ENVIRONMENTAL REPORT 2009







1. Message from the Government Property **Administrator**

Protecting the environment is a core corporate value of the

In performing our functions as the steward of government properties, we subject all our activities to the closest environmental scrutiny. From the conception of new office and quarters buildings on the drawing board to the day-to-day management of our premises, we strive to minimize our impact on the environment.

This report gives an account of our work on environmental protection in the year 2009 and its outcome. In pursuing our environmental objectives, we are greatly encouraged by the support of all the parties we work with, including user bureaux and departments accommodated in our buildings, our works agents, property management agents and other business partners, occupants of properties under our management and an increasingly environmentally conscious and responsible community.

As is obvious in the report, much has been done over the years and our greatest challenge is to maintain the momentum beyond the low-hanging fruit. With the advent of the information age and increasing office automation in an affluent society, the pressure on energy consumption and waste reduction and separation is ever-increasing. I am confident that with the strong partnership we have built up with all parties concerned, we will rise to the challenge and continue to make further progress in managing our properties in an environmentally responsible manner.

2. Vision and Mission



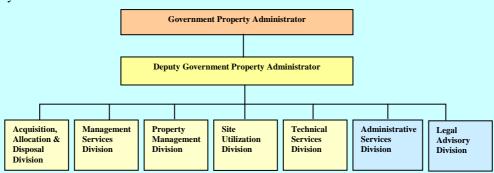
With the vision of providing suitable government accommodation to enable efficient delivery of public services, the Agency's mission is:

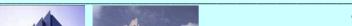
- To meet Government's need for accommodation through optimal use of and necessary adjustments to the current stock.
- To provide quality management services for government properties through the most cost-effective means available.
- To modernise government properties to meet changing operational and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

3. Organisation and Functions

The Government Property Agency has an establishment of 204 and is headed by the Government Property Administrator. It discharges its main functions through five functional Divisions in accordance with agreed strategic plans in striving to achieve the Agency's vision and mission. Two support Divisions provide administrative and legal advisory services respectively to the Agency.

K K Kwok, JP Government Property Administrator









The main functions and activities of the Agency are:

- To construct, purchase or lease as may be necessary office premises to meet Government's 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.





4. Environmental Policies



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, separation of waste at source, etc;
- To implement green office management through effective housekeeping to minimize waste and use of resources; and
- To promote environmental awareness and participation among staff and visiting members of the public 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 accommodated in JUBs and tenants in government quarters as well as non-governmental organisations (NGOs) and private tenants in premises under our management. 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 the construction and refurbishment of government premises, the Agency seeks to minimise the environmental input in the design, construction methods and choice of materials.
- To make proper use of scarce land resources and the existing building stock, the Agency coordinates the different accommodation needs of bureaux and departments in ensuring the optimum utilisation of government sites and premises.
- In managing government properties, the Agency continues to implement green housekeeping measures to minimise energy consumption and facilitate collection of waste for recycling as far as possible.

6. Green Management Committee and Internal Environmental Audit



To coordinate and spearhead the work on environmental protection, the Agency established a Green Management Committee (GMC) in December 2003. Comprising representatives from all Divisions under the Deputy Government Property Administrator, the GMC operates as the focal point in bringing together the inputs of Divisions in tackling environmental issues covering all aspects of the Agency's functions.

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.

The Agency completed IEA 09 in Jun 10. It concluded that all operations generally conform to the environmental policies and targets set for 08/09.

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 2009

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. The energy saving achieved is being monitored.

With the progressive implementation of energy-saving projects in the current programme, the Agency expects to realize an estimated total saving in the region of \$10M over the next five years. Beyond that, however, further energy savings in JUBs are likely to be more difficult to achieve as much of the benefits of energy saving measures based on current technologies 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





Air-conditioning systems account for a major part of the overall energy consumption in office buildings. The Agency has introduced additional measures to reduce energy consumption 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, the Agency has installed floor-by-floor energy monitoring meters with Remote Monitoring Systems (RMS) in a number of JUBs. The current 3-year cycle of Energy Audits for all 49 JUBs has all been completed. In view of the 10-year duration applicable to commercial buildings and commercial portions of composite buildings as specified in the new Building Energy Codes, EMSD recommended a new 5 to 6-year cycle for the next round of audits. Follow-up actions in response to audit results are being implemented. 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. The Agency also performed regular checks to ensure that users and Property Management Agents carry out energy saving measures . Motion sensors have been installed for the escalators at Queensway Government Offices to save energy. A programme is currently in progress to install similar sensors for lighting installations at the car park of the Wanchai Government Offices Complex and Mt Butler Quarters and the staircases in a number of JUBs.

As a means of monitoring electricity consumption, the Agency records monthly statistics on total power consumption of JUBs and conveys them to the Building Management Committee (BMC) of each JUB. At every BMC meeting, energy saving is a standing item on the agenda for a thorough review of the results obtained in the previous period and planning future energy saving strategies. With the completion of the installation of floor-by-floor energy monitoring meters in various JUBs, PMAs are now able to closely monitor the power consumption of individual floors. This will alert the user bureaux/departments in JUBs and the Agency to any irregularities and enable the user to investigate them and develop remedial measures in collaboration of the Agency's works agents and PMAs.



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

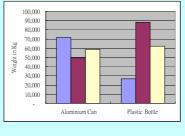


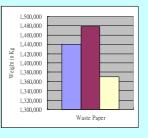
By incorporating suitable provisions in the property management contracts, the Agency implemented environmental awareness programmes and green campaigns through PMAs in JUBs and quarters under the Agency's management. To raise occupants' environmental awareness, it prepares publicity materials and widely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

The Recyclable Waste Collection Campaign, which involves distributing environmental friendly refuse bags and floor-by-floor Source Separation Programme, continued in the quarters under the management of the Agency and JUBs. An expanded mode of the Source Separation Programme now covers 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 pockets after Lunar New Year, etc, as the Building Management Offices may arrange periodically.

Each PMA organises 5 to 9 environmental awareness activities in 2009, which included the collection of used clothes, recyclable batteries, used red pockets, used toner cartridges, old electrical and electronic equipment, etc. They also promoted a programme on source separation of commercial and industrial/domestic waste. They Agency received reports on such activities at its monthly contract meetings with PMAs.

The Agency records data on the quantities of recyclable wastes collected under each category and reports them to EPD on a monthly basis. The total amount of recyclable waste collected at GPA venues, including waste paper, aluminum cans and plastic bottles, decreased by 7.7% from 1,616,101 kg in 2008 to 1,491,409 kg in 2009.





2007 2008

08 2009

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, the Agency has 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.

An example of environmental initiatives for future JUBs is 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 for the 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 the 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. In the deleasing of Public Libraries in Yat Tung (I) Estate and Butterfly Estate, for instance, the incoming tenants are willing to retain most of the existing fixtures and fittings. As a result, this reduced the reinstatement cost for Government and avoided the generation of considerable unnecessary construction waste.

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 the 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 office accommodation in the Chek Lap Kok Airport for Customs and Excise Department's dog kennel. In this case, the user and the works agent have revised the design and carried out a cost-saving exercise to reduce 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, the Agency now requests of all new leasing or renewal to change the limit to 25.5°C.

In line with Government's policy on energy saving, the Agency encourages tenants of our premises 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. It has instructed the cleansing company to collect separately recyclable waste paper, plastic bottles and aluminum cans.

In paper consumption, the Agency maintained a similar level of paper consumption in 2009 compared with the last year. The Agency anticipates that the room for further significant reductions in coming years may be limited as we have already reduced paper consumption by 14.65% between 2002 and 2008, and have initiated practically all reasonable measures to reduce paper consumption.

For water saving, the Agency continued to use self-closing taps in all toilets of the Agency. It has posted notices inside pantries and toilets of the Agency to remind staff of water saving.





7.9 Green Housekeeping in GPA's Offices





Electronic mailing is currently widely in use for communication and information dissemination within the office and with 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.

In the replacement of computer equipment, the Government Logistics Department now supplies new computer equipment with energy-saving features through bulk purchase contracts. New network printers with double-sided printing functions have replaced old ones. This practice has been in place for all newly acquired printers since 2007.

The Agency continues to re-circulate notices on environmental policies and green activities as well as circulars on housekeeping measures and energy conservation 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 the inclusion of environmental friendly features in GLD's tender specifications for partition screens and workstation panels:

- Wooden panels used in making partition screens and workstation panels should meet the low formaldehyde content/emission requirement of Class E1.
- All work stations feature energy saving fluorescent tubes (T5 type) as task lights.
- Screen panels of computer equipment feature an on/off switch to facilitate switching of when 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 the awareness of greenhouse gas emissions and to actively participate in combating climate change. The Agency supported the initiative and nominated office buildings under its management to participate in the annual audit. Carbon audits were carried out in 5 JUBs, namely North Point Government Offices, Harbour Building, Cheung Sha Wan Government Offices, Trade and Industry Department Tower and Shatin Government Offices in 2009. 4 JUBs recorded decreases of about 0.05-10% in greenhouse gas mission while another JUB showed a slight increase about 0.7%. To improve the performance in future, the Agency has continuously launched programmes on floor-to-floor source separation of waste and recycling in all JUBs.

7.13 Green Activities organised by GMC





Two series of green activities were organised.

The Agency organized joint seminars with ArchSD on 'Maosi Ecological Demonstration Primary School' and 'Vertical Greening' in early October and November 2009 respectively. During the seminars, ArchSD introduced several speakers who demonstrated the sustainable design of an award-wining school project in China and examples of projects with vertical greening features in Hong Kong.



The Agency conducted site visits to the vertical greening systems at 'Sau Mau Ping Housing Estate' and 'Vision City' in December 2009. During the visit, staff were able to experience the effects of several vertical green systems introduced in both public and private housing projects.

These activities were well attended and received by staff.





8. Awards for 2009



The Agency won a number of environmental awards in 2009. They include gold awards for 6 Lok Fung Path and 10 Lok Fung Path in the competition on Source Separation of Domestic Waste organized by EPD; and bronze awards for Wong Tai Sin Rank and File Married Quarters, Sau Mau Ping Disciplined Service Quarters, Pamela Youde Hospital Staff Quarters, 25 Park Road, Pokfulam Fire Station Officers Married Quarters and Tseung Kwan O Fire Service Quarters in the same event; and silver award for Revenue Tower and merit awards for Wanchai Tower and Queensway Government Offices in the competition on Source Separation of Commercial and Industrial Waste.

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. The Agency made arrangements for the buildings under its management to obtain Indoor Air Quality certification annually. All the JUBs suitable for such monitoring achieved "Good" Class of Indoor Air Quality in 2009.

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 2010 onwards



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

- 1 In collaboration with works agents, incorporate sustainability and energy saving features in the design and construction of new government office buildings and renovation projects.
- 2 Facilitate implementation of energy saving and renewable energy projects developed in collaboration with works agents in buildings.
- 3 Implement greening in buildings where practicable.
- 4 Monitor electricity consumption and issue statistics to BMCs of JUBs each month to enhance the monitoring of energy consumption levels and facilitate the 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 agents and building management agents.
- 6 Maintain the indoor air-conditioning temperature of government offices at 25.5°C in summer and shorten the operating hours of chillers as far as possible by rationalizing the working hours of bureaux/departments in JUBs.
- 7 Reduce the illumination level of common areas in JUBs outside office hours.
- 8 Reduce the number of lifts and escalators in operation in JUBs during off-peak hours to a minimum without adversely affecting the 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.
- 12 Maintain the condition in tenancy agreements of Government canteens requiring canteen operators not to

use single-use and non-decomposable lunch boxes.

13 Keep up green housekeeping measures such as using intranet for distribution of circulars and notices to all staff, reduce paper, electricity and water consumption, use 100% recycled paper and 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 Hong Kong Awards for Environmental Excellence Scheme organized by the Environmental Campaign Committee (ECC).



10. Comments and Suggestions

We welcome comments and suggestions regarding the report and environmental initiatives of the Agency. Please contact Mr. Thomas Chan, 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.

