

 **EXECUTIVE SUMMARY**

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## This Report

The Sustainability Report 2006/07, *Sustainable Housing: Our Commitment and Your Participation*, is our second Sustainability Report that reaffirms our commitment to society while presenting the Housing Authority (HA)'s business, environmental and social performance. This Report describes the [environmental](#), [social](#) and [economic](#) performance of the HA as a whole for the period 1 April 2006 to 31 March 2007. We have developed this report with reference to the Environmental Protection Department's *A Benchmark for Environmental Performance Reports*, and incorporated relevant elements recommended in the *Global Reporting Initiative (GRI) G3 Guidelines 2006*, and the GRI sector supplement for Public Agencies published in March 2005.

## Our Vision and Priorities

The Housing Authority is responsible for developing and implementing public housing programmes to meet the housing needs of people who cannot afford private housing. We have been working to ensure the implementation, maintenance and sustainability of an effective housing programme that will not only meet Hong Kong's requirements but also contribute towards a stable and happy community.

## Environmental Performance

We set 28 environmental targets for the year 2006/07 ranging from waste management, awareness and participation, energy efficiency, landscaping and greening, water, air, noise and hazardous materials. Of these targets, 26 were fully met, one achieved substantial progress and one fell short. Our environmental performance for 2006/07 is outlined below:

*Increased estate landscaping and greening has greatly improved amenity comfort and the quality of our estates:*

- About 5 300 trees, 587 200 shrubs and 51 600 annuals were planted.
- Landscape improvements completed at 18 selected estates with the upgrading of 110 000 m<sup>2</sup> of greenery.



■ School Children Participated in Landscape Improvement in an Estate

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- Successfully re-landscaped the green areas of two thematic gardens - the Anti-mosquito Planting Strip at Sun Chui Estate and the Fruit Garden at Tai Hing Estate.
- Introduction of vertical green panel system at Eastern Harbour Crossing Phase 4 (under construction).



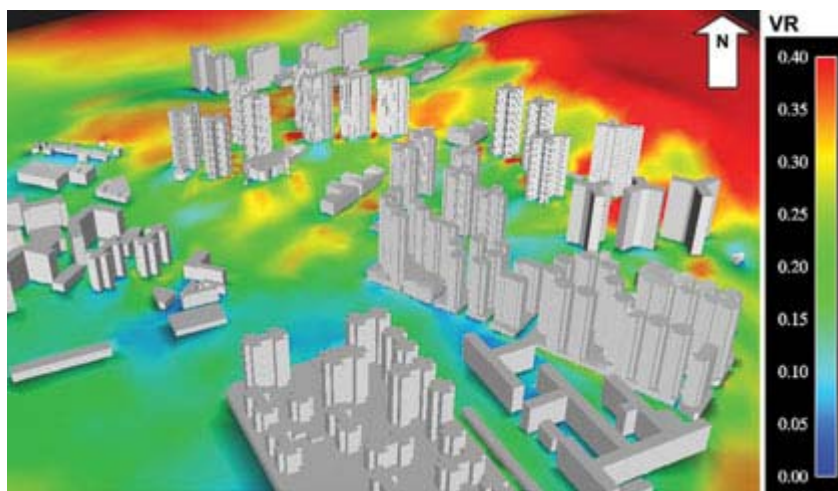
■ Eastern Harbour Crossing Phase 4 Fitted with Vertical Green Panels (under construction)

*Installation of water reduction appliances/facilities led to a decrease in water consumption:*

- A reduction of 6.17% of potable water consumption against 2005/06 was achieved by the end of March 2007 due to the installation of water saving systems by landlord in Public Rental Housing estates.
- Water Recycling Systems implemented in 21 building contracts resulted in a water saving of approximately 12%.

*Implementation of air quality measures led to better air quality in offices, construction sites and estates:*

- Microclimate studies are used for the planning and design of all our new estates to create a healthy, environmentally friendly and sustainable living environment for tenants. This initiative won the Hong Kong Institute of Architects' Special Architectural Award for Architectural Research in 2006 and Hong Kong Institute of Planners' Award in 2007.



■ Microclimate Studies - Air Ventilation Assessment Study for a New Housing Project

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- We use precasting and prefabrication and 'hard-paved construction' technologies to reduce dust emission significantly.



■ Pre-cast Technology Adopted for Kwai Chung Flatted Factory



■ Hard Paved Construction at One of Our Construction Sites

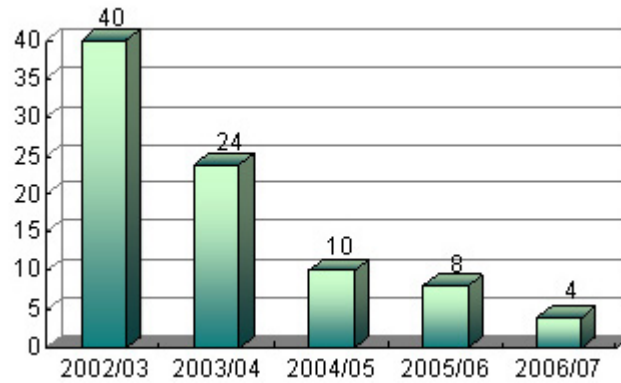
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- We avoided using building materials that include ozone depleting chemicals.

*Installation and utilisation of better construction and operational practices has reduced noise nuisance:*

- Hydraulic concrete crushers, as opposed to percussive breakers, are now used in our demolition projects to reduce construction noise.

- We have replaced 16 high speed pumps with low-noise, low speed pumps.
- In 2006/07, we received only 4 noise complaints, as compared to 8 last year, and no noise abatement notices from the Environmental Protection Department.

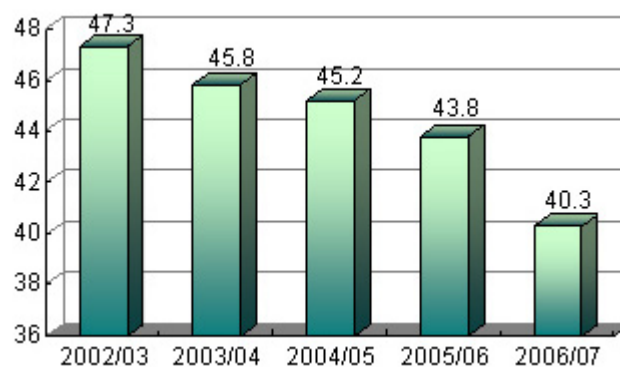
### Number of Noise Complaints Against Construction Sites



### *Utilisation of energy saving measures and appliances has decreased energy consumption:*

- We have continued to use energy efficient products in our operation.
- Energy consumption for our office premises was 40.38 million kWh, representing a cut of 7.88% compared to 2005/06's consumption.

### Annual Electricity Consumption in Housing Authority offices (kWh in millions)



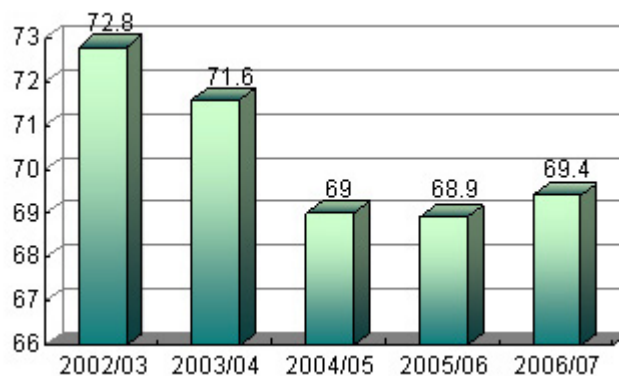
- We promoted wider application of renewable energy. More trial use of solar energy was conducted on projects.



■ Solar Panels Installed for External Lighting

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- Compared to 2005/06, energy consumption for public areas slightly increased from 68.9 kWh to 69.4 kWh per flat per month. This was due to the fact that new buildings with more electrical installations have been developed.

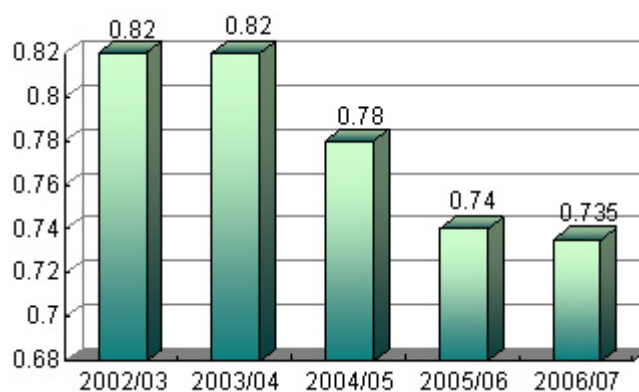
Energy Consumption in Public Area of Estates (kWh per flat per month)



*Waste management measures have decreased waste generation and material consumption:*

- We encouraged the use of building materials that are long-lasting and can be easily maintained to reduce waste generation.
- We implemented a waste separation at source scheme at 60 estates.
- On average our residents generated 0.735 kg /capita day of domestic waste in 2006/07 compared to 0.74 kg and 0.78 kg in 2005/06 and 2004/05, respectively.

**Improvements in Residents' Daily Domestic Refuse Generation  
(kg per person per capita day)**



- In total, 12.3% of paper, 28.3% of aluminium cans, 6.2% plastic bottles and 6.8% of used clothes were recovered for recycling from our estates.

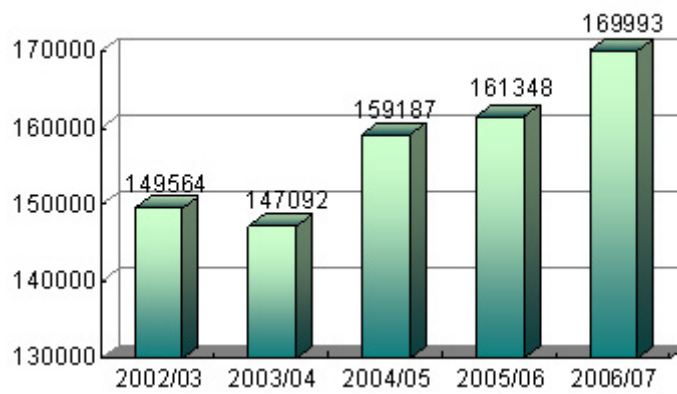




■ Collection Facilities for Recyclables

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- Waste paper collection increased by 5.36% as compared to 2005/06.

### Improvements in Waste Paper Collection in Housing Authority Offices (kg)



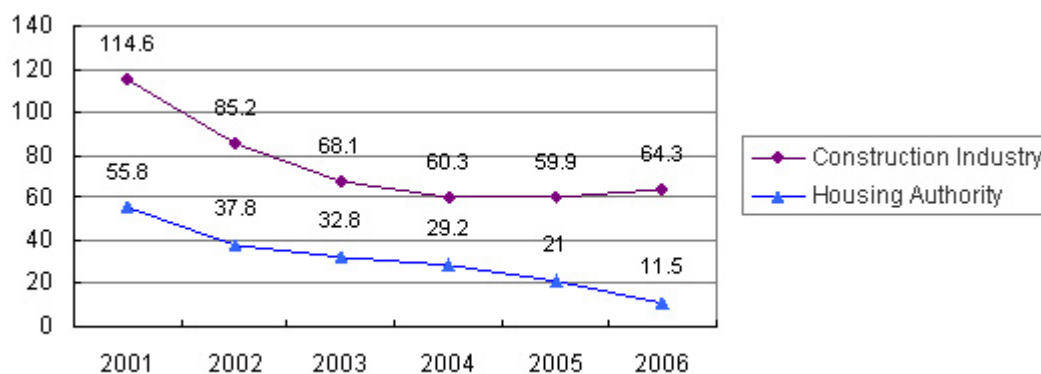
## Social Performance

We set 10 social targets for the year 2006/07 covering safety and the Marking Scheme. Of these targets, 9 were fully met and 1 achieved substantial progress. Our social performance for 2006/07 is outlined below:

*Implementation of safety measures in our construction sites and maintenance works has led to a better safety record than the local industry:*

- We continued to implement our Safety Audit Scheme and Performance Assessment Scoring System to assess site safety and performance of our contractors. At the end of 2006, the average score improved by almost 4% compared to figures at the end of 2002.
- Our accident rate for new works construction sites has dropped from 55.8 per thousand workers in 2001 to 11.5 in 2006. One fatal accident occurred in 2006/07.

**Accident Rate for New Works per 1 000 workers, compared to Local Construction Industry Average**



*Implementation of hygiene and health initiatives protect our residents and the community:*

- We have updated the Marking Scheme for Estate Management Enforcement in Public Housing Estates to include penalty fines for noise nuisance and smoking on enclosed common areas.
- We provided designated outdoor smoking areas in our estates to ensure

minimum disruption and nuisance to other estate residents.

- We conducted preventative measures to eliminate black spots of mosquito breeding and to ensure the cleanliness and environmental hygiene of our estates.

*Training and other initiatives ensure our employees are developed:*

- We have provided general training courses for our departmental staff and individual-tailored training courses on specific issues for selected staff. A number of training programmes have also been extended to our contractors to align service quality.



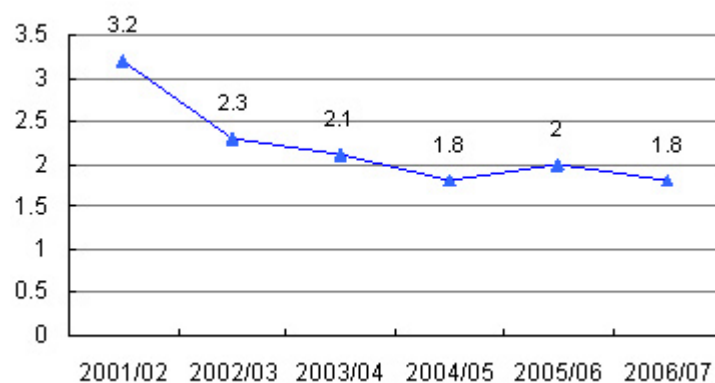
■ Training of Employees and Contractors

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- We provided subsidies for our staff to pursue continuing professional education outside of office hours.
- We proactively investigated possible instances of non-skilled worker exploitation and provided education to the workers on their rights and contract condition of their employment with a hotline to prevent such actions.

*Implementation of various initiatives to manage housing resources and provide better customer services:*

- 18 700 flats were allocated to waiting list applicants, bringing the total number of Public Rental Housing (PRH) flats in use to 677 800 by the end of March 2007.
- 9 129 PRH units were recovered for re-allocation to waiting applicants in 2006/07 due to investigations into suspected tenancy abuse cases.
- Stringent checks on eligibility of public housing tenants for subsidised housing were conducted on some 4 200 cases.
- We maintained average waiting time for general PRH applicants and elderly single applicants well within the pledge of three years and two years respectively.

**Trend of Average Waiting Time (years) for Public Rental Housing Applicants**





- E-Payment Card system has been made available for tenants to pay their monthly rent at over 760 convenience stores operating 24 hours allowing a more convenient method of payment.
- The number of overcrowded households dropped to 4 587 through the Overcrowding Relief Exercise and Living Space Improvement Transfer Scheme.

## Economic Performance

We set 4 financial targets for the year 2006/07 covering rent adjustment, maintenance, and vacancy reduction. All were fully met. Our financial performance for 2006/07 is outlined below:

### *Implementation of initiatives to improve the financial situation of the Housing Authority (HA) and benefit our tenants:*

- We continued to explore opportunities to improve and strengthen our financial and risk-management processes in order to provide maximum financial and business value in all our activities.
- A rent adjustment mechanism was introduced which sets rents based on the household income of Public Rental Housing (PRH) tenants.
- A one-month-off rent remission was granted for our PRH tenants and interim housing licensees in February 2007.
- We launched a Phase 1 Sale of Surplus Home Ownership Scheme Flats with average selling price set at 70 per cent of assessed market values.

### *Improvement of cost effectiveness to enhance the occupancy rate and maintain the quality of housing*

- We conducted various measures to shorten the re-letting period and improve the



letting rate of our vacant flats.

- To prolong the life of our older estates we continued to conduct checking on the condition and carried out preventative maintenance and improvement.
- The Total Maintenance Scheme checks both the external and internal condition of flats in 30 estates annually. By the end of March 2007, our ambassadors had visited 34 400 homes and issued over 26 600 repair orders.



■ Total Maintenance Scheme Repair Activities

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- The Comprehensive Structural Investigation Programme looks at the structural safety and economic sustainability of our estates that are over 40 years old. Through this programme, 5 estates will be sustained for a further 15 years.
- The Independent Checking Unit continues to provide third party monitoring and control of all new HA developments and alteration works.

## Stakeholder Engagement

We set 10 stakeholder engagement targets for the year 2006/07 covering awareness raising and participation initiatives. All were fully met. Our stakeholder engagement

performance for 2006/07 is outlined below:

*Implementation of communication programme strengthens the connection between the Housing Authority (HA) and the communities we serve:*

- The 'Housing Channel' communicates housing-related messages to Public Rental Housing tenants.
- Fire safety messages are spread through fire drills and publicity programmes to tenants, and through seminars to contractors and staff
- Our bi-weekly online newsletter, 'Housing Dimensions', keeps our staff and other stakeholders informed of the HA's major developments.
- We continued to enhance the HA website, which consists of about 20 000 content pages in both Chinese and English versions catering for every stakeholder's interest.
- The Green Corner, located in our headquarters, showcases our green initiatives.



■ The Green Corner educating the public on environmental issues

*Stakeholders' participation in implementing our goals:*

- Through the 'Green Delight in Estates' programme, a series of education activities were held in collaboration with local green groups to raise

environmental awareness, including workshops, recycling days and other activities.



■ Launching of the Recycling Day in 'Green Delight in Estate' programme

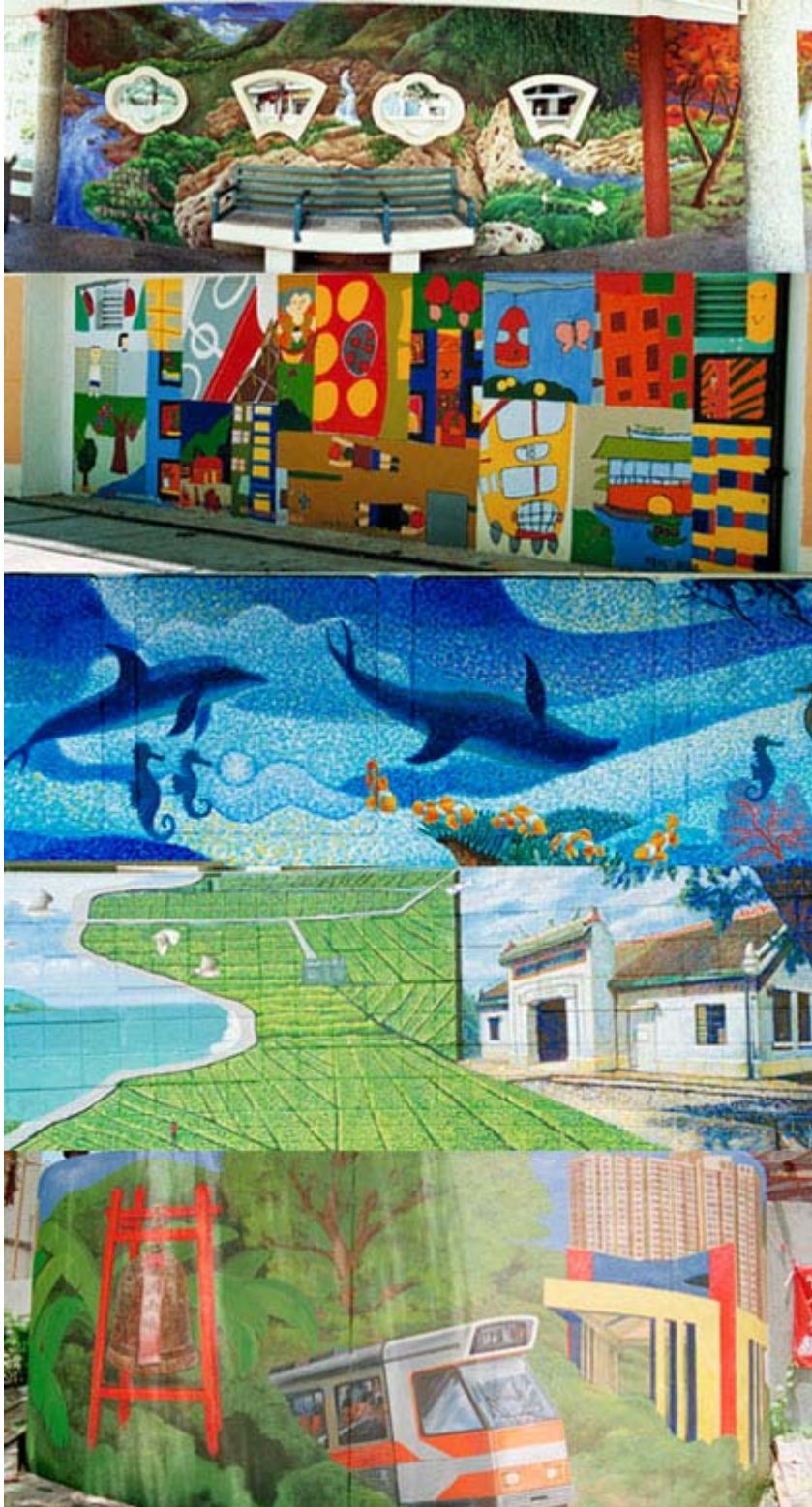
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- 'Action Seedling' was launched in 14 construction projects to motivate contractors to undertake their corporate social responsibility and encourage community participation in the greening of new housing estates at an early stage.



■ School pupils participating in planting seedlings and nursing plants



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- "Lets Give Yau Tong a New Look" engaged the public in a mural design competition to express their vision on sustainability.



■ Wall Murals at Yau Tong Phase 1 Showing Tenants' Visions on Sustainability

 *Implementation of feedback mechanisms lets us know how to improve:*

- Our customer satisfaction survey in 2006/2007 showed that 86.7% of the respondents considered the Total Maintenance Scheme either satisfactory or highly satisfactory.
- 81.4% of our residents were satisfied with the planning and design of their estates as a whole on newly completed projects as found in the Resident Survey.
- More than 6 000 visitors visited our Maintenance Education Path and Mobile Maintenance Education Booths which provided home care information.

## Way Forward

To continue achieving our vision for sustainable housing, we have identified and committed to various targets in 2007/08. Key targets are summarized as follows.

### **To continue promotion of sustainability issues:**

#### **Awareness and Participation Targets**

Promote environmental awareness in the Housing Authority (HA) work place, in Public Rental Housing (PRH) estates, and in the community, for example by launching campaigns to promote waste reduction and recycling in PRH estates and joint programmes with green groups and the Estate Management Advisory Committees, displaying information on environmental issues at our headquarters' Green Corner, providing environmental messages on the e-Learning Portal, and organising tree planting days in selected estates and Green Property Management Award.

Conduct various initiatives for HA staff, for example, activities organized by the HA Staff Club, active communication with staff, and obtain feedback to enhance operational effectiveness.

**To reduce water consumption:**

**Water Conservation Targets**

Reduce water consumption by conducting trial schemes in new projects, using self-stopping or movement-sensing water taps, conducting a replumbing programme to minimise pipe bursting and leakage, studying the feasibility of using rain water for irrigation and general cleaning.

Have water consumption of 1% less than that of 2005/06 in our headquarters.

**To enhance greening and landscaping:**

**Greening and Landscaping Targets**

Increase greening in estates through hydro-seeding and tree planting of newly formed slopes, providing green treatment to hard surfaced slopes, improving existing vegetated slopes, upgrading existing landscapes, and allocating open areas in selected estates for setting up theme gardens.

**To lessen safety and environmental risks:**

**Control of Hazardous Materials Target**

Further abate the remaining asbestos-containing materials in existing HA managed properties by implementing asbestos abatement programme through estate redevelopment programme and asbestos removal works.

**To reduce noise nuisances:**

**Noise Nuisance Reduction Target**

Reduce noise nuisance from water pumps in PRH estates by replacing 3 000 rpm water pumps with 1 500 rpm water pumps.

**To maintain our waste management practices:**

**Waste Management Targets**

Increase domestic waste recovery rate of paper, aluminium cans, plastic bottles and used clothes by arranging publicity activities such as Waste Recycling Credit Scheme for all PRH estates, publicity campaigns, and implementing various initiatives to encourage paper recycling in HD offices.

Implement waste separation at source programme in all estates by phases.

Reduce generation of waste, including A3 and A4 paper consumption and construction and demolition (C&D) waste generation.

Ensure proper disposal of C&D waste by developing a Construction Waste Index.

Use environmentally-friendly paper in printing of all publicity materials (except sales and marketing publication) by implementing its use as a pre-requisite in all

printing jobs.

**To continue improvements on energy efficiency:**

**Energy Efficiency Targets**

Reduce electricity consumption by adopting Energy Codes and obtaining energy certificates for landlord services installed in new domestic blocks, shortening operating hours of air conditioners and lighting in shopping malls, enhancing staff awareness of energy savings, exploring the use of more energy efficient equipment, and exploring the application of green design for building services equipment.

**To improve our safety performance:**

**Safety Performance Targets**

Improve safety performance by monitoring contractors closely, holding regular seminars on audit findings and best safety practices, participating in safety campaigns, providing safety training to staff, and developing a consolidated safety handbook and guidelines.

Keep accident rate to be below 25 accidents per 1 000 workers.

**To uphold our social contribution:**



## Social Performance Targets

Continue to actively work with relevant stakeholders to promote better understanding of HA policies and initiatives through different publicity channels.

Conduct various initiatives for HA staff, for example, activities organised by the HA Staff Club, active communication with staff, and obtain feedback to enhance operational effectiveness.

Continue implementation of the Marking Scheme in all PRH estates and factories to enhance the living and working environment respectively.

### To fine tune our economic performance:

#### Economic Performance Targets

Minimise the vacancy of PRH estates.

Conduct tenancy control and education campaigns with an aim to reduce abuse of housing resources.

Assess older estates to identify where preventive maintenance, restoration and improvements should be made.

 MESSAGE FROM THE CHAIRMAN

As Hong Kong's major provider and manager of public rental housing, the Housing Authority accords a high priority to sustainability. It is our mission to provide sustainable housing to our tenants, which constitute almost one-third of Hong Kong's population. To achieve this we have to keep up a constant drive to utilise the most intelligent designs, to improve our production quality as well as to make the best use of materials and the latest techniques.



This year we continue to keep our focus on sustainability in our estates, offices and new constructions. We have concentrated on achieving our targets and spearheading initiatives that are consistent with our vision and policies. We carry a great responsibility and strong commitment in this area as we pursue our mission to provide Hong Kong with housing that meets its social, environmental and economic needs well into the 21<sup>st</sup> century.

The progress achieved in the pursuit of our sustainable development goals has been made possible by the substantial support of our tenants, staff and the wider community. With the continued support and input from these stakeholders, we are certain that we will thrive on the challenges that lie ahead.

Eva Cheng

A handwritten signature in blue ink, appearing to read 'Eva Cheng', written in a cursive style.

Chairman



## MESSAGE FROM THE DIRECTOR

It gives me great pleasure to present the second Sustainability Report which provides an overview of the Housing Authority's economic, social and environmental performance for 2006/07. The theme of this Report, "Our Commitment and Your Participation", reaffirms the Authority's forward-looking and action-oriented approach to ensuring the quality and sustainability of public housing. It highlights our efforts to involve our major stakeholders (tenants, business partners and other interest groups) in the operation, design and creation of the environment we live in.



We are guided by our mission to provide affordable quality housing, management, and maintenance services to meet the needs of our customers and this year, we have set targets in areas such as waste management, landscaping and greening, material consumption, reuse and recycling, noise and emission control, and reduced energy consumption through energy-saving installations and administrative measures.

This Report shows our successes in 2006/07 in the pursuit of sustainable development. Throughout the Report, there are examples of how we have pursued our sustainability goals through a series of small but practical steps in the design, construction and management of our properties. We are encouraged by the results and will continue to seek further improvements in all areas in the future.

Finally, I would like to commend our tenants and business partners for their cooperation, as well as the impressive teamwork and effort in embedding sustainability principles in the Housing Authority's operations. With continuous support and active involvement, we are confident that we can further improve the quality of life in our housing estates and in doing so, enhance our contribution to the stability and well-being of Hong Kong.

Thomas CY Chan

A handwritten signature in blue ink, which appears to read "Thomas CY Chan". The signature is stylized and fluid.

Director of Housing

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## Purpose


This Sustainability Report 2006/07, *Sustainable Housing: Our Commitment and Your Participation*, is our second Sustainability Report and reaffirms our commitment to society as well as presenting the Housing Authority (HA)'s business, environmental and social performance. In this report, the HA presents information and data on its strategies, systems, operations and performance in relation to the three main pillars of sustainability: economy, environment and society. The report has been prepared to provide a clear and balanced picture of HA's performance in 2006/2007.

We believe that communication with our stakeholders is key to our success. As such, we have prepared this report with our diverse stakeholders groups in mind: tenants and homeowners in our estates, business partners, our staff and government colleagues, non-governmental organisations (NGOs), media and the public.

## Criteria

We have developed this report with reference to the Environmental Protection Department's *A Benchmark for Environmental Performance Reports*, and incorporated relevant elements recommended in the *Global Reporting Initiative (GRI) G3 Guidelines 2006*, and the GRI sector supplement for Public Agencies published in March 2005.

We have not reported against every indicator in the GRI set. Some indicators are better suited to private sector organizations (such as manufacturers) than to the public sector. We have however attempted to take as many GRI reporting elements and

 indicators into the scope of our reporting as possible, and used feedback on previous reports and discussions with stakeholders to ensure that the report's content meets the expectations of our target audiences.

## **Scope**

This Report describes the [environmental](#), [social](#) and [economic](#) performance of the Housing Authority (HA) as a whole for the period 1 April 2006 to 31 March 2007 for public rental housing estates owned by the HA, and for new developments under planning and construction.

## **Independent Verification**

A third-party was invited to verify the Report to ensure its completeness, accuracy and reliability. The structure and contents of the Report was reviewed by the Hong Kong Quality Assurance Agency (HKQAA). The HKQAA's independent verification statement is provided [here](#).

## **Dissemination**

The [summary](#) of this report is also distributed as a brochure in two languages, Chinese and English.



## Feedback

### ***2006 / 07 Sustainability Report***

A variety of information on the Housing Authority (HA)'s management activities is available on the HA website, [www.housingauthority.gov.hk](http://www.housingauthority.gov.hk), and you can also access the [previous Sustainability Report](#) on the website.

We take into account all comments suggested by our readers, as we believe these comments will help us continuously improve our service delivered to the public. We would welcome your feedback on this Report by sending the Feedback Form ([Pdf version](#) or [MS-Word version](#)), by email to [emu@housingauthority.gov.hk](mailto:emu@housingauthority.gov.hk), or by post to:

Senior Manager, Environmental Management  
Environmental Management Unit  
Hong Kong Housing Authority Headquarters  
33 Fat Kwong Street, Ho Man Tin.  
Kowloon, Hong Kong

### ***Feedback from Last Year***

Our first [Sustainability Report \(2005/06\)](#) has helped us gather valuable feedback from our stakeholders. The feedback was not only related to the reporting and communication process, but also included suggestions on sustainability initiatives and processes. We thank all parties for the feedback, and are working to address them as appropriate.

Here is a selection of the comments provided to us:

Your Comments	Our Response

What action has been taken by the HA to prevent future damage of trees?	We have reminded the relevant management agencies about their obligations to protect plantations and the need to follow proper guidelines in preserving greenery in the HA's public rental housing estates.
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Does HA collect grass cuttings, leaf litter and cut foliage and branches from its maintenance operations for composting or recycling as mulch?	The relatively small scale of lawn areas generate only a small amount of leaves as compared to countries where such practices are being implemented. The collection of vegetation for composting or recycling is therefore not currently practicable or cost-effective considering the availability of materials.
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Will the HA consider providing aluminium cans and plastic bottles recycling collection facilities in the HA Headquarters?	The HA has arranged for the provision of the three-colour waste collection recycling bins/or other facilities at prominent locations within HA Headquarters.
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The use of trucks with Power Operated Cover will be a better option to promote environmental protection, road safety and better haul overload control.	Specifications for Power Operated Cover for trucks has been incorporated into the HA's contract requirements.
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Strategy for paper saving in terms of sustainability reports production.	HyperText Markup Language (HTML) version of the Sustainability Report will be provided online, and only a limited number of summary booklets of less than 15 pages each will be printed using Forest Stewardship Council certified environmentally-friendly paper. This allows for
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accessibility to all stakeholders.



## HIGHLIGHTS

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The Housing Authority (HA) is on the road to sustainability. The HA's history and role in society has helped foster a culture of sustainability in all our activities and this report shows a lively and inspiring organisation committed to continuous improvement.

### Environmental

- Created a healthy, environmentally friendly, and sustainable living environment for tenants through microclimate studies at the planning and design stage of all new public housing developments.
- Introduced a pilot vertical green panel system on the external wall of buildings in Phase 4 in the Eastern Harbour Crossing Site that provides a greener environment to explore the potential benefits of improved heat insulation as well as acting as noise and dust barriers.
- Required our contractors to implement Water Recycling Systems for all projects involving Large Diameter Bore Piling Works as well as the construction of new buildings, piling and civil engineering projects.
- Implemented "hard-paved construction" at all our building, and piling sites, thus reducing dust generation and improving drainage on site.
- Expanded the use of innovative technology for precast concrete facades, staircases and semi-precast slabs to the construction of the superstructure of the Kwai Chung Flatted Factory, employing volumetric precasting techniques. 60% of the concrete work of this project was of precast or prefabricated technology. This technology reduces dust, noise and waste generation at construction sites as well as providing safer and cleaner sites for workers.
- Incorporated a solar photovoltaic system into the design of the redevelopment of Lam Tin Phases 7 and 8 to supplement the power supply for some communal facilities.
- Reduced energy consumption at HA office premises by 7.88% compared to consumption in 2005/06.
- Significantly increased aluminium can and plastic bottle recovery in existing



estates, with recycling rates of 28.3% and 6.2 % respectively.

- Increased the quantity of waste paper collected in HA offices by 5.36% compared to that in 2005/06.

## Social

- Accident rate for new works construction sites dropped from 55.8 per thousand workers in 2001 to 11.5 in 2006.
- Added three more hygiene-related misdeeds to the Marking Scheme for Estate Management Enforcement in Public Housing Estates to reflect the increased scope of the scheme to consider health aspects of Public Rental Housing (PRH).
- Extended the smoking restriction to all common areas, both indoors and outdoors within housing estates, except at designated outdoor areas, to ensure that such facilities will result in minimal disruption and nuisance to other estate residents.
- Introduced stringent measures into services contracts to protect the wages, working hours and the rights of non-skilled workers.
- Re-allocated 3 533 flats to eligible applicants under the Express Flat Allocation Scheme.
- Allocated 18 700 flats to Waiting List applicants, bringing the total number of PRH flats in use to 677 800.
- Re-housed 520 overcrowded households into larger flats.
- Introduced the Accelerated Refurbishment-On-Demand process to speed up the reletting and refurbishment of vacant flats, which shortened the re-letting period from 57 to 34 days on average.
- Introduced the Alternative Counter Collection Channel, a Rent Enquiry Hotline, a pilot Auto-dialling Rent Reminder, a Direct Rent Payment arrangement to ease payment of rents.

## Economic

- Improved the living environment and building durability and safety through the





## Total Maintenance Scheme.

- Improved our financial position through divestment of commercial properties, and sale of surplus Home Ownership Scheme (HOS) flats.
- Introduced a new income-based Public Rental Housing (PRH) rent adjustment mechanism that provides for both upward and downward domestic rent adjustments based on movement in the income index which reflects changes in household income of PRH tenants.
- Rolled out a phased programme for sale of 16 600 surplus HOS flats. The first phase was launched in January 2007.
- Achieved construction costs for the superstructures of our new developments that are 40% lower than that of projects in the private sector of similar scope.

## Stakeholder Engagement

- Maintain an ongoing dialogue with the contractors in the construction industry, property management and maintenance industries to ensure delivery of quality products and services.
- Collaborated with the Hong Kong Polytechnic University to run a part-time Certificate Course in Public Housing Agency Management.
- Informed our tenants, our staff and the general public of our activities and achievements through a wide range of media.
- Launched a mini website called "Environmental Estates" to promote greater understanding of our green initiatives.
- Launched "Action Seedling" under the Community Participation Scheme to motivate contractors to undertake their corporate social responsibility and encourage community participation in the greening of new housing estates at an early stage.
- Engaged the local community through workshops to collect public views and



engage the community not only in the design and planning of projects but also the facilities they would like to see in their community.

- Unveiled a mural in Yau Tong Estate which amalgamated the 25 winning entries submitted by the estate residents and school children in the "Lets Give Yau Tong a New Look" mural design competition.
- Conducted a three-month public consultation on the review of our domestic rent policy, which aims to develop a rent policy that would be more flexible, establish a closer link with tenants' affordability and help to promote the long-term sustainability of the public housing programme.
- Actively sought feedback from our stakeholders on our performance to understand what is expected of us as a socially responsible organization.
- Rolled out the second phase of the long-term community environmental education programme, "Green Delight in Estates", across a further 30 estates through sustained and in-depth community activities in collaboration with Green Groups.

## Major Achievements/Awards

We continued to reap awards in 2006/07. We provide a listing of achievements:

- Our use of micro-climate studies won a Special Architectural Award for Architectural Research in the Hong Kong Institute of Architects Annual Awards 2006 and a Merit award in the Hong Kong Institute of Planners Award 2007.
- Our installation exhibit of Public Housing Development in Hong Kong was selected to be part of the Hong Kong's exhibit at the Venice Biennale International Exhibition, which eventually achieved an Award for Members Work outside of Hong Kong at the Hong Kong Institute of Architects Annual Awards 2006.
- Our study on the "Life Cycle Assessment and Life Cycle Costing Study" of Building Materials and Components has achieved a Merit award in the Green



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Building Award 2006 (Research and Planning Studies Category) organised by the Professional Greening Building Council.

- Our "Garden of Felicity" display, based on the theme "Cherishing the Family", won the Gold Award for Design Excellence (Landscape Display) in the 2007 Hong Kong Flower Show organised by the Leisure and Cultural Services Department.
- Tsz Ching Estate was awarded the Grand Prize for the Green Property Management Award (Public Housing) Eco-business award.
- The HA has retained the "Gold Wastewi\$e Logo" for the sixth consecutive year in the Wastewi\$e scheme organised by the Environmental Protection Department.

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→ [Economic Priorities](#)

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The Housing Authority (HA) is a statutory body established in April 1973 under the Housing Ordinance (Chapter 283). Within the government's overall housing policy framework, the HA is responsible for developing and implementing public housing programmes to meet the housing needs of people who cannot afford private housing.

The HA plans, builds, manages and maintains different types of public housing, including rental housing estates, interim housing estates, and transit centres. In addition, the HA owns and operates some flatted factories and ancillary commercial and other non-domestic facilities.


## Our Vision

*We are the public housing provider in Hong Kong and we aim to provide safe, affordable and sustainable housing in Hong Kong.*

As the agency tasked to manage Hong Kong's public housing needs, we provide public rental housing for about 30% of Hong Kong's total population.

We have been working to ensure the implementation, maintenance and sustainability of an effective housing programme that will not only meet Hong Kong's requirements but also contribute towards a stable and happy community.

In order to achieve our vision for sustainable housing, we have been striving to develop better designs which integrate environmentally friendly, user friendly, functional and cost effective solutions. We have put this vision into action through our *Strategy for Sustainable Construction*, which reflects the Hong Kong Government's view on

 sustainable development and provides a framework for identifying our sustainability priorities.

#### Strategy for Sustainable Construction

Our *Strategy for Sustainable Construction* aims to 'progressively achieve sustainable development in public housing which balances environment, social and economic needs with a view to attaining healthy living, sustainable construction and enhancement of the total urban environment.'

## Environmental Priorities

The Housing Authority is the largest developer in Hong Kong with a stock of approximately 677 800 flats which house approximately one third of the population of the city. We have a construction programme of approximately 15 000 new flats every year and this programme requires proper management to limit its impact on the local environment. Given our high-density, high-rise environment, our designs, construction activities and management of estates has to be undertaken in a manner that benefits our tenants and the community at large. We are committed to properly managing and reducing our consumption of resources in our day-to-day activities, in particular in relation to the production of waste and use of energy. We also are committed to finding and utilizing better construction methods to further reduce our environmental footprint and reduce the overall impact of our development, management and maintenance processes.



## Social Priorities

Serving a third of the population of the city in some 190 housing estates requires management practices that attach great importance to people and the provision of the estate services that they require. The Housing Authority aims to make public housing estates a better place to live, and to ensure that our tenants enjoy a quality living environment with a focus on safety and hygiene. We are also working at prioritizing the demands of potential customers according to our policy pledges by providing public housing to those who need it most. We strongly believe that public housing will promote social stability and economic prosperity and foster social cohesion. We seek to provide an affordable, healthy, safe, comfortable and convenient living environment for tenants, as well as a model working environment for those employed on our construction, maintenance and property management services.

## Economic Priorities

The economic performance of an organization provides the key to its success and hence its sustainability. Cost effectiveness is critical to the economic sustainability of the Housing Authority (HA) because decisions on any aspect of the housing programme from design, through construction, to operations and maintenance will have an impact on the public purse. Cost-effectiveness is being achieved through a number of measures, including the divestment of some of our assets and implementing management measures to sustain the useful life of our existing buildings. Management measures to get the best returns out of the HA resources are constantly reviewed. Enforcing better tenancy controls to reduce the abuses of public housing, more efficient maintenance services and hence upgraded assets via the Total Maintenance Scheme and reducing vacancies in flats, are all very important aspects of work.

## GOVERNANCE STRUCTURE & MANAGEMENT

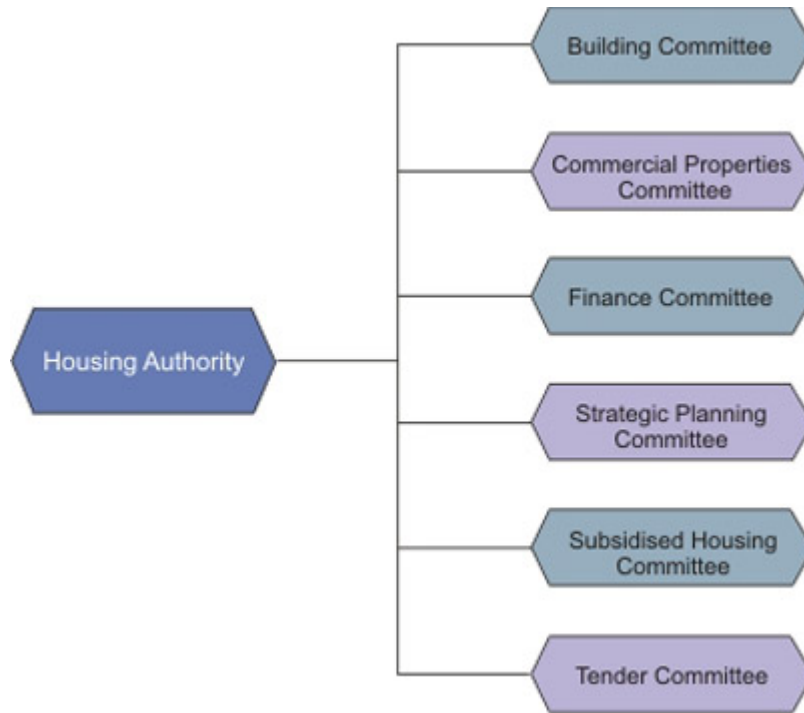
- [Structure and Governance](#)
  - [Housing Department Environmental, Health and Safety Committee](#)
  - [Overarching Policies and Management Systems](#)
- .....

### Structure and Governance

With the re-organisation of the policy bureaux of the Government Secretariat with effect from 1 July 2007, the Secretary for Transport and Housing takes charge of housing policy and assumes the office of the Chairman of the Housing Authority (HA). The Director of Housing assumes the office of the Vice-chairman. The HA has two official members and 29 non-official members as at the end of March 2007, apart from the Chairman and the Vice-chairman. Appointments are made by the Chief Executive. Non-official members are appointed ad personam.

The HA has six standing committees that are responsible for formulation, administration and oversight of policies in the areas of strategic planning, building, tenders, commercial properties, finance and subsidized housing.

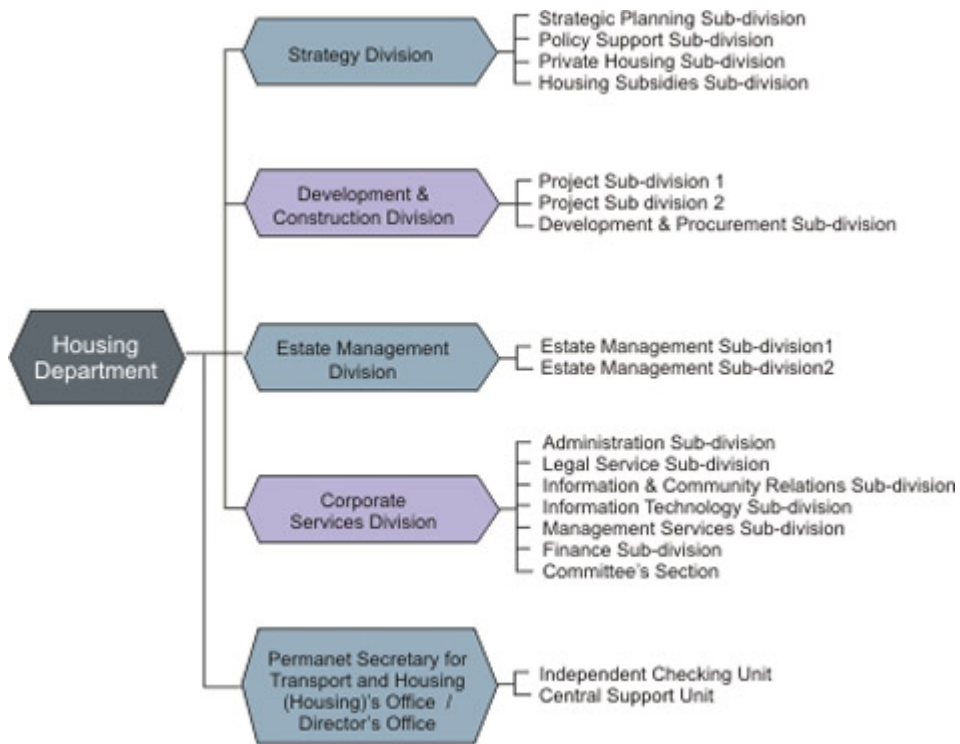
### [Organisational Chart of the Six Standing Committees of the HA](#)



The Housing Department (HD) acts as the executive arm of the HA in implementing its policies and those set by its standing committees. The HD is headed by the *Permanent Secretary for Transport and Housing (Housing)* who also assumes the Office of the Director of Housing.

### Housing Department Organisational Structure





### Housing Department Environmental, Health and Safety Committee

To improve the overall safety and health management in the Housing Department (HD), the scope of the Housing Department Environmental Committee has been expanded to cover safety and health policy. Thus it has been renamed the Housing Department Environmental, Health and Safety Committee (HDEHSC). Its responsibilities are to develop and give policy direction on all environmental, health, safety and sustainability issues within the HD. Since the re-organisation, two further sub-committees (the Housing Department Occupational Safety and Health Sub-committee, and the Housing Department Site Safety Sub-committee) were set up under the HDEHSC to oversee occupational safety and health for employees at their workplace and site safety management measures for works contracts respectively.

### Overarching Policies and Management Systems

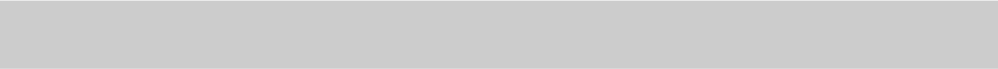


In order to meet our vision for sustainable housing, we are balancing the economic, social and environmental needs and concerns of all our stakeholders. To help achieving this balance, we have formulated our Environmental and Safety Policies respectively. With the active support of all staff, relevant policies on sustainability are systematically implemented throughout the Housing Authority (HA) and communicated to our suppliers and contractors. Sustainability concerns are embedded in our tendering and contracting procedures and implementation of our policies and systems are regularly checked and monitored. We also provide training and undertake promotional events to ensure that staff and contractor competences meet our needs and to raise the awareness of our tenants in general.



**Environmental Policy**

To promote healthy living and a green environment;



To develop a strategic framework and implement environmental management for the promotion of sustainable development;



To strictly comply with and fully implement all relevant environmental legislation and regulations;



To address environmental concerns and incorporate environmental initiatives in planning and design, construction and demolition, marketing and estate management activities;



To minimize environmental impacts from our operations (air, dust, noise, waste and water) on residents and the public;



To develop procurement policies to minimize the use of resources and achieve cost effectiveness;

To promote environmental awareness and participation among staff, residents and contractors through education and publicity programmes; and

To review and seek continual improvement on the implementation of an environmental management system.

#### **Safety Policy**

To provide information on safety and health criteria in new projects and maintenance operations for contractors, the public and other key stakeholders;

To make safety and health performance one of the critical considerations in tender selection for all new and existing building projects;

To build up a safety profile of contractors for continuous assessment of safety performance;

To monitor contractor's safety performance by independent and in-house assessment;

To work through partnership by incorporation of contractors' input in respect of safe construction technology and equipment; and

To promote safety and health issues particularly related to HA projects to enhance the safety and health of all persons involved.

We believe that our vision for sustainable housing in Hong Kong is achievable with business partners and contractors who share our vision. Our procurement principles were developed to guide us in the procurement process to ensure that our partners operate in a sustainable manner.

#### Environmental Procurement Policy

To identify significant environmental impacts of materials and services in use;

To purchase materials, goods and services to specifications that are compliant with relevant environmental legislation;

To include environmental considerations in our purchasing decisions so that, if technically acceptable and economically viable, lower environmental-impact goods are purchased;

To assess the environmental commitment of suppliers, contractors and service suppliers as part of the tender evaluation process, and to reward the best environmental performers;

To require contractors and service providers (where appropriate) to produce Environmental Management Plans in their bids for work, and to evaluate the evidence of implementation as part of the supervision of the works;

To provide feedback and advice, and facilitate training to key suppliers, contractors and service providers on environmental performance and improvement opportunities;



Top

To ensure all staff, as well as suppliers, contractors and service providers are aware of, and act in accordance with, the Environmental Procurement Policy and contribute to the HA's environmental objectives; and

To establish systems, targets and action plans for effective environmental procurement and regular reporting on performance.

## ENVIRONMENTAL PERFORMANCE

- [Estate Landscaping and Greening](#) → [Water](#) → [Air](#)
- [Noise](#) → [Energy](#) → [Waste](#)
- [Control of Hazardous Materials](#) → [Material Usage](#) → [Compliance](#)
- [Case Study: Microclimate Studies](#)

We conduct our operations with consideration for their environmental impacts. Our responsibility for the environment ranges from the construction, maintenance, and operation of our facilities, to the conservation of natural resources.

In an effort to maintain a leading role in protecting the environment, we continually seek opportunities to improve environmental performance. To improve our environmental performance throughout the year, performance targets were set in 2006/07. We have been constantly reviewing these targets while addressing any new issues of concern.

## Estate Landscaping and Greening

Enhancing the comfort and quality of public housing estates as well as their surrounding environment has been one of our continuous priorities. The uniquely compact environment in Hong Kong has posed a challenge of providing aesthetic and healthy surroundings for residents. As a result, we have continued to actively resolve the challenges ahead.

In 2006/07, our landscape architects and Horticultural Team continued their efforts to improve the living environment in our estates through the planting of about 5 300 trees, 587 200 shrubs and 51 600 annuals.

Greening and Landscaping Targets for period 2006/07	Performance
Provide green treatment to newly formed slopes.	Fully Met
Improve the slope appearance in existing Public Rental Housing	Fully Met



(PRH) estates.

Add new vegetation and promote greening in new housing estates to meet the minimum target of 1 tree per 15 PRH flats. Conduct tree surveys to ensure that this is met.	Fully Met

Upgrade the existing landscape in 18 selected PRH estates by improving soft landscaping through the Landscape Improvement Programme.	Fully Met

Enhance greening in PRH estates by allocating open areas in selected estates for setting up theme gardens.	Fully Met

Promote green environment at 24 estates with Estate Management Advisory Committees (EMACs) through the provision of green activities in these estates.	Fully Met

### *Vertical Landscaping and Greening*

A new attempt to establish a pilot vertical green panel system on the external wall of buildings is underway in Phase 4 in Eastern Harbour Crossing Site. Consisting of modular prefabricated external cladding panels that can be moved around, they act as 'trellises', allowing plants to grow on them while providing a green environment and acting as heat insulators as well as noise and dust barriers. The modulated and prefabricated panels enable easy on-site installation and future maintenance work. Trial panels have been installed on site during the construction stage and to be relocated to their permanent location upon project completion.



- Eastern Harbour Crossing Phase 4 Fitted with Vertical Green Panels (under construction)

### *Thematic Gardens*

In 2006/07, the persistent efforts of the Horticulture Team have finally been paid off by the establishment of two thematic gardens, namely, the Anti-mosquito Planting Strip at Sun Chui Estate and the Fruit Garden at Tai Hing Estate.

Attesting to the experience and expertise gained in these activities over the years, our 'Garden of Felicity' display, based on the theme 'Cherishing the Family', won the Gold Award for Design Excellence (Landscape Display) in the 2007 Hong Kong Flower Show organised by the Leisure and Cultural Services Department.

### *Roof Top Planting and Slope Greening*

In order to maximise the available space for enhancing greenery, we have continued to plant vegetation on podium roofs of shopping centres, car parks and low-rise buildings. Major landscape improvement works were conducted by our Horticultural Team in 18 estates including the upgrading of 110 000 m<sup>2</sup> of greenery. In the past year,



green treatment was provided to 350 m<sup>2</sup> of slope area. Improvement to slope appearance has also been carried out at eight estates.

### ***Greening Activities***

In addition, greening improvement activities for 5 000 m<sup>2</sup> were carried out in 24 estates through the EMACs.

Apart from landscaping and greening of housing estate areas, the Horticulture Team also provides basic horticultural and arboricultural training courses to estate frontline staff, as well as promoting greening activities and enhancing residents' awareness of environmental protection. In addition to the efforts by the Horticulture Team, local communities have also been encouraged to participate in planting seedlings in 14 housing estates (See [Stakeholder Engagement](#) section for details).



■ Landscape Improvement in Chun Shek Estate



■ Landscape Improvement in Sun Chui Estate



■ School Children Participated in Landscape Improvement in an Estate

## Water

Managing the drinking water quality and a reliable water supply for Public Rental Housing (PRH) estate residents is paramount to ensuring the safety of water supplies. Therefore, we keep our water supply systems in top condition through preventive maintenance and good services.

We are always seeking opportunities to reduce our water consumption both through raising awareness and through various water saving technologies built into our operations.


Water Conservation Targets for period 2006/07		Performance
Reduce flushing water consumption by conducting trial schemes in new projects.	Fully Met	
Reduce potable water consumption for installations under landlord control in PRH estates.	Fully Met	
Enhance efficient potable water usage in shopping centres by installing self-stopping or movement-sensing water taps during toilets upgrading.	Fully Met	
Record and monitor water consumption at the Housing Authority headquarters (HAHQs) in meeting the target of water consumption to less than that of 2005/06.	Fully Met	

### **Fresh Water Quality Scheme**

In 2003, a Fresh Water Plumbing Quality Maintenance Recognition Scheme was launched by the Water Supplies Department, to ensure the continuing quality of potable water in our buildings. This requires regular monitoring of water supplies in buildings and by the end of March 2007, 1 015 blocks in 148 estates had been certified under the Fresh Water Quality Scheme.

### **Protecting Potable Water Quality**

To safeguard the potable water quality and to tackle the effects of water discoloration due to deteriorated steel pipes, we continue to carry out our ongoing programme of

 replacing the original galvanized steel pipes with copper or unplasticised polyvinyl chloride (uPVC)-lined steel pipes. This is a 13-year plumbing programme, first initiated in 1996/97. In 2006/07, fresh water pipes in 60 blocks were replaced at a cost of HK\$96 million. This brings our total number of housing blocks with replacement of water pipes to 800 by the end of March 2007.

### ***Water Savings***

Reducing water use and water wastage in our estates is a constant priority and challenge. Our long-term goal is to prevent water wastage by improving operational efficiencies and advancing new technologies. That is why we combine a series of best practices that conserve water, use technology throughout our construction and maintenance programmes, and inform our tenants of water saving tips.

To reduce potable water consumption, self-stopping water taps have been installed. A replumbing programme is also in place to reduce the incidence of pipe bursting and leakage. A reduction of 6.17% of potable water consumption against 2005/06 was achieved by the end of March 2007 due to the installation of water saving systems by landlords in PRH estates.

It is now a mandatory requirement for our contractors to implement Water Recycling Systems for all projects involving Large Diameter Bored Piling Works as well as the construction of new buildings, piling and civil engineering projects. During the year 2006/2007, Water Recycling Systems have been implemented in 21 building contracts, resulting in approximately 12% of water saving. In addition, two ground investigation contracts are implementing recycling of flushing water which has resulted in total water saving of 11 300 m<sup>3</sup>.

### ***Water Related Complaints***

In 2006/2007, we received two water related complaints on our contractors due to the cement contaminated water leaking from construction sites. These complaints have been followed up by the contractors and closed.

## **Air**

We continue to incorporate measures to reduce any air quality impact caused by our

operations, particularly during the construction of Public Rental Housing (PRH) estates.

The major air quality impact caused by the construction and demolition works is the emission of dust. The Housing Authority (HA) requires all of its contractors to implement all practicable means to avoid or control dust and exhaust emissions from construction materials, equipment and vehicles. In addition, we continue to apply the pre-casting and prefabrication technology and have recently introduced the "hard-paved construction" arrangements at all building and piling sites.


### ***Reducing Dust Impacts at Construction Sites***

In order to further reduce the air quality impact posed by our construction works, in 2005 we introduced "hard-paved construction" at all our building and piling sites. The practice uses precast concrete slabs or other materials to provide hard paving at the construction sites, thus reducing the accumulation of mud, and therefore dust by the wind and carried by the wheels of vehicles to the vicinity surrounding the sites. Hard paving also facilitate site drainage and enables efficient delivery and storage of building materials. All Piling and Building Works are benefiting from this practice.



■ Hard Paved Construction at One of Our Construction Sites

### ***Odour Control at Refuse Collection Points***

 The HA has training programmes and policies in place to ensure the proper management of refuse collection in the PRH estates. From construction to estate management, these procedures are integrated throughout our operations. By the end of March 2007, 20 packaged deodorizers had been installed in refuse collection points in the buildings to help control odours and prevent nuisance to residents and staff.

#### ***No Use of Ozone Depleting Chemicals***

To comply with the Government's regulation on the ban of the use of ozone depleting chemicals, none of our air conditioning units or chillers use chlorofluorocarbons (CFCs). Our fire extinguishers are also free of halogen gas. Our environmental procurement policy also stipulates no ozone depleting chemicals are to be used in the building materials that we use in new works and maintenance contracts.


#### ***Regional Atmospheric Pollution and Climate Change***

To address concerns on regional air pollution and global climate change, we are actively engaged in finding ways to reduce our energy consumption and carbon footprint. We are an avid advocate of the Action Blue Sky Campaign of the Government launched in July 2006. As new fuel efficient and alternative technologies become widely available and affordable, the HA's long-term goal is to decrease total carbon dioxide emissions produced by our operations. Currently, our efforts are focused on the following measures:

- Using both local and international standards on the use of CFC-free equipment and the implementation of best practices to reduce dust and air emissions;
- Publishing information on energy consumption (See [Energy](#) section);
- Adopting energy efficiency measures in our housing designs in accordance with the Building Energy Codes promulgated by the Hong Kong Electrical and Mechanical Services Department and exploring measures to increase the application of renewable energy; and
- Sharing our experience and knowledge of air pollution reduction measures at both local and international levels through conferences and seminars.

#### ***Air and Dust Complaints***

In 2006/2007, we received three dust complaints and two odour complaints on our contractors. The dust complaints were related to construction site operations and the odour complaints were associated with renovation works. All these complaints have

 been followed up by the contractors and closed out.

## Noise

This year, we continue to implement measure to the reduce noise impact of our operations, mostly from construction sites and from water pumps in Public Rental Housing (PRH) estates. The use of precasting and prefabrication technology not only reduces air pollution but has also reduced the amount of mechanical equipment used on site and therefore the cumulative noise impact.

Noise Targets 2006/07	Performance
Reduce noise nuisance from water pumps in PRH estates by replacing 3 000 rpm water pumps with 1 500 rpm water pumps.	Fully Met

### **Reducing Noise at Construction Sites**

The innovative technology for precast facades, staircases and semi-precast slabs, first used by the Housing Authority in the 1980s, was expanded in our pilot project at Kwai Chung by increasing the extent of use of precast concrete in building works. The construction of the superstructure of the Kwai Chung Flatted Factory, completed in early 2007, has employed precasting and prefabrication technology for 60% of the concrete works. The increased use of precast concrete is expected to reduce the impact on air quality, noise and waste as well as provide safer and cleaner sites for workers.



■ **Advanced Pre-cast Technology Adopted for Kwai Chung Flatted Factory**

Hydraulic concrete crushers, as opposed to percussive breakers, could now be specified for use in our demolition projects, which could significantly lessen construction noise levels. We have also implemented the guidelines for noise-sensitive construction sites.

#### ***Water Pump Replacement***

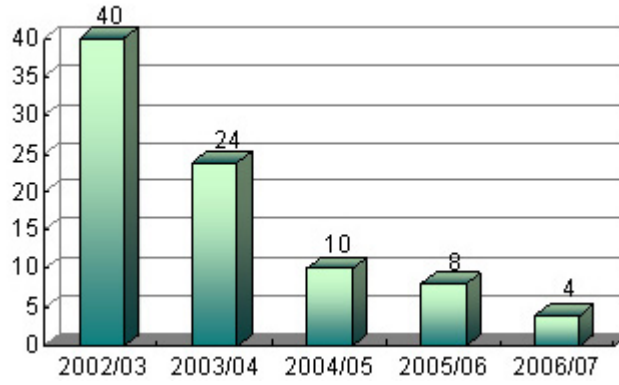
In 2006/07, 16 high speed pumps in PRH estates were replaced with low-noise, low speed pumps to cut noise levels.

#### ***Noise Complaints and Abatement Notices***

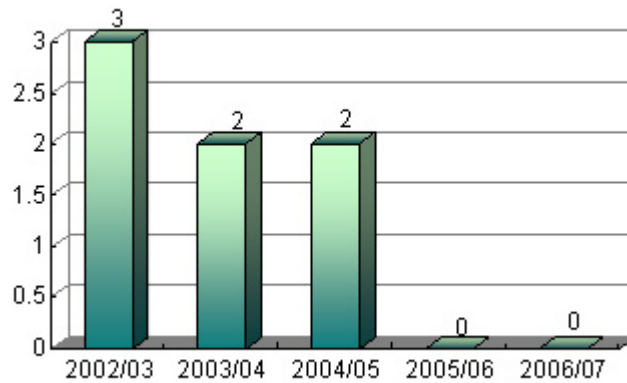
In 2006/2007, we received nine noise complaints, four of which were related to construction works. The number of noise complaints against construction sites has therefore decreased, representing a decreasing trend for the past five years. Other noise complaints were related to renovation, maintenance and repair works. In the same period, no noise abatement notices were issued to the public housing estates by the Environmental Protection Department. All these complaints have been followed up by the contractors and closed out.

### **Number of Noise Complaints Against Construction Sites**





Number of Noise Abatement Notices Received



## Energy

With increasing energy demand and the associated environmental impact, the Housing Authority (HA) has consciously worked towards reducing energy use in our operations, especially in our headquarters, offices and in public areas of the Public Rental Housing estates, as well as enhancing the energy efficiency of our new projects.

Energy Targets 2006/07	Performance
------------------------	-------------

Reduce electricity consumption of landlord services installation in new domestic blocks by adopting Energy Codes and obtaining energy certificates for completed projects. Fully Met

Explore and study application of more energy efficient equipment by completing trial installation of solar powered lamp poles, adjustment of lift counterweight settings and adopting a wider use of T5 fluorescent tubes. Fully Met

Explore and study application of green design for building services equipment. Fully Met

Reduce energy consumption of shopping centres with central air conditioning system by shortening operating hours of the air conditioner and lighting and undertaking initiatives to enhance staff awareness of energy savings. Fully Met

Reduce energy consumption for office premises by performing various energy saving initiatives. Fully Met

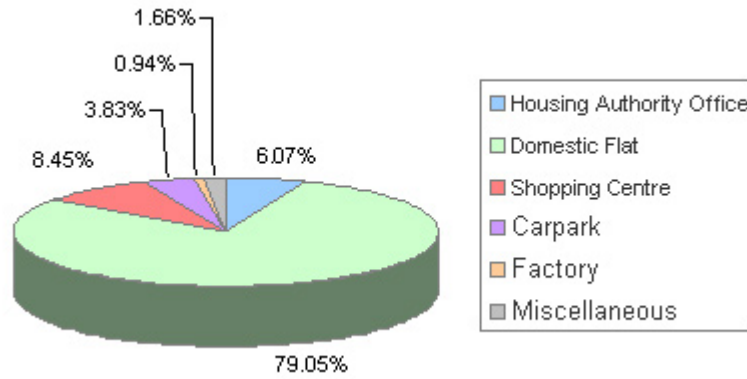
### ***Energy Consumption***

In 2006/07, electricity consumption by our headquarters, offices and all our premises was

643 992 838 kWh, 0.85% less than 2005/06.

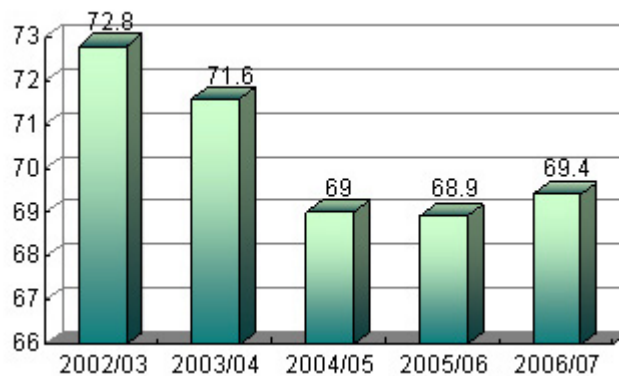
The percentage breakdown of electricity consumption by the HA's different premises is given below.

### ***Composition of Total Electricity Consumption in 2006/07***



Electricity consumption in the public areas of our estates accounted for the highest proportion (about 79%) of our annual electricity consumption. The HA carried out several large-scale energy saving exercises in 2002/03 and 2003/04 that improved energy efficiency dramatically in those years. Compared to 2005/06, energy consumption for public areas in 2006/07 slightly increased from 68.9 kWh to 69.4 kWh per flat per month. This was due to the fact that new buildings with more electrical installations have been developed.

### Energy Consumption in Public Area of Estates (kWh per flat per month)

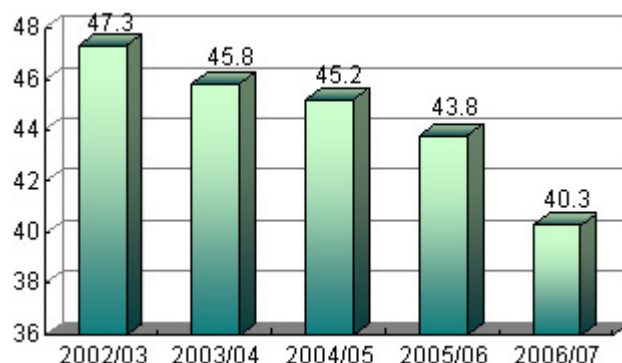


### Renewable Energy and Energy Efficiency

The efficient use of energy in our buildings is a key factor in our efforts to pursue sustainable practices in the provision of housing. Energy consumption in our offices was 40.38 million kWh from April 2006 to March 2007, representing a reduction of 7.88% compared to consumption in 2005/06. In addition to gaining a certificate for our energy saving initiatives under the Hong Kong Energy Efficiency Registration Scheme, we also took the initiative to submit our buildings for assessment under 'BEAM', the Hong Kong Building Environmental Assessment Method, which assesses the performance of the

buildings under comprehensive environmental assessment criteria.

### Annual Electricity Consumption in Housing Authority offices (kWh in millions)



In 2006/07, the HA installed T5 fluorescent tubes at Fanling Area 36 Phase 3 public housing management offices and emergency exit signs at the Lee Yue Mun Phase 2. The use of T5 fluorescent tubes is expected to cut energy consumption by 30% compared that of the ordinary T8 fluorescent bulbs.

To reduce energy consumption in shopping centres, timers have been adjusted to shorten the operating hours of the air conditioning systems for five shopping centres including On Kay Court, Kwai Chung, Hoi Lai, Tin Yan, and Mei Tin. Energy saving measures are also included in circulars and discussed at frontline management meetings to enhance staff awareness.

In line with our energy management policies to conserve energy wherever possible, during the year, we have continued to reduce the use of artificial lighting in areas where daylight provides sufficient illumination.

Apart from the installation of energy efficient products for electrical, lighting and lift installations, we have been actively involved in exploring the benefits of solar power and the potential for their use in various external lighting schemes. We have successfully adopted the use of a solar panel mounted on a rooftop to power two light fittings at a Shatin estate, and two solar-powered lamp posts in an estate in Fanling area. In the redevelopment project of Lam Tin Phases 7 and 8, which commenced in 2006, a solar photovoltaic system has been incorporated into the design, to be located on the roofs of some domestic blocks and on top of the covered walkways to supplement the power supply for some communal facilities. The redevelopment project is scheduled for completion in 2009.



■ Solar Panels Installed for External Lighting

## Waste

As one of the largest players in the Hong Kong construction industry, the Housing Authority (HA) is promoting the need to implement effective waste management by its business partners and following the 4Rs principles: Reduce, Reuse, Recycle and Recover.

Our efforts in waste management at residential properties and in our offices have focused on facilitating the collection and recovery of domestic waste for recycling.

Waste Targets for period 2006/07	Performance
Reduce construction and demolition (C&D) waste and ensure proper disposal by developing a Construction Waste Index	Fully Met

through conducting surveys of C&D waste.

Increase domestic waste recovery rate for paper.	Fully Met
Increase domestic waste recovery rate for aluminium cans.	Fully Met
Increase domestic waste recovery rate for plastic bottles.	Fully Met
Increase domestic waste recovery rate for used clothes.	Fully Met
Reduce domestic waste to 0.7326 kg per person per day.	Substantial progress
Implementation of waste separation at source programme in all estates by phases.	Fully Met
Reduce A3 and A4 paper consumption in all Housing Department (HD) offices by performing various initiatives to reduce paper consumption.	Fully Met
Collect waste paper in all HD offices and implement various initiatives to encourage paper recycling.	Fully Met
Use environmentally friendly paper in printing of all publicity materials (except sales and marketing publications) by implementing its use as a pre-requisite in all printing jobs.	Fully Met

The Wastewi\$e Scheme is a programme to help Hong Kong businesses reduce waste generated on their premises or through their services and products, by setting targets and benchmarking their commitment to waste reduction.

Following assessment by the Environmental Protection Department (EPD) and the Hong Kong Productivity Council, the HA has achieved another year of 'Gold Wastewi\$e Logo' accreditation.



■ Wastewi\$e Logo

### ***Construction Waste***

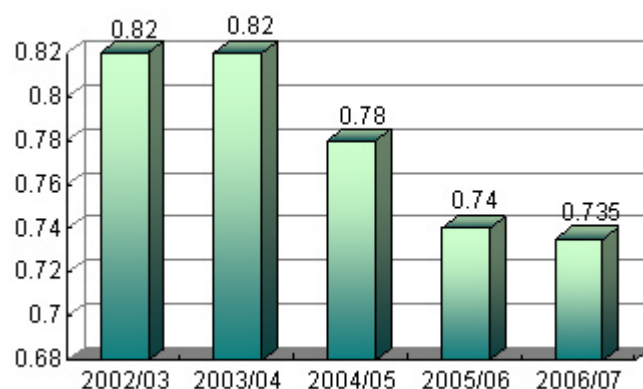
To reduce the amount of construction waste associated with our operations, we had an Environmental Procurement Policy to address the aspects such as the choice of renewable, recyclable or environmental-friendly building materials. We have also undertaken a Life Cycle Assessment and Costing Study of building materials to select those that reduce environmental impact and long-term costs. We encourage simple designs and the use of building materials that are long-lasting and can be easily maintained.

As of 2002, we have required all of our contractors to adopt a comprehensive Environmental Management Plan on site. We stipulate that contractors must separate construction wastes into inert/ non-inert material for recycling as much as possible. The Construction Waste Index has been implemented in building contracts to ensure the measurement of the quantity of C&D waste generated. In general our contractors have carried out proper on-site sorting and have reduced the quantity of C&D material/waste compared with previous years for sites of similar nature.

### Domestic Refuse Production

According to our Waste Reduction Credit Scheme records, on average our residents generated 0.735 kg /capita day of domestic waste in 2006/07 compared to 0.74 kg and 0.78 kg in 2005/06 and 2004/05, respectively.

### Improvements in Residents' Daily Domestic Refuse Generation (kg per person per capita day)



### Domestic Waste Recovery

The following table presents the amount of waste recovered for recycling in Public Housing Estates in 2006/07.

#### Quantity of Waste Recovered for Recycling

Waste	Quantity recovered (tonnes)	Percentage recovered
Paper	13,025.1	12.3
Aluminium	267.7	28.3
Plastic bottles	503.3	6.2
Used clothes	561.5	6.8



The recovery rate for paper is similar to that of 2005/06, whilst there has been a significant increase in aluminium can and plastic bottle recovery. According to EPD records, 269.44 kg of rechargeable batteries were recovered from the Housing Department from April 2006 to March 2007. A scheme on waste separation at source has been implemented since 2005/06 in 60 estates.

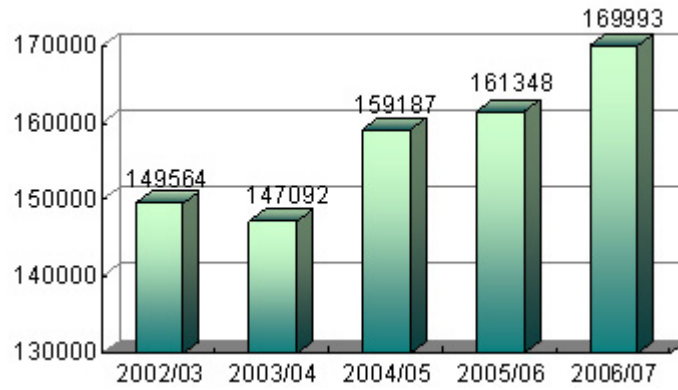


■ Collection Facilities for Recyclables

### ***Office Paper Recovery***

In 2006/07, there was a 1.95% reduction in A3 and A4 paper consumption in HA offices. The amount of waste paper collected from April 2006 to March 2007 was 169 993 kg., an increase of 5.36% as compared to that of 2005/06. Apart from publicity materials, all paper used by the HA for printing is made of recycled paper.

### **Improvements in Waste Paper Collection in Housing Authority Offices (kg)**



**Waste Related Complaints**

In 2006/2007, we received two complaints on our contractors regarding fly-tipping of construction waste. These complaints have been followed up by the contractors and closed out.

**Control of Hazardous Materials**

A target has been set for the past year on the control of hazardous materials with a particular concern on asbestos removal works.

Control of Hazardous Materials Targets	Performance
Further abate the remaining asbestos-containing materials in existing Housing Authority managed properties by implementing an asbestos abatement programme through estate redevelopment programmes and asbestos removal works.	Fell Short

**Asbestos Removal**

A performance target to achieve 1.5% asbestos removal measured in terms of demolition of pre-1986 blocks has been set. Due to adjustment of demolition progress, up to March

 2007, asbestos removal has been carried out at five blocks at Cheung Sha Wan Flatted Factory and four blocks at San Po Kong Flatted Factory, representing only 0.9% of removal for the blocks.

#### **Disposal of Mercury from Spent Fluorescent Tubes**

Mercury-containing lamps are often used in Public Rental Housing; these include all fluorescent lamps and high intensity discharge lamps. Since the release of mercury from broken lamps can contaminate the environment and create health hazards through inhalation or skin contact, we dispose of such items with care and in accordance to the Environmental Protection Department's Guidelines and the Waste Disposal (Chemical Waste)(General) Regulations were applicable. Appropriate measures include proper sealing, packaging, labeling and storage of packaged mercury-containing lamps.


### **Material Usage**

A target has been set for the past year on material usage with particular encouragement on the use of softwood timber doors.

<b>Material Usage Targets</b>	<b>Performance</b>
Use of softwood timber doors in Public Rental Housing (PRH) estates	Fully Met

A target has been set for the use of softwood timber doors in PRH estate in 2006/07 as softwood timber is a sustainable option. We are monitoring the performance in one of our pilot project commenced in June 2006. The research and project teams visited two factories in China in December 2006 manufacturing products with Forest Stewardship Council certified timber. The pilot project will be completed in October 2009.

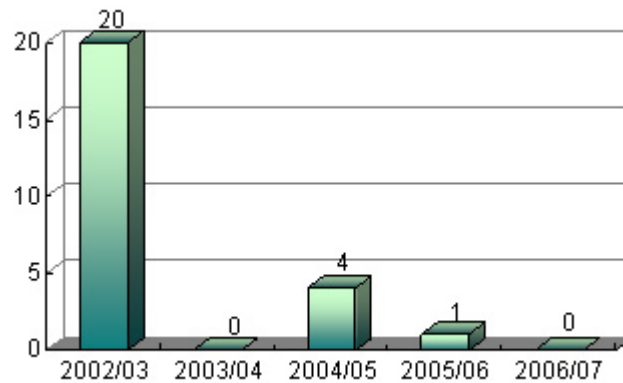
In the past year, we have continued to insist our contractors use reusable metal hoardings, metal formwork and prefabricated building elements. As a result, in the past year we were able to avoid the use of 10 780 tonnes of timber.

 We have continued our use of pulverized fuel ash (PFA) as a partial cement substitute on our construction sites. In 2006/07, our use of PFA saved 15 600 tonnes of cement use.

## Compliance

We continually keep track of our contractors' performance through site inspections. In 2006/07, no environmental non-compliance incidents were recorded.

### Number of Environmental Convictions against Housing Authority Construction Sites



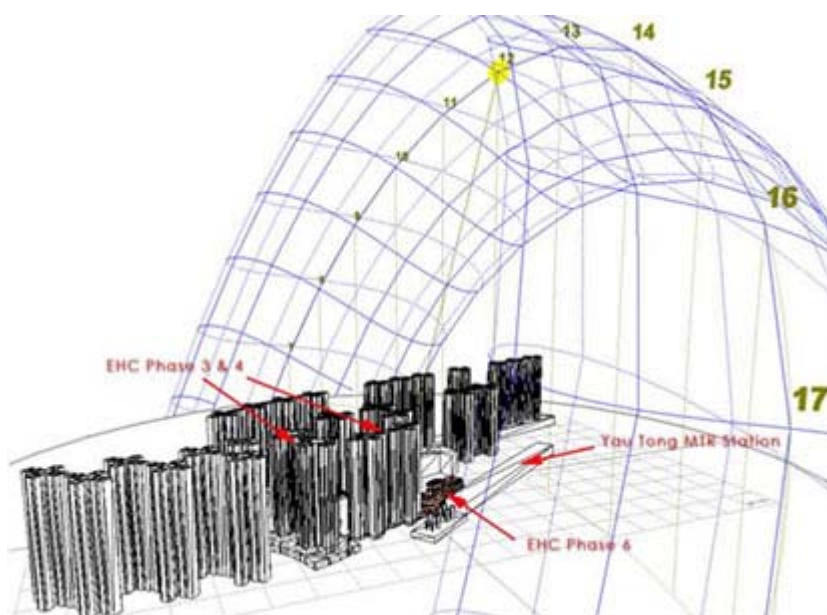
## Case Study: Microclimate Studies

Microclimate studies were first employed in 2001 in the development of site-specific layout plans and building designs for our housing estates. Since 2004, this revolutionary concept was then applied to all projects in the planning and design stage and in a bid to create a healthy, environmentally friendly and sustainable living environment for tenants. Using sophisticated computer simulation models with the application of computational fluid dynamics, these studies provide details of a site's overall environment and surroundings, such as wind speed, air flow, daylight angle, shading area, heat generation and retention, traffic noise and the dispersion of pollutants of individual sites. The results provide information for designers to determine the best disposition, location and orientation of individual buildings, as well as the best utilisation

of the site. These factors are then taken into consideration in refining the design of the development to create an environment where the use of natural daylight, cross ventilation and the flow of air, as well as the dissipation of heat and pollutants, are optimised to create a more pleasant, clean and green environment for residents. The studies also enable the planning of the most suitable areas for outdoor activities within the estates and the planting of greenery to achieve the greatest benefits in the moderation of temperatures, the provision of shade and the protection against wind. Designers can thus optimise the development potential of our sites without any "wall effect".



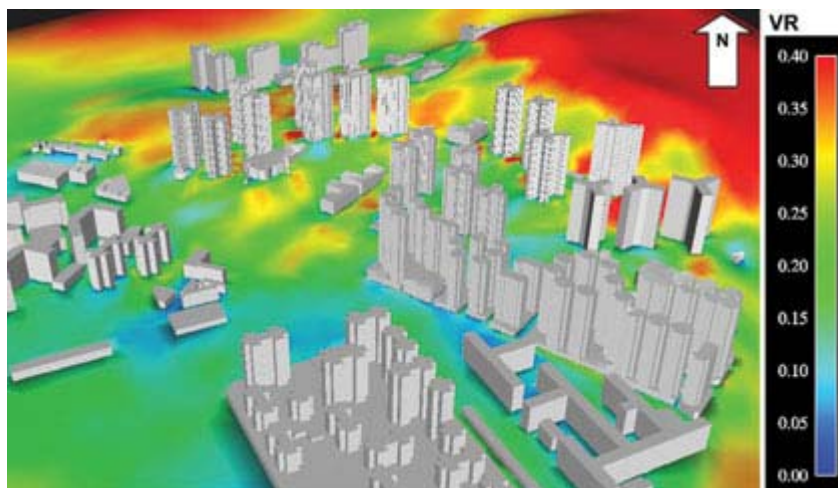
- Urban greening design approach with enhancement of building permeability



With the microclimate data, we can also custom-design environmentally friendly precast facades for each flat with glazing, ledges, fins and other features that address orientation, sun-penetration, wind direction and noise abatement. These are now being implemented in a number of pilot projects. With the incorporation of these key elements into the building designs, our tenants can enjoy a comfortable and healthy environment with an optimum level of natural daylight and ventilation in their flats ultimately leading to reduced energy consumption and cost.

The Upper Ngau Tau Kok Estate Redevelopment Phase 2 and 3, which is scheduled for completion at the end of 2008, is the first estate that has adopted microclimate studies in its design. All new estates due for completion with effect from 2009, will benefit from the application of microclimate studies.

This novel concept has been followed with interest in the building industry. The Planning Department has also mandated the requirement of Air Ventilation Assessment at prescribed sites. This Housing Authority initiative won the Hong Kong Institute of Architects' Special Architectural Award for Architectural Research in 2006 and a merit award at the Hong Kong Institute of Planners Award 2007.



■ Air Ventilation Assessment Study for Choi Wan Road Housing Development

 **SOCIAL PERFORMANCE**

- [Safety](#)
  - [Hygiene and Health](#)
  - [Employee Development](#)
  - [Our Contribution to Society](#)
  - [Case Study: Tsz Ching Estate Green Property Management](#)
- 

The provision of affordable quality housing while improving quality of life is about working with the community to foster greater social prosperity and encourage individual achievement. This cooperation results in trust and collaboration, performance and accountability, and careful, attentive services to our tenants and homeowners.

We hope to provide our service responsibly, efficiently and cost-effectively as possible. Safety at construction sites and in our estates remains a major focus of our social programmes. Various measures have also been implemented to help to improve hygiene and the health of our tenants, most notably the inclusion of new health related requirements into the Marking Scheme for Estate Management Enforcement in Public Housing Estates.

### Safety

The safety of our people and of the general public is of utmost importance to us. We train our people to avoid injury to themselves and others in all phases of their work and we do not tolerate unsafe work practices.


We encourage the involvement of all of our people in safety awareness activities and we give recognition to employees for safety accomplishments. We are committed to fostering the most effective safe practices in all of our work.

By meeting our own high safety standards, we contribute to the well-being of our people, our organisation, and the communities we serve.



Safety Performance Targets for 2006/07	Performance
Continues to tighten monitoring of contractors with high accident rates.	Fully met.
Extend the Pay for Safety, Environmental and Hygiene Scheme to building services subcontracts.	Fully met.
Continue to hold regular seminars on audit findings and best practices with the participation of contractors and project teams.	Fully met.
Continue to partner with industry stakeholders in participating in territory-wide safety campaigns and publicity	Fully met.
Improve the safety of office operations with potential health and safety risks.	Fully met.
Continue to provide safety training to staff.	Fully Met.
Consider expanding the Silver Card training and requirements to maintenance and improvement work contracts.	Fully Met
Issuance of consolidated safety manual and design checklist.	Substantial progress.
Keep accident rate to be below 25 accidents per 1 000 workers.	Fully met.



 Safety has always been a priority for all of our employees, contractors, and tenants in our daily operation. Even as we continue to increase the level of technological sophistication in our operations, the key success factor lies in our care for people.

### [Housing Department Site Safety Sub-committee](#)


Understanding that safety depends very much on the cooperation of our employees and business partners, we established the Housing Department Site Safety Sub-committee (HDSSSC) with the participation of employees, government departments, contractors' associations, worker unions and other related organisations to foster a greater focus on safety. Tasked with the job of reviewing and advising on site safety management measures on all HA construction and maintenance contracts, the HDSSSC holds meetings with stakeholders at half-yearly intervals to review site safety measures. The first meeting was held in November 2006 with more than 30 participants.

### [Housing Authority Safety Audit Scheme](#)

This year, we continued to implement the Housing Authority Safety Audit Scheme, developed and operated since 1996, to assess the site safety performance of our contractors in new projects. The auditing system has been reviewed regularly in respect of its coverage and safety standards. Given the steady improvements in safety performance over the years, the safety auditing system has been further upgraded, with the following highlights in 2006/07:

- Expanding the scope of safety audit to cover the safety performance of Building Services Nominated Sub-contracts
- Linking the safety audit performance to payment for site safety items under Pay for Safety, Environment and Hygiene (PSE&H) Scheme, with the score banding for payments according to the level of performance achieved in the safety audit
- Adjusting the scoring under the Serious Accident component of the PSE&H Scheme to take into account the seriousness of accidents. Tenderers who suffered such mishaps in the past have been placed under "quarantine" with the issue critically examined before a contract is awarded
- Increasing the weighting of audit scores in the effectiveness of physical implementation of safety
- More emphasis on high risk or high accident rate activities.

### [Safety Consideration in Procurement](#)

 Management and mitigating risks is vital to project success in the interests of site safety. Competent contractors are those who can excel and sustain continuous improvements in site safety. We have been continuously reviewing and enhancing our measures to secure competent and reliable companies. During the tender evaluation, tenderers past safety records will be taken into account as part of the Performances Scores under the Preferential Tender Award System. For maintenance contracts, good safety record has been incorporated in the selection of tenderers. Contractors with poor safety records would have less chance for tendering our projects.

### [Performance Assessment Scoring System](#)

In addition, our Performance Assessment Scoring System (PASS) plays an invaluable and systematic role in assessing, monitoring and measuring the effectiveness of our building contractors. At the end of 2006, the average PASS score improved by almost 4% compared to figures at the end of 2002. Site safety assessment under PASS has been further strengthened in 2006/07 through the following additions:

- Incorporate better standards for safe practices on site
- Address safety of temporary electrical installations
- Differentiate Green Card and Silver Card compliance

Meanwhile, the Building Services PASS, first launched in 2002, also improved by 13.4%, 13.2% and 3.2% for electrical, fire services and water pumps, as well as lift and escalator installations during the period. Extending the value of this system, Piling PASS, relating to piling sub-contractors, was introduced on a trial basis in late 2006.

### [Site Safety Standards and Monitoring](#)

As a major public sector client, the Housing Authority has taken an active role in upholding site safety standards. We have continuously rolled forward initiatives to motivate contractors to improve their safety performance, develop safe working conditions on site, enhance safety awareness and foster best work practices. We continue to focus on our Site Safety Strategy, first endorsed in 2000, tightening specification requirements and strengthening tender and contractual controls to ensure that safety is maintained to the highest standards at our sites. Our Site Safety Strategy essentially relates to construction works that encompasses 40 initiatives under five focus areas (Please see [note](#)).

### [Environmental, Health and Safety Construction Practices](#)

As Hong Kong's largest property developer, we seek to lead the industry with environmentally friendly, healthy and safe construction practices. We have taken another step forward in this direction with the introduction of 'hard-paved construction' at all our building and piling sites, thus creating a cleaner, safer and more efficient site.



■ **Hard Paved Construction at One of Our Construction Sites**

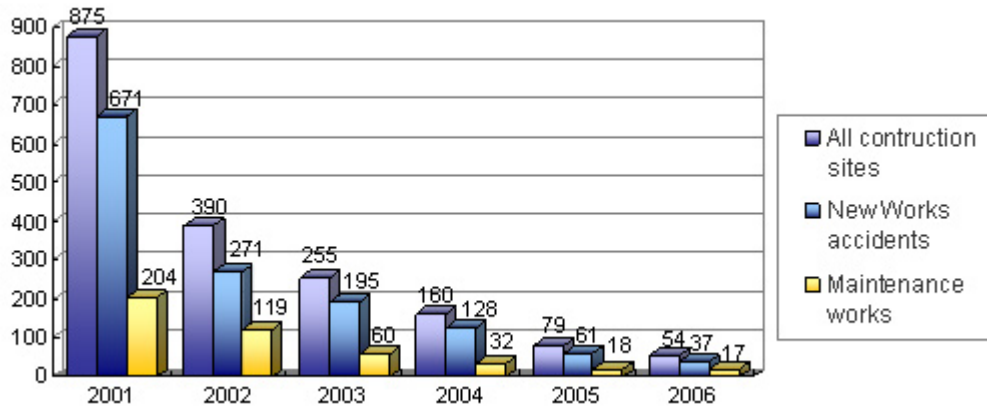
Our pilot project, exploring the greater use of precast concrete in the building progress proceeded apace in 2006/07. The use of precast concrete also reduces any associated health risk on-site (Please see the [Environmental Performance, Noise Section](#) for further details).

### [Safety Indicators](#)

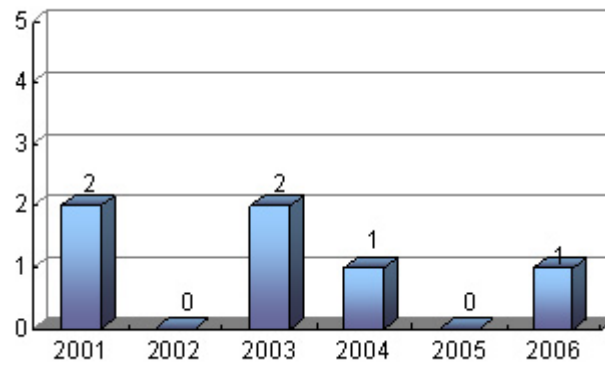
Our safety indicators demonstrate that our safety initiatives and programmes achieved our annual goals. These measures have helped drive down accident rates significantly. Performance of New Works Contracts has improved from an accident rate of 55.8 per thousand workers in 2001 to 11.5 in 2006 (Please see [note](#)). Our figure compares favourably with the overall industry average, where the accident rate per 1 000 workers stands at 64.3 (Labour Department, Hong Kong Government) in 2006.

[Top](#) Despite our safety initiatives, controls and procedures, one fatal accident occurred in a district term maintenance refurbishment contract involving demolition works, in which a section of a partition wall abutting the ceiling fell and struck a worker.

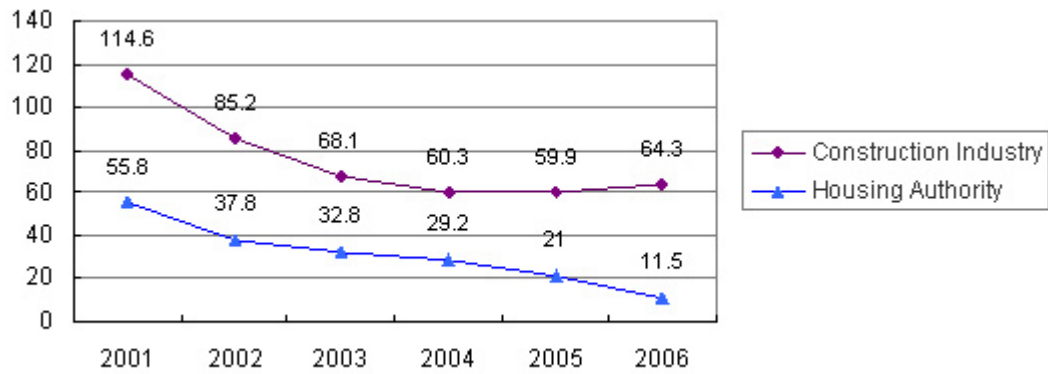
### Accidents at Housing Authority Construction Sites



### Number of Fatalities



### Accident Rate for New Works per 1,000 worker compared to Local Construction Industry Average



### *Building Safety, Quality, and Maintenance*

Because of the physical nature of many of our services, safety in our estates has always been a significant challenge and a top priority. As such, we have developed and implemented the following policies and programmes in 2006/07 to ensure the health and safety of our tenants.

### *Estate Improvement Programmes*

Supporting the Total Maintenance Scheme and the Comprehensive Structural Investigation Programme, our Estate Improvement Programmes seek to improve the quality of life of our residents with the modernisation and improvement of facilities in our estates. Initiatives range from work carried out for the visually and physically impaired, such as the installation of additional lifts or the modernisation of lifts, better or more energy efficient lighting to the provision of leisure and landscaping facilities.



■ **Total Maintenance Scheme Repair Activities**


*Redecoration* – Maintaining our estates in tip-top condition, the redecoration of 11 estates proceeded smoothly. A new Colour Advisory Review Panel was set up during the year to provide specialist advice on colour schemes, oversee redecoration projects and review customer feedback.

*Improved Water Quality* – A long-term plumbing programme to replace galvanized iron fresh water pipes with non-ferrous pipes in our existing domestic blocks was launched in 1996/97. During 2006/07, fresh water pipes in 60 blocks were replaced at an investment of HK\$96 million. By the end of March 2007, the fresh water pipes in 800 blocks had been replaced.

*Water Supply Systems* – Continuing the improvements to our water supply systems, 15 pump rooms were renovated in seven estates. To date 278 pump rooms have been renovated under this programme.

*Electrical Wiring* – In 2006/07, the electrical rewiring programme inside domestic flats was rolled out in nine estates. A total of 7 818 flats were rewired with wiring accessories upgraded to the latest statutory standards and the number of sockets increased to suit tenants' requirements.

*Lift Modernization Programmes* – These programmes progressed smoothly in Tai Hing, Shek Kip Mei and Wo Che Estates. In total, 33 lifts have been constructed. In

 response to requests from the public, we are also conducting feasibility studies, looking into the structural aspects as well as tenant needs, to add lifts into various low-rise domestic blocks, which are currently without lift services.

### Marking Scheme for Estate Management Enforcement

Our Marking Scheme for Tenancy Enforcement in Public Housing Estates aims to ensure that our tenants behave in a socially responsible manner. The Scheme allots penalty points or a fixed penalty fine for tenant behaviour which causes danger or a nuisance to other residents or is detrimental to our estates. The Scheme has been renamed as 'the Marking Scheme for Estate Management Enforcement in Public Housing Estates'. Three more hygiene-related misdeeds – "causing noise nuisance", "damaging or stealing the Housing Authority's property" and "smoking or carrying a lighted cigarette in enclosed common areas, including public lifts, lift lobbies, corridors and staircases, in a domestic building" – were added to the scheme. The new measures took effect in January 2007. These changes are in place to reflect an increased scope of the scheme to consider health aspects of Public Rental Housing (PRH).

Between the scheme's inception in 2003 and end of March 2007, a total of 5 645 cases relating to 5 431 households have received penalty points. Ten households have accrued 16 or more points under the marking scheme. As a result, nine Notices-to-Quit have been issued and one tenant submitted a Notice-to-Quit himself.

Social Performance Target for period 2006/07	Performance
Continue implementation of the Marking Scheme in all Public Rental Housing (PRH) estates and factories to enhance the living and factory environment respectively.	Fully met.

### Property Service Agent Management

In order to maintain the property management services provided to PRH by outsourced private management companies, a Property Service Agent (PSA) Review Committee has been established to monitor the PSA performance. This year, the performance scoring system has been reassessed to balance the considerations of the Housing Department staff, the Estate Management Advisory Committees (EMACs) and the tenants. We also implemented a series of regulatory actions to deal with varying levels of

 [Top](#) underperformance.

Similarly, the performance of service contractors is assessed against a point system with local tenants, Housing Department staff and EMAC members providing separate scores on performance. The resulting score plays a major consideration in decisions on the extension of contracts and in the awarding of tender opportunities for future projects.

As part of the letting strategies for providing greater flexibility for tenants, immense effort has also been invested into redesigning spaces into community centres and services that will benefit the community. (See the [Case Study](#) for further details)

### [Universal Design and Barrier-free Access](#)

To improve the quality of life of our tenants and meet the diverse needs of our community, since 1998 we have incorporated the principles of barrier-free access into the design of all our projects. Extending this concept into the home, universal design principles have been incorporated into all building common areas and into individual flats since 2004. These design developments facilitate easy access for tenants with special needs (eg the young, the old, and the handicapped). In addition to providing a safe and accessible environment for tenants with special needs, the design developments also help foster a sense of community as they allow existing residents to "age in place" and the physically and visually impaired to live safely and independently within the community.





■ Barrier-Free Access Design in Practice

Apart from barrier-free access, provisions brought in under this concept also include tactile paths, tactile guide maps at strategic points, audio and visual information, safety

 features in the home as well as specially designed play areas for children. These are now standard provision in all new estates and a programme is in place for modifications to existing estates to meet the latest standards. We also carry out home modifications for the aged or disabled residents based on advice from occupational therapists and supported of a medical certificate. Improvement works for the visually impaired also commenced in existing estates in early 2006.

### [Enhancing Fire Safety](#)

Fire safety is a key priority in our activities. As such, we continued to upgrade our fire service installations, especially our fire alarm systems in public housing estates. Damaging or stealing such service installations was included as a misdeed under our Marking Scheme for Estate Management Enforcement in Public Housing Estates from January 2007.

## Hygiene and Health

Our safety and environmental policy also covers hygiene and public health quality. We strongly believe that healthy and secure public housing will promote social cohesion and economic prosperity. More specifically, we have implemented the following measures to improve the hygiene and health of our stakeholders and mitigate the impact from our contractors' operations.

### *Smoking Restriction*

With the implementation of the new anti-smoking laws in early 2007, we have extended the smoking restriction to all common areas, both indoors and outdoors within housing estates except at designated outdoor smoking areas. This is to ensure that such facilities will result in minimal disruption and nuisance to other estate residents. To cater for the need of persistent smokers in housing estates, the Subsidised Housing Committee, also endorsed the setting up of designated outdoor smoking areas in estates in consultation with the Estate Management Advisory Committees ensuring that such facilities will cause minimum disruption and annoyance to non-smoking estate residents.

### *Drainage Improvements*


We developed a new "common W-trap design" in collaboration with the City University of Hong Kong to address the drainage problems associated with dried-up floor traps in the above ground drainage systems, which were identified as a contributory factor in the spread of the Severe Acute Respiratory Syndrome (SARS) virus. The new design has now been implemented in all two new projects and a Technical Guide has been produced to facilitate installation in future new projects.



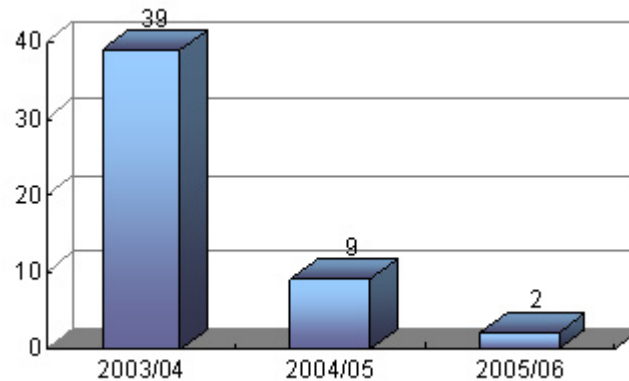
■ The Common W-trap Design to the spread of disease

### *Mosquito Control*

Mosquitoes cause a great nuisance to the public, and some species, such as *aedes albopictus*, pose threats to public health as vectors of diseases like dengue fever. The Government established the Monthly Ovitrap Index (MOI) in 2005, which reflects the territory-wide situation of *aedes albopictus*. We have long been supporting the Food and Environmental Hygiene Department in preventing the breeding of mosquitoes. Measures for mosquito control included inspections of mosquitoes breeding 'black spots' to assess the problem in our estates, trimming of overgrown vegetation, clearing of blocked drains and paving of uneven ground in estates to eliminate the potential for breeding of mosquito larvae. Mosquito-catching apparatus have also been placed in strategic locations at PRH estates in high MOI districts.

 We have initiated training and public events to promote awareness amongst our staff, contractors and tenants through seminars, posters, inspection checklists, meetings and telephone hotlines to provide information and assistance on the control of mosquito breeding. As a result, the number of convictions for mosquito breeding from our construction sites has been significantly reduced in recent years.

**Number of Convictions for Mosquito Breeding from our Construction Sites**



## Employee Development

Attracting and retaining a skilled and motivated workforce is essential to our organization. We offer competitive compensation and benefits, invest in the skill development of our people through comprehensive training and development programmes which promote life-long learning opportunities.

### *Training for Employees and Contractors*

Training is the cornerstone of safety in the Housing Authority (HA)'s operations. General safety training courses are regularly organized and self-learning packages are available for all HA staff to familiarize themselves with the current practices and statutory requirements, and to enhance their hands-on skills. In 2006/07, 34 classes were held covering 9 training modules, attended by 660 departmental staff. These included green card refresher courses, courses on safety training for

certified workers in confined spaces, safety management in alteration of buildings and risk management in temporary works.

In line with our succession planning, individual-tailored training programmes are offered to staff with high potential for greater responsibilities. Training programmes include leadership skills, interviewing and investigating skills, management development, handling family violence, prevention of suicidal acts, as well as patriotic education programmes. The average training provision assigned for such staff members for 2006/07 was about HK\$1 600 per person.



■ Training of Employees and Contractors

In addition, we provide subsidies for our staff to pursue continuing professional education outside of office hours. To inject fresh impetus into our management work, we also arrange overseas training for our staff.

On a general level, our e-learning portal continues to go from strength to strength. During 2006/07, a number of new web-based courses including procurement in estates, cleansing and security contractors, maintenance and inspection of plumbing and drainage systems were developed and uploaded onto our e-learning platform, enabling our staff to gain easy, convenient and 24 hour access to this knowledge sharing experience.

Driving more professional services, we collaborated with the Hong Kong Polytechnic University to run a part-time Certificate Course in Public Housing Agency Management. We sponsor half the course's tuition fees for 475 property officers nominated by Property Service Agents (PSAs) to encourage PSA staff to participate in the programme.

### *Securing Workers' Payment and Rights*

#### [On-demand Bond](#)

To empower the HA to make direct payments to workers for outstanding wages in proven cases of default by a contractor or sub-contractor, we extended the requirement for an On-demand Bond in all new work contracts in October 2006. This bond can be used to secure payment of staff wages in arrears by overcoming constraints imposed by the law on insolvency if the contractor or sub-contractor in question proceeds to liquidation or is being wound up.

#### [Corporate Structure and Remuneration Package](#)

Seeking to build a leaner and more dynamic organisation, a target was established to reduce the HA's establishment by 3 500 posts. As a result, 3 471 posts were deleted over a five-year period from 1 October 2002 to 31 March 2007. With the completion of this exercise, no further substantial changes to our establishment are expected.

In 2005, we commissioned a consultant to look into the remuneration package of the HA contract staff. As a result, salaries for our contract staff were revised in line with the

consultant's findings and market conditions in 2006/07. Greater flexibility in staff recruitment and retention was also introduced to deal with situations where there is high demand for a particular skill in the market. We are also working on a performance-based salary progression scheme for our contract staff which will both motivate and reward staff for service excellence.

### [Protecting the Rights of Non-skilled Workers](#)


We have introduced stringent measures into services contracts to protect the wages, working hours and the rights of non-skilled workers. We are taking a hard line in demonstrating our determination in this direction. From 1 May 2006 onwards, a service contractor convicted under the relevant government ordinances or who has received three demerit points in a service contract will have his or her service contract terminated immediately. Additionally, a contractor who has such a conviction or a total of three demerit points from one or more government departments over a rolling period of three years will be removed from our list of approved contractors for a period of up to five years.

Our Central Monitoring Team also took a proactive role, conducting investigations into possible instances of non-skilled worker exploitation. During the year, 2 183 employment records pertaining to 53 cleaning and security service contracts in 37 estates were checked and 1 563 non-skilled workers were interviewed in the detection and prevention of any such exploitation. We also helped non-skilled workers to learn about their rights and the contract conditions of their employment through the provision of printed information, interviews, seminars and briefings as well as information hotline. We hope that these stringent measures will send out clear messages that we will not tolerate exploitative actions of any kind and that quality and sustainable services are only possible with an equal commitment to social responsibility.

### [Caring for Contract Workers](#)

Apart from HA's direct employees, the nature of our service also involves a large number of contractors. It is our responsibility to protect the welfare of the people who are employed both directly and indirectly by the HA. Previously, three HA building sites have experienced contractual problems including the failure of the contractors to meet contractual obligations and reports that their workers were not being paid. Last year we have regained these sites and after intensive negotiations, the projects were re-awarded in May and June 2006.

In order to protect the workers under the initial contracts, the new contractors were required to employ at least 80% of the original subcontractors. Benefiting from workers

 with extensive knowledge with the projects and the improved site conditions, the construction work proceeded smoothly. The resulting progress has been extremely satisfactory with all three projects well on track.

### [Working Group on Monitoring Wage Payment to Workers](#)

As a result of our activities with regard to the termination and re-tendering of three construction contracts in 2005/06 and the intensive negotiations held at that time with the Labour Department, the Environment, Transport and Works Bureau as well as industry representatives, all new building and demolition contracts tendered from May 2006 onwards include a number of wage monitoring measures. Measures such as the keeping of proper worker attendance and payment records, the provision of a Labour Relations Officer on site, as well direct payment to workers in case of default have helped protect the interests of workers and provide them with a more secure working environment.

The Working Group on Monitoring Wage Payment to Workers was established by the HA in December 2006 to secure wage payments to workers. The group consists of workers, employers and representatives of government departments.

## Our Contribution To Society

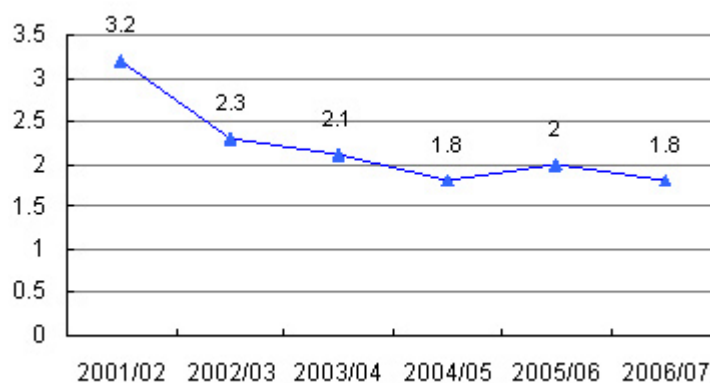
Since the establishment of the Housing Authority (HA), we have taken the community's needs as our priority. We pay particular attention to those in need and aim to provide them with a comfortable and good quality living environment. We do so by carefully managing and allocating available housing resources, identifying and shaping policies for those with imminent needs. We have extended our efforts to conserving housing heritage and revitalising assets for the enjoyment of not only our tenants, but also for the general public.

### [\*Housing Management and Allocation\*](#)



During 2006/07, the HA continued to provide subsidised rental housing to those who cannot afford to rent accommodations in the private market. It has also assisted the Government in maintaining the Average Waiting Time for Public Rental Housing (PRH) for the last four years. The overall average waiting time for general PRH applicants and elderly one-person applicants, was maintained well within the Government's pledge of three years and two years, respectively.

Trend of Average Waiting Time for Public Rental Housing Applicants (years)



To ensure housing resources are efficiently allocated, we have effectively utilised the Tenancy Management Module of our Estate Management and Maintenance System. In addition, our District Tenancy Management Office and a special unit, the Public Housing Resources Management (PHRM) Sub-section are working closely together to demonstrate excellent progress in liaising with other government departments (eg the Police, the Customs and Excise Department, etc.) to ensure appropriate housing resources allocation and prevent the abuse of such resources.

Some of our major achievements during 2006/07 include the following:

- PHRM carried out in-depth investigations into about 5 500 suspected tenancy abuse cases and supported regional management in checking into suspected cases of housing abuse. As a result of these investigations and activities, 9 129 PRH units were recovered for re-allocation to waiting applicants;
- We conducted an Express Flat Allocation Scheme in the latter half of 2006 to allow quicker access to PRH especially for those wishing to be rehoused promptly. The Scheme has not only increased the efficiency of housing

allocation but also improved the letting rate of our less popular flats. The results were extremely encouraging with the successful letting of 3 533 flats to eligible applicants in 2006/07;

- The PHRM conducted stringent checks on some 4 200 cases to determine the eligibility of public housing tenants for subsidised housing according to the Housing Subsidy Policy, the Policy on Safeguarding Rational Allocation of Public Housing Resources and the Grant of New Tenancy and Tenancy Management Policies;
- 18 700 flats were allocated to Waiting List applicants (among which 3 716 elderly households were expedited through various priority schemes), bringing the total number of PRH flats in use to 677 800 by the end of March 2007. A further 18% were living in 380 500 flats under the HA's subsidised home ownership schemes;
- 520 overcrowded households were successfully re-housed into larger flats through two Territory-wide Overcrowded Relief exercises. Through the Living Space Improvement Transfer Scheme, first launched in January 2006, 1 254 households were re-housed and 4 551 lettings were made as a result of this special transfer. This programme allows tenants living in a flat area below 7 m<sup>2</sup>/person to move into a larger home. At the end of March 2007, the number of overcrowded households had dropped to 4 587 or 0.71% of the total PRH homes;
- 545 more affluent tenants, including 241 families who purchased their own homes under subsidized home ownership schemes, returned their PRH flats to us;
- 560 households were relocated and re-housed as a result of the clearance of 390 illegal rooftop structures in single staircase tenement buildings as well as 160 squatter dwellings;
- In November 2006, we endorsed a 2007/08 programme of activities to review policies encouraging adult children and young families to live with their elderly parents or relatives, together with existing priority schemes such as the Elderly Persons Priority Scheme and Special Scheme for Families with Elderly Persons. These initiatives, which can advance PRH allocations by a maximum of three years, aim to foster the well-being and caring the elderly by encouraging families to live with, and take care of, their elderly relatives;

- In December 2006, we introduced the Accelerated Refurbishment-On-Demand process to speed up the reletting and refurbishment of vacant flats. Prospective tenants, who opt for the Vacant Flat Refurbishment Allowance under this scheme will have their new homes handed over within 14 days of their acceptance of the flat. This initiative has shortened the re-letting period significantly, which falls from 57 days to 34 days on average;
- Our Comprehensive Redevelopment Programme (CRP) to clear a total of 566 old housing blocks is also proceeding on schedule. The CRP is nearing completion with 550 blocks or 97.2% of the total number being cleared by the end of 2006/07. The programme aims to provide a significantly improved living environment for tenants; and



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- **Comprehensive Redevelopment Programme clearing old housing blocks**

- The use of Housing for Senior Citizens (HSC), an earlier type of housing with shared facilities built for the elderly, has been optimised by converting surplus units into normal PRH and thus increasing the available PRH stock for allocation to waiting-list applicants. To ensure the smooth implementation of the HSC conversion programmes in the right pace, about 500 of these units will be converted into normal PRH flats every year.

### *Convenient Payment Method*

Making it easier for tenants to pay their rents and in a bid to reduce rent arrears, our

Alternative Counter Collection Channel came into service in March 2007 to facilitate more convenient rent payment by tenants. The service enables our PRH tenants to pay their rents at more than 760 convenience stores throughout Hong Kong. Hand-in-hand with this service, a Rent Enquiry Hotline, providing information on a tenant's current payment status and payment history for the past six months, was also opened. Additionally, a pilot Auto-dialling Rent Reminder was rolled out in 28 estates in March 2007. The service reminds tenants who have payments outstanding through either a short message service or a recorded message, to settle their rents promptly.

A Direct Rent Payment arrangement with the Social Welfare Department has been implemented in mid-2007. Under this scheme, rental payments can be made directly to the HA for tenants receiving Comprehensive Social Security Assistance.

### *Making Use of Public Spaces*

To make the best use of public spaces, action has been taken to redesign spaces into community facilities for services that will benefit the community.

One such example is the letting of space to non-profit-making organisations under the "Enhancing Self-Reliance through District Partnership Programme" established by the Home Affairs Department. Under this initiative, non-profit-making organisations are able to get funding from the scheme to assist in their work to help alleviate district based poverty, assist socially disadvantaged groups and provide support services to needy groups. Leasing applications in Pak Tin, Shek Pai Wan and Kwai Chung Estates are currently being processed.

Other examples of redesigning spaces to meet the needs of the community include the conversion of the top floor of the car park in Tin Heng Estate into an integrated children and youth services centre, the leasing of Chak On Market as a continuing education and community college, the successful conversion of former Chinese restaurants at Kwai Shing West and Wah Fu (II) Estates into residential care homes for the elderly as well as the conversion of part of the car park at Nam Shan Estate into a cultural and arts centre.

### *Heritage Conservation*

With the ever increasing constraint on land availability and therefore heritage conservation opportunities, we are seeking to maintain Hong Kong's housing heritage with conservation programmes. A prime example is the conservation of Mei Ho House at Shek Kip Mei Estate, one of the oldest six-storey resettlement blocks built in the

1950s, which received a Grade I Historical Building designation from the Antiquities Advisory Board in 2005. To make sure that the building will add value to the community rather than becoming a burden, we have invited the Hong Kong Institute of Architects, the Hong Kong Institution of Engineers, the Hong Kong Institute of Planners and the Hong Kong Institute of Surveyors to work with us in organising an idea competition in 2007 to invite the views of the public on the best use of Mei Ho House and its surroundings, with the redevelopment of Shek Kip Mei Estate.



■ Conservation of Mei Ho House

### *Management of Commercial Premises*

We continue with the renovation and improvement works at our commercial premises to enhance facilities and ensure that they are on par with other shopping centres in Hong Kong. We also organise various promotional, seasonal and community events to generate greater customer activity and a happy, fun and lively shopping environment for the general public, thus creating value for our tenants and community.

In the management of our commercial facilities, a marking scheme has been put into place to ensure that tenants maintain a clean and healthy environment. In October 2006, an Enhanced Marking Scheme (EMS) was introduced. It covers all commercial tenancies and licences of shops, shop stalls and cooked food stalls, allotting penalty points for various hygiene misdeeds. The offending tenant, on accumulating 16 points,

▲ Top may have his tenancy terminated.

Hand-in-hand with the launch of the EMS, we introduced the Incentive Award Schemes to improve the cleanliness of our shopping malls. Awards are presented on a quarterly basis with effect from October 2006, which include the Best Toilet Management Award as well as a Best Hygiene Award for Food Premises.

## Case Study: Tsz Ching Estate Green Property Management

Tsz Ching Estate was awarded the Grand Prize for the Green Property Management Award (Public Housing) Eco-business award due to the Housing Authority's achievements in enhancing healthy living and a green environment. This was achieved through a holistic approach whereby various estate-based environmental functions and activities were coordinated throughout the year through the Estate Management Advisory Committees, government departments, the police, schools, green groups and our designated contractors to enhance public awareness on environmental protection.



- Tsz Ching Estate won the Grand Prize for the Green Property Management Award (Public Housing) Eco-business Award

Tsz Ching Estate has 8 177 housing units, 11 domestic blocks with a population of some 25 000 people. The estate is built on a sloped area with very scattered planting areas covering 5.5% of the total area. To achieve our green management, we turned the slope railings into a designated natural laundry area, turned unused land to a green corner-cum-orchard, and constructed a giant plastic bottle from collected waste plastic bottles to promote recycling of plastic materials. All activities were successfully launched with the passionate participation of hundreds of residents.



■ Green Corner-cum-Orchard

They have a very comprehensive program on at-source separation of domestic waste. Very impressive achievements in recycling were made through voluntary donations and the bi-weekly Green Exchange Counter, resulting in over 257 700 kg of recyclables collected, including paper, plastic, aluminium, clothing; an increase of 18.5% against 2005/06 figures. 151 943 kg of waste electrical appliances, metals and construction waste were also collected; a decrease of 4.5% against 2005/06. Through this programme, the overall domestic waste of Tsz Ching Estate also reduced by 5.7%.



- A Giant Plastic Bottle Constructed from Collected Waste plastic Bottles to Promote Recycling





In the area of energy savings, we adopted the Electrical and Mechanical Services Department's Code of Practice for energy efficiency. With the installation of an indoor lighting management device in the corridors of Ching Yi House, electricity consumption was reduced by 30.9%. The installation of photocell sensor control in public areas of domestic blocks further conserved energy by 1.07%. Review of the illumination level and re-circuitry has resulted in an 8% electricity saving. With cooperation from our own staff, the office electricity consumption has been reduced by 8.5%.



■ Indoor Lighting Management System


## ECONOMIC PERFORMANCE

- [Financial Performance](#)
  - [Domestic Rent Policy](#)
  - [Resource Optimisation](#)
  - [Operating with Cost Effectiveness](#)
  - [Case Study: Total Maintenance Scheme](#)
- 

This year, the Housing Authority (HA) has taken another major step forward in achieving a sustainable future. This is particularly highlighted by the introduction of a new domestic rent adjustment mechanism, which provides a more flexible framework that better reflects Public Rental Housing (PRH) tenants' affordability and contributes to the long-term sustainability of the public housing programme. We also aim to ensure more rational and efficient use of public housing resources.

Economic Performance Targets for period 2006/07		Performance
Complete the review of the Domestic Rent Policy and consult the public of the initial findings.		Fully met.
Continue to minimize the vacancy of PRH estates.		Fully met.
Conduct tenancy control and education campaigns with an aim to recover more flats and reduce abuse of housing resources.		Fully met.
Continue on assessment of older estates and enhance their preventative maintenance restoration and improvements.		Fully met.

## Financial Performance

 Supporting the vision and mission of the Housing Authority (HA), the delivery of quality financial management through a 'best practice' approach remained our key focus in 2006/07. We continued to explore opportunities to improve and strengthen our financial and risk-management processes in order to provide maximum financial and business value in all our activities.

The HA is financially autonomous and its massive public housing programmes are sustained through internally generated funds.

The overall consolidated surplus for the HA for 2006/07 was HK\$3.942 billion. The total capital expenditure for 2006/07 was HK\$3.852 billion which was slightly higher than 2005/06 by about 2%.

As of 31 March 2007, the HA's funds available for investment stood at HK\$52.455 billion.


## Domestic Rent Policy

The mission of the Housing Authority (HA) is to provide public rental housing to needy families who cannot afford private rental accommodation. It has been the HA's long-standing policy to keep the rent of Public Rental Housing (PRH) affordable.

### *A New Rent Adjustment Mechanism*

In June 2006, a three-month public consultation on the review of Domestic Rent Policy ended. The review had been carried out by the HA's Ad Hoc Committee with a view to mapping out a rent policy that is more flexible, matching more closely tenants' affordability, and promotes the long-term sustainability of Hong Kong's public housing programme.

Taking full account of the public views received during the consultation, the HA

 endorsed the report on the Review of Domestic Rent Policy in November 2006. Amongst other important recommendations is a new PRH rent adjustment mechanism that provides for both upward and downward PRH rent adjustments based on changes in household income of PRH tenants. To enable its proper operation, in January 2007, the Government introduced the Housing (Amendment) Bill 2007 into the Legislative Council to replace the statutory 10% median rent-to-income ratio in the Housing Ordinance (Cap. 283) with the new income-based rent adjustment mechanism. The Housing (Amendment) Ordinance 2007 was passed by the Legislative Council in June 2007 and had come into operation on 1 January 2008. To provide a new starting point for the income-based rent adjustment mechanism to operate effectively, the HA reduced the PRH rent by 11.6% starting from August 2007.


### *Rent Remission*

In February 2007 the HA decided to grant a one-month-off rent remission for their PRH tenants and interim housing licensees. The rent remission resulted in a loss of revenue of HK\$963 million for the HA.

In July 2006, to improve the vacancy rate at wet markets, we introduced extra rent free concessions for shop stalls that have remained vacant after at least three open tender exercises. The extra rent free periods range from two to six months, depending on the duration of vacancy. To ensure that this offer will not be misused, the rent-free period is granted in stages throughout the three-year tenancy. In view of the positive market response, this extra rent-free initiative was extended in March 2007 to long-standing vacant retail shops.

### *Rent Assistance Scheme*

The Rent Assistance Scheme was first introduced in 1992 aiming at granting relief in the form of rent reduction to PRH tenants who are facing temporary financial hardship. Its eligibility criteria have been reviewed and relaxed on several previous occasions. In August 2007, the criteria were further relaxed so that assistance would be more readily available to needy tenants. The rent-to-income ratio (RIR) and household income threshold were lowered respectively from a RIR of 20% to 18.5% and income threshold from 60% to 70% of the respective Waiting List Income Limits. The resident requirement for newer PRH block types was reduced from three to two years, and the requirement of moving to cheaper PRH accommodation after receiving rent assistance for three consecutive years was relaxed and better defined. Elderly households and those

 living in older block types (except for under-occupation cases) are exempted from this requirement of moving to cheaper accommodation. At the end of March 2007, some 39 000 households had benefited from this scheme.

## Resource Optimisation

### *Sale of Surplus Home Ownership Scheme Flats*

The repositioning of Hong Kong's housing policies in 2002 saw the cessation of the Housing Authority (HA)'s subsidised home ownership schemes including the production and the sale of flats under the Home Ownership Scheme (HOS), the Private Sector Participation Scheme and the Tenants Purchase Scheme. To address the surplus of some 16 600 HOS flats, we rolled out a detailed programme for the sale of these units in April 2006. Some 16 600 surplus HOS flats were to be offered for sale in phases over the 2007 to 2009 period. In January 2007, the first phase took place when 3 056 surplus HOS flats were placed for sale to eligible applicants. The flats were located at Kingsford Terrace Stage I in Wong Tai Sin, Yu Chui Court Stage III in Sha Tin and Block J of Tin Fu Court in Tin Shui Wai. The average selling price was set at a 30 per cent discount of the assessed market values. The exercise went well with more than 99% of the flats being sold. We carried out pre-sale maintenance and rectification work to ensure that the flats could be handed over to purchasers in a reasonable condition.

### *Reinstatement for Elderly Tenants*

In November 2006, the Subsidised Housing Committee approved the issuance of a Letter of Assurance or a Letter of Reinstatement on request to the elderly tenants whose Public Rental Housing (PRH) tenancies have been surrendered or tenancies deleted upon their admission to residential care homes for the elderly. This is to guarantee their return to PRH should the need arise in the future.

### *Shortening the Letting Process for Commercial Premises*

During 2006/07, considerable effort was expended to shorten the letting process for commercial premises and minimise the vacancy period between lettings of these premises. To this end, Open Instant Tenders (OIT) and Walk-in Applications were introduced to provide more flexible rental terms with the first OIT being held in October

### ***Promotion to Enhance Car Park Occupancy***

To enhance PRH and car park usage rates, starting from 1 June 2006, HA car parks charges have been reduced by 8.3% for hourly charges in urban and extended areas, and by 12.5% in New Territories. In addition, since April 2006 monthly charges for private cars in some 30 car parks with occupancy rates below 50% have also been reduced by an average of 6%.

In addition, since January 2007, the minimum purchasing requirement from 100 parking coupons and its multiples has been halved to 50 parking coupons and its multiples. A 20% discount on car parking coupons was offered to make it easier for smaller shop tenants to benefit from bulk purchase.

Prompted by the Link Management's car parking increases of around 7% in their high occupancy car parks, the decision was taken to apply full monthly charges at our car parks enjoying occupancy rates of 90% and above. At the same time, the current reduced day pass rate was also extended to cover weekends and public holidays as well.

Operating with Cost-Effectiveness

### ***Enhancing Occupancy Rate***

To enhance occupancy rates to Public Rental Housing (PRH), the Accelerated Refurbishment On-Demand Scheme has been endorsed. In 2006/07, this Scheme reduced the average letting cycle from 57 to 34 days. PRH tenants choosing the refurbishment allowance now receive their flats within two weeks.

### ***Comprehensive Structural Investigation Programme***

To ensure the quality of existing estates, a Comprehensive Structural Investigation Programme (CSIP) was launched in 2005 to look into the structural safety and economic sustainability of our estates that are over or about 40 years old. By 2006/07, six studies had been completed and concluded that apart from So Uk Estate, which will be redeveloped in two phases from 2008/09 to 2011/12, these estates will be retained for a further period of 15 years. Estate Improvement Programmes are in place to implement any necessary repair works and other ongoing improvements include the installation of additional lifts, the provision of better leisure facilities and the launching of landscaping

 activities.

### ***Project Performance Improvement Through the Use of Expertise***

To integrate our expertise with those of our contractors, in June 2006 we introduced the Modified Guaranteed Maximum Price Contracting Model on a pilot basis. The Model allows the contractor to commit to a price ceiling, based on his design proposals at the start of the project. Under this Model, any cost savings made from the project are shared equally between the contractor and the Housing Authority. The Model has been applied to Eastern Harbour Crossing Phase 4 in Yau Tong on a trial basis and has resulted in savings of HK\$350 000.

### ***Improvements in Construction Quality***

Improved construction quality translates into greater sustainability of our estates, lower future maintenance costs and a pleasant and more sustainable living environment for our residents. We therefore continued to make the best use of new construction techniques, suitable building materials, effective tender practices as well as timely contract management and associated monitoring initiatives. We are particularly pleased to report that the construction costs for our superstructure works were 40% lower than projects of similar scope in the private sector. This has further forwarded our aim in producing and providing affordable homes for those in need.

### ***Maintaining Quality Housing***

To ensure the continuing quality and cost-effectiveness of housing and estate facilities for our tenants, we provide regular maintenance to PRH through a series of programmes, including the Total Maintenance Scheme, the CSIP and the Independent Checking of the regulatory requirements of development proposals and Performance Monitoring of our service providers.

The Housing Department's Public Housing Recurrent Survey 2006 showed that the satisfaction levels of PRH households towards their estate management services reached their highest levels ever.

### ***Independent Checking and Performance Monitoring***

To ensure the regulatory compliance of PRH facilities, the Independent Checking Unit continues to provide third party monitoring and building control of all new HA

▲ developments and alteration and addition works to the existing stock of Housing Authority buildings. During the 2006/07, the unit also processed advice to the Licensing Authorities and regulated the use of all lift and escalator installations within our estates in line with the relevant requirements of the Lifts and Escalators (Safety) Ordinance.

## Case Study: Total Maintenance Scheme (TMS)

We introduced our Total Maintenance Scheme (TMS) in 2006 as an innovative and proactive approach to the maintenance of our public rental housing stock. The scheme aims to check both the external and internal condition of flats in 30 estates annually, with a view to completing the inspection of all Public Rental Housing developments in a continuing five-year cycle.







■ Total Maintenance Scheme Repair Activities

e programme works hand-in-hand with our tenants to identify defects not only in the common areas but also in their homes. We encourage our tenants to bring these defects to our attention before they develop into more serious and thus costlier problems.

Our "In-Flat Inspection Ambassadors" carry out inspections and arrange minor touch-up work, as necessary, on the spot. Work orders are also issued straight away for serious repairs, to ensure that they are fixed in a speedy fashion. Since the launch of the TMS, our ambassadors have commenced visits, inspections and repairs in 26 estates. By the end of March 2007, they had visited 34 400 homes and issued over 26 600 repair orders.



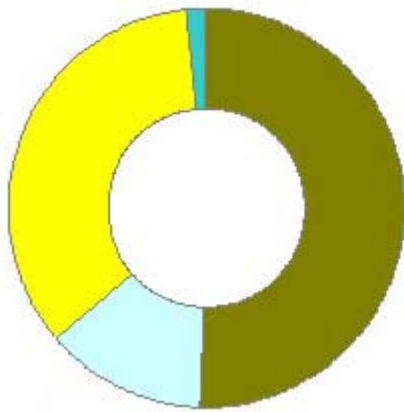
■ An In-Flat Inspection

The TMS has also brought a number of new initiatives into existence, including the setting up of a flat-to-flat maintenance database as well as the strengthening of research in building diagnostic methodologies and maintenance technologies.

The TMS works in tandem with our Comprehensive Structural Investment Programme, which is being carried out on our older housing estates. These two programmes, supported by our Estate Improvement Programmes, ensure the sustainability of public housing stock as they check the safety, building quality, quality of accommodation, as well as the lifestyle and living standards in our housing developments.

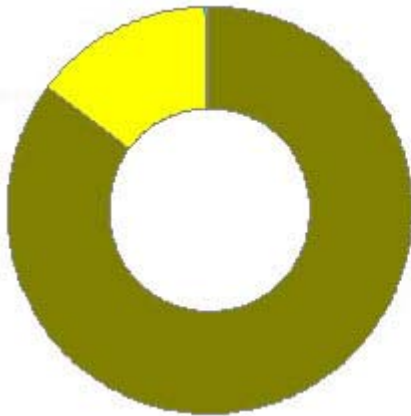
Customer Satisfaction Survey: Pre-Total Maintenance Scheme

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Top



■ Satisfied / Very satisfied	50.6%
□ Dissatisfied	13%
■ Average / Neutral	34.8%
■ No comment	1.6%

### Customer Satisfaction Survey: Post-Total Maintenance Scheme



■ Satisfied / Very satisfied	85.4%
□ Dissatisfied	0%
■ Average / Neutral	14.3%
■ No comment	0.4%

## **STAKEHOLDER ENGAGEMENT**

→ [In Partnership with our Stakeholders](#)

→ [Participation](#)

→ [Feedback from Stakeholders](#)

→ [Informing our Stakeholders](#)

→ [Dialogue](#)

→ [Case Study: Green Delight in Estates](#)

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The Housing Authority (HA)'s activities are of interest to a wide range of stakeholders. We have identified our principal stakeholders as those who are an integral part of our operations and play an essential role in meeting our vision for sustainable housing. They are all concerned with how well we fulfill our responsibilities. We have identified our stakeholders as:

- Residents in our estates;
- Business partners, including contractors and sub-contractors;
- Our staff;
- Other government colleagues;
- District councils;
- Suppliers and subcontractors;
- Green groups;
- The many organisations that represent society in general – both in the social as well as the environmental sphere;
- Educational and professional institutions; and,
- The media.

In developing residential projects we acknowledge that we have a responsibility for creating new, and contributing to existing, communities. We also understand that our development projects have an impact on existing and future communities.

The HA places its stakeholders at the very core of its sustainability management. This commitment is strengthened year after year with continuing dialogue and communication with each of our stakeholder groups. Maintaining dialogue with the industry and various community groups keeps us closely involved with society and helps us to understand what is expected of us as a socially responsible organisation. Through active involvement, we can contribute to and work together with communities to further our sustainable practices.

To take account of this, we have built community engagement and consultation into our planning and development processes. We recognize the importance of undertaking a

stakeholder needs analysis at the outset of projects and the need for engagement plans to be regularly updated as interests and concerns change.

For the idea of sustainable living to permeate to all levels of the community, the greatest challenge is in instilling a culture of green living in our estates. We have introduced education campaigns and outreach programmes to promote concepts of 'greener' living, such as reducing and sorting waste for recycling, promoting energy and water saving schemes, and avoiding estate hygiene problems.

In this section, we have detailed the opportunities and the challenges HA faces in creating a culture of commitment among employees and communities.

Stakeholder Engagement Targets for period 2006/07	Performance
Review and monitor environmental awareness in Public Rental Housing (PRH) by reviewing the need for surveys and providing the results to the related sections for necessary improvement.	Fully Met
Review and monitor environmental awareness of HA and enhance staff environmental awareness by undertaking training, displaying at the HA headquarters' Green Corner, providing information on the e-Learning Portal, and launching an environmental mini-website on to the HA website.	Fully Met
Collaborate with green groups to conduct environmental awareness programme in PRH.	Fully Met
Promote environmental and safety awareness and practices in the HA's workplace and PRH estates.	Fully Met
Increase tenants' awareness and support of greening by organising tree planting days in selected estates.	Fully Met



Promote green management initiatives in PRH estates by organising the Green Property Management Award with green groups.

Fully Met

Enhance community awareness on environmental protection by launching campaigns to promote waste reduction and recycling in PRH estates and joint programmes with green groups and Estate Management Advisory Committees, including distributing environmental publicity materials to tenants.

Fully Met

Promote environmental awareness in Home Ownership Scheme (HOS) estates by liaising with Property Management Agents (PMA) to organise activities for residents in HOS courts and by referring environmental messages from the Environmental Protection Department to PMAs.

Fully Met

Continue to actively work with relevant stakeholders to promote better understanding of HA policies and initiatives through different publicity channels.

Fully Met

Conduct various initiatives for HA staff, for example activities organised by the HA Staff Club, active communications with staff and obtain feedback to enhance operational effectiveness.

Fully Met

## In Partnership with our Stakeholders

Partnerships with our customers, Property Service Agents (PSAs), as well as our other stakeholders are crucial in the delivery of quality services. We therefore maintain an ongoing dialogue with the property management and maintenance industries such as the

 Hong Kong Association of Property Services Agents and Hong Kong Federation of Electrical and Mechanical Contractors. These regular meetings provide a platform for information exchange on a spectrum of issues from ranging from government policies to trade practices and market developments. This also means that the industry is consulted on our policy developments and that we are able to work together on the best methods for service delivery.

We also invite our property service agents and relevant maintenance contractors to attend Estate Management Advisory Committee meetings so that the Housing Authority (HA), service agents, contractors and tenants can work together in harmony for the better management of our estates. PSAs and contractors are also invited to HA training workshops and seminars related to estate management, technical and site safety matters.

To assist in the development of more professional services, we collaborated with the Hong Kong Polytechnic University to run a part-time Certificate Course in Public Housing Agency Management. We sponsor half the course's tuition fees for 475 property officers nominated by PSAs to encourage PSA staff to participate in the programme.

Providing recognition for outstanding achievements among our partners, we held the Quality Public Housing Construction and Maintenance Award for the fourth year running. Awards were presented for quality work, environmental protection, occupational safety and health, ethics and integrity, partnership and customer activities.



■ Quality Public Housing Construction and Maintenance Award

## Informing our Stakeholders

Effective communications play an essential role in fostering awareness and understanding of our activities among the general public. As such, a planned, sustained and proactive publicity programme helps strengthen the connection between the Housing Authority (HA) and the communities we serve.

### *Informing our Tenants*

#### Housing Channel


We continue to utilise the 'Housing Channel', first launched in 2004, to communicate housing-related messages to Public Rental Housing (PRH) tenants. Liquid Crystal Display (LCD) monitors have been installed in the ground floor lift lobbies of residential blocks for the Channel to effectively reach its target audience. In 2006/07, we produced over 20 videos on housing related matters, ranging from fire safety, public hygiene and the latest misdeeds identified through the Marking Scheme for Estate Management Enforcement in Public Housing Estates, to information on the sale of surplus Home Ownership Scheme flats as well as green initiatives and activities. These videos were uploaded onto our website so that they are easily accessible to tenants and the public. The rolling text at the bottom of the screens also keeps tenants informed of important and urgent information and developments within individual estates.

#### Estate Management Advisory Committee Newsletter

Information on the Housing Channel is supplemented by publications, videos and other printed materials. Keeping our two million tenants updated on important housing matters and local estate news, some 270 issues of the half-yearly Estate Management Advisory Committee Newsletter have been produced so far. They are distributed directly to each household to update residents on important housing issues and estate news. In November 2006, we extended this service enabling tenants who are visually impaired to gain access to this information via an enquiry hotline. Tenants can access the hotline for recordings of both current and previous issues of the newsletter.

#### Fire Safety Awareness Events



 Fire safety is a major priority in our activities. We actively spread the fire safety message through fire drills and publicity programmes including a Fire Safety Quiz Game as well as Estate Fire Safety Fun Filled Shows, organized jointly with a local radio station. Under these programmes, tenants are encouraged to take care of and learn how to use fire services installations.

These activities are reaping positive results. A survey of 1 500 tenants during the year showed that safety awareness is extremely high. More than 80% of the respondents were satisfied or very satisfied with fire safety standards in our estates, 94% knew that smoke doors should always be kept closed and nearly everyone interviewed knew that lifts should not be used to escape from a fire.

### [Maintenance Education Path and Mobile Maintenance Education Booths](#)

In an effort to encourage tenants to take care of their homes and to report defects, we have set up Maintenance Education Path and Mobile Maintenance Education Booths in 20 PRH estates. More than 6 000 visitors were received in 2006/07. We have also arranged widespread publicity both in hardcopy and electronic forms to promote our tenants' understanding and cooperation at the outset. A maintenance hotline was also established, providing a one-stop service to report defects and make service appointments.


### *Informing our Staff & Contractors*

#### [Online Newsletters](#)

Our bi-weekly online newsletter, Housing Dimensions, keeps our staff and other stakeholders informed of our many activities and major developments while also covering issues of interest to staff. During the year, 24 issues were produced, providing a wealth of information on our activities. This electronic newsletter also serves to enhance the transparency of our organization as members of the public can log on freely to view these stories. We maintain a number of avenues for staff members to conveniently send in their feedback. Suggestion boxes are placed in office premises and our website and Intranet also feature feedback collection functionalities.

#### [Safety Training](#)

It is also important that we enlist the participation of key players and stakeholders in safety promotion, publicity, and training events. For New Works contractors and project

 staff, we organized a series of safety seminars and safety alert sessions in 2006/07 with over 300 participants, in conjunction with Occupational Safety and Health Council (OSHC), Labour Department and Buildings Department. We also conducted briefing sessions in January 2007 for over 500 participants comprising New Works contractors, sub-contractors, independent safety auditors and project teams when we launched the system enhancements on HA Safety Audit Scheme and the revised Pay for Safety items.

As for Maintenance Works, we arranged a seminar in conjunction with the Labour Department in October 2006, with about 150 participants, sharing experience with our staff and maintenance contractors on safety measures on truss out scaffolding and working at height. We also participated in a seminar organized by Hong Kong Construction Association in November 2006 with about 250 participants, sharing experiences on various safety measures on maintenance contracts. With the support of the OSHC, we have arranged a series of experience sharing seminars for maintenance contractors /services providers and our staff with about 900 participants, providing useful tips for risk management, and accident prevention. In collaboration with industry stakeholders, we issued a safety booklet *Maintenance, Improvement and Estate Management* for frontline site workers and HA staff.

### *Informing the Public*

#### Communication Through the Media

To keep the communities of Hong Kong fully informed of our activities and developments, we maintain an active dialogue with the media. During the year, our News Unit issued over 100 press releases and arranged 65 press briefings and interviews, providing news, views and detailed information on our new policies, developments and initiatives. We also handled some

1 370 media enquiries on a variety of issues and 1 150 public complaints and enquiries referred to us by the press.

#### Green Corner

The Green Corner, located on the 5th floor, Block 4 of the HA's Headquarters, is the venue for showcasing green measures undertaken by various offices of the Housing Department (HD). In October 2006, some display panels and a video presentation were set up to show the Estate Management Division's latest environmental initiatives which include:

- Waste separation at source in PRH Estates;
- Various waste separation measures;



- Experience of Sau Mau Ping Estate in promoting waste separation at source; and
- Study tour to Taiwan on waste management measures.



■ The Green Corner educating the public on environmental issues

### [Housing Authority / Housing Department Website](#)

We have continued to enhance the HA/HD website and provided more user friendly information tools, richer content, easier access as well as better e-services to the public. Currently the website consists of about 20 000 content pages in both Chinese and English versions catering for every stakeholder interest. A diverse range of e-initiatives and services is also provided, including electronic forms and online service enquiries. Most importantly, the website serves as an invaluable source of information (in both text and videos) in our key sales and marketing exercises. For example, detailed information on the 2007 Phase I Sale of Surplus HOS Flats was placed on the website to provide easy and open access for public review. On average, our website receives 3 million hits per month.

A mini website called "Environmental Estates" was launched in October 2006 to promote greater understanding of our green initiatives. The website provides tips on green living and information on our educational and publicity programmes for estate residents.

## Participation

### *Estate Management Advisory Committee*

Satisfactory estate management is a result of a collaborative effort between residents, committees and the estate community. The Estate Management Advisory Committee (EMAC) was established in 1995 initially in only eight estates to ensure that estate management is effective, efficient and attuned to tenants' needs and aspirations, and to encourage residents to be more attentive to and more ready to participate in matters of their concern. As a result of the encouraging results of the first year's pilot run, the scheme was extended to all other rental estates in 1996.

The EMAC decentralises estate management to the local level, aims to help enhance the communication between tenants and the management, and encourage tenants' participation in estate matters.



■ An Estate Management Advisory Committee Meeting

### *Community Workshops on Design and Planning of Estates*

We have a long-standing practice of engaging the local community and consulting various concern groups in the early stages of the design and development of our estates. Community workshops, for example, were held in Ma Hang during 2006/07 to collect public views and engage the community not only in the design and planning of the project but also the facilities they would like to see in their community.

### *Action Seedling*

In addition to incorporating green elements into the design and management of housing estates, we hope to motivate our contractors to undertake corporate social responsibility and encourage residents and the community at large to participate in the greening of newly-completed housing estates. We have recently launched the 'Action Seedling' under the Community Participation Scheme to encourage community participation in the greening of new housing estates during the construction stage.



■ Local residents participating in Action Seeding

Local residents and school pupils participate in planting seedlings and nursing green plants for 14 housing estates which are scheduled for completion in the coming two years. Through EMACs, local schools and community organisations, seedling plants will be given out by the Housing Authority (HA) and its building contractors to participants who will nurture the plants at home until they are fit for transplanting into the planters of the new estates.



■ School pupils participating in planting seedlings and nursing plants

We believe that apart from creating a greener and more pleasant environment, the programme will also help foster a greater sense of belonging among the residents and the community. Furthermore, it will provide an opportunity for our contractors to play their part in greening and environmental protection.

### *Tree Planting Days*

Every year, the Horticulture Team of the Housing Department (HD) organises tree planting days in selected housing estates to raise the awareness and interests of residents in estate greening. The first Tree Planting Day of this year was held in Sha Kok Estate on 10 June 2006, at which some *Wodyetia bifurcata* and hundreds of colourful seasonal flowers were planted to enhance the natural environment. Another Tree Planting Day was held in Shun Tin Estate on 22 July 2006 at which some *Podocarpus macrophyllus* and hundreds of *Clerodendrum thomsonae* shrubs were planted. Another was held at Wah Fu (II) Estate in September 2006. Among the participants were members of EMAC and representatives from local organizations and the HD.



■ Residents Actively Participating in a Tree Planting Day in an Estate

### *Programme on Source Separation of Waste*

The HA has been implementing the Programme on At-Source Separation of Waste in 30 estates every year, to promote environmental awareness among tenants, expand the categories of recyclables, increase the recycling rate of domestic waste, and encourage separation of recyclables in order to facilitate collection by the cleaning workers. So far, 90 estates have participated in the Programme and we will extend it to all housing estates throughout the territory as soon as possible so as to enhance the recovery rate of domestic waste. The ultimate aim is to help reduce the amount of waste being disposed of at landfill sites.

A competition was organized to encourage participating estates to adopt a waste separation mode that suits them best in terms of convenience and cost-effectiveness. The assessment criteria included overall recovery arrangement, performance of the management team, tenants' participation, recovery rate and cost-effectiveness. The winning estates were presented with awards in a ceremony held on 1 April 2006.

The awards were as follows:

Award	Winning Estate

Grand Award	Gold - Sau Mau Ping Estate Silver - Tin Chak Estate Bronze - Kwong Fuk Estate and Shek Lei (II) Estate Merit - Po Tat Estate and Oi Tung Estate
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The Most Innovative Award	Sau Mau Ping Estate
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The Best Management Team Award	Sau Mau Ping Estate
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The Excellent Participation Award	Po Tat Estate
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The Best Recovery Award	Kwong Fuk Estate
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■ Forum on Source Separation of Waste cum Award Presentation Ceremony



### *Moon-Cake Box Recycling Campaign*

The HA once again joined hands with Friends of the Earth (HK) to promote the collection of moon-cake boxes for recycling. Large collection bins were placed in Public Rental Housing estates for both residential and commercial tenants to drop in their unwanted moon-cake boxes. Some of the boxes collected were used to form a jumbo domino at the finale of the campaign to arouse public concern over environmental protection.




■ Collection of Moon-Cake Box for recycling at Lei Yue Mun Estate

### *Public Art*

Various initiatives help to drive a sense of community and feeling of ownership and belonging in their home estates. One such example is the incorporation of community contributions into design elements within estates through the painting of wall murals. Currently there are 12 wall murals in 11 of our estates. The latest, unveiled at Yau Tong Estate in November 2006, amalgamated the 25 winning entries in the estate's "Lets Give Yau Tong a New Look" mural design competition. The 26 metres long by four metres wide mural was painted by more than 50 people to showcase the community's visions for sustainability and harmony.



■ Wall murals painted by 50 people at Yau Tong Phase 1 showing their visions on sustainability

 The use of art is not limited to murals and paintings. In 2002, 16 sculptures were placed on display amidst garden paths around Yat Tung Estate with the opening of the first phase of the Tung Chung Artwalk, a joint collaboration between the HA and the Leisure and Cultural Services Department. 26 artworks were selected from 316 outstanding submissions in a competition celebrating the modern face of Hong Kong's heritage. The second phase, consisting of the final 10 art items, were added to the art trail in November 2006. Many of the artists' submissions take inspiration from Tung Chung's history and heritage, and reflect the traditions of the former fishing village. The art trail is open to the public all year round. It helps provide a richer and more rewarding living environment and act as a platform for art to flourish into the future.

### *Volunteers for Seniors Day*

With 406 900 senior citizens, aged 60 or above, living in our public housing estates, we held a number of activities to promote healthy aging and to support and improve the quality of life for this very large, and often disadvantaged, group of residents. In conjunction with HOPE Worldwide, we once again organised the Volunteers for Seniors Day in January 2007. Taking a positive step forward this year, the programme expanded from a one-day event into a year-round programme. Volunteers carried out assessments of the homes of elderly residents in 14 estates in Kowloon, seeking to improve safety and prevent accidents. The volunteers also help single elderly tenants with cleaning, small scale decoration work, and repairs.

### *Other Activities*

In addition to these activities, we supported the Government's and Hong Kong's green groups initiatives for a happy and healthy lifestyle. We participated in the Green Carnival, the Hong Kong's Tree Planting Day, the Hong Kong Flower Show, as well as the Electrical and Mechanical Services Department's Safety Carnival.

## Dialogue

### *Domestic Rent Policy Consultation*

A three-month public consultation on the review of our domestic rent policy ended in June 2006. The review was to develop a rent policy that would be more flexible,

establish a closer link with tenants' affordability and help to promote the long-term sustainability of the public housing programme.

### *Site Safety Dialogue with Subcontractors*

Understanding that site safety depends very much on the cooperation of our business partners, we established the Housing Department Site Safety Sub-committee (HDSSSC) in 2006 with the participation of the government, contractors' associations, worker unions and other related organizations to foster a greater focus on safety. Meetings with stakeholders are held at six monthly intervals to review site safety measures and are tasked with the job of reviewing and advising on site safety management measures on all Housing Authority (HA) construction and maintenance contracts. The first HDSSSC meeting was held in November 2006 with over 30 participants. A comprehensive range of issues have been discussed and action plans drawn up, including:

- Contract Provisions;
- Incentives and Sanctions; and
- Research, Training and Promotion.

The HA continues to participate in territory-wide safety campaigns to raise safety awareness, foster a positive safety culture and adopt safe working practices. We take pride in the awards and commendations won by our contractors in site safety contests.

The HA has set up a site safety forum for New Works contracts, Maintenance Works contracts, Property Services Agents contracts and Cleansing contracts.

### *Project Partnering Workshops*

We run partnering workshops with our subcontractors as part of all our building and piling contracts. After six years experience, a better understanding of each others problems has led to prompt solutions, smoother progress, less paper work, and improved quality of work. Everybody has become more proactive in working towards common project objectives.



■ A Project Partnering Workshop

### *Staff Consultation*

In 2006/07, five departmental consultative committees provided a formal forum for discussion and consultation between the Housing Department management and staff on matters of mutual concern through 24 meetings. Keeping our open door policy, which ensures any employee can express concerns to or receive guidance from any manager, we conducted a number of focus group discussions, goodwill visits, counselling sessions, interviews, meetings and tea receptions with staff unions to foster greater understanding with our staff.

### Feedback from Stakeholders

We believe that people do their best when they feel pride in their contributions, when they are treated with dignity, and when their talents are encouraged to flourish in an environment that embraces two-way communications. With around 8 700 employees and about 2 million tenants, equal opportunities and understanding is a hallmark of Housing Authority (HA)'s culture – we know that our ability to improve as an organization is directly tied to feedback. It reflects a mindset of inclusiveness, respect, and cooperation – a core value that drives our relationships with employees, tenants, business partners, and communities.

### *Feedback Mechanisms for Tenants*

### Telephone Hotline

In 2006/07, our hotline answered 1.057 million call enquiries, or an average 2 894 calls a day, or over 2 calls per minute. Although the majority of these calls were answered by the automatic phone system, our representatives of the Housing Department Integrated Communications Centre also worked around the clock to meet the demands. Apart from telephone calls, the Centre also handled on average 179 faxes and emails per day, or in total 65 000 per year.

In addition to these activities, a new Public Rental Housing (PRH) Maintenance Hotline, facilitating the implementation of our Total Maintenance Scheme, was also introduced in July 2006 to answer enquires on the scheme. The Sales Hotline, supporting the Sales of Surplus Home Ownership Scheme Flats, was launched in January 2007. By the end of March 2007, it had answered 74 800 calls, an average of 830 calls per day.


### Complaints and Requests Management System

The Complaints and Requests Management System (CRMS) provides online registration, referral, handling and monitoring for complaints and enquires on an integrated computer platform. With some 3 000 users, the system has streamlined complaint handling procedures and expedited responses to complaints. It also generates statistical data, thus provides reports showing the number, pattern and trend of complaints. During the year, a total of 3 041 complaints and 22 785 enquiries were received and processed by CRMS.

### Tenants Satisfaction Surveys

We conduct regular surveys to gauge our tenants' views on estate management. We conduct various customer satisfaction surveys and other ad-hoc surveys to tenants on issues such as domestic block and flat designs. We also undertake regular Housing Return Surveys. Alternatively, tenants may bring forward their views to Estate Management Advisory Committees or local District Councils from which the views and suggestions are dealt with efficiently.

Findings of the Housing Department (HD)'s Public Housing Recurrent Survey 2006 showed that satisfaction levels of PRH households towards estate management services reached the highest levels. 81.4% of the residents were also satisfied with the planning and design of the estate as a whole on newly completed projects in the Resident Survey.

 Our customer satisfaction survey, analysed in October 2006, showed that 86.7% of respondents, living in the five PRH estates with the TMS programmes scheduled for completion by March 2007, considered the TMS either satisfactory or highly satisfactory. The average flat entry rate for ambassadors was in the 80 – 90% range.

### *Feedback Mechanisms for Staff*

#### [Staff Opinion Survey](#)

As our re-structuring exercises are now largely complete, the HA is preparing to conduct a staff opinion survey covering all serving staff in mid-2007. The objective of the survey is to obtain systematic feedback from staff on human resource management dimensions to plan for the HA's future human resource management strategy. Our ultimate goal is to develop a talented, committed and motivated workforce whose aims are to seek continuous improvement in the delivery of service to the public.

In October 2006, a consultant was commissioned to conduct the survey for HA. After a series of focus group meetings and consultation with staff representatives, staff unions and consultative committees, the consultant has customised the survey questionnaire for HA.

#### [Staff Suggestion Scheme](#)

Formal mechanisms, like our Staff Suggestion Scheme (SSS), are also in place. The SSS is designed to encourage employees to identify areas of concern so that improvements may be made. For those constructive inputs for improvements that are subsequently put into practice, corresponding employees are rewarded. Communications channels include Feedback Boxes placed in office premises and HD Intranet. In 2006/07, we received 61 suggestions through these channels.

#### Case Study: Green Delight in Estates

With the aim of raising environmental awareness of Public Rental Housing (PRH) tenants through sustained and in-depth educational activities at the community level, we

launched, in collaboration with three local green groups, namely, the Conservancy Association, Friends of the Earth (HK) and Green Power, a long-term community environmental programme 'Green Delight in Estates' in 2005 across 30 estates. In October 2006, the second phase of the programme was rolled out across a further 30 estates, including the following activities:

- A workshop was held in October 2006, where the three co-organising green groups shared with the Housing Department's estate management staff and members of the Estate Management Advisory Committee their knowledge and experience in promoting environmental protection and green living.
- A Recycling Day was held in over 150 PRH estates between October and November 2006, where tenants were encouraged to support waste separation at source and shown how to separate various kinds of unwanted household items for recycling.



■ **Launching of the Recycling Day**

- Some 300 young PRH tenants have been recruited as Green Estate Ambassadors. We have adopted a train-the-trainer educational approach with our Green Estate Ambassadors, who were properly trained on environmental protection concepts and were sent off to disseminate and promote green messages in housing estates.





■ Training Workshop for Our Green Estate Ambassadors

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- In-depth Environmental Education Programme
- Like 2005/06, each of the three green groups carried out their own unique education activities in selected housing estates, aiming to strengthen tenants' awareness in environmental protection. Thirty PRH estates took part in the programme last year.

According to the findings of a survey conducted by the Chinese University of Hong Kong, the residents have become more conscious of a green living after having participated in activities under the first phase of the Green Delight programme. Among those tenants of the participating estates, 72% had considered themselves becoming more knowledgeable about environmental issues. The corresponding percentage for tenants from housing estates not taking part in the programme was only 67%.



- Informative signs educate people about the local wildlife



- Wildlife flourishing in the green areas of estates

Green Delight in Estates will eventually be rolled out to all public housing estates.

## TARGETS & OUTLOOK

We will continue to incorporate appropriate sustainability principles into all of our activities and practices. We want 2007/08 to be another year in which the Housing Authority (HA) improves its sustainability performance.

Our commitment to sustainability does not end on when our targets are met. We are constantly challenging ourselves to ensure that our performance gets better each and every year. Therefore, we undertake the following:

- To be guided by our vision of sustainable housing and ensure that our sustainability initiatives align to this vision;
- Continue to implement and develop innovative and cost-efficient ways to protect and enhance the environment, particularly through the effective use of resources;
- Implement and adopt cost-effective procurement measures that benefit not only ourselves, but our business partners and contractors as well; and
- Enhance communications with our stakeholders to ensure a quick response to their queries, and engage them on issues that matter to them.

To achieve these, we commit to the following targets:



### Targets to continue promotion of sustainability issues

Review and monitor environmental awareness in Public Rental Housing (PRH) by reviewing the need for surveys and providing the results to the related sections for necessary improvements.



Review and monitor environmental awareness of HA staff by reviewing the need for in-house telephone surveys and enhancing general awareness by undertaking training and improving communication strategies.



Collaborate with green groups to conduct environmental awareness programme in PRH.





Promote environmental and safety awareness and practices in the HA's workplace and PRH estates.

Increase tenants' awareness and support of greening by organising tree planting days in selected estates.

Promote green management initiatives in PRH estates by organizing *Green Property Management Award* with green groups.

Enhance community awareness on environmental protection by launching campaigns to promote waste reduction and recycling in PRH estates and joint programmes with green groups and Estate Management Advisory Committees (EMACs), including distributing environmental publicity materials to tenants.

Enhance staff environmental awareness and knowledge by soliciting and analyzing training needs, organizing seminars, displaying of environmental issues at HA Head Quarters' (HAHQs') Green Corner and providing environmental messages on the e-Learning Portal.

Promote environmental awareness in Home Ownership Scheme (HOS) estates by liaising with Property Management Agents (PMAs) to organize activities for residents in HOS courts and by referring environmental messages from the Environmental Protection Department to PMAs.



Reduce flushing water consumption by conducting trial schemes in new projects, ie pilot project Shek Lei Phase 10 and conducting performance reviews.

Reduce potable water consumption for installations under landlord control in PRH estates by using self-stopping water taps and conducting replumbing programmes to minimize pipe bursting and leakage as well as studying the feasibility of using rain water for plant watering and general cleaning.

Enhance efficient potable water usage in shopping centres by installing self-stopping or movement-sensing water taps during toilets upgrading.

Continue to reduce water consumption at HAHQs by performing water saving initiatives as appropriate.

#### **Targets to enhance greening and landscaping**

Provide green treatment (eg hydro-seeding and tree planting) to newly formed slopes.

Add new vegetation and promote greening in new housing estates to meet the minimum target of one tree per 15 PRH flats. Conduct tree surveys to ensure that this is met.

Upgrade the existing landscape in 18 selected PRH estates by improving soft landscaping through Landscape Improvement Programme.



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Promote a green environment at 24 estates with EMAC support through the provision of green activities in these estates.

Improve the slope appearance in existing PRH estates by providing green treatment to hard surfaced slopes and improving on existing vegetated slopes. Also, chunam surfaces will be improved through hydro-seeding stone pitching and toe planters.

Enhance greening in PRH estates by allocating open areas in selected estates for setting up theme gardens.

#### **Targets to lessen safety and environmental risks**

Further abate the remaining asbestos-containing materials in existing HA managed properties by implementing asbestos abatement programme through estate redevelopment programme and asbestos removal works.

#### **Targets to reduce noise nuisances**

Reduce noise nuisance from water pumps in PRH estates by replacing 3 000 rpm water pumps with 1 500 rpm water pumps.

### Targets to maintain our waste management practices

Increase domestic waste recovery rate for paper, aluminium cans, plastic bottles and used clothes by arranging publicity activities such as Waste Recycling Credit Scheme for all PRH estates.

Promote waste reduction through various publicity campaigns with the aim to reduce generation of domestic waste.

Implement waste separation at source programme in all estates by phases.

Reduce A3 and A4 paper consumption in Housing Department (HD) offices by performing various initiatives to reduce paper consumption.

Collect waste paper in HD offices and implement various initiatives to encourage paper recycling.

Reduce construction and demolition (C&D) waste and ensure proper disposal by developing a Construction Waste Index through conducting surveys of C&D waste.

Use environmentally-friendly paper in printing of all publicity materials (except sales and marketing publication) by implementing its use as a pre-requisite in all printing jobs.

**Targets to continue improvements on energy efficiency**

Reduce electricity consumption of landlord services installation in new domestic blocks by adopting Energy Codes and obtaining energy certificates for completed projects.

Explore and study application of more energy efficient equipment by completing trial installation of solar powered lamp poles, adjustment of lift counterweight settings and adopting a wider use of T5 fluorescent tubes.

Reduce energy consumption in shopping centres with central air conditioned systems by shortening operating hours of the air conditioners and lighting and undertaking initiatives to enhance staff awareness of energy savings.

Reduce energy consumption of office premises by performing various energy saving initiatives.

Explore and study application of green design for building services equipment.

**Targets to improve our safety performance**

Continue to tighten monitoring of contractors with high accident rates.





Enhance the 'Pay for Safety, Environment and Hygiene' scheme with more performance driven initiatives for site safety.

Tighten control measures for high-risk operations on site.

Continue to hold regular seminars on best safety practices with the participation of contractors and project teams.

Continue to partner with industry stakeholders in territory-wide safety campaigns and publicity.

Improve safety of office operations with potential health and safety risks.

Continue to provide safety training to staff.

Issuance of site safety handbook and guidelines.

Keep accident rate to be below 25 accidents per 1 000 workers.

#### **Targets to uphold our social contribution**

Continue implementation of the Marking Scheme in all PRH estates and factories to enhance the living and factory environment respectively.

Conduct various initiatives for HA staff, for example activities organized by the Housing Authority Staff Club, active communications with staff and obtain feedback to enhance operational effectiveness.

Continue to actively work with relevant stakeholders to promote better understanding of Housing Authority policies and initiatives through different publicity channels.

#### Targets to fine tune our economic performance

Implementing the new rent adjustment mechanism and following up the outcome of the Review of Domestic Rent Policy

Continue to minimize the vacancy of PRH estates.

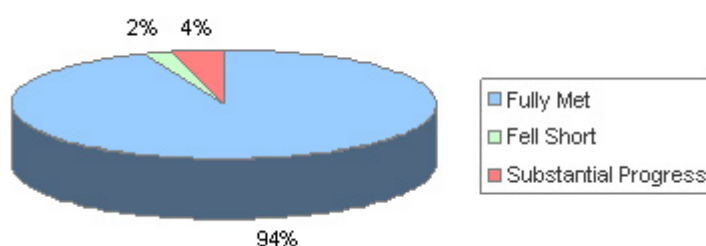
Conduct tenancy control and education campaigns with an aim to reduce abuse of housing resources.

Continue on assessment of older estates and enhance their preventive maintenance, restoration and improvements.

## PREVIOUS TARGETS

52 targets were made for the year 2006/07 ranging from awareness and participation, water conservation, greening and landscape, control of hazardous materials, noise nuisance, waste management, energy efficiency, safety performance, economic, and social. Of these targets, 49 were fully met, 2 achieved substantial progress and 1 fell short.

2005/06 Target Performance



### Action Plan for Targets Not Fully Met

Targets	Progress	Action Plan for 2007/08
Further abate the remaining asbestos containing materials in existing HA managed properties by implementing asbestos abatement programme through estate redevelopment programme and asbestos removal works	Up to March 2007, five blocks of Cheung Sha Wan Flatted Factory (FF) were demolished and asbestos containing materials in four blocks of San Po Kong Flatted Factory were removed, which resulted in 1.7% asbestos removal. However, when calculating asbestos abatement in terms of removal from a number of blocks, we only achieved 0.9% asbestos removal.	To continue monitoring the progress and take action if necessary.



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Reduce domestic waste to  $\leq 0.7326$  kg per person per day.

Up to March 2007, 99.6% of the target was achieved.

To continue monitoring the progress and take action if necessary.

Issuance of consolidated safety manual and design checklist.

Site safety handbook and guidelines are under preparation.

To continue monitoring the progress and take action as necessary.

## VERIFICATION STATEMENT



### Verification Statement for Hong Kong Housing Authority Sustainability Report 2006/07

#### SCOPE AND OBJECTIVE

Hong Kong Quality Assurance Agency (HKQAA) conducted an independent verification of the Hong Kong Housing Authority (HA)'s Sustainability Report for 2006/07 (herein referred to as 'the Report'). The Report described the environmental, social and economic performance of HA for the period from 1 April 2006 to 31 March 2007. The objective of the verification was to provide an independent opinion on the materiality, completeness, accuracy, and reliability of the information presented in the Report.

The verification scope included:

- Assess the adequacy of coverage of all relevant issues in relation to HA's sustainability performance;
- Verify the reliability of data and information management mechanism for gathering, collating, analysing, and presenting the data in the Report;
- Assess the accuracy and consistency of the selected data presented in the Report;
- Assess the overall reasonableness and balance of Report with regard to the information presented;
- Identify the relevant areas for future improvement

#### VERIFICATION METHODOLOGY

Our verification procedure included review of relevant documentation, interview with representative of HA with accountability for preparing the Report, analyse selected sample of data consolidated in the Report. The sample data was verified for accuracy through

examination of supporting information and cross-checking with HA published annual report and available third parties' information.

## OUR OPINION

It is HKQAA's opinion that the information presented in the Report provided a structured, balanced and reasonably accurate representation of HA's performance in the context of environmental, social and economic aspects.

### Report Materiality and Completeness:

The Report was a fair and honest representation of HA's initiatives, targets, progress, performance and case studies on its environmental, social and economic achievements. The Report provided a balanced view of the key sustainability issues and achievements along with a comprehensive set of sustainability performance indicators relevant to its core business operations.

### Report Accuracy and Reliability:

All sample data examined during our verification was accurate and consistent with the supporting information reviewed. Based on the samples examined, the information provided in the Report was reliable in the presentation of HA's sustainability commitments, initiatives, performance, and achievements for the reporting period.



Jane Lin  
Lead Verifier

HONG KONG QUALITY ASSURANCE AGENCY