

# ENVIRONMENTAL REPORT 2011 Government Property Agency



## 1. Message from the Government Property Administrator

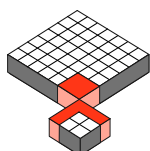
Environmental protection is an integral part of the corporate functions of the Agency.

As the steward of Government properties, we proactively 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 properties, we strive to minimize our impact on the environment. The latest Government office project we embark on is the construction of the Trade and Industry Tower in the Kai Tak Development Area which has been selected as an energy efficiency demonstration project of public works to try out various energy efficient designs and technologies.

This report sets out our work in environmental protection in the year 2011 and the results of our efforts made. In pursuing our environmental objectives, we rely heavily on partnership with user bureaux and departments accommodated in our buildings, our works agents, property management agents and other business collaborators, occupants of properties under our management and an increasingly environmentally conscious and responsible community. We express our deep appreciation to the support provided by these parties which is instrumental in our environmental protection work.

As clearly evidenced in the report, much has been carried out over the years and our greatest challenge is to maintain the momentum to go forward and to make further improvement. Community aspiration in energy consumption and waste reduction, recycling and separation is ever-increasing. We are 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 improvement in managing our properties in an environmentally responsible manner and to make our contributions to environmental protection in Hong Kong.

Alan SIU, JP  
Government Property Administrator



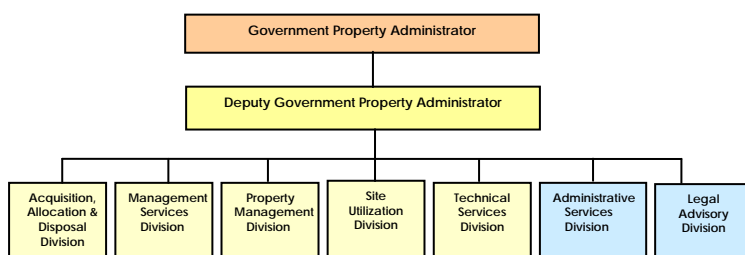
## 2. Vision and Mission

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 Agency has an establishment of 204 and is headed by the Government Property Administrator. The Agency 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.



Organisation Chart

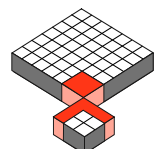


## 4. Environmental Policies



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, institution or 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.
- 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

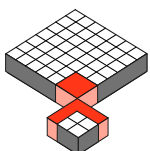


To coordinate and spearhead the work on environmental protection, the Agency established a Green Management Committee (GMC) in December 2003. Comprising representatives from all Divisions under the Deputy Government Property Administrator, the GMC operates as the focal point in bringing together the 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 Policies and commitments.

The Agency has completed IEA 2011. It concluded that all operations generally conformed to the Environmental Policies and targets set for 2010/11.

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 2011

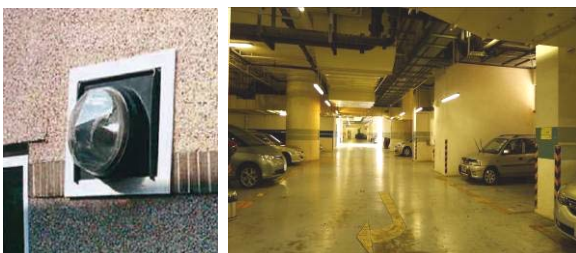
### 7.1 Rolling Programmes for Energy-saving Retrofit and Renewable Energy Projects



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, namely air-conditioning, luminaries, electrical installations and lift operation, were identified for continued and focused action. We also carried out energy retrofit projects proposed by EMSD to upgrade the existing installations progressively in a cost-effective manner according to a coordinated 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 renewable energy, the Agency is working with EMSD on a pilot basis to install anidolic sun-light pipes in the carparking area of Shun Lee Disciplined Services Quarters. Sun-light pipe helps to maximize usage of renewable energy by reflecting external sunlight to internal carparking area through a pure silver base mirror-finished aluminium tube. The result achieved in energy-saving will be closely monitored.



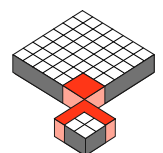
With the progressive implementation of energy-saving projects in the current programme, the Agency expects to realize an estimated total saving in the region of \$3.2M over the next five years. Beyond that, however, further energy-savings in JUBs are likely to be more difficult to achieve as much of 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 to further save energy.

### 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 (from 2009 - 2011) of Energy Audit for all of the 48 JUBs has 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 has recommended a new 8-year cycle for the next round of audit.



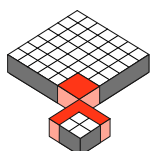
Follow-up actions in response to audit results are being implemented. Energy-saving measures implemented include the removal of unnecessary light fittings for those offices with excessive illumination level identified in the audit and encouragement of users to adopt good practices in the office such as installing timers for electrical appliances, switching off computers when leaving the office, and task lighting etc. The Agency also performs 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, Aberdeen Fisheries and Management Office and Harbour Building to save energy.

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 examine them and develop remedial measures in collaboration with the Agency's works agents and PMAs.

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



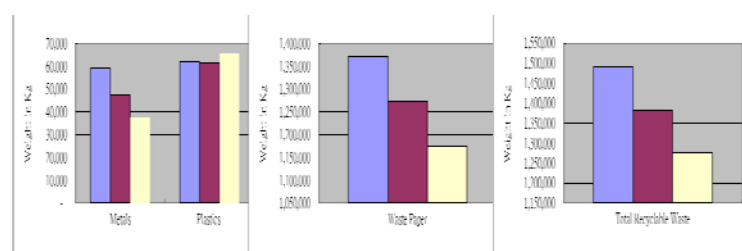
By incorporating suitable provisions in the property management contracts, the Agency implements environmental awareness programmes and green campaigns through PMAs in JUBs and quarters under the Agency's management. To raise occupants' environmental awareness, the Agency prepares publicity materials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



The Recyclable Waste Collection Campaign, which involves distributing environmental friendly refuse bags and implementing floor-by-floor Source Separation Programme, continued in the quarters and JUBs under the management of the Agency. An expanded mode of the Source Separation Programme now covers most quarters. Under the Programme, large brown boxes are placed on the ground floor, besides 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 the Building Management Offices may arrange periodically. The Agency will shortly introduce a pilot programme on recycling of glass bottles in selected venues under its management.

Each PMA organises 5 to 7 environmental awareness activities in 2011, which included the collection of recyclable batteries, used clothes, red packets, toner cartridge, plastic bottles, electrical and electronic equipment as well as spent mercury containing lamps, etc. They also promoted a programme on source separation of commercial and industrial/domestic waste. The Agency receives 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 7.4% from 1,380,829 kg in 2010 to 1,278,615 kg in 2011.



2009 2010 2011  
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 Re-provisioning 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.

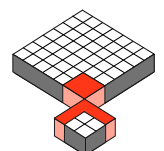
An example of environmental initiatives for new JUBs is the connection of the future Trade and Industry Tower to the District Cooling System planned for Kai Tak development for provision of air-conditioning and the adoption of state-of-the-art energy efficient designs and technologies for the project. We will also adopt energy conservation and environmental features in the project including desiccant wheels dehumidification for fresh air, automatic static pressure reset control for air supply, free air cooling system for large server rooms, heat recovery

system for condensate, brushless motor for fan coil units, light-emitting diode type down lights and landscape lights, task lighting, lift power regeneration system and sun tracking light pipes. Besides, renewable energy technologies including photovoltaic system, solar hot water system, solar chimney and daylight sun-tubes will be used for environmental benefits.

For greening features, we will provide landscaping in the appropriate areas at ground floor, covered elevated walkway and the main roof. We will also provide vertical greening on the building facades. The overall greening will cover more than 30% of the site area. For recycled and other environmental features, we will adopt rainwater for landscape irrigation, automatic refuse collection system and low-emitting materials including carpet, composite wood and agrifiber products.



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 Released or Newly Leased Properties



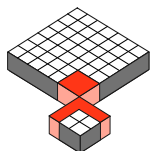
In vacating leased-in premises, the Agency has taken the initiative to encourage landlords to retain existing fittings or fixtures for use by future occupants. In the releasing of Public Libraries in Yat Tung (I) Estate and Butterfly Estate, for instance, the incoming tenants are willing to retain most 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 examine the possibility of retaining existing fittings or fixtures for use. An example is the leasing of office accommodation in Victoria Centre. The premises was taken over in an as-is condition and the incoming user retained some of the existing fixtures and fittings in order 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 all new leasing or renewal cases to adopt the 25.5°C limit.



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.

## 7.9 Green Housekeeping in GPA's Offices



Electronic mailing has been widely used by the Agency 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 (GLD) 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.

As a user department in Revenue Tower, the Agency fully participates in EPD's programme of Source Separation of Commercial and Industrial Waste. The agency has instructed the cleansing company concerned to collect separately recyclable waste paper, plastic bottles and aluminum cans.

In paper consumption, the Agency maintained a similar level of paper consumption in 2011 as compared with that in the preceding year. The Agency anticipates that the room for further significant reduction in coming years may be limited as we have already reduced paper consumption by 21% between 2002 and 2011, and have initiated practically all necessary measures to reduce paper consumption.



For water-saving, the Agency continues to use self-closing taps in all toilets of the Agency. Notices have been posted inside pantries and toilets of the Agency to remind staff of water saving.

### 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 tenders 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 off-switch to facilitate switching off when not in use.

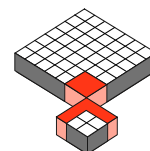
### 7.11 Clean Air Charter

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 in order to contribute towards improving our 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 guidelines for carbon audit 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 supports the initiative and has nominated office buildings under its management to participate in the annual audit. Carbon audit was carried out in 47 nos. of JUBs in 2011. Twenty-six out of the 47 JUBs recorded decreases of about 0.08%-10.01% in greenhouse gas emission while the other 11 JUBs recorded increases of about 0.27-8.92%. The increases were mainly due to more electricity consumption arisen from additional electrical installations (mainly server rooms and their resultant 24-hour air-conditioning supply), extended air-conditioning for overtime work, renovation works and higher occupancy rates etc. The carbon audit of the remaining 10 JUBs are in progress. To improve the performance in future, the Agency will continue to launch programmes on floor-to-floor source separation of waste and recycling in all JUBs.



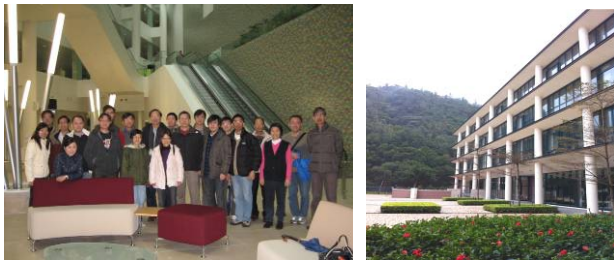


### 7.13 Green Activities organised by GMC



The Agency conducted site visit to a green award winning building, the HSBC New Data Centre at Tseung Kwan O Industrial Estate in early February of 2011. During the visit, staff were able to experience innovative designs introduced in a private project that achieved high energy-saving performance and pleasant green environment.

The activity was well attended and received by Agency staff.



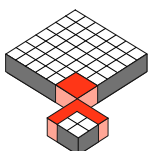
### 8. Awards for 2011



The Agency won a number of environmental awards in 2011. In the competition on Source Separation of Domestic Waste organized by EPD, we received gold awards for 6 Lok Fung Path and 10 Lok Fung Path; silver award for Tseung Kwan O Fire Services Quarters and bronze awards for Sau Mau Ping Discipline Services Quarters and 25 Park Road. In the Commercial and Industrial Waste category of the same event, our efforts were recognised with certificate of merit for Revenue Tower, certificates of appreciation for Immigration Tower, Wanchai Tower, North Point Government Offices, North Point Fire Brigade Building and Eastern Law Courts Building.

In response to EPD's launch of the 2008 Hong Kong Awards for Environmental Excellence Scheme, the Agency actively participated in the competition on 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 2011.

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



## 9. Environmental Targets for 2011 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 Government buildings.
- 3 Implement greening in Government 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 audit and re-audit 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 two 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 audit 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 audit on selected JUBs.
- 18 Continue to support and participate in environmental awards schemes including 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, Deputy Departmental Secretary (Administration) (telephone number 2594-7605) or e-mail to [enquiry@gpa.gov.hk](mailto:enquiry@gpa.gov.hk) accordingly.

