



Partnership for Green Construction



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1. A Joint Effort

Our vision is of a Hong Kong which enjoys an environment that is both healthy and pleasant, in which the community places a premium on sustaining an environment for both themselves and future generations.

To realize this vision, we will continue to strive for improving and safeguarding the environment. Nevertheless, our effort alone cannot be adequate. We need the support and cooperation from as many people and organizations as possible to help us protect the environment. There is strength in unity.

Polluters in Hong Kong traditionally have been controlled through laws and enforcement actions. While this approach can round up the offenders and is still necessary to uphold the law, it does not prevent the pollution at source. We need to help potential polluters to better understand the importance of environmental protection and the appropriate preventive measures, explain to them the requirements of the law to avoid infraction and to encourage better environmental performance. This is where environmental partnership, i.e. industry-government cooperation comes in.

Over the past few years, the Environmental Protection Department (EPD) has established formal partnerships with four trade sectors, namely the construction, restaurants, vehicle repair workshops and property management trades, with the goal of helping them to reduce pollution incidence.

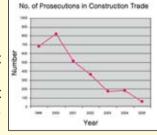


Formal partnership was set up with the construction trade in 2001.

The first attempt at forming a partnership was initiated in 1997 with the construction industry. Efforts have been made by both sides to enhance communication and identify ways of minimizing the environmental impacts

of construction activities. The involvement of the Hong Kong Construction Association (HKCA) has helped to make the partnership a success and we formalized these efforts in 2001.

Since the establishment of the partnership, not only have we seen a remarkable improvement in working relationship between the two sides, from somewhat speculative and suspicious before to cooperative and



constructive now, we have also seen encouraging results in law compliance by the industry.

The partnership programme is believed to be a valuable contribution to the drop in prosecutions for the construction trade from a peak of 828 cases in 2000 to 69 cases in 2005. Contractors have realized that it is in their interest to implement proper environmental protection measures and that compliance with environmental laws is not that difficult.



2. Objectives of the Programme

Our Objectives:

"Enhance environmental protection awareness of all involved in the construction industry and assist the construction industry in environmental compliance"

"Improve communication with the construction industry to understand its needs"

"Develop training tools to help the construction industry meet environmental requirements"

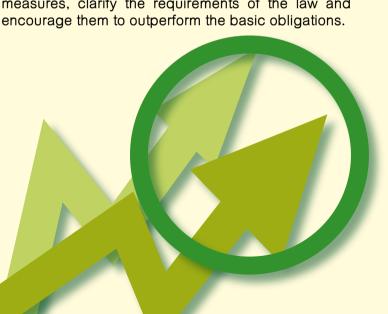
"Promote and keep abreast of environmentally friendly construction technology and offer advice on pollution prevention measures to improve the quality of living in Hong Kong"

Without doubt, partnering with the construction trade helps to improve understanding and enhance cooperation between the two sides. After all, reduction in pollution by the trade is the main goal that EPD hopes to achieve. To this end, EPD has been taking the lead to communicate with and educate the construction sector. Through discussions with the HKCA and the Hong Kong General Building Contractors Association (HKGBCA), the partnership programme has adopted a proactive approach with the following key objectives:

- to enhance the environmental awareness of the construction industry
- to help the construction industry to comply with

- environmental laws and improve its environmental performance
- to promote and keep abreast of environmentally friendly construction technology for use in Hong Kong

EPD meets regularly with the HKCA and the HKGBCA to discuss issues of mutual interest, to work together to provide adequate environmental training to construction workers and supervisory staff and to help the contractors, consultants and developers in identifying less polluting alternatives for their projects. EPD also meets with individual contractors for major projects to offer advice on pollution preventive measures, clarify the requirements of the law and encourage them to outperform the basic obligations.







3. Stakeholder-oriented Partnership

Reduction in pollution from the construction industry requires the contribution from concerned parties. To achieve our objectives, we have been working closely with various stakeholder groups comprising government organizations, business associations, green groups, the general public, academic and professional institutions. Our main collaborating partners include:



Government Organizations

- Environment, Transport and Works Bureau (ETWB) and associated works departments
- Housing Authority (HA)

Within Government, ETWB has overall policy responsibility for the environment and each government works department has a role to play in safeguarding the environment. We have been working together to tackle environmental issues, e.g. under the EIA mechanism, and implement environmental requirements under public works contracts. We also shared knowledge and experience on environmental matters through discussion forum and seminars.



Business Associations

- Hong Kong Construction Association (HKCA)
- Hong Kong General Building Contractors Association (HKGBCA)
- Hong Kong Quality Assurance Agency
- The Hong Kong Productivity Council
- The Business Environment Council

These business organizations are important focal point partners in helping to foster greater environmental responsibility and awareness among companies of the construction sector and promote green construction practices.





Educational Institutions

- The University of Hong Kong
- The Hong Kong University of Science and Technology
- The Hong Kong Polytechnic University
- Construction Industry Training Authority
- Institute of Vocational Education
- Vocational Training Council

These institutions run environmental training courses for different levels of staff to meet the needs of the construction industry. Some of them also helped EPD to formulate solutions for practical problems and to produce training materials for the industry.



Professional Institutions

- The Hong Kong Institution of Engineers
- The Hong Kong Institute of Architects
- The Hong Kong Institute of Surveyors
- The Hong Kong Society of Accountants

As professional institutions, they provided valuable input and support to environmental protection efforts in Hong Kong. They also helped in enhancing the environmental knowledge among the professional communities by organizing conferences and continuing education for their members.

Others

- Green Groups
- General Public

Environmental protection efforts by EPD cannot be effective without the support of the general public. On the basic level, the general public can contribute by producing less waste and pollution. Together with the green groups, they can also help monitor the quality of our environment and provide feedback to the government on areas requiring improvement.







4. Achievements at A Glance

Since the formal establishment of the partnership programme with the construction industry in 2001, we have identified various key areas and activities to fulfil the programme objectives. In terms of priority, our main focuses have been on education, promotion environmental awareness. communication enhancement and promotion of green technologies and equipment. With the support of relevant bodies, training workshops were organized, materials such as pocket handbooks, leaflets, posters, videos, CD-ROMs were produced and websites for sharing information were developed. Advice on pollution prevention measures was also offered to operators through various channels.

Since 1999, EPD has organized and participated in about 120 seminars and conferences which were attended by over 10,000 participants from the construction industry. Company directors, managers, architects, engineers, planners, supervisors and workers were among the audiences.



- Launched the construction partnership programme with the HKCA to strengthen the working relationship with and promote environmental awareness in the industry.
- Established a task force in collaboration with the HKCA on reducing construction waste.
- Completed the phasing out of noisy piling hammers in built-up areas.
- Launched an electronic complaint service for lodging pollution complaints by e-mail at all Local Control Offices (now named as Regional Offices). This system also serves to prompt contractors to address public complaints speedily.





2000

- Implemented the new management framework for disposal of dredged sediment.
- Instigated new policy endorsed by the Executive Council to redress noise impacts from existing roads by means of engineering and non-engineering measures.
- Set up more Integrated Enforcement Teams in Local Control Offices (now named as Regional Offices) to further enhance the licensing services and interaction with contractors.



2001

• Formalized the construction partnership programme with the HKCA to further enhance cooperation.

- Implemented territory-wide tighter construction noise controls at new Noise Control Designated Areas.
- Launched the web-based Environment Monitoring & Audit (EM&A) results on the environmental performance of EIA projects.
- Launched an on-line electronic application system for environmental permits and licenses.









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2002

- Released the "Best Practice Guide for Environmental Protection on Construction Sites" in collaboration with the HKCA to set out a general guide on undertaking environmental protection works in construction industry.
- Launched the website "Partnership with Trade & Industry - Construction Industry" to provide relevant training materials and information on activities to the trade and the public.
- Launched a Cyber Help Bench to provide all relevant EIAO information, including guidance notes, approved EIA reports and permits etc., to the trade and the public.
- Held the first EIAO Users Liaison Groups
 Congress organized by EPD for the four
 major EIA stakeholder groups. Partici pants included project proponents,
 consultants, contractors,
 green groups, academics
 and ACE members.

2002(Cont'd)

- Commenced the use of webcams, under the EIAO, at selected major work sites to enhance transparency and encourage compliance.
- Opened the Customer Service Centre to enhance the handling of enquiries and pollution complaints.
- Established an Environmental Forum between the Housing Department and the HKCA, with input from the EPD to discuss environmental issues relevant to public housing projects.
- Assisted the CEDD to open and operate a waste concrete recycling facility at Tuen Mun Area 38.



2003

- Launched the "Green Construction Example" and "Green Construction Equipment" websites.
- Collaborated with the Hong Kong Polytechnic University to organize a short course, the "Certificate of Environmental Protection in Construction Industry" for management staff of construction sites.
- Implemented a 14-day fast-track processing procedure for Construction Noise Permit Applications.
- Established working relationship with the Hong Kong General Building Contractors Association to extend the construction partnership programme to small and medium sized contractors.



2004

- Developed an administration system for Quality Powered Mechanical Equipment to promote the use of quiet and environmentally friendly construction machines.
- Launched the "Help Desk to Help the Trade" to provide a one-stop source of information for the business community including the construction industry, on environmental standards, legislation and practical guides for reference.
- Implemented the new provisions of the Noise Control Ordinance to engage the top management of the construction companies in taking preventive measures to avoid noise offences.
- Launched the support website on Environmental Management Information and ISO 14001 EMS for the construction sector to facilitate adoption and implementation of ISO 14001 EMS by SMEs in the sector.



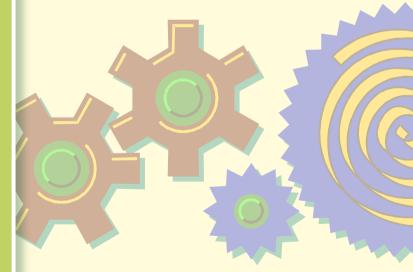




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2005

- Launched the administrative Quality Powered Mechanical Equipment scheme to promote the use of quieter and more environmentally friendly construction equipment.
- Updated the environmental management system support packages for SMEs in the construction sector to ISO14001:2004 version.
- Commenced implementation of the Construction Waste Disposal Charging Scheme.
- Launched a "Pay for Environment Scheme" to introduce comprehensive contractual requirements and to provide financial incentives for implementing enhanced pollution abatement measures in all future public construction projects.



5. Major Products Launched



Websites

- Partnership with Trade and Industry http://www.epd.gov.hk/epd/partnership/eng/ cons.htm
- Green Construction Information Corner http://www.hkca.com.hk/epd/epdfront.htm
- Green Construction Examples
 http://www.epd.gov.hk/epd/english/news_
 events/current issue/prjindex.html
- Achievements in Environmental Pollution Control on Construction Activities

http://www.epd.gov.hk/epd/english/ news_events/current_issue/achievements_ construction.html



Website on "Partnership with Trade and Industry - Construction Industry" provides useful information to enhance the environmental awareness of the industry.



Website on "Achievements in Environmental Pollution Control on Construction Activities" provides good models showing what the industry can help protect the environment.









Training Tools and Guides

- "Train-the-Trainer" CD-Rom package on environmental requirements and effective waste minimization practices.
- Green Construction Pocket Handbook to provide useful green practices for frontline workers.
- Posters and screensavers for construction industry to promote environmental awareness on construction sites.
- Best Practice Guide for Environmental Protection on Construction Sites to provide a general understanding of the pollution control ordinances and suggestions on environmental protection measures on sites.
- Videos on minimizing air, waste, water and noise pollution on environmental law requirements and good practices for educating workers and site supervisors.
- Video on "The New Era of Low Waste Construction" to provide some basic ideas of waste reduction measures for general reference.

MMM

- VCDs of the speaker notes and highlights of various events held since 2002.
- Leaflet on "Proper Procedures Handling Construction Materials".



The "Train-the-Trainer" CD-Rom package helps the industry in conducting their own in-house training on environmental protection covering.

Training Tools and Guides



Video on "The New Era of Low Waste Construction".

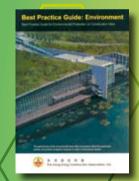


The speaker notes and highlights of the workshop "Green Construction Practices - Everybody's Responsibility" held in October 2003 are contained in this VCD.



Leaflet to promote proper handling of construction waste.





The Best Practice Guide discusses the environmental issues that are often encountered within the construction industry and the practical mitigation measures to reduce environmental impacts.



Posters to promote environmental awareness on construction sites.



The "Green Construction Pocket Handbook" provides many useful green tips for quick reference of frontline construction workers.







Training Courses

- "Environmental, Safety and Health" offered by the Hong Kong Polytechnic University for management staff of construction site.
- "Environmental Protection in the Construction Industry" offered by the Hong Kong Polytechnic University for management staff of construction site.
- "Environmental Protection Course for Construction Supervisors" offered by the CITA for site foremen.





Brochure of the certificate programme offered by the Hong Kong Polytechnic University.

6. The Way Ahead



Like many other major world cities, Hong Kong faces the same challenge of having to maintain a fast growing economy without compromising the quality of the living environment. Being in a unique position to help build Hong Kong's world-class infrastructure and facilities, the construction sector has a key part to play in protecting Hong Kong's environment and achieving sustainability. In practical terms, achieving a sustainable development project needs to engage all the stakeholders involved in the delivery process, from the initial project conception, through to its design, construction and use. Without the involvement of all stakeholders, truly sustainable development and protection of the environment cannot be achieved.

The EPD has been taking a proactive approach to help the business operators in the construction sector overcome the problems they face in their efforts to comply with the environmental requirements while striving for success in their business endeavours. While this environmental partnership has only a short history, it has started to deliver positive results in various aspects. We have faith in achieving further results by continuing our efforts in collaborating with the construction sector.

To make ourselves best placed to address future expectations and challenges, the EPD has also reorganized itself recently and set up a Business

Facilitation Office. A dedicated team has been created in the office to work on the partnership programme with the construction industry to enhance the advisory role of the Department in this programme while avoiding role conflicts between advisory and enforcement functions. There are still a lot of works ahead of us and we would appreciate the understanding, support and contributions from all stakeholders.

We all wish to live in a better environment. Through partnership with the industry, both sides can

- continue to improve capabilities
- share knowledge and experiences
- support each other

in delivering changes that will directly benefit the quality of our environment. So, let us all work more closely together to make Hong Kong a truly sustainable world city of Asia with a high quality of living environment.









Looking Forward

We will continue to:

- Identify areas for improvement and new initiatives to enhance the environmental awareness and performance of the construction industry
- Develop compliance assistance policy, principles and strategies
- Actively promote and extend the government-industry partnership programme to relevant stakeholder groups
- Work closely with the trade and stakeholders in implementing compliance assistance activities
- Prepare compliance assistance materials (e.g. checklists, guidebooks, "how to" manuals)
- Develop technical solutions as appropriate for the construction sector
- Provide advisory services on enquiries from the construction sector

