

*Best Practices*  
*on*  
*Environmental Measures and Initiatives*

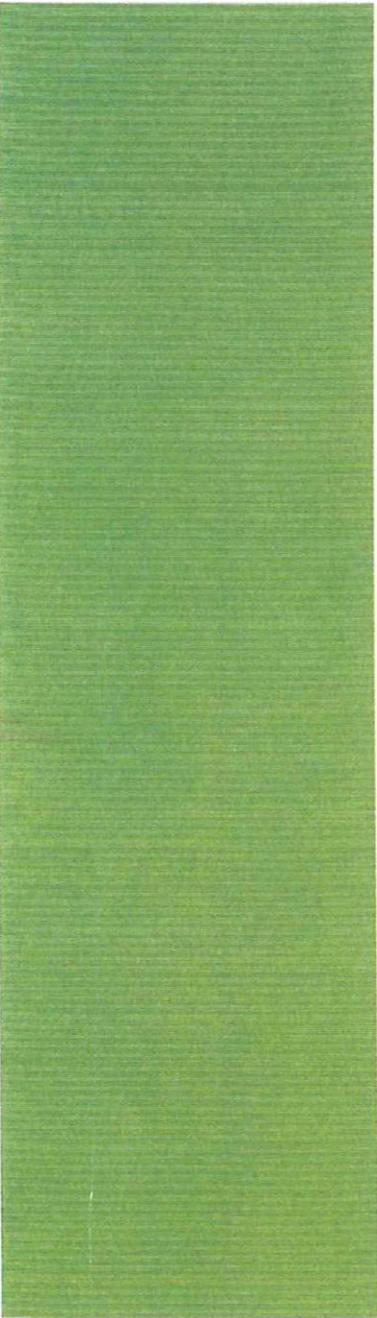


**Environmental  
Protection  
Department**

Based on  
1999 and 2000 Environmental Performance Reports for  
Government of the Hong Kong Special Administrative Region

Report by  
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January 2003

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## INTRODUCTION

**This guide is produced by the Environmental Protection Department (EPD) to assist government agencies within the Hong Kong Special Administrative Region Government (HKSARG) to achieve continuous improvement of environmental performance through implementation of suitable best practices of environmental measures and initiatives.**

**Chapter 1 provides an overview of how the best practices on environmental measures and initiatives are categorized to suit their operational needs. The following chapters provide lists of best practices on environmental measures and initiatives under each specific category. This guide serves to bring together practical environmental measures and initiatives for government agencies to adopt to suit their own circumstances.**

**It should be emphasized that this Guide does not impose uniformity on the selection and adoption of best practices on environmental initiative, as there are significant differences amongst bureaux and departments.**

**As this Guide is based on a review of practices adopted by the service for the first two years of environmental reporting, suggestions provided are by no means exhaustive. This Guide aimed at assisting government agencies to achieve continuous improvement in environmental performance, which is beyond compliance, and therefore it does not cover any legislative requirements. Access to environmental**

**legislations of Hong Kong could be made by visiting the EPD homepage ([/www.epd.gov.hk](http://www.epd.gov.hk)). In addition, the content of this Guide will be revised from time to time to reflect future advances and development in the field.**

## BACKGROUND AND CONTEXT

**T**o promote environmentally responsible management within the public sector, bureaux and departments of the HKSARG have been required to publish annual Environmental Performance Reports (EPRs) since 2000. To help these government agencies to improve the quality of their future EPRs, desktop reviews had been conducted for the first two crops of reports produced for the calendar years 1999 and 2000.

The overall results of the reviews have been separately reported in the "Summary of Overall Environmental Reporting Standard 1999" and the "Summary of Overall Environmental Reporting Standard 2000". These summary reports presented the overall environmental reporting status of the HKSARG, identified areas of strengths and weaknesses in reporting practices, and recommended best practices on environmental measures and initiatives from a service-wide perspective.

To facilitate more effective sharing of experience amongst all government bureaux and departments, this document serves to consolidate identified best practices on environmental initiatives for both years to become an initial reference tool. It is intended that this guide provides the basis to spur continuous improvements in environmental performance within the service.

Some of the identified best practices could be further developed into specific "To Do List" or "Practical Tips" for interested parties to follow. Some of the first examples to be produced could include: "Green Publication Checklist", "Green Conference Checklist" and "Green Driving Checklist".

# CHAPTER 1 OVERVIEW

The identified best practices are broadly divided by different categories as shown in the table below:

**Best practice environmental initiatives/ measures categories:**

- Energy Efficiency
- Paper Saving
- Green Procurement
- Office-based Waste Recycling
- Eco-driving
- Water Conservation
- Staff Awareness and Training
- Environmental Management System
- Stakeholder Dialogue

The best practices presented in this document are tested with success as reported by individual bureaux and departments, and are considered practical and useful measures to be worth considered for implementation by bureaux and departments to continuously improve their environmental performance. More importantly, organizations can gain inspiration for their environmental work by reviewing all best practice examples presented in this document.

### ***Structure of This Document***

Following the overview in Chapter 1, the best practices under the nine categories are presented in Chapters 2 through 10 respectively. A feedback form for collecting valuable views and comments from bureaux and departments is provided in Chapter 11.

## CHAPTER 2 ENERGY EFFICIENCY

### *Air-conditioning*

- Conduct routine checks and affix "Save Energy" sticker to AC switch to remind staff to switch off air-conditioners when not in use.
- Control air-conditioning by a Central Control and Monitoring System, and use automatic switch-off timers.
- Change manual control to occupancy sensor control.
- Use small air-conditioning zones and sectoral switches in offices to facilitate switching off when not occupied.
- Adjust thermostats and set room temperature and fan speed at a reasonable level to avoid excessive air conditioning. As a general advice, the temperature setting should be at 25.5 °C in summer.
- Switch off ventilation in lift after being idle for 5 minutes.
- Switch on air-conditioning only 30 minutes before staff start work.
- Use reflective film on windows against direct sunlight.
- Ensure that windows are closed when air-conditioners are operating and keep entrance doors to non air-conditioned rooms closed.
- Use venetian blinds to mitigate room temperature rise due to direct sunlight.
- Install variable speed motor controls for fresh air units in air-conditioning systems, wherever appropriate.

### *Lighting*

- Conduct routine checks and affix "Save Energy" sticker to the lighting switch to remind staff to switch to switch off lights when not in use.
- Control lighting by a Central Control and Monitoring System, and use automatic switch-off timers.
- Change manual control to occupancy sensor control.

- Use small lighting zones and sectoral control in offices to facilitate switching off when not occupied.
- Use natural light where possible. Switch off e.g. 50% of lighting in certain areas as daylight can reach the areas, e.g. waiting halls, corridors and common areas during office hours.
- Switch off lighting in lift after being idle for 5 minutes.
- Replace aging lighting facilities with energy-saving devices and use lamps with Energy Efficiency label.
- Use long lasting rechargeable batteries e.g. in fire exit illumination.

### *Office Equipment*

- Use power saving features on computers and office equipment.
- Switch off all unused computer monitors, printers and office equipment.
- Unplug all hand-held equipment chargers from socket outlets when not in use.
- Minimize the use of personal electrical appliances such as heater, fan, lamp and kettle.
- Use computers and office equipment with Energy Efficiency Labels.

### *Other*

- Carry out energy audits and develop a structured energy saving plan..
- Require Unit Environmental Auditors to submit periodic returns on energy consumption to the Headquarters for monitoring purposes.
- Use staircases instead of lifts for inter-floor traffic

## CHAPTER 3 PAPER SAVING

### *Avoid Paper Use*

#### (a) Electronic Means to Avoid Paper Use

- Use e-mail for internal and external communication, instead of paper memos and faxes.
- Use electronic submissions, forms and payment methods.
- Use e-tendering process.
- Introduce e-filing systems where applicable, i.e. using diskettes and CD-ROMs to keep records. Avoid paper records unless it is absolutely necessary.
- Use e-faxes (i.e. send and receive faxes electronically instead of using printouts).
- Adopt electronic templates of letterhead, memo and forms to avoid pre-printed copies.
- Transfer documents on diskettes or through e-mail for editing and review.
- Upload reports and paper for public access through the internet to reduce number of printed copies.
- Implement computer programme for booking of meeting rooms, to reduce consumption of paper.
- Send greeting cards by electronic means.
- Use digital cameras for site photo taking and establish a digital photo system to store digital photos. Avoid development of paper copies of photos unless it is absolutely necessary.
- Reduce the printed copies of publications by the Department's library by subscribing to CD-ROMs and on-line databases.

- Review critically the distribution of items such as diaries, calendars, telephone directories and performance pledge booklets by replacing them with electronic equivalents as far as possible.

#### (b) Share Documents to Eliminate Paper Use

- Post circulars and notices on bulletin boards, in particular e-bulletin boards accessible by communal terminals.
- Whenever possible and time permits, circulate documents using routing slips rather than sending out individual copies.
- Commenting/editing of documents on-screen using different fonts or colour by different parties.
- Encourage sharing of document in meetings especially when there are more than one representative from one department/bureau.

#### (c) Proper Use of Paper Fax

- Avoid fax machine that uses thermal papers to eliminate the need for making copies of filing.
- Use fax note instead of leader page for outgoing faxes.
- Avoid sending original documents after they have been sent by fax.

#### (d) Review Distribution Lists

- Examine critically who should be on distribution lists
- Minimize photocopies by circulating circulars and other documents instead of providing officers with personal copies, or by circulating one copy to all staff for each section/sub-division.
- Examine critically the copies, circulars and official publications to be produced.

### Reduce Paper Use

- Use both sides of the paper, whether for copying or printing.
- Promote printing of documents in condense mode i.e. multiple pages onto a sheet.
- Reduce font size, margins and line spacing, and adjust page format to reduce the pages of a document.
- Proper use of copiers to reduce abortive copying (e.g. ensure right setting before copying).



### Reuse/Recycle Waste Paper

- Provide green boxes at strategic places in every workplace for collection of waste papers for recycling or reuse.
- Use the blank side of used paper.
- Re-use envelopes and loose minute jackets by sticking labels over them.
- Collect used cardboard boxes for re-use.

# CHAPTER 4 GREEN PROCUREMENT

## *Procurement of Goods*

- Introduce green specification in procurement of non-GSD stock items (e.g. environmentally friendly printer cartridge, rechargeable batteries, energy saving personal computer and monitor).
- Impose supply chain pressure to require suppliers to provide information on their environmental performance.
- Introduce green marking scheme in tender assessment.

## *Procurement of Services*

- Introduce green marking scheme in tender assessment.
- Impose supply chain pressure to require contractors to provide information on their environmental performance.
- Collect, analyse information and take follow-up actions regarding contractor's environmental regulatory performance.
- Suspend contractors from tendering if the contractor has been convicted repeatedly of environment related offences.





# CHAPTER 6 ECO-DRIVING

## *Reduce Fuel Consumption*

- Use videoconferences to reduce the need for travel.
- Plan the route by combining trips wherever possible, and avoiding heavy traffic.
- Ensure that staff turns off idle vehicle engines during waiting time.
- Control fuel consumption by encouraging staff to share pool car.
- Join pooling system of government vehicles to maximise the use of vehicles between departments.
- Maintain moderate speed and accelerate smoothly.
- Maintain correct tire pressure.



Bus fleets are using ultra low sulphur diesel

## *Minimize Vehicle Emissions*

- Use ultra-low sulphur diesel fuel for diesel vehicles (e.g. trucks, buses, and light buses).
- Use unleaded fuel for petrol vehicles (e.g. private cars and motor cycles).
- Install diesel-oxidation-catalysts in diesel vehicles.
- Introduce environmentally friendly vehicles, replace all pre-EURO I vehicles progressively with new vehicles meeting the latest emission requirements, retrofit catalytic converters to some EURO I diesel engines on trial basis, retrofit passive particulate traps to some EURO I and EURO II Engines on trial basis.
- Achieve good vehicle servicing and maintenance, and check conditions regularly, e.g. check the emission level of vehicles, and leakage during routine maintenance.



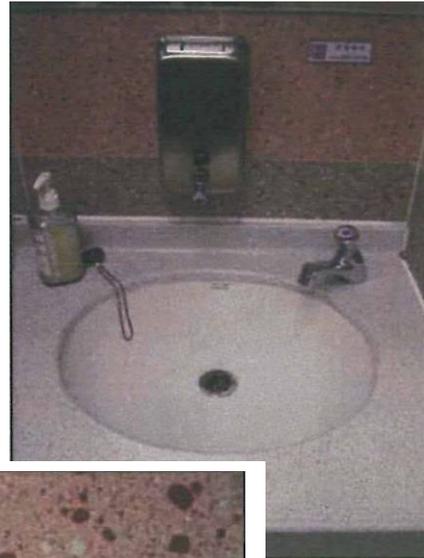
Particulate traps and catalytic converters help reduce emissions from diesel engines

## *Waste Recycling*

- Participate in retreaded tyre pilot study.

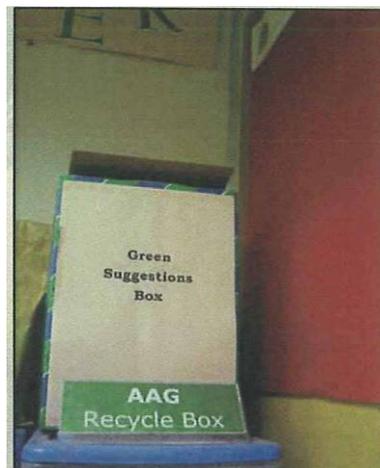
## CHAPTER 7 WATER CONSERVATION

- Regular maintenance inspection of the plumbing fixtures to prevent leaks and dripping.
- Install water saving faucets, e.g. timer taps in toilets and water saving, self-stopping taps.
- Reduce flushing cistern volume.



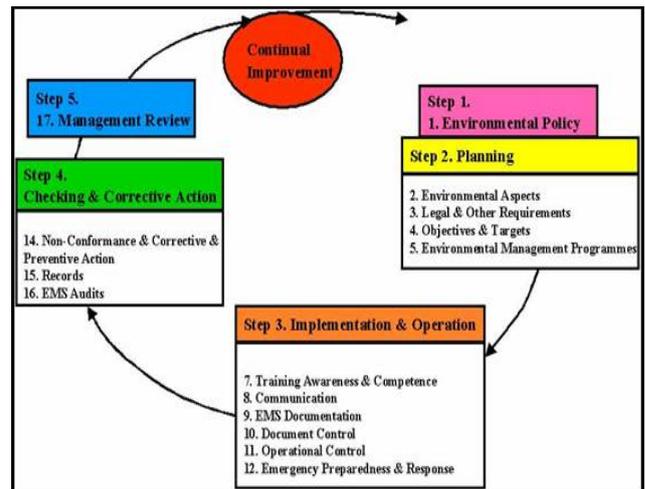
## CHAPTER 8 STAFF AWARENESS AND TRAINING

- Provide information to staff and increase staff awareness of various environmental aspects and measures through posters, leaflets and labels on e.g. waste, energy and paper savings, either by distributing it or by displaying it in prominent locations to increase staff awareness.
- Issue regular reminders and guidelines on best green practices to increase staff awareness of green practice guidelines.
- Provide training regularly for relevant staff, e.g. seminars, workshops, and training courses on green management, EMS or environmental audits.
- Encourage staff to contribute ideas on green practices e.g. through staff suggestion scheme. Arrange competitions and give awards to winning proposals to raise staff's awareness, e.g. cash prizes or departmental commendations.
- Set up "Green Corners" on the Department's notice boards for the purpose of displaying environmental information or provide green management corner on the departmental computer network or send information on e-mails.



# CHAPTER 9 ENVIRONMENTAL MANAGEMENT SYSTEM

- Bureaux and departments that are currently implementing some environmental management measures but no EMS are encouraged to consider upgrading into a formally structured EMS, (e.g. in accordance with the ISO 14001 Standard) with environmental policy, environmental objectives and targets set, and with designated staff responsible for implementing green practices, and monitoring and reviewing the environmental performance on a regular basis.
- Bureaux and departments that are currently implementing an EMS but not conforming to an international standard such as the ISO 14001 Standard are encouraged to consider certification of their EMS to ISO 14001 to suit their operational need, where appropriate.
- Bureaux and departments that are currently implementing an EMS certified to ISO 14001 Standard are encouraged to maintain their EMS to achieve continual improvement in environmental performance.



# CHAPTER 10 STAKEHOLDER DIALOGUE

- Being open to the public through websites, information to media, demonstrations, writing papers, press releases and interviews.
- Upload the annual Environmental Performance Reports onto website for public access.



**HOW YOU CAN HELP** Environmental Performance Reporting

Collection of environmental performance reports of government bureaux, departments and agencies (as of July 2013)

The government structure of the HKSAR, as effective from 1 July 2007, is applicable to the environmental performance reports of government bureaux, departments and agencies for the reporting period of 2008 onwards, which are presented in this webpage.

To view reports in previous years for :

- 2005 - 2007, please click [here](#)
- 2002 - 2004, please click [here](#)
- 1999 - 2001, please click [here](#)

No.	Bureau / Dept	Contact	2010 Env. Report (12th crop)	2009 Env. Report (11th crop)	2008 Env. Report (10th crop)
1a	Chief Secretary for Administration's Office - Administration Wing	Yes			
1b	Chief Secretary for Administration's Office - Efficiency Unit	Yes			
2	Civil Service Bureau	Yes			

# **CHAPTER 11** FOLLOW-UPS

**B**ureaux and departments are welcome to feedback their experience in the use of this document "Best Practices on Environmental Measures and Initiatives". In addition, we welcome suggestion of innovative ideas and new environmental measures/initiatives from bureaux and departments to enhance and improve on the examples contained in this edition of the guide which will be revised from time to time, and what they identified as priority areas where early work to develop practical "To Do List" are considered appropriate.

Furthermore, we welcome your successful experiences on implementation of the best practices on environmental measure and initiatives, that you wish to share with other bureaux and departments.

We would like to know what you think about this document. Your comments will be greatly appreciated and will be considered for the future editions. Please send your suggestions and comments by letter, fax or through our website.