

Sustainable Development :  
**A Green Future**

The Fourth Review of Progress on  
the 1989 White Paper:  
*Pollution in Hong Kong – a time to act*

Planning, Environment and Lands Bureau  
Government Secretariat  
January 1998



## RESOURCES & PUBLICATIONS : publications

### White Paper on Environment

[Introduction](#)

[Outline of the Fourth Review](#)

[Checklist of Progress Against Targets](#)

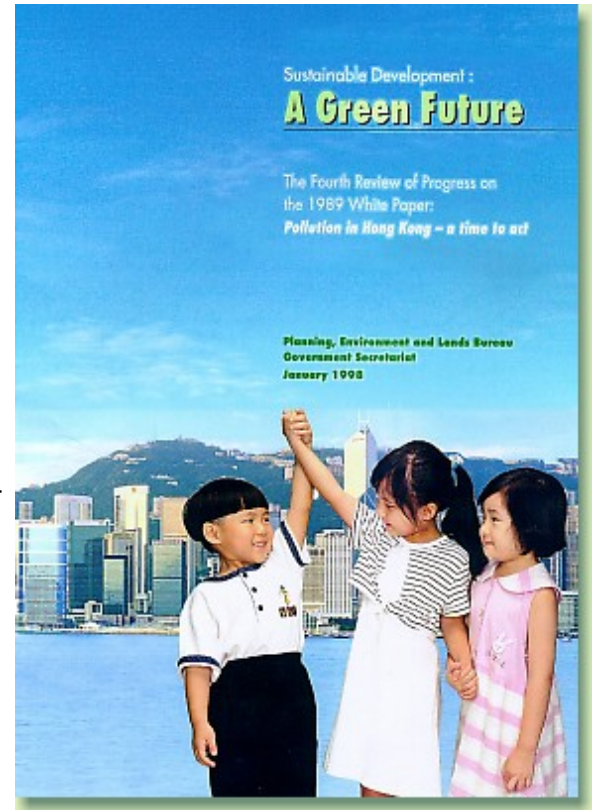
[Plans for Environmental Protection and Conservation](#)

[The Way Forward](#)

[Annex A](#) THE 1989 WHITE PAPER - PROGRESS AGAINST TARGETS

- [Section A](#) Progress report on items listed in Chapter IV of the Third Review ( White Paper targets )
- [Section B](#) Progress Report on additional measures described in the Second White Paper Review
- [Section C](#) Progress Report on additional measures/new initiatives described in the Third White Paper Review

[Annex B](#) MAIN ON-GOING ACTIONS AND NEW INITIATIVES



[▲ Back to top](#)

[▲ Table of Content](#)

---

2005 © | [Important notices](#)

Last revision date: 28 April 2006

## RESOURCES & PUBLICATIONS

### White Paper on Environment

#### Introduction

The 1989 White Paper (Pollution in Hong Kong - a time to act) contained a promise that reviews of progress would be conducted every two years. Reviews were prepared and published in 1991, 1993 and 1996. This is the fourth and the last review.

2. The First Review in 1991 summarised progress during the first two years of the programme, noting that action in most areas (with the exception of water pollution control measures) was proceeding in an encouraging way. The Second Review (1993), a more comprehensive document emphasized that protecting and sustaining the environment was a responsibility, not of some particular sector of society, but of all of us. The Third Review was aimed at arousing the public's awareness of the concept of sustainability. It contributed to informing the public and stimulating their debate on various environmental issues.

3. This Fourth Review takes stock of progress made towards targets set out in the 1989 White Paper, and the additional targets set in the subsequent reviews; presents plans under each functional programme area of air, water, noise and waste; pursues the concept of sustainable development and addresses Hong Kong's contributions to regional environmental protection.

#### Outline of the Fourth Review

4. This review comprises two main parts:

- A checklist of progress against targets set out in the 1989 White Paper and the three previous reviews (Annex A); and
- A summary of the main measures already planned to be carried out in the next two years (Annex B).

#### Checklist of Progress Against Targets

5. The checklist reports progress on 79 items of which 90% were completed since the last review. The table below summarizes the situation.

#### Progress Against Targets

Targets	No. of Targets	Percentage Completed
Targets set out in the 1989 White Paper:	119	
• Completed and on-going in previous reviews	114	96%
• Completed and on-going up to the 4th Review	117	98%
New initiatives proposed in the 2nd Review:	89	
• Completed and on-going in previous reviews	75	84%
• Completed and on-going up to the 4th Review	85	96%

Further commitments made in the 3rd Review:	28	
<ul style="list-style-type: none"> <li>Completed and on-going in the 4th Review</li> </ul>	26	93%

### Plans for Environmental Protection and Conservation

6. The main actions for the next two years are presented in the forms of integrated plans which cover the following key issues:

- planning against pollution, including implementing the Environmental Impact Assessment Ordinance;
- prevention and control of air, water and noise pollution, outlining the current progress of various control strategies and forthcoming plans to improve environmental quality;
- waste management strategies focusing on the Waste Reduction Plan;
- progress on conservation of energy, natural environment and biodiversity;
- community awareness and environmental education as well as support to industry;
- implementation of the polluter pays principle and use of economic instruments for environmental protection; and
- update on regional co-operation, including the work done by the Hong Kong-Guangdong Environmental Protection Liaison Group and participation in international fora such as APEC

7. The summary highlights the scale of various environmental programmes and actions now being pursued; the practical, social and political issues faced in pursuing them; and the need to press ahead to complete all current tasks while at the same time looking beyond the present programmes.

### The Way Forward

8. This is the last review of the 1989 White Paper. Apart from providing a basis for the preparation and discussion of our strategic environmental policy options for the next century, it also serves as the precursor to the next White Paper on the Environment - Hong Kong's Agenda 21.

9. The next White Paper will be the blueprint for the preparation of strategies, plans and policies for sustainable development in the 21st Century. The findings and recommendations of the SUSDEV 21 Study will fit into the framework of Hong Kong's Agenda 21.

[▲ Back to top](#)

[▲ Table of Content](#)

## Annex A

### THE 1989 WHITE PAPER - PROGRESS AGAINST TARGETS

The following tables summarize progress made against the targets set out in the 1989 White Paper and all the previous Reviews.

2. **Section A** reports the progress on the 14 outstanding targets listed in the Third Review. Twelve targets were either completed or on-schedule, which is more than 98% of the total 119 items proposed in the White Paper in 1989. The two outstanding items are:

- a. Commissioning of the Yuen Long/Tuen Mun Refuse Transfer Station; and
- b. Commissioning of the Centralized Incineration Facility for animal carcasses and clinical waste

The former's delay was due to public objection and tendering complications. The latter was the result of a change in disposal strategy for animal carcasses and clinical waste.

3. **Section B** reports further progress against the 37 outstanding measures proposed in the Second Review. As at December 1997, 33 targets (89%) were completed, on-schedule or on-going. There are delays on the following four items:

- a. Higher penalties for smoky vehicles;
- b. Completion of the High Priority Programme of the Sewage Strategy;
- c. Banning the use of diesel hammer for piling; and
- d. Introduction of landfill charging.

Progress is being made with a view to completing these targets as soon as practicable.

4. **Section C** reports the progress of the additional measures and new initiatives proposed in the Third Review. A total of 26 out of 28 items (93%) were either completed or on-schedule. Delay was encountered for the following initiatives:

- a. Commissioning of the low level radioactive waste storage facility; and
- b. Commissioning of the SUSDEV 21 Study

The former's delay was due to the objection of land owners and green groups on the siting of the facility and the unacceptably high tender price received. The latter study started in September 1997.

5. Overall, of the 79 targets reported in this Review, 71 are either completed or on-schedule.

[▲ Back to top](#)

[▲ Table of Content](#)

## RESOURCES & PUBLICATIONS

### (A) Progress report on items listed in Chapter IV of the Third Review (White Paper targets)

para	Status	Item	Target	Progress (as at December 97)
<b>Waste Management</b>				
2.15	✓	Commission HKIWTS	96/97	Commissioned in April 97.
2.15	✓	Commission WKTS	(97/98)	Commissioned in June 97
2.15	L	Commission Yuen Long/Tuen Mun RTS	98/99	Commissioning deferred to 99/00. Delay due to objections from the public and complications of the tendering process. Tenders to be called in January 98.
2.15	O	Commission N Lantau RTS	(97/98)	To be commissioned in April 98.
2.15	O	Commission Outlying Islands transfer facilities	(97/98)	Construction started in early 97.
2.16	✓	Close Pillar Point landfill	95/96	Closed in January 97.
2.21	L	Commission CIF for animal carcasses, clinical waste	93/94	Funding support is outstanding. Alternative disposal options are being explored.
<b>Water Pollution</b>				
3.25	✓	Declare Victoria Harbour WCZ	93	Declared in phases between 94-96. First phase declared in Nov 94; 2nd phase in Sept 95, 3rd phase in April 96.
3.25	✓	Control effluents in all WCZs	95	Full control achieved in 96.
<b>Air Pollution</b>				
4.28	✓	Start phasing out incinerators	--	Staged programme completed. All municipal incinerators were phased out by May 97. [See below, Section B, para 6.20].
4.29	✓	Reduce construction dust	92	Regulatory control to require construction sites to adopt mandatory dust suppression measures was implemented in June 1997.
<b>Noise</b>				
5.17	✓	Control noise from vehicles	93	Legislation introduced into LegCo in December 1995. Regulation to require vehicles to meet stringent noise emission standards for first registration was implemented in August 1996.

## Environmental Education

8.20	○	Secure site for environmental resource centre, and open	--	First resource centre in Wanchai opened in Dec 93. Visitor Centre in Revenue Tower opened in June 94. The second resource centre is being operated by a green group under funding of Environment and Conservation Fund. More centres are planned, for operation by community groups.
8.22	○	Education Department to set up 3 new field centres	(93/94)	The second and third centres, on Route Twisk and Cheung Chau, opened in 1995 and 1996. The site for fourth centre has not yet been identified.

Legends: ✓ Action completed L Programme running late ○ Action on-going

Note: Target dates in brackets are internal targets, not given in the White Paper.

[▲ Back to top](#)

[▲ Table of Content](#)

---

2005 © | [Important notices](#)

Last revision date: 28 April 2006

## RESOURCES & PUBLICATIONS

### (B) Progress Report on additional measures described in the Second White Paper Review

Para	Status	Item	Situation as at December 1997
<b>Conservation</b>			
5.35	✓	The need for a Conservation Authority will be examined	A review of conservation policy was completed in May 96.
<b>Pollution Control</b>			
<b>Air</b>			
6.12	L	Penalties for smoky vehicles will be increased by 1995	Implementation of a higher penalty scheme depends on a more objective enforcement mechanism, which is now being developed in consultation with the Police.
6.12	✓	Inspection and maintenance programmes for commercial vehicles will be stepped up in 1995	Smoke inspection by means of smoke meter and checks on air filters and emission control system of a vehicle has been incorporated into the annual inspection of commercial vehicles on a sampling basis.
6.13	O	Government will encourage introduction of electric vehicles	Electric vehicles have been exempted from first registration tax since 1994. Trial of two electric vehicles ended in 1996. The trial showed that electric vehicle technology is not yet mature and reliable enough for large scale introduction in the local operating environment.
6.15	✓	Open burning of refuse in urban areas will be banned by 1994	Regulation to prohibit open burning activities was implemented in Feb 1996.
6.15	✓	Construction dust control measures to be implemented in 1994	Regulatory control to require construction sites to implement mandatory dust suppression measures came into effect in June 1997.
6.20	✓	Close Kwai Chung incinerator	Closed in May 97.
6.21	✓	A toxic air contaminant study will be completed by March 95	The study on toxic air pollution was completed in mid 1996.



6.21	○	A comprehensive programme to control toxic air pollutants will be introduced by 1997	Assessment of toxic air pollutants is being undertaken in two air quality monitoring stations. Two air quality monitoring stations were established and put into operation in July 1997 to monitor toxic air pollutants. An air toxics control plan for overall control of toxic air pollutants is under preparation.
6.23	○	Measures to mitigate sick building syndrome will be introduced by 1995	Consultancy on indoor air pollution was completed. Measures to prevent indoor air pollution being considered.
6.23	✓	Air quality objectives for semi-enclosed spaces will be established by 1994	Air quality guidelines for road tunnels were promulgated in 1993.
6.23	✓	Guidelines and practice notes on ventilation design and systems and their operation will be published by 1996	Practice notes for basement carparks were issued in November 1995 and for transport exchanges in 1997. Compliance with the Practice Notes being monitored. A follow-up survey for some 59 basement car parks conducted in March and April 1997 confirmed significant improvement of the air quality and good compliance with the issued Practice Notes.
Water			
6.32	○	Measures to control non-point source polluting discharges and toxic discharges will be considered	Separate studies to develop strategies for dealing with toxic substances and non-source pollution will be commissioned in 1998/99, subject to funding.
6.53	○	Discussions with PRC on the EIA for the oceanic outfall will continue	The EIA commenced in May 1996.
6.56	L	The High Priority programme of the sewage strategy will be implemented for completion by mid-97	Delayed due to contractual difficulties. Completion anticipated by 2000.
6.57	✓	Victoria Harbour WCZ will be declared in phases 1994-97	Phase 3 came into effect on April 96.
Noise			
6.67	✓	Regulations on motor vehicle noise will be proposed in 1994	Legislation introduced into LegCo in December 1995. Regulation to require vehicles to meet stringent noise emission standards for first registration was implemented in Aug 1996.
6.69	✓	Stricter control on powered mechanical equipment and noisy manual work will be introduced in 1994	Amendments to Noise Control Ordinance enacted in Jan 94. Resolution tabled in LegCo in Jan 96. Tightened control was implemented in Nov 96.

6.69	L	Piling with diesel hammers will be banned in built-up areas by 1994	Target implementation date revised to 1997 in Third Review to cater for extensive consultation. Provisions for the control under Noise Control Ordinance made in May 97. Measures to phase out noisy diesel, steam and pneumatic hammers will be implemented in early 1998.
6.69	O	Use of excavator-mounted breakers in certain works operations will be restricted by 1994	Target implementation date revised to April 1996 in Third Review. Control to be implemented in stages. Starting from April 96, quiet road opening equipment must be used for night time work. Restriction on other types of construction works under review.
6.71	O	KCRC and MTRC will introduce noise abatement programmes	<p><i>KCR</i>: Noise abatement programme extended to 27 projects. Noise control works at Tai Wo station, Hin Keng and Tai Po Market have been completed.</p> <p><i>MTR</i>: All trains will be retrofitted with new wheels sets and noise dampers by 1999. A noise enclosure between Shau Kei Wan Portal and Heng Fa Chuen station completed by August 1997.</p>
6.75	O	Scheme to minimise vehicle noise at night will be proposed	Feasibility of 5 traffic management schemes are currently under study. Consultation started in 1997.
6.76	O	\$445M will be spent on the School Insulation Programme [by 96]	Around 400 schools have been insulated. Additional 200 schools will be insulated from 1997 to 1999.
6.76	O	\$101M will be spent on noise mitigation for households affected by ACP [by end 95]	\$90M has been spent on noise mitigation measures in the form of noise insulation for households affected by ACP[by 1996]. Further \$62M spent in 1997.
6.76	O	More roads will be treated with noise reducing overlay	All new highways will be treated. About 9.7 km of existing road has been resurfaced, benefiting 13,000 dwellings.
Waste			
6.92	L	Charges for solid waste at landfills will be introduced from early 94	Delayed due to objection from the trade. Charging scheme was modified considerably to address concerns of the trade; negotiation with the trade is on-going with the aim to implement the scheme as soon as possible. The WDO amendment enabling payment in arrears was enacted in Jan 97.
6.94	O	Planning for a Centralised Incineration Facility will continue	Alternative disposal options and their feasibility are being assessed.
6.94	O	Code of Practice for clinical waste will be published in 1994	Code of Practice and draft legislative control framework are being revised to tie in with the alternative disposal arrangements.

## Pre-empting Problems

7.7 ✓ Legislation for EIAs will be introduced in 1994 EIA Ordinance was enacted in Jan 1997 and was implemented on 1 April 1998.

7.39 ○ Government will plan an overall waste minimisation strategy for HK A draft Waste Reduction Plan is the main outcome of the Waste Reduction Study. Public consultation was completed in Aug 1997. The final Waste Reduction Plan will be published and implemented in 1998.

## Energy Efficiency

8.6 ○ EEAC will complete research on patterns of energy consumption by 1994 Research completed on a sample of commercial and industrial buildings. Consultant completed an energy end-use database in end 1997. Enhancement on transport sector energy consumption pattern and MARKAL forecasting model will be completed by mid 1998.

8.7 ✓ An Energy Efficiency Display Centre will be set up in the Science Museum by 1996 Opened in July 1996.

8.17 ○ Draft energy codes will be published by the EEAC in 1994 We have completed the lighting and the air-conditioning design codes for voluntary implementation in late 1998. We are finalizing the draft code on electrical installations for EnAC endorsement in mid 1998. Public consultation on the draft code for lifts and escalators will start in late 1998.

## Global Goals

9.6 ○ Government will work closely with WWF on a full environmental profile for HK The project began in Dec 95 with funding from the Environment and Conservation Fund and Woo Wheelock Green Fund.

9.17 ✓ Government will seek extension of Basel Convention to HK The Convention was extended to Hong Kong in Oct.95.

## Shared Responsibility

10.12 ✓ EPD's local control offices will be extended Six offices have been set up.

10.14 ○ An Environment Resource Centre (ERC) will be opened in 1993; more centres will be considered Wanchai ERC opened in Dec 93. EPD Visitor Centre opened in June 94. The second ERC in Tsuen Wan is being operated by a green group under the funding from Environment and Conservation Fund.

Legends: ✓ Action completed L Programme running late ○ Action on-going

[▲ Back to top](#)

[▲ Table of Content](#)



## RESOURCES & PUBLICATIONS

### (C) Progress Report on additional measures/new initiatives described in the Third White Paper Review

Para	Status	Additional Measures/ New Initiatives	Status as at December 97
<b>Waste Management</b>			
2.13	L	Commission of a low level radioactive waste storage facility on Siu A Chau in 1997.	Commissioning of the low level radioactive waste storage facility was delayed due to objections from land owner and green groups, and tender complications. The commission date is deferred to mid-2000
2.14	O	Introduce an improved marine refuse scavenging service in 1996. Further measures to reduce littoral and marine refuse are being considered.	Number of vessels for garbage reception and floating refuse scavenging increased to 21 and 37 respectively. Six specialised scavenging vessels at a cost of \$37 million being acquired; first two will be delivered in late 1997.
<b>Air</b>			
2.38	✓	Introduce the most advanced European emission standards and diesel fuel with a sulphur content of 0.05% in 1997.	Completed. Low sulphur content (0.05%) diesel and Euro II emission standards on large diesel vehicles were implemented on 1 April 1997.
2.46	✓	Regulations are being prepared to control the standards of professionals and contractors taking part in asbestos abatement works. Once these are in force an Asbestos Administration Committee will be set up by mid-1996.	Completed. Asbestos Administration Committee was set up in May 1996. Registration of qualified personnel involved in handling asbestos started in May 1996. From June 1997 onwards, only registered personnel and undertakings will be allowed to handle asbestos related work.
2.48	O	Practice notes on ventilation in bus termini are being prepared and should be issued in mid-1997.	Draft Practice Notes were being finalised. The Transport Department and the Electrical and Mechanical Services Department were liaised to improve the ventilation in existing bus termini.
2.48	O	Regulatory control of air quality in road tunnels is being considered.	Private Members' Bills to bring the air quality standards of the franchised tunnels in line with the latest international trend were enacted in June 1997. Transport Bureau is examining the technical capability of these tunnels to meet the revised, more stringent air quality requirements.

2.50	✓	Co-ordinating local action to phase out CFCs, HCFCs and halons.	Import of CFCs for local consumption has been banned since January 1996. Quota control on local consumption of HCFC started in January 1996.
Noise			
2.53	✓	An amended Technical Memorandum is being prepared to tighten control on the use of diesel hammer pile drivers in populated areas.	Legislation and technical memorandum to phase out the use of noisy percussive hammers including diesel, steam and pneumatic hammers were made in May 1997.
2.57	✓	Regulations to control false activation of car burglar alarms will be introduced in early 1996.	Completed. Implemented in April 1997.
2.58	○	Legislation to control noise from loudhailers and public address systems on vessels is being considered.	A "Guide on the Use of Loudhailers and Public Address Systems on Board of Vessels" has been distributed to the local shipping community. We are considering legislation to facilitate enforcement against vessels which cause unnecessary noise nuisance.
Integrated Pollution Control			
2.65	✓	Establish 'one-stop shop' licensing service for construction industry by end of 1996.	The 'one-stop shop' licensing service for construction industry has been set up in early 97 and extended to all other sectors by end of 1997.
2.66	○	Introduction of multi-disciplinary enforcement teams progressively through 1996 and 1997.	On-going.
Conservation			
2.69	✓	14 potential extension sites for Country Parks have been identified. One such site, at Tai Tong, was designated in 95.	14 potential sites for Country Parks have been identified. Two such sites at Tai Tong and Wan Tsai, were designated in 1995 and 1996 respectively.
2.70	✓	Two marine parks (at Hoi Ha Wan and Yan Chau Tong) and one marine reserve (at Cape D's Aguilar) will be established in 1996.	Hoi Ha Wan Marine Park, Yan Chau Tong Marine Park and Cape D'Aguilar Marine Reserve were designated in July 1996.
2.70	✓	A marine sanctuary will be established at Sha Chau and Lung Kwu Chau.	The Sha Chau and Lung Kwu Chau Marine Park was designated in November 1996.
2.71	✓	A consultancy on the management of Mai Po and Inner Deep Bay as a Ramsar site will start in early 1996.	The consultancy study on management of Mai Po and Inner Deep Bay was completed in March 1997. The recommendations will be implemented subject to resource allocation.

2.71	✓	Hong Kong is to participate in the East Asia-Australasian Shorebird Reserve Network being set up to protect migratory birds.	The Mai Po and Inner Deep Bay Ramsar site was included in the Network when it was launched in March 1996.
2.72	○	Two biodiversity baseline surveys have begun: one on terrestrial and freshwater habitats, the other on corals and fishes.	Both studies are in progress. The former will be completed in May 1998 and the latter in October 1998.
2.72	○	An artificial reef programme will start in 1996 to enhance fisheries resources and marine biodiversity	Preparation for the artificial reefs deployment commenced in July 1996. The first phase of the deployment is planned for December 1997 in the Hoi Ha Wan Marine Park and Yan Chau Tong Marine Park
3.28	○	Firm proposals on a comprehensive conservation policy should be ready by about May 1996.	Firm proposals on the comprehensive conservation policy are being considered by relevant government departments.
Energy Conservation			
2.74	○	Planning is in hand to extend the voluntary energy efficiency labelling scheme to other kinds of appliance in addition to refrigerators.	The scheme was extended to cover washing machines in December 1997. We plan to expand the scheme to compact fluorescent lamp in 1999 and to non-household electrical appliances and gas appliances in future.
2.74	○	Other measures to improve the energy efficiency of buildings at the design stage include the issue for consultation in 1996/97 of draft codes of practice on the design of lighting systems and air-conditioning systems.	We have completed the lighting and the air-conditioning design codes for voluntary implementation in late 1998. We are finalizing the draft code on electrical installations for EnAC endorsement in mid 1998. Public consultation on the draft code for lifts and escalators will start in late 1998.
2.74	○	Publicity materials on promoting energy conservation in the transport sector are being prepared.	Short tips on promoting energy conservation in transport sector are ready for distribution by EMSD.
3.29	✓	The government intends to set up an Energy Advisory Committee during 1996.	The Energy Advisory Committee was set up in July 1996.
Sustainable Development			
3.24 - 3.27	L	A major consultancy study called SUSDEV21 will start in 1996 (subject to funding approved by the LegCo).	The consultancy study has started in September 1997.
3.32	○	To consider how to take the environmental factor into account in our statistical system on the economy.	Detailed study will be carried out under the SUSDEV21 Study.
Life Cycle Analysis & Eco-labelling			

- |      |   |  |                                    |
|------|---|--|------------------------------------|
| 3.40 | ✓ | In early 1996 the government will commission a \$4.5 million study on life cycle analysis and eco-labelling. | The study was completed in May 97. |
|------|---|--|------------------------------------|

**Toxic Substance Control**

- |             |   |  |   |
|-------------|---|--|---|
| 2.49 - 3.42 | ○ | Action is in hand and regulations to control emissions of benzene from petrol filling stations and of perchloroethylene from dry cleaning processes. | Legislation is being prepared to require Petrol Filling Stations to install vapour recovery systems for their dispensing facilities to minimise benzene emissions. The laundry industry is being consulted on the draft regulation to reduce perchloroethylene emissions from dry cleaning processes. |
|-------------|---|--|---|

Legends: ✓ Action completed   L Programme running late   ○ Action on-going

[▲ Back to top](#)

[▲ Table of Content](#)



## Annex B

### MAIN ON-GOING ACTIONS AND NEW INITIATIVES

This appendix summarizes the main on-going actions and new initiatives. It can serve as a checklist to monitor progress in implementing the strategy initiated in the 1989 White Paper, and in pursuing further tasks relating to sustainability.

#### The 1989 White Paper Objectives

Achieving the objectives of the 1989 White Paper will depend on several factors, including financial and staffing resources of the government, consultation with those affected by particular proposals, and the general level of community and political support for the measures necessary to achieve the objectives. On attaining the White Paper's objectives, we can expect:

- a. an environmentally acceptable waste management programme for the foreseeable future;
- b. comprehensive and environmentally acceptable territory-wide schemes for sewage collection and disposal, lasting well into the 21st century;
- c. our inshore waters to be a community asset, particularly for swimming and recreation;
- d. attainment of air quality objectives, with significantly reduced risks to health;
- e. a general improvement in environmental conditions as a result of improved procedures and better co-ordinated planning;
- f. a more environmentally aware and well informed community prepared to improve its environment; and
- g. a quieter city.

#### Main Actions for the Next Two Years

##### A. Planning Against Pollution

Environmental assessments will continue to be an integral part of development planning:

- We have implemented the EIA Ordinance on 1 April 1998 to make the EIA requirements enforceable. We will continue to apply strategic environmental assessments to major policies and strategies.
- EPD will launch a video on environmental auditing to both the public and private sectors by mid 1998 as part of an environmental audit training consultancy.
- EPD will establish the Housing One-Stop Shop to facilitate dedicated and timely solutions to overcome environmental constraints associated with the public and private housing supply.

##### B. Air Pollution Prevention and Controls

Achievement of air quality objectives will depend to a large extent on our ability to reduce pollution from diesel vehicles. Further actions include:

- To complete a trial of LPG taxis with a view to developing a viable strategy to convert part of the diesel vehicle fleet to clean fuel alternatives.

- To introduce the latest Euro Phase II standards to small diesel vehicles on 1 October 1998
- To make vehicle smoke emission checks a standard feature of annual inspections of in-service commercial diesel vehicles subject to the satisfactory performance of smoke meter measurement.
- To investigate the practicability of introducing dynamometer smoke tests to all smoky vehicles being spotted.
- To examine mechanisms to strengthen enforcement against smoky vehicles.
- To examine the feasibility of disposing of ozone depleting substances at the Tsing Yi Chemical Waste Treatment Centre.
- To continue to extend licensing control to all premises operating the specified industrial processes by 2002.
- To develop legislative controls on benzene emissions from petrol filling stations and on perchloroethylene emissions from dry cleaning facilities.
- To set up additional air quality monitoring stations at busy roadsides, including Central, Causeway Bay and Eastern District.
- To set up equipment to monitor the ambient concentrations of key toxic air pollutants.
- To develop a numerical air quality model to provide more accurate projections of the air quality implications of territory wide land use and transport plans.
- To monitor the compliance with advisory guidelines for facilities susceptible to air pollution such as road tunnels, underground car parks and large transport terminus, and where necessary, to develop measures to assist the operators concerned to improve the air quality in their premises.
- To carry out air quality improvement work for Sha Tin New Town Plaza and Tsuen Wan MTR Interchange.
- To study in collaboration with our Guangdong counterparts the air pollution issues in the Pearl River Delta Region.

### C. Water Pollution Prevention and Controls

The water pollution control strategy is generally on track and has brought about a modest but steady improvement in the quality of inland waters. Further actions include:

- To continue the implementation of all the 16 SMPs work for completion by 2006.
- To complete the construction of six collector tunnels under the Strategic Sewage Disposal Scheme (SSDS) Stage I by 2000.
- To complete the detailed EIA Study of SSDS Stage II oceanic outfall by 1998.
- To commission a study on Stages III and IV of SSDS in early 1998.
- To continue the construction of new sewers in phases over the next five years in Sha Tin, Tai Po, Sai Kung, Hong Kong Island South, Cheung Chau, Tuen Mun and the North District.
- To review the sewage charging scheme.
- To formulate a pertinent management strategy for Deep Bay in consultation with Shenzhen authorities.
- To conduct a comprehensive review of the cumulative water quality impacts of strategic coastal developments.
- To develop a coherent policy on toxic substances and a strategy for controlling their

release into the water environment.

- To initiate an assessment of the importance of non-point pollution sources with a view to devising a control strategy.

#### D. Noise Pollution Prevention and Controls

The noise control strategy is on track. Future priority will be given to the abatement of road traffic noise. Further actions include:

- To monitor closely the potential noise impacts arising from major infrastructure projects, such as the Western Corridor Railway and the MTR Tseung Kwan O Extension.
- To continue to provide environmental inputs to the town planning process to pre-empt excessive noise impacts.
- To re-surface 1.5 km of road with noise reducing materials by 1998 under the Quiet Road Surface Programme.
- To continue to provide noise insulation measures to the remaining 3,800 classrooms in 200 schools under the School Insulation Programme.
- To study the feasibility of installing noise barriers or enclosures on existing roads.
- To continue to work closely with MTRC and KCRC to ensure the use of best practicable mitigation measures to minimize noise impacts from rail operations.
- To look for and promote advanced construction methods, equipment and techniques with less noise pollution.

#### E. Waste Management

The waste management strategy is on track with the development of the waste management facilities identified in the Waste Disposal Plan mostly completed. Further actions include:

- To implement the Waste Reduction Plan in 1998 with a view to reducing waste to be disposed of at landfills by 40% over ten years.
- To formulate a reduction and disposal strategy for construction and demolition wastes.
- To refine and implement an effective clinical waste control strategy.
- To build a stand-alone animal carcass cremator.
- To commission a low-level radioactive waste storage facility on Siu A Chau by 2000.
- To promote green purchasing.
- To closely monitor the import and export of hazardous and contaminated wastes to ensure that our controls conform with international standards.
- To expand the floating refuse scavenging service in phases.

#### F. Conservation of Natural Environment and Biodiversity

Our conservation policy should strike a balance between the need for development and the needs of the natural environment, to ensure that development is sustainable. Further actions include:

- To continue to participate actively in international fora with a view to fostering regional co-operation in fisheries management and conservation.
- To formulate a fisheries conservation strategy.
- To invest some \$100 million over five years on the development of artificial reefs at marine

parks and at sites of special importance to local fisheries.

- To increase penalties for conducting destructive fishing practices.
- To better understand local biota through surveys on biodiversity of corals and reef fish and study on the Chinese White Dolphin.
- To enhance conservation management of the Mai Po/Inner Deep Bay Ramsar site.
- To identify more sites for designation as country parks, marine parks and marine reserves.

#### G. Energy Efficiency and Conservation

All targets set in the 1989 White Paper were achieved. The following initiatives are being pursued to promote energy efficiency and conservation:

- To review the current statutory control of overall thermal transfer value (OTTV) of new commercial and hotel buildings.
- To implement the codes of practice for lighting and air conditioning installations.
- To promote the draft code of practice for the design of electrical installations.
- To develop the draft code of practice for lifts and escalators installations.
- To prepare guidelines for the design of energy efficiency building services installations.
- To extend the energy efficiency labelling scheme to washing machines and compact fluorescent lamps.
- To continue to conduct energy audit surveys and implement improved energy management in public sector buildings.
- To review the guidelines on energy audits.
- To continue to evaluate the costs and benefits of different demand side management (DSM) measures and to co-ordinate the power companies' DSM programmes.
- To develop an energy end-use database and modelling system.
- To investigate the feasibility and develop a plan for the wider use of water cooling of condensers in air-conditioning installations.
- To investigate the application of renewable energy in Hong Kong.
- To study the use of alternative fuelled vehicles and other transport initiatives.

#### H. Environmental Education and Support to Industry

We will continue to run a series of educational and support to industry programmes with a view to further heightening public awareness on the importance of environmental protection. Further actions include:

- To set up a mobile environmental resources centre by the end of 1998.
- To set up more resource and education centres.
- To develop more environmental education kits for teachers, students and different target groups of the community.
- The Environmental Campaign Committee (ECC) to continue to organize environmental education activities for schools and members of the community.
- To further incorporate environmental education elements into school syllabuses at both primary and secondary levels.
- To continue to support environmental education and research projects under the funding

of the Environmental and Conservation Fund and the Woo Wheelock Green Fund.

- To maintain close liaison with green groups in launching environmental education and awareness programmes.
- The Industry Department will continue to render their technical and financial support to industries in complying with environmental requirements.

#### I. Sustainable Development

A major consultancy study known as 'Study on Sustainable Development for the 21st Century' (SUSDEV 21) started in September 1997.

The objectives of the study include:

- To define the meaning of sustainable development in the local context.
- To develop guiding values, sustainability indicators and criteria covering the economic, social and environmental objectives.
- To conduct baseline economic, social and environmental studies.
- To establish a 'sustainable development system' (SDS)

The SDS will enable the systematic evaluation and monitoring of sustainability of our future development, and to provide a means for corporate decision-making on policies, plans, programmes and resource allocation to achieve sustainable development in Hong Kong.

The study will get the widest possible public participation throughout the study process to increase public awareness of the importance of sustainable development and solicit feedbacks on the community aspirations.

#### J. Internalizing Environmental Costs

To tackle environmental problems in a more effective way, we will make further use of market mechanisms to integrate economic decisions into environmental policy.

- We will extend the polluter pays principle to enable the community to make a fair and reasonable contribution to the cost of providing the services necessary to protect the environment.
- We will consider more use of other economic instruments for internalizing environmental costs. As a first step, we are launching and planning various charging schemes.

#### K. Regional Co-operation

While recognizing that pollution is no respecter of territorial boundaries, we will continue to co-operate with our neighbouring countries to safeguard the regional environmental quality.

- Co-operation with Guangdong on environmental issues will continue under the Hong Kong - Guangdong Environmental Protection Liaison Group. Close contacts between Hong Kong and Guangdong have been maintained in implementing the 1997 Work Programme.
- We will continue to participate in the expert groups on energy conservation under the Asia-Pacific Economic Co-operation (APEC).
- We will continue to participate in the APEC Marine Resources Conservation Working Group in the area of marine environmental protection and conservation.
- We will consider what practical measures could be implemented both to conserve energy and to reduce greenhouse gas emissions.
- We will continue to ban the import and exercise strict control over the consumption of ozone depleting substances.

[▲ Back to top](#)

[▲ Table of Content](#)

---

2005 © | [Important notices](#)

Last revision date: 28 April 2006