future direction for promotion of CP.

BACKGROUND

25. On 11 January 2008, this Committee approved a funding commitment of \$93.06 million for implementation of the Programme to promote CP technologies and practices amongst Hong Kong-owned enterprises in the PRD region. On 18 April 2008, EPD launched the Programme in collaboration with GDEIC. HKPC is the implementation agent of the Programme.

Environmental Protection Department
December 2012

Enclosure to FCR(2012-13)60

Estimated Cost Breakdown for the Extension Programme

	Funding by Government (\$ million)	Contributions by HKPC (\$ million)	Contributions by Industry (\$ million)	Total Cost (\$ million)
1. TECHNOLOGY PROMOTION				
Events Organisation, Publicity and Promotion (seminars, factory visits, exhibitions, website, guidebooks etc)	3.28	0.00	0.00	3.28
Organisation of the "Hong Kong-Guangdong Cleaner Production Partners Recognition Scheme"	1.90	0.00	0.00	1.90
Sub Total	5.18	0.00	0.00	5.18
2. ON-SITE IMPROVEMENT ASSESSMENTS				
Project Implementation Costs	6.25	0.00	6.25	12.50
Sub Total	6.25	0.00	6.25	12.50
3. DEMONSTRATION PROJECTS				
Project Implementation Costs	27.00	0.00	27.00	54.00
Sub Total	27.00	0.00	27.00	54.00
4. VERIFICATION SERVICES				
Project Implementation Costs	2.00	0.00	0.00	2.00
Sub Total	2.00	0.00	0.00	2.00
5. PROGRAMME MANAGEMENT & TECHNICAL SUPPORT				
(i) Programme Director (10% staff time)	0.00	0.73	0.00	0.73
(ii) Programme Manager	4.16	0.22	0.00	4.38
(iii) Programme Officer (2 nos.)	0.00	2.33	0.00	2.33
Sub Total	4.16	3.28	0.00	7.44
(iv) Programme Management				
- Mainland Programme Supporting Staff (4 nos.)	1.43	0.00	0.00	1.43
- Mainland Office Accommodation	0.48	0.00	0.00	0.48
- HK Office Accommodation & Project Administration	0.00	0.80	0.00	0.80
Sub Total	1.91	0.80	0.00	2.71
(v) Programme Technical Support Team				
- Team Members (3 nos.)	3.50	2.12	0.00	5.62
Sub Total	3.50	2.12	0.00	5.62
TOTAL	50.00	6.20	33.25	89.45
