CHAPTER 5 —

Our Green Performance

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Our in-house green policy emphasises energy conservation, paper conservation and 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 2007, we implemented the following additional step to reduce the energy used by air-conditioning systems :

- Installation of sunblind with better light and heat insulating effect to selected offices in ATCX 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 2007, we implemented the following measures:

- Completion of the installation of energy efficient LED exit signs at the ATCX/TWR and BATCX.

- Replacement of T8 fluorescent light tubes by energy efficient T5 tubes in the common area, staircases and plant rooms at ATCX.

- Replacement of outdoor architectural floodlight underneath ATCX/TWR by energy efficient LED light.

These new initiatives were in addition to existing measures from previous years, such as not using the architectural floodlights at BATCX and switching off all unnecessary corridor lights at ATCX/TWR and BATCX.

In 2008, we will implement the following measures to further save energy:

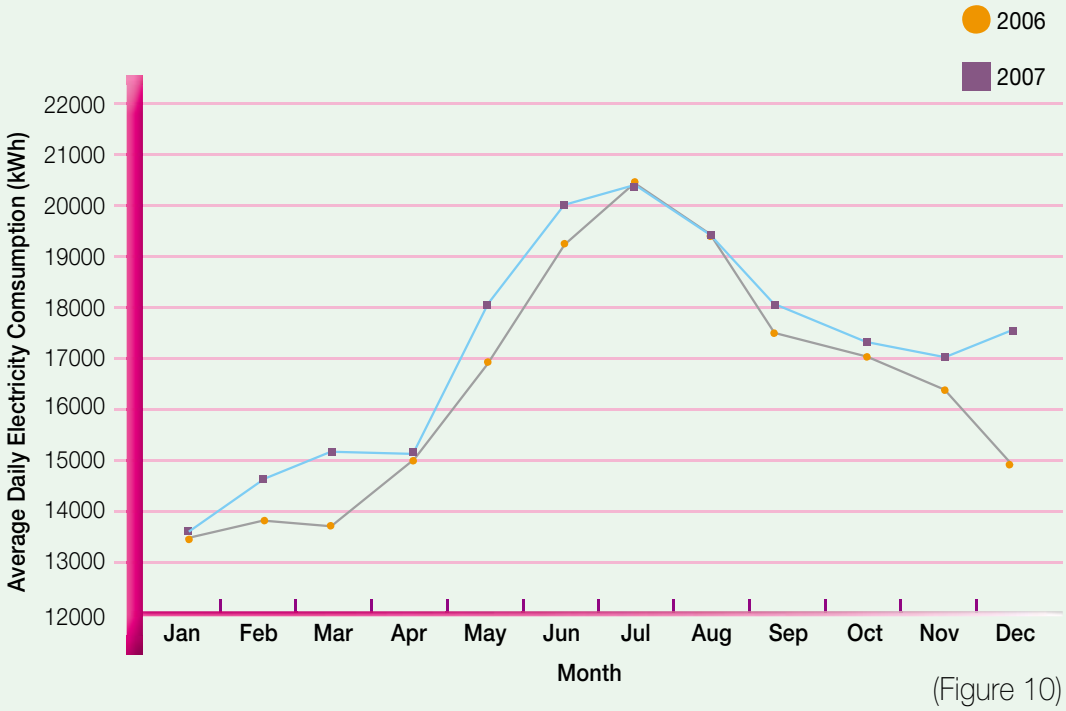
- Provision of wind curtain to the sliding door at the ATCX entrance.
- Suspension of chilled water supply for non-operational areas after office hours and during weekends.

Elevators

In 2007, we continued to reduce energy consumption by suspending one passenger elevator and one cargo elevator at ATCX during overnight periods.

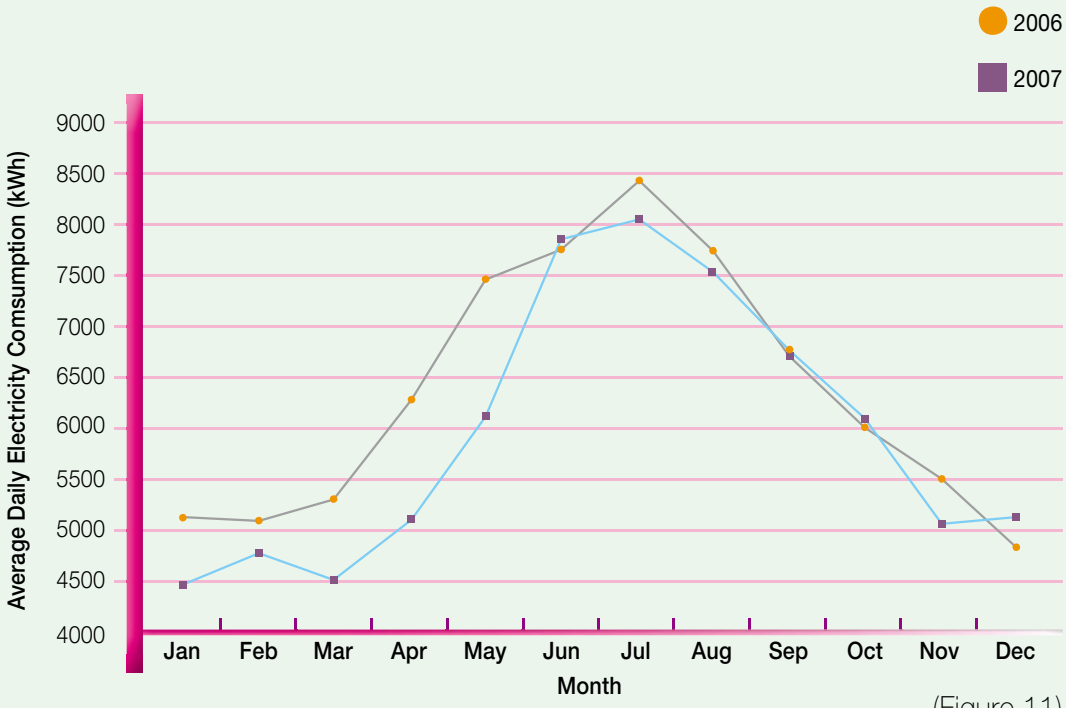
Results

In 2007, average daily electricity consumption at ATCX/TWR increased by 4.32% compared with 2006(Figure 10). ATCX/TWR is the main operational area of CAD. In 2007, additional air traffic equipment had been installed giving rise to higher power and air conditioning demand, and resulted in increased electricity consumption.



(Figure 10)

Average daily electricity consumption at BATCX decreased by 6.35% in 2007 (Figure 11).



(Figure 11)

Third-party Property Managers

Besides CAD's own premises, we would also meet with the managers of non CAD-owned buildings regularly 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 2007

In 2007, CAD premises consumed a combined 30,731 kilowatt-hours on an average day. This was a 0.8% increase on 2006.

Target for 2008

In 2008, we will continue to adhere to our energy-saving policy.

Driving Green

Poor driving habit not only increases fuel consumption, but also causes more pollutants to be emitted. In view of this, we had arranged all CAD drivers to receive training on environmentally responsible driving practices. They are told to adhere to the policy of stop idling engines to reduce unnecessary exhaust emission. Besides, all CAD vehicles have undergone regular checks and maintenance to ensure that emissions are within an acceptable range.

Buying Green

Air Traffic Control Equipment

In addition to meeting key safety standards, all new air traffic control equipment that we purchase must also be energy-efficient. For instance, in 2007, we have completed the replacement of the Air Traffic Management Systems' standard cathode-ray-tube (CRT) displays with sophisticated, low-energy LCD displays.

Other Equipment

Environmental considerations are taken into account when procuring goods and services of any description. Wherever feasible, our tender specifications require operations that emphasise recycling and energy efficiency.

Target for 2008

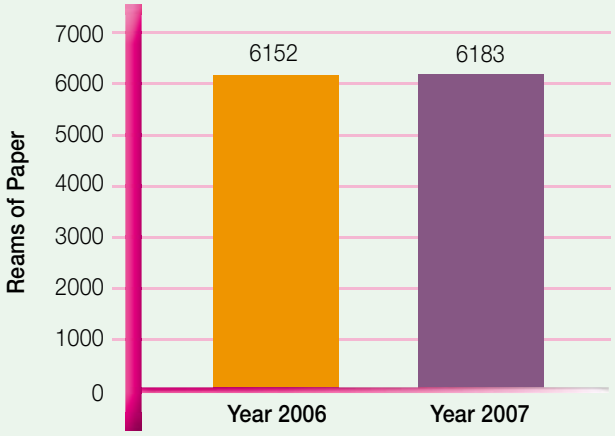
We will ensure environmentally responsible operation. In new equipment purchases and tenders in 2008, we will continue to demand the high levels of energy efficiency and environmentally responsible operations.

Paper Conservation

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

Our Performance in 2007

In 2007, we used 6,183 reams of paper (Figure 12), which was a 0.5% increase on 2006.



(Figure 12)

Target for 2008

In 2008, we will strive to reduce this figure by using electronic communication wherever possible and emphasising the use of recycled paper in any situations that require printed matter.

Recycling Initiatives

Our recycling programmes target at waste paper, used CDs and laser printer cartridges, all of which are forwarded to our suppliers or other designated parties for recycling. The following charts show the volume of materials sent for recycling in 2007 compared to 2006.

Recycle bins for aluminum cans and plastic bottles.

Waste Paper

	2006	2007
Waste Paper Collection (Kg)	5,700	5,600

Used Compact Disc

	2006	2007
Used Compact Disc Collection (g)	20,731	15,760

Laser Printer Cartridges

	2006	2007
Laser Printer Cartridge recycled	362 units	436 units

Target for 2008

In the year ahead, all staff will be reminded to continue recycling waste paper, used CDs and laser printer cartridges. We'll 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 2007, our appointed contractor handled all wastes in accordance with statutory requirements.

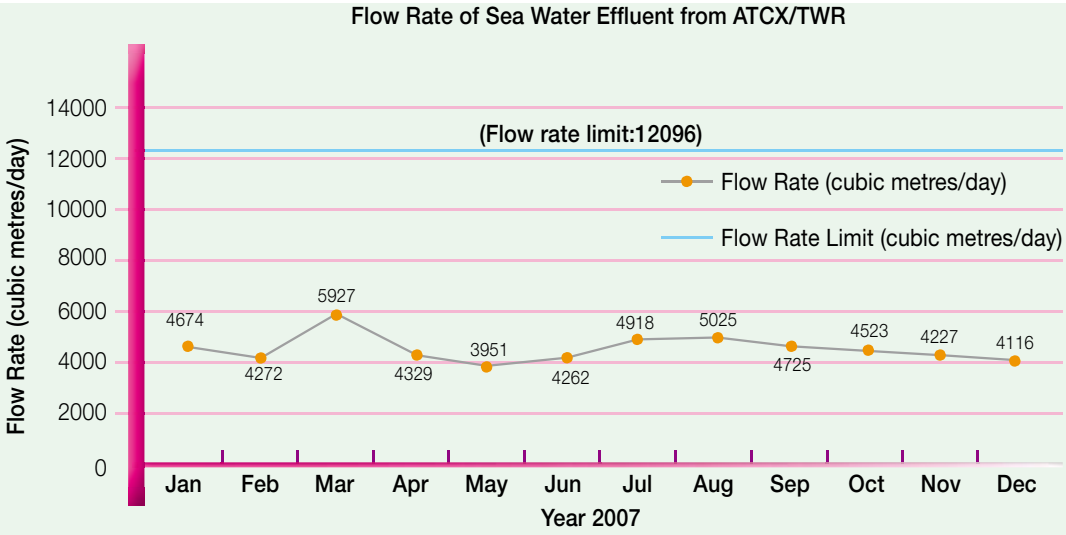
Target for 2008

In 2008, we will monitor our contractor to ensure continued statutory compliance.

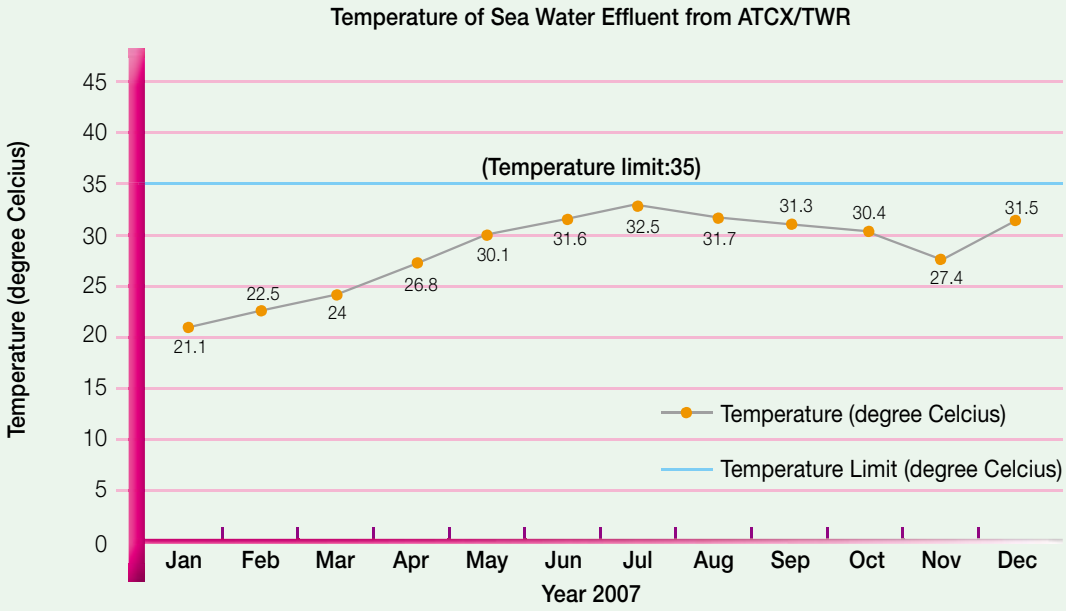
Sea Water

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.

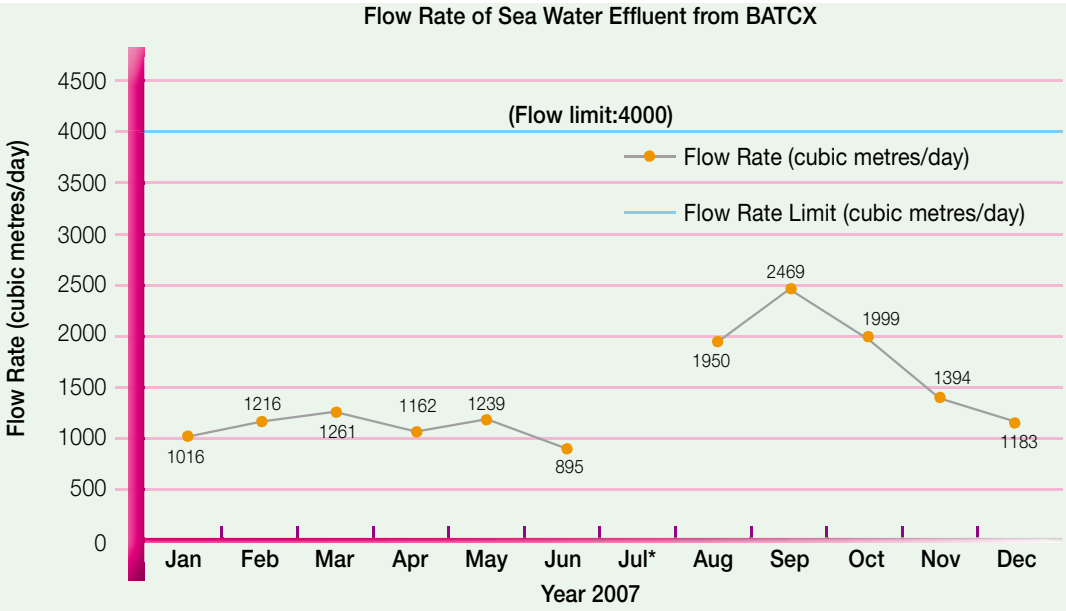
In 2007, we remained within the prescribed limits. Figures 13-16 show the flow rate and temperature of our discharges from ATCX/TWR and BATCX respectively.



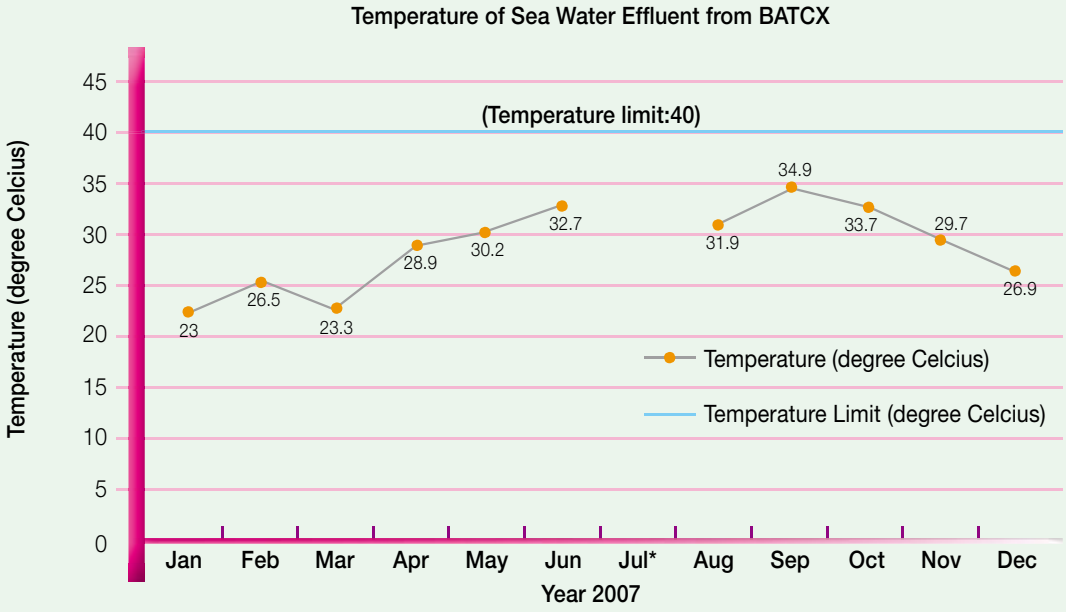
(Figure 13)



(Figure 14)



(Figure 15)



(Figure 16)

* Note: Air-cooled chiller was used from 1 July to 23 August 2007.

Target for 2008

In 2008, we will continue working hard to ensure that these discharges remain within the accepted limits.

Staff Training

In 2007, 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'll continue to emphasise our green policies and play our part in helping to protect our planet's precious natural resources.