# 促進和諧 美好家園 Fostering a Family Spirit

Public rental housing (PRH) estates in Hong Kong are communities within the larger community. One of the most important roles for the Housing Authority (HA) is to ensure these "mini-communities" grow from strength to strength. We do this by providing high quality living environments characterised by safety, accessibility, cleanliness, sustainability and social harmony. We engage deeply with each of these areas in our management and maintenance activities for PRH estates.

#### Quality living programmes

Our three quality living schemes continued to provide tenants across all PRH estates with safe, sound and well-maintained living environments. They are the Total Maintenance Scheme (TMS), the Comprehensive Structural Investigation Programme (CSIP), and the Estate Improvement Programme (EIP).

TMS operates on a five-year cycle, the current one of which (the second such cycle) began in 2011. In 2012/13, we brought TMS to 30 estates, at the

same time adopting a special focus on building safety in response to recent building control initiatives introduced by the Government. Supplementing TMS is the Responsive In-flat Maintenance Service (RIMS), which now covers all 204 estates and courts, including 13 new estates. Under RIMS, frontline staff can register maintenance requests directly from tenants and set repair processes in motion quickly.

CSIP focuses on estates approaching 40 years of age, and ascertains their structural integrity for future planning. CSIP findings reveal the structural soundness of our older estates, and help us assess whether it is more cost-effective to revitalise these estates or simply clear them for redevelopment.

EIP is a programme applied to estates considered structurally safe under CSIP. It introduces modernisation and enhances the amenities so that residents can enjoy a fresh, up-to-date lifestyle within historic built environments.



#### Accessibility for all

In the year 2012/13 we made good progress with our lift addition programme, launched in 2008 to bring lifts to some older estates. The overall programme includes 35 projects, of which 22 were completed in 2012/13, bringing the total number completed to 32. Residents have appreciated the improved pedestrian access and convenience that these additional lifts provide. Meanwhile, we continued with our Lift Modernisation Programme, under which older lifts are being replaced in phases with new models that are more advanced, accessible and energy-efficient. Lift modernisation work for around 520 lifts in 24 estates is currently in progress.

At the same time, we have been carrying on with improvement works at existing estates in line with the requirements laid out in the Government's *Design Manual: Barrier Free Access 2008*. These works include upgrading existing lifts, improving pedestrian walkways and other access-ways, and adding features for people with disabilities.

# Fire safety initiatives

Reducing the risk of fire is a top safety agenda item across our PRH estates. We aim to ensure that all residents understand what to do in case of fire, and therefore continued to conduct regular fire drills throughout the year while encouraging residents' participation through advertisements and incentives. Generally, we conduct a fire drill at each domestic block once every two years. We also keep residents well informed about preventing fires and using fire-fighting equipment, as well as about fire evacuation procedures, through fire safety campaign activities and dissemination of safety information. Our collaboration with Estate Management Advisory Committees (EMACs) is another fruitful way of getting the fire safety message across. Each year we grant awards to those EMACs promoting fire safety awareness at their estates most effectively. In 2012/13, 18 EMACs received awards.

The Fire Services Department (FSD) continued to be a strong contributor to our fire safety awareness initiatives. Over the year, the FSD sent its Mobile Publicity Unit and Fire Safety Education double-decker bus to PRH estates across the territory on around 70 occasions. The FSD also provided training for those PRH residents wishing to become official Fire Safety Ambassadors and Trainers. On our part, we organised the annual fire safety quiz at all PRH estates for the eighth consecutive year, to an enthusiastic response, with the 16 000 entries breaking previous records. Regular video broadcasts about fire safety on the Housing Channel and messages on local radio channels also helped keep fire safety awareness high.

# Lift & escalator safety

With thousands of commuters in PRH estates using lifts and escalators daily, safety in lifts and on escalators is another priority for the HA. We continued with regular campaigns throughout 2012/13 to boost awareness of safety issues among users. We also fully introduced the Retractable Fall Arrestor System to enhance the safety of those working on lifts and in lift pits. Since April 2012, we have been implementing the HA Safety Auditing Scheme (Maintenance & Improvement (M&I)) for Lift Maintenance Contracts and Lift Modernisation Works, which has improved the way we monitor safety performance during lift works.

<sup>1</sup> Our TMS Team helps fix a minor in-flat problem for a tenant.

### Enhanced security

In 2012/13, we continued the massive project of replacing our estate-wide CCTV surveillance system with colour cameras, digital video recorders and broadband network transmission, in an effort to enhance security of the domestic blocks under our care. By the end of the year 2012/13, replacements had been completed in some 880 blocks in 134 estates. The project will be completed in 2014.

#### Clean neighbourhoods

Keeping PRH estates clean involves close collaboration between the HA, service contractors, and residents. Apart from promoting good hygiene practices among tenants through public education, we have implemented the Marking Scheme for Estate Management Enforcement in Public Housing Estates to discourage hygienic related misdeeds in public housing estates. Under this scheme, tenants will be allotted penalty points if they are found committing misdeeds causing health hazards or nuisance to others. If 16 penalty points or above are accumulated within a two-year period, the subject tenancy may be terminated.

# Green living

In today's society, environmental considerations are paramount at every level of daily life. At the HA, we make "green living" an underlying theme of all our estate management work. We are moving forward in this direction by obtaining relevant International Organisation for Standardisation (ISO) certification. In 2012/13 we continued our efforts towards obtaining ISO 14001 Environmental Management System certification for property management in 93 estates, in two batches, successfully gaining full certification in January 2013. We also carried out studies at two PRH estates during the year on the feasibility of implementing BEAM Plus (Building Environmental Assessment Methods – Plus) for Existing Buildings at the estates. The studies identified possible improvement measures that could be carried out to enhance overall environmental performance in areas like energy use, water use, and indoor environmental quality. We have decided to aim for BEAM Plus for Existing Buildings at just one of these estates in the first instance.



We are active in assessing energy usage across PRH estates and constantly looking for new ways of saving energy. During the year we began replacing electromagnetic ballast with energy-saving electronic ballast in light fittings in all our existing estates (around 960 blocks), as part of a 42-month programme that will be completed in 2015/16. On a smaller scale, we extended the use of lower-energy consumption LED light fittings in one of the domestic blocks of Kai Ching Estate, which began its intake in June 2013, for further evaluation over the coming year. We also conducted Carbon Audit exercises for 14 selected PRH domestic

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blocks of different block types; the results will be used to establish a baseline reference for these block types for future studies.

Apart from adopting the good energy saving practices mentioned above, we also began pilot implementation of the ISO 50001 Energy Management System in Kwai Shing West Estate in January 2013, with the aim of obtaining the certification by June 2013. The experience gained from this exercise will be used to develop a roadmap for certification that can be used at all PRH domestic estates.

# Tree planting and green activities

During the year we set about enhancing the levels of greening at 18 estates where existing greenery was less flourishing than it could be. At Shek Yam East and Tsz Ching Estates, we set up thematic gardens as special highlights of their estate green environments. Tree planting days were organised at 10 different estates during 2012/13, adding to the approximately 100 000 trees that we care for. To manage this forest of trees effectively, we run a comprehensive electronic tree database which is used, among other things, to conduct an annual tree assessment exercise. Further, to keep PRH residents aware of tree conservation practices and of the many valuable and beautiful trees growing on estates across Hong Kong, we operate an Estate Tree Ambassador scheme made up of 630 volunteers. We organised training courses for these ambassadors during the year so they could more effectively stimulate interest in trees at their estates.

- 1 LED light fittings that consume less energy are installed in one of the domestic blocks of the newly built Kai Ching Estate.
- 2 The thematic garden at Shek Yam East Estate.

We also conducted activities designed especially to promote a love of plants and green living among residents at 20 estates. Some green initiatives were conducted as part of our Green Delight in Estates programme, run in partnership with three green groups. Each year the programme includes an estate-wide campaign on a main environmental theme, plus in-depth educational and promotional programmes designed by the three green groups for selected estates. The main theme for the year was "Reduction of Municipal Solid Waste", selected to chime with the Government's current policy. Events under the theme included a green recipe competition, fun days, talks, workshops and visits. Recycling of food waste was also tried out at six estates.

#### Waste management

A number of waste management programmes are now operating across our PRH estates. One of them is the Source Separation of Domestic Waste Programme, in which we have been involved since 2005. During the year we collected some 27 600 tonnes of waste paper, 1 930 tonnes of plastic bottles and 1 130 tonnes of aluminium for recycling.

#### Estate management partnerships

Many groups, both external and internal, contribute in important ways to the smooth running of PRH estates. One of the most important groups is the EMACs. Made up of local representatives, EMACs are vital intermediaries between PRH tenants and local estate management teams. Typically engaged and proactive, they often drive new initiatives and are on the spot to resolve issues as they arise. EMACs are given funds which they can use to partner with non-governmental organisations (NGOs) to organise various types of estate-based community building functions. In 2012/13, some 410 such partnering functions were held. Many of these were based around the needs of the elderly, and all EMACs adopted the theme "Healthy Living for the Elderly" as their motto for activities run for elderly PRH residents. During the year this partnering platform was also used in collaboration with the Department of Health to launch community health programmes at a number of estates, where the benefits of physical activity and healthy eating were promoted.

# Working together with contractors for safety and quality

Many essential tasks on HA estates are carried out by contractors, but the HA remains highly involved in many aspects of their work. We regularly assess the work performance of our contractors, and have set up a new central audit team to calibrate how we assess the work of different Property Services Agents. This has helped make the assessment process fairer and more accurate. In March 2013 we adopted the General Specification 2013 for maintenance and improvement contracts. This provides comprehensive guidance for contractors and incorporates the latest international standards, legislative requirements, safety and quality control standards, and environmental considerations.

We are also committed to protecting all workers associated with the HA, including those employed by HA service contractors. As part of this process, we keep in close touch with labour unions so that we are aware of any concerns. We also conduct surprise checks at work sites to discourage any exploitation



of non-skilled workers. We encourage non-skilled workers to become more aware of their rights, and during the year arranged a seminar with the Labour Department to increase these workers' knowledge of key legislation, such as the Statutory Minimum Wage Ordinance and other labour protection laws.

We take pride in the standards of safety we maintain across our operations, and are active in organising events to promote safety for our contractors. In June 2012 we collaborated with the Occupational Safety and Health Council to jointly host the sixth annual Site Safety Forum for Works Contracts and Property Services Contracts. Aiming at the twin goals of "safe work" and "zero incidents", the forum brought together contractors, service providers and frontline workers in an environment where they could share experiences and learn more about good safety practices. With assistance from the Occupational Safety and Health Council, in April 2012 we implemented the Housing Authority Safety Audit System (M&I) for District Maintenance Contracts, Redecoration Contracts, Lift Addition Contracts, Lift Modernisation Contracts and Lift Maintenance Contracts. In February 2013, we launched the Occupational Safety Forum for Cleansing Service, designed to promote safety awareness among frontline cleansing workers.

Our annual Estate Management Services Contractors Awards Presentation Ceremony was held in March 2013. Twenty-five awards were presented to recognise the outstanding performance of various HA services and estate management contractors in 2012.

<sup>1</sup> The Estate Management Services Contractors Awards Presentation Ceremony recognises outstanding performance by HA contractors.

# Maintenance for Sustainability

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The Housing Authority (HA) currently maintains around 1 160 buildings, 44% of which were constructed as far back as the 1980s or earlier. Since building performance inevitably deteriorates over time, the HA runs a range of maintenance and improvement programmes designed to enhance the performance of its aging buildings. These programmes aim at creating sustainability at three main levels: environmental, social, and economic. In 2012/13, three of our major maintenance projects were commended in the Royal Institution of Chartered Surveyors (RICS) Hong Kong Awards 2013. We feature these three award-winning projects here as a glimpse of the many sustainability initiatives being implemented by the HA.

### Nam Shan Carpark conversion

The Carpark Block at Nam Shan Estate had long been under-utilised, and had a high vacancy rate. Meanwhile, the nearby City University of Hong Kong (CityU) had been searching for spaces for many of its important educational activities. In an inspired win-win arrangement, the HA decided to convert the top four storeys of the Nam Shan Carpark into an Educational Centre, and make this available to CityU for lease. The conversion also lifted the nearby Nam Shan Shopping Centre, bringing in an influx of students and academics from the new Education Centre.

To successfully convert the bulk of a featureless carpark building into a comfortable, modern education centre suitable for human occupation was no small job, especially given the very tight construction programme of just 15 months. Much structural upgrading was required to start with, and this needed to be carried out with minimal nuisance to neighbours. The HA used silent type demolition methods (e.g. diamond wire-cut and coring) to form openings in floors and walls, and a carbon filter system to absorb the smell released when fire-resistant paint was applied to the structural steel frame. To link the floors together efficiently, we built a foundation-less lift tower and specially treated the external façade to help transfer the loading to other structural components. Completed on schedule, the conversion works turned the building from a half-empty carpark into an attractive modern space full of life and vibrant intellectual activity.



# Comprehensive Structural Investigation Programme (CSIP)

Rolled out in 2005, CSIP was the first programme in Hong Kong to examine the structural conditions of aged buildings systematically and in-depth. It aims not only to identify deterioration and defects in buildings but also the root causes for them, and to develop effective maintenance and repair solutions that can be applied so as to keep the buildings in a good state for at least another 15 years.

Over the years, the HA has developed a number of innovative maintenance and repair techniques under CSIP, including hydro-scarification and the multi-pulse sequencing system (MPS). Hydro-scarification uses high-pressure water jets to remove building materials such as concrete, thus minimising the need for using

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noisy and dust-generating jackhammers that can be a big nuisance to residents and the public. MPS utilises osmosis through low-voltage electricity to create an effective water barrier, helping to effectively combat water leaks that could have adverse effects on the structural integrity of certain building elements. Following repairs recommended under CSIP, the aged HA estates have had their life-spans extended, avoiding the need for mass redevelopment and hence saving considerable amounts in terms of money, time and manpower. The HA is now sharing the knowledge and experience gained from CSIP with the building industry as a whole, with the aim of creating long-term building sustainability across Hong Kong. CSIP was selected as one of the top three projects under the "Innovative Award of the Year" category of the RICS Hong Kong Awards 2013, where it gained a merit award.

# upgrading existing lifts, improving access paths and other walkways, and making appropriate changes to stairs, steps, drain channel covers, gratings and any other features that could compromise accessibility. All the enhancements meet the requirements outlined in the Government's *Design Manual: Barrier Free Access 2008* as far as practicable.

Some of the enhancement initiatives are relatively simple, but enormously effective. These include adding tactile warning strips on landings and at the top and bottom points of staircases, enhancing handrails along pathways, and adding appropriate channel covers and gratings to drains and channels. Lift improvements are more complex and costly, but equally important. Since 2008, we have been adding many new lifts at outdoor locations within the boundaries of PRH estates in order to connect elevated platforms with large differences in levels, and adding lifts to older PRH blocks lacking lift services. This is now being expanded to include the provision of lifts alongside many existing outdoor footbridges. In the three years from 2013/14, some \$250 million will be invested in new lift additions. Our Barrier Access Improvement Programme was selected as one of the top three projects under the "Project Management Team of the Year" category of the RICS Hong Kong Awards 2013.

#### **Barrier-free access**

Barrier-free access refers to the process of improving accessibility on PRH estates so that people of all physical abilities can access the facilities and venues they need to lead a comfortable and unhindered life. To this end, we have introduced a HK\$330 million barrier-free access improvement programme across all PRH estates. This six-year programme, which began in 2010/11, involves

