ENVIRONMENTAL DEPORT 2000

ENVIRONMENTAL REPORT 2008 Government Property Agency



1. Message from the Government Property Administrator

Environmental protection is an integral part of the corporate culture of the Agency. It underscores everything that we do in our line of duty. From the planning of new office buildings on the drawing board to the day-to-day management of properties under our portfolio, minimizing the impact on the environment is one of our first and foremost considerations.

The report sets out our work in environmental protection in the year 2008 and the results of our efforts. I am pleased that in pursuing our environmental initiatives, we have been greatly encouraged by the support of all the parties we work with, including user bureaux and departments, property management agencies and other business partners, occupants of properties under our management and an increasingly environmentally conscious and responsible community. The strong partnership we have forged with them has enabled us to rise to the challenges and respond positively to rising public aspirations about the quality of the environment which we all share.

K K Kwok, JP Government Property Administrator



2. Vision and Mission

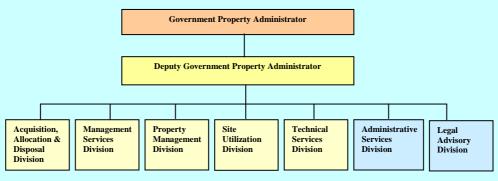


With the vision of providing suitable government accommodation to enable efficient delivery of public services, the Agency's mission is:

- To meet Government's need for accommodation through optimal use of and necessary adjustments to the current stock.
- To provide quality management services for government properties through the most cost-effective means available.
- To modernise government properties to meet changing operational and statutory requirements.
- To optimise the utilization of government sites and properties.

3. Organisation and Functions

The Government Property Administrator heads the Agency, which has an establishment of 213. Its main functions are carried out by five functional Divisions under agreed strategic plans in pursuit of the Agency's vision and mission. Two support Divisions provide administrative and legal advisory services respectively to the Agency.



Organisation Chart





The main functions and activities of the Agency are:

- To construct, purchase or lease for general use office premises to meet accommodation needs and to ensure their proper utilization.
- To manage government properties under its purview.
- To optimize the use of government, institutional and community sites through reviewing site reservations, seeking the release of underutilized government sites and examining proposals for new developments.
- To vet accommodation requirements of bureaux and departments.
- To optimize the use of government-owned premises and de-lease office accommodation as far as possible.
- To lease out surplus government properties with commercial potential and implement new commercialization initiatives where appropriate.
- To scrutinize deeds of mutual covenants and execute assignments in respect of government accommodation in private developments.





The Agency's Environmental Policies are:

- To contribute to environmental conservation by ensuring that sustainable designs, building materials, installations and processes are adopted in the construction of new government joint-user office buildings (JUBs) and quarters, and in fitting-out and refurbishment projects;
- To ensure that the management of government properties under the Agency's portfolio is carried out in an environmentally responsible manner, for example, by promoting energy saving;
- To implement green office management through effective housekeeping to minimize waste and use of resources; and
- To promote environmental awareness and participation among staff in the continuous improvement of environmental protection, reducing pollution and enhancing energy conservation and efficiency.





5. Working with Partners



Our partners mainly comprise users of government properties under the Agency's purview and agents for works and management. The former include bureaux and departments as government users and tenants including non-governmental organisations (NGOs) and private tenants of surplus premises. Our agents include Architectural Services Department (ArchSD), Electrical and Mechanical Services Department (EMSD), Property Management Agents (PMAs) and real estate agents.

We have been working closely with our partners to implement the Environmental Policies in the following areas:

- In meeting Government's accommodation needs, the Agency builds or refurbishes offices with environmental considerations in the design, construction methods and choice of materials.
- In order to make better use of scarce land resources and existing building stock, the Agency coordinates the different accommodation needs of bureaux and departments to optimize the use of government sites and premises.
- In managing government properties, the Agency continues to implement green housekeeping measures to reduce energy consumption and facilitate collection of waste for recycling as far as possible.

6. Green Management Committee and Internal Environmental Audit



A Green Management Committee (GMC) was established in December 2003 to coordinate the Agency's efforts in environmental protection with inputs from all Divisions covering various aspects of the Agency's functions. It comprises representatives from all Divisions and is chaired by the Deputy Government Property Administrator.

The GMC continues to review environmental policies, set performance targets on green measures, review and report green management measures and arrange green training activities to enhance staff awareness. It has also organised annual Internal Environmental Audits (IEAs) to ensure compliance with the Agency's Environmental Polices and commitments.

IEA 08 was completed in Jun 09. All operations generally conformed to the environmental policies and targets set for 07/08.

The Agency is a member of the Energy Efficiency and Conservation Sub-committee under the Energy Advisory Committee composed of members of various disciplines from the public and private sectors, contributing views and support to the green policies of Government.

7. Environmental Initiatives in 2008

7.1 Rolling Programmes for Energy Saving Retrofit and Renewable Energy Projects



The Agency has been working closely with EMSD and ArchSD in exploring new energy saving opportunities with a view to further reducing energy consumption in JUBs. Four major energy consumption areas, in respect of air-conditioning, luminaries, electrical installations and lift operation, were identified for continued focussed action. We also carried out energy retrofit projects proposed by EMSD to upgrade the existing installations progressively in a cost-effective manner according to an implementation programme.

The programme included replacement of existing plant and equipment at the end of their economic life with more energy-efficient alternatives, such as replacing existing T8 fluorescent lights with T5 lights, replacing spot ceiling lights with compact fluorescent lights, replacing quartz lights in all lifts with Light Emitting Diodes (LED) type, replacing existing exit sign lighting with LEDs, and installation of frequency inverters and automatic tube cleansing systems in air conditioning systems. To promote the use of renewal energy, installation of photovoltaic panels in the government quarters at Cloudridge was completed in early 2009.

With the progressive implementation of energy-saving projects in the current programme, it is estimated that a total saving in the region of \$10M in energy cost will be realised over the next five years. Beyond that, however, further energy savings in JUBs are unlikely to be significant, as much of the benefits of energy saving measures will have been realized. Nonetheless, the Agency will continue to make efforts to identify new opportunities for further energy saving.





7.2 Monitoring Electricity Consumption in Government Joint User Buildings





Electricity used by air-conditioning systems accounts for a major part of the overall energy consumption in office buildings. Additional energy saving measures have been introduced in all JUBs since the summer of 2005, including raising the average room temperature to 25.5°C during the summer months and shortening the core air-conditioning hours. Other measures including reducing the number of light fittings, optimising the operating hours of lift services and public lighting, installation of timers to switch off building services installations such as exhaust fans inside car parks during the off-peak hours are continuously being enforced.

To achieve further improvements, floor-by-floor energy monitoring meters with Remote Monitoring Systems (RMS) have been installed in a number of JUBs. The current 3-year cycle of Energy Audits for all 49 JUBs is nearing completion. A new 3-year cycle will begin in October 2010. Follow-up actions in response to audit results are being Energy saving measures implemented include the removal of unnecessary light fittings for those offices with excessive illumination level identified in the audits and encouragement of users to adopt good practices in the office such as installing timers for electrical appliances, switching off computers when leaving the office, etc. Regular checks were carried out to ensure that energy saving measures had been carried out by users and Property Management Agents. Motion sensors had been installed for escalators at Queensway Government Offices to save energy. Similar sensors for lighting installations are being installed at car park of Wanchai Complex, Mt Butler Quarters and staircases in JUBs.

Monthly statistics on total power consumption of JUBs are recorded and reported to the Building Management Committee (BMC) of each JUB as a means of monitoring electricity consumption. At every BMC meeting, energy saving is an agenda item for a thorough review of the results obtained in the previous period and planning future energy saving strategies. Installation of floor-by-floor energy monitoring meters is nearing completion in various JUBs, which will enable the Property Management Agents to closely monitor the power consumption for individual floors. Any irregularities are investigated in conjunction with the Agency's works agents, **PMAs** and bureaux/departments for developing remedial measures.



7.3 Environmental Awareness, Waste Separation and Re-cycling Programme in JUBs and Quarters

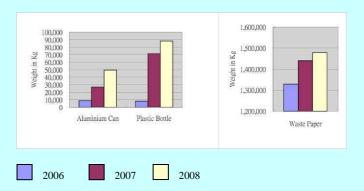


By incorporating suitable provisions in the property management contracts, the Agency implemented environmental awareness programmes and green campaigns through PMAs in JUBs and quarters under the Agency's management. To raise occupants' environmental awareness, publicity materials were prepared and widely distributed to user departments.

The Recyclable Waste Collection Campaign, which involves distributing environmental friendly refuse bags and floor-by-floor Source Separation Programme, continued in quarters under the management of the Agency. An expanded mode of the Source Separation Programme has also been implemented to most quarters. Under the Programme, large brown boxes are placed on the ground floor beside the existing 3-colour source separation boxes to collect different types of recyclable materials, such as mooncake boxes, electrical appliances, books, clothing, used red packets after Lunar New Year, etc, as arranged periodically by the Building Management Office. Since June 2008, a Fluorescent Lamp Recycle Program was implemented in most quarters and JUBs.

There were 5 to 8 environmental awareness activities organised by each PMA in 2008. They included collection of used clothes, collection of recyclable batteries, Community Green Network Programme organised by Environmental Protection Department (EPD), collection of used toner cartridges, recycling of old electrical and electronic equipment, etc. Besides, a barter exchange programme is also promoted in some quarters. These activities were reported at PMAs' monthly contract meetings with the Agency.

Data on the quantities of recyclable wastes collected under each category are recorded and reported to EPD on a monthly basis. Compared with 2006, the total amount of recyclable waste collected at GPA venues, including waste paper, aluminum cans and plastic bottles, increased by 5.1% from 1,538,685 kg in 2007 to 1,616,101 kg in 2008.



Waste collected under Waste Separation and Recycling Programme at GPA venues

7.4 Procurement of Energy-efficient Electrical Appliances

The Agency continued to implement the policy of procuring energy-efficient domestic electrical appliances for quarters under its management, such as refrigerators, which comply with Energy Label Grades 1 or 2 under the Energy Efficiency Labeling Scheme operated by EMSD.





7.5 Prohibiting the use of Non-decomposable Lunch Boxes



Through the incorporation of special provisions in tenancy agreements, we have been prohibiting operators of canteens in government buildings from using single-use non-decomposable lunch boxes for take-away services since 2004.

7.6 Environmental Concerns and Initiatives in New JUBs and Reprovisioning Projects



In line with the policy of sustainable development, we have stipulated explicit requirements in the Project Definition Statements of new projects which fall under the Agency's purview to ensure optimization of site development potential, adoption of sustainable designs to cater for proponent's present and future needs, and adoption of energy-efficient installations to facilitate energy saving and green management of the properties in the long run.

Examples of environmental initiatives being studied for future JUBs include the connection of the proposed Kai Tak Government Offices to the District Cooling System planned for Kai Tak developments and the adoption of state-of-the-art energy efficient designs and technologies as an energy efficiency demonstration building project.

In examining the site utilization of development projects, the Agency continued to ensure that the proposed projects optimise the development potential of the sites and would cater for the user departments' present and future needs. Where the proposals involve the re-provisioning of any existing facilities, consideration will be given to beneficial use of the existing accommodation after re-provisioning. The Agency also reminds departments of the need to follow EPD's guidelines in addressing environmental concerns in drawing up their development proposals.

7.7 Reuse of Fittings and Fixtures in Deleased or Newly Leased Properties



In vacating leased-in premises, the Agency has taken the initiative to encourage landlords to retain existing fittings or fixtures for use by future occupants.

For leased-out surplus quarters, the Agency has adopted a flexible approach in requiring tenants to fulfill their reinstatement obligations. For fittings or fixtures which are still in good condition and useful to incoming tenants, the Agency will waive the tenant's reinstatement obligation. Apart from reducing construction waste, the arrangement also improves the marketability of surplus quarters for future leasing.

In new leasing cases, the Agency liaises with the works agent and landlords to investigate the possibility of retaining existing fittings or fixtures for use. An example is the leasing of Landmark East Tower 2 for Census and Statistics Department. As Landmark East is a brand new office building, the Agency requested the user-department to keep the fitting out cost to a minimum. For example, the tenant was requested not to remove the standard provisions of the landlord including the false ceiling as far as practicable. This resulted in reducing the fitting out cost as well as the amount of construction waste.



7.8 Reduction of Energy Consumption in Leased Properties





In some of the tenancy agreements of leased-in premises, the upper limit of air-conditioning temperature provided was previously specified by the landlord at 23.5°C. Given that the room temperature for government accommodation is now generally maintained at 25.5°C during the summer months and to support energy saving, landlords have been asked to change the limit to 25.5°C for new leasing or renewal cases.

In line with Government's policy on energy saving, tenants of our premises have been encouraged to follow the Government's practice in setting the air-conditioned temperature in all areas in the building at 25.5°C during the summer months and to frequently check and adjust the room temperature to avoid excessive cooling.

As a user department in Revenue Tower, the Agency fully participates in EPD's programme Source Separation of Commercial and Industrial Waste. Recyclable waste paper, plastic bottles and aluminum cans are collected separately for collection by the cleansing company.

In paper consumption, the Agency has reduced the paper consumption by 14.65% from 2002 – 2008. However, the Agency anticipates that the room for further significant reductions in coming years may be limited as the workload on the Agency increases and much of the benefits of sound housekeeping have already been realized.

A review was conducted in end 2008 on the feasibility of shutting down some of the servers after the office hours for energy saving. The review concluded that it is feasible upon some modifications of their configuration and settings. This energy saving initiative is now being implemented.





7.9 Green Housekeeping in GPA's Offices





Electronic mailing is widely used for communication and information dissemination within the office and to outside parties. The Agency has continued to use 100% recycled paper, adopt double-sided printing, collect waste paper for recycling and use recycled toner cartridges for all computer printers.

New computer equipment with energy-saving features is purchased through Government Logistics Department's bulk purchase contracts, while old ones are traded-in when purchasing new computers. Old network printers have been replaced with new ones with double-sided printing functions. This practice has been extended to all newly acquired printers since 2007.

Notices on environmental policies and green activities as well as circulars on housekeeping measures and energy conservation are re-circulated to all staff periodically through the intranet to remind them of proper green housekeeping measures.

7.10 Tender Specifications for New Fixtures



In scrutinizing the fitting out of government offices, the Agency stipulated that environmental friendly features should be included in GLD's tender specifications for partition screens and workstation panels:

- Wooden panels used in making partition screens and workstation panels are required to meet the low formaldehyde content/emission requirement of Class E1.
- > Energy saving fluorescent tubes (T5 type) are provided as task light for workstations.
- > Provision of on/off switch on the screen panels to enable easy switch-off of computer equipment on officers' worktop when they are not in use.



7.11 Clean Air Charter



In line with Commitment 4 of the Clean Air Charter which states that Government bureaux and departments undertake to adopt energy-efficient measures in their operations, the Agency will continue to adopt energy-efficient measures in all its practices as set out above and in accordance with the Environmental Policies, as its contribution to improving air quality.

7.12 Carbon Audit



Climate change has become a major challenge to the international community. With reference to internationally recognized guidelines, EPD and EMSD have produced draft guidelines for carbon audits of buildings in Hong Kong. The guidelines assist users and managers of buildings to improve awareness of the emission of green house gases from their buildings and to actively participate in actions to combat climate change. The Agency supports the initiative by nominating office buildings under its management to participate in the audit in 2008. The first Carbon Audits to North Point GO, Harbour Building and Cheung Sha Wan GO have been completed and would be carried out annually in future. In addition, audits for other JUBs are being planned.

7.13 Green Activities organised by GMC





Two green activities were organised.

A visit was organized in April 08 to two buildings which had won the Green Property Management Award 07: Hong Kong Pacific Centre in Tsim Sha Tsui and Skyline Tower in Kowloon Bay. During the visit, the property management agents explained to us environmentally-friendly measures in managing the properties. They organized guided tours to view green features such as computerized reporting system for building faults, green roof management and maintenance, recycling programme for chemical waste such as fluorescent tubes, etc., automatic tube cleansing systems for chillers, photosensors for lighting control of car parks, etc.





Another visit was made to the Science Park in early 2009. During the visit, staff were able to view green features such as the building integrated photovoltaic system, automatic refuse collection system, district heating and cooling plant, photocell controlled perimeter lighting, motion sensor and low-e glass.

These activities were well attended and received by staff.







8. Awards for 2007 and 2008



In recognition of the environmental performance of buildings under the management of the Agency, a number of prizes were awarded to the Agency in 2007:

A Golden Award and a Silver Award by EPD were won in respect 10 Lok Fung Path and 6 Lok Fung Path respectively in the competition on Source Separation of Domestic Waste organized by EPD. In addition, 9 and 20 quarters/JUBs managed by the Agency won Bronze Award and Certificate of Merit in the same event. A total of 13 quarters were cited by The Salvation Army for their keen participation in the Recycling Program.

In response to EPD's launch of the 2008 Hong Kong Awards for Environmental Excellence Scheme, the Agency actively organised itself to compete for the Sectoral Awards in the Public Sector and NGOs group. As a first step, the Agency made arrangements for the buildings under its management to obtain Indoor Air Quality certification in 2008. The result has been encouraging and all the JUBs considered suitable for such monitoring have achieved "Good Class" of Indoor Air Quality.

Also in support of the Scheme, the Agency arranged for its PMAs to participate in Property Management Sector Awards and to apply for respective labels for JUBs.





9. Environmental Targets for 2009 onwards



The Agency will continue to implement the following measures to promote environmental protection in the coming years:

- In collaboration with works agents, incorporate sustainability considerations and energy saving features in the design and construction of new government office buildings and renovation projects under the Agency's management.
- 2 Facilitate implementation of energy saving and renewable energy projects developed in collaboration with works agents for buildings under the Agency's management.
- 3 Implement greening in the Agency's premises where practicable.
- 4 Monitor and issue electricity consumption statistics to BMCs of JUBs each month to enhance the monitoring of energy consumption levels and facilitate the future implementation of energy-saving measures.
- 5 Carry out energy audits and re-audits in JUBs, and implement action plans for further energy saving measures in conjunction with works and building management agents.
- 6 Continue the policy of setting the indoor air-conditioning temperature for government offices at 25.5°C in summer and shortening the operation hours of chillers as far as possible by rationalizing office hours of bureaux/departments in JUBs.
- 7 Reduce the illumination level of common areas in JUBs during off-peak hours.
- 8 Reduce the number of lifts and escalators in operation in JUBs during off-peak hours to a minimum without adversely affecting normal service level.
- 9 Implement waste separation and recycling programmes in all JUBs and quarters and compile monthly records on waste quantities for effective monitoring of performance.
- 10 Conduct at least 2 environmental awareness activities annually in each JUB or quarters building.
- 11 Continue to procure energy-efficient domestic electrical appliances which meet Energy Label Grades 1 or 2 under the Energy Efficiency Labeling Scheme operated by EMSD for quarters under our management.

12 Maintain the condition in tenancy agreements of Government canteens requiring canteen operators not to use single-use and non-decomposable lunch boxes for take-way services.

- 13 Keep up green housekeeping measures such as using intranet for distribution of circulars and notices to all staff, reducing paper & electricity consumption, using 100% recycled paper & recycled toner cartridges for all printers and regularly remind staff of housekeeping rules.
- 14 Carry out annual internal environmental audits and review the findings to identify necessary improvements.
- 15 Conduct environmental awareness activities annually for staff in the Agency.
- 16 Carry out planning and feasibility studies on the use of state-of-the-art energy efficient designs and technologies.
- 17 Carry out carbon audits on selected JUBs.
- 18 Continue to support and participate in environmental awards schemes such as the 2008 Hong Kong Awards for Environmental Excellence Scheme.



10. Comments and Suggestions

We welcome comments and suggestions regarding the report and environmental initiatives of the Agency. Please contact Mr. Michael S. C. Mak, Secretary of the Green Management Committee (telephone number 2594-7756) or Mr. Louis Leung, Departmental Secretary (telephone number 2594-7605) or e-mail to ds@gpa.gov.hk.

