Chapter 5

Our Green Performance

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The green policy of CAD emphasises energy conservation, paper conservation, recycling, proper disposal of environmentally hazardous waste, and promotion of environmental awareness among all staff.

Being Green

Energy Conservation

The Air Traffic Control Complex and Tower (ATCX/TWR) and the Back-up Air Traffic Control Complex (BATCX) are CAD's major premises. They have incorporated a number of energy-saving building services features according to relevant Electrical and Mechanical Services Department codes.

Air-conditioning

Air-conditioning accounts for the majority of the CAD's electricity consumption. In 2008, we continued to install sunblinds of better light and heat insulation effect in various rooms of ATCX/TWR and BATCX.

Lighting systems

Using lights in a responsible manner is one of the quickest and easiest ways to help care for the environment. In 2008, we:

- completed the replacement of T8 fluorescent light tubes by energy efficient T5 tubes in all common corridors and staircase at ATCX.
- completed the replacement of outdoor architectural floodlight underneath ATCX/TWR by LED light which is more energy efficient.

In addition to the initiatives mentioned above, the long standing measures such as not using the architectural floodlights at BATCX and switching off all unnecessary corridor lights at ATCX/TWR and BATCX were continued to be implemented.

In 2009, we will implement the following measures to further save energy:

- Installation of an occupancy sensor system at common areas and corridors in ATCX, which would reduce energy consumption by turning off lights automatically in unoccupied space.

Third-party Property Managers

Besides CAD's own premises, we would also meet with the managers of non CAD-owned buildings to discuss energy-saving initiatives if needed. For instance, at the Queensway Government Offices, the management authority now strictly controls the air-conditioning and limits the operating hours of its chiller plant, which significantly reduce energy wastage.

Our Performance in 2008

In 2008, CAD premises consumed a combined amount of 30,537 kilowatt-hours of electricity on an average day. This was a 0.63% decrease compared with 2007.

Target for 2009

In 2009, we will continue to adhere to our energy-saving policy.

Driving Green

All CAD drivers are required to strictly follow the policy of switching off engine while waiting to avoid idling emissions and achieve fuel saving. In 2008, CAD replaced two obsolete shuttle buses with one Euro IV E-Friendly 28-seaters bus and one Euro V E-Friendly 49-seaters bus. Besides, all CAD vehicles had undergone regular checks and maintenance to ensure that their emissions are within acceptable range.

The new E-friendly shuttle bus introduced in 2008.

Buying Green

Air Traffic Control Equipment

In addition to meeting key safety standards, all new air traffic control (ATC) equipment that we purchase must also be energy-efficient. Measures had been taken to enable share-use of display monitors by multiple ATC applications. Examples of share-use of monitors included Advanced Surface Movement Guidance & Control System sharing with Surface Movement Radar, and Flight Plan Conflict Advisory System sharing with Similar Callsign Advisory System.

Other Equipment

Wherever feasible, our tender specifications require operations that emphasise recycling and energy efficiency.

Target for 2009

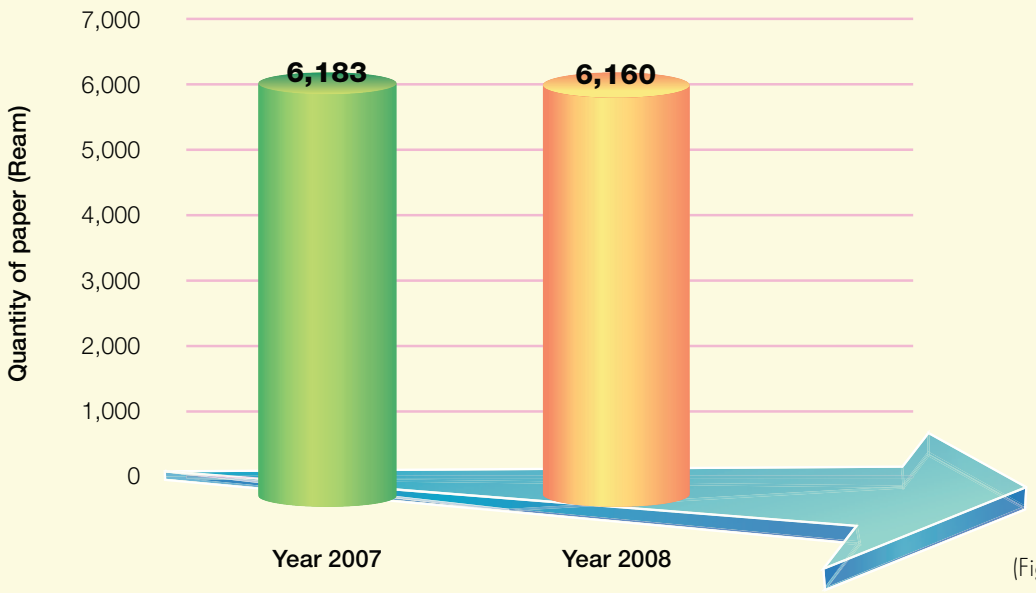
In new equipment purchases and tenders in 2009, we will continue to demand a high level of energy efficiency and environmentally responsible operations.

Paper Conservation

All staff are encouraged to reduce their paper consumption wherever possible. In addition to double-sided printing and photocopying, our Document Management System enables announcements and other important information to be disseminated electronically.

Our Performance in 2008

In 2008, we used 6,160 reams of paper (Figure 10), which was a 0.4% reduction compared with 2007.



(Figure 10)

Target for 2009

In 2009, we will strive to keep this figure at low level by using electronic communication wherever possible and emphasising the use of recycled paper in situations that require printed matter.

Recycling Initiatives

Our recycling programmes target at waste paper, used CDs and laser printer cartridges. All these materials were forwarded to our suppliers or other designated parties for recycling. The following charts show the volume of materials sent for recycling in 2008 compared with 2007.

Recycle bins are placed in the office to encourage recycling.

	Year 2007	Year 2008
Waste Paper Collection (kg)	5,600	4,470
Used Compact Disc Collection (g)	15,760	13,694
Laser Printer Cartridge recycled (units)	436	467

Target for 2009

In the year ahead, all staff will be reminded to continue recycling waste paper, used CDs and laser printer cartridges. We will also examine whether there are other areas where recycling initiatives are feasible or appropriate.

Environmentally Hazardous Waste

Chemical Waste

We operate 13 outstations, all of which are essential to safe air traffic control. In the event that the mains electricity supply to these outstations is interrupted, they automatically switch to other power supplies, such as standby diesel generators or battery packs. However, both these alternative power supplies generate chemical waste, which may pose a possible risk to the environment that must be disposed of in a safe and appropriate way.

In 2008, our appointed contractor handled all wastes in accordance with statutory requirements.

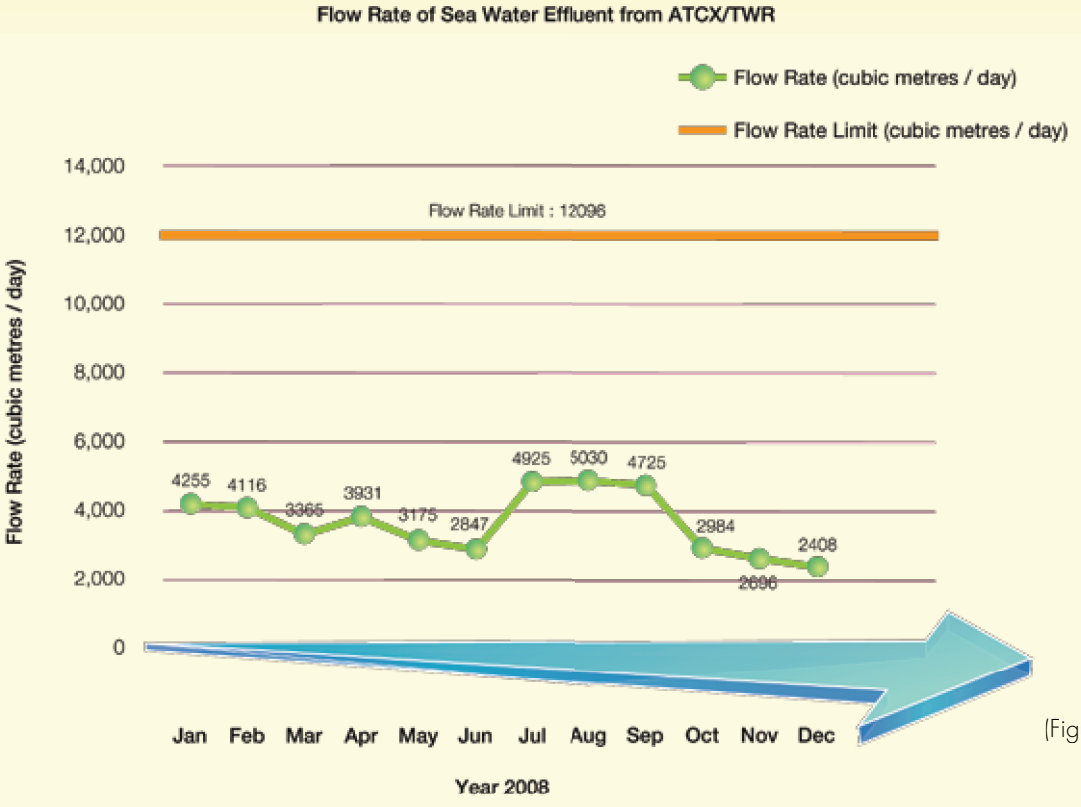
Target for 2009

In 2009, we will monitor our contractor to ensure continued statutory compliance.

Sea Water

Both ATCX/TWR and BATCX use sea water for their cooling systems. To ensure minimum environmental impact from this process, all sea water discharges are monitored for flow rate, temperature, pH value and residual chlorine under standards set by the Water Pollution Control Ordinance.

In 2008, we remained within the prescribed limits. Figures 11-14 show the flow rate and temperature of our discharges from ATCX/TWR and BATCX respectively.



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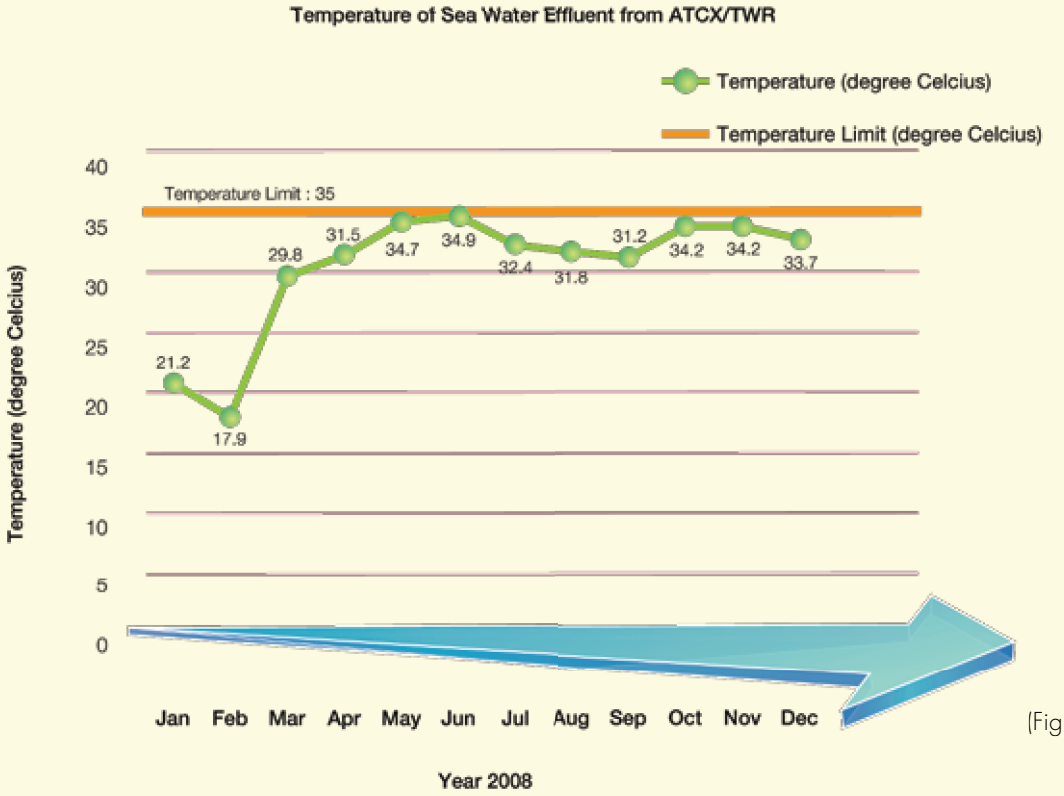

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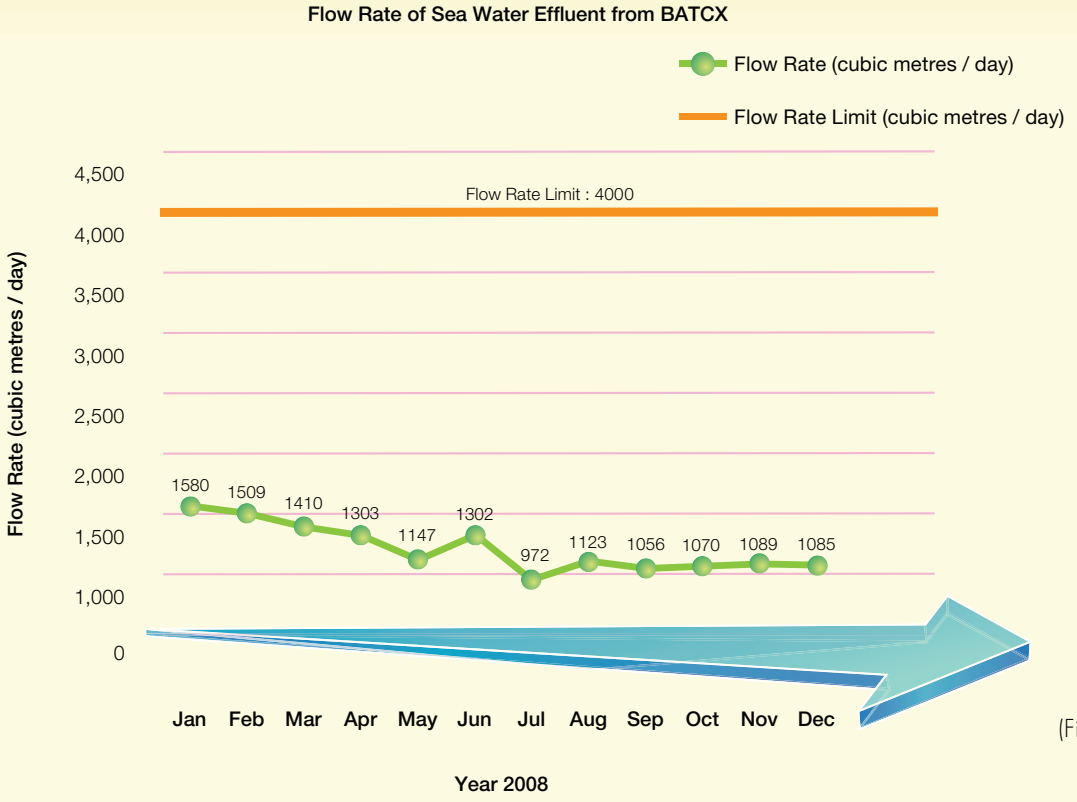

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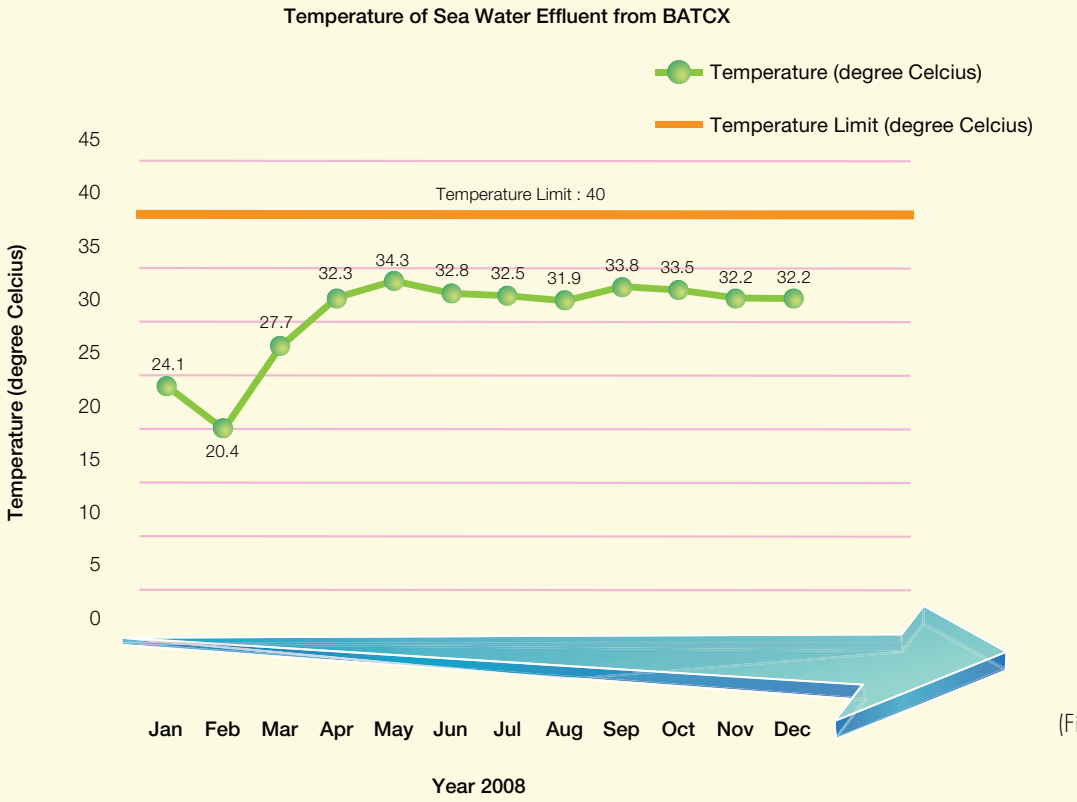

(Figure 14)

Target for 2009

In 2009, we will continue to ensure that these discharges remain within limits.

Staff Training

In 2008, we worked hard to remind all staff of the importance of environmentally responsible operations, such as the need to reduce energy consumption and save paper.

In the year ahead, we will continue to promote our green policies.