# AUDIT COMMISSION CONTROLLING OFFICER'S ENVIRONMENTAL REPORT 2009

# INTRODUCTION

Established under Article 58 of the Basic Law, the Audit Commission functions independently and is accountable to the Chief Executive of the HKSAR. The Commission carries out two types of audit: regularity audits and value for money audits. Regularity audits are intended to provide an overall assurance of the general accuracy and propriety of the financial and accounting transactions of the government and other audited bodies. Value for money audits are intended to provide independent information, advice and assurance about the economy, efficiency and effectiveness with which any bureau, department, or audited organisation has discharged its functions. As at 31 December 2009, the Commission had an establishment of 185.

# **OUR ENVIRONMENTAL POLICY**

2. The Audit Commission is committed to ensuring that our operations are conducted in an environmentally responsible manner and meeting the commitments of the Clean Air Charter. To help promote environmental protection and reduce air emissions, the Audit Commission:

- adopts green housekeeping practices and energy-efficient measures; and
- carries out value for money audits on selected government activities which have a significant environmental impact and on related environmental issues, with a view to highlighting areas for improvement in the implementation of Government's environmental improvement policies.

# HOUSEKEEPING PRACTICES AND ENERGY-EFFICIENCY MEASURES:

3. The Audit Commission is committed to adopting green housekeeping practices and energy-efficient measures. Since 1993, a Green Manager at Directorate level has been appointed to introduce and review initiatives to improve the Commission's green housekeeping practices and energy-efficient measures. Through the years, the range of initiatives has expanded. Staff of the Audit Commission are required to follow the following green measures:

#### Paper saving measures

#### Reduction of paper and envelope consumption:

- use electronic mail and intranet for communication and dissemination of information;
- disseminate the Audit Reports on the Internet (<u>http://www.aud.gov.hk</u>);
- use PC-based faxes;
- use plain paper fax machines;
- avoid using fax leader pages;
- avoid sending original documents after they have been sent by fax;
- adopt electronic templates of letterhead, memo and forms to avoid pre-printed copies;
- use photocopiers and printers with double-sided printing function;
- print on both sides of paper;
- minimise photocopies by circulating circulars and other documents instead of issuing personal copies to officers;
- review distribution lists regularly;
- use old sets of documents for re-circulation;
- send unclassified documents without envelopes;
- reuse old envelopes and loose minute jackets/use transit envelopes if required; and
- send greeting cards in festive seasons by electronic means.

#### Reuse of paper:

- place "reuse green boxes" at designated locations to collect paper used on one side for reuse; and
- use blank side of used paper for drafting, photocopying and printing documents (including fax).

#### Recycling of paper:

- print Audit Reports using recycled paper or paper made from woodpulp derived from renewable forests; and
- place "recycle green boxes" at designated locations to collect waste paper for recycling.

#### **Energy saving measures**

- set A/C temperature at 25.5°C;
- use venetian blinds to adjust room temperature when necessary;
- reduce lighting to minimum required for illumination;
- use energy-efficient fluorescent tubes;

- install occupancy sensors in the washrooms where lighting usage is not frequent;
- colour-code the individual lighting switches in multiple-switch circuits to identify lights not in use;
- switch off lights, air conditioning, computers and electrical appliances not in use;
- unplug all hand-held equipment chargers from socket outlets when not in use;
- minimise the use of personal electrical appliances such as heater, fan, lamp and kettle;
- set office equipment to energy saving mode during office hours;
- install timer adaptors to turn off office equipment after office hours;
- use computer workstations and printers with automatic energy saving function;
- turn off the monitor when leaving the office, even for a short period;
- turn off non-essential servers at night, on Saturdays and pubic holidays;
- use LCD monitors instead of CRT monitors when replacement is required; and
- conduct routine checks during lunch hour and after office hours to ensure that any unnecessary lights and air-conditioners are switched off.

### **Publicity/education measures**

- issue internal circular to regularly remind all staff on the economical use of paper and energy saving;
- display posters which remind drivers to switch off vehicle engine while waiting;
- post 'save energy' and 'save water' notices near light switches and water taps;
- place notices near photocopiers to remind staff to make photocopies using reusable paper and to collect waste paper for recycling; and
- conduct environmental seminar.

#### Other green measures

- enforce smoke-free work place policy in all offices;
- arrange regular cleaning of carpet;
- clean air ducts regularly with a view to maintaining good air ventilation;
- conduct regular indoor air quality checking;
- place air purifiers near photocopiers;
- switch off the engine of the departmental vehicle while waiting;
- use unleaded fuel;
- collect used printer cartridges for reuse;
- use refillable ball pens and clutch pencils;
- minimise use of products which are not environmental friendly (e.g. correction fluid);
- repair old equipment;
- use hand-dryers in washrooms;
- install timer taps in toilets;
- reuse decorative materials in festive seasons;
- exchange diskettes within and outside of department;
- collect used CDs for recycling; and
- provide rubbish bins in the pantry for collecting waste plastic bottles and cans.

# GREEN HOUSEKEEPING PRACTICES AND ENERGY-EFFICIENCY MEASURES:

## PERFORMANCE AND TARGET

# PAPER AND ENVELOPE CONSUMPTION

4. In 2009, there was an increase of 11.6% in paper consumption and 94.8% in envelope consumption as compared with 2008 due to the conduct of two recruitment exercises for which a large number of applications were received. About 99% of the total quantity of paper used in 2009 was recycled paper with at least 50% recycled pulp.

5. In 2010, it is the Commission's target to control the growth of paper and envelope consumption.

### **ENERGY-EFFICIENCY MEASURES**

6. The Commission occupies an internal floor area of  $1,961 \text{m}^2$  on the  $25^{\text{th}}$  and  $26^{\text{th}}$  floors of the Immigration Tower. In 2009, the electricity consumed by normal power supply of office areas was about 210,450 kWh<sup>1</sup>. The corresponding indirect emission was 402, 244.1 and 12.6 kg of SO<sub>2</sub>, NO<sub>x</sub> and RSP<sup>2</sup>.

7. There is one departmental vehicle, using unleaded fuel in the Commission. The total mileage in 2009 was 10,548 km and the unleaded fuel consumption was about 1,779.7 litres. The related emission was about 9.5 kg of  $NO_{x}$ .

8. In 2010, the Commission will make continued efforts to promote energy saving in the office premises.

<sup>&</sup>lt;sup>1</sup> The electricity consumption for the office A/C system is excluded as no separate meters are available for measurement.

<sup>&</sup>lt;sup>2</sup> The indirect emission from electricity consumption is calculated according to the formulae set out in the "Guide to Clean Air Charter Report Writing" published by EPD in January 2008.

## AUDIT STUDIES ON ENVIRONMENTAL ISSUES:

# PERFORMANCE AND TARGET

9. In 2009, the Audit Commission issued one value for money audit report on environmental-related issues.

"Wider use of water-cooled air-conditioning systems" (Chapter 11 of the Director of Audit's Report No. 53 of October 2009)

10. According to the Electrical and Mechanical Services Department, electricity consumed by air-conditioning systems accounts for about one-third of the total electricity consumption in Hong Kong. The air-conditioning system of a typical office building may account for more than 50% of its total electricity consumption. Significant energy saving can be achieved by adopting energy-efficient air-conditioning systems and good energy management practices. Central air-conditioning systems in non-domestic buildings can be broadly categorised as air-cooled air-conditioning systems (AACS) or water-cooled air-conditioning systems (WACS). WACS are much more energy-efficient than AACS, and the reduction in electricity consumption will bring about environmental benefits, e.g. conservation of fossil fuels and reduction in emission of carbon dioxide. The Audit Commission conducted a review to examine the Government's efforts and progress in promoting the wider use of WACS in Hong Kong. The review focused on: (a) measures to promote wider use of WACS; (b) use of WACS in hospitals; (c) development of district cooling systems; (d) health concerns over cooling towers and water-using apparatus; (e) inspection of cooling towers; and (f) control measures on unauthorised cooling towers. The Audit Commission had made a number of recommendations to address the issues.

11. The Audit Commission will continue to conduct value for money audit studies on issues which have significant environmental impact.

#### THE WAY FORWARD

12. The Audit Commission will make continued efforts to help promote environmental protection through adopting green housekeeping practices as well as energy-efficient measures, and carrying out value for money audits on environmental issues.

#### FEEDBACK

13. We value very much your feedback, which would be useful for further improving our report in the coming years. If you have any comments or suggestions, please let us know by any of the following means :

Post: Audit Commission 26th floor, Immigration Tower 7 Gloucester Road, Wanchai Hong Kong (Attention: Departmental Secretary)

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