



Executive Summary

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- Our Social Performance
- Our Economic Performance

This is the eleventh edition of the Sustainability Report publicised by the Hong Kong Housing Authority (HA), **Smart Living in Sustainable Community**. This Report highlights the annual achievements and progress of HA's sustainability performance from 1 April 2015 to 31 March 2016. This Report is prepared in accordance with the internationally recognised GLOBAL REPORTING INITIATIVE (GRI) G4 SUSTAINABILITY REPORTING GUIDELINES Core option. This Executive Summary aims to provide you with an overview of our sustainability performance and achievements in 2015/16.

Our Environmental Performance

We set 40 environmental targets for 2015/16 and 37 out of 40 targets were fully met. The target of the collection of used clothes and paper waste recycling in Public Rental Housing (PRH) estates was fell short due to the HA's keen promotion on source reduction of waste. Meanwhile, the paper consumption has increased in nearly all offices in 2015/16 as a result of the increase in manpower as well as business activities. We will critically review the position and set the future saving target under comparable operating conditions. We will continue to implement paper saving measures, such as wider use of e-reports and e-operations, to control paper consumption.

Our environmental performance for this year is outlined below:

Initiatives in Planning and Construction of New Housing Estates

Adopting Low Carbon Building Design

- We have applied Carbon Emission Estimation (CEE) at the planning and design stage for all new development projects since 2011 to benchmark the carbon emission level among our projects. During the year, we have carried out CEE for 12 projects during the design stage.
- Since implementation, it is estimated that we have achieved an average of about 13% reduction in carbon emission as compared with the baseline figure of New Harmony 1 Option 6 block in terms of construction floor areas.

Environmentally Friendly Construction Practices

- We formally launched a database to indicate the availability of non-inert construction and demolition recyclable materials excavated from construction sites for collection by recyclers to facilitate waste recycling two years ago. The database is now available on the HA website and updated on a monthly basis.

Green Building Recognition

- In 2015/16, the PRH development at Ex-Kwai Chung Police Married Quarters achieved “Provisional Platinum” rating under BEAM Plus version 1.2.

Renewable Energy

- For new rental domestic building blocks, we have installed grid-connected photovoltaic (PV) system where appropriate to provide at least 1.5% of the communal electricity consumption.



◀ Photovoltaic Panels

Energy Efficiency in Buildings

- We have been adopting LED bulkhead lights since early 2016 as the standard luminaires in public areas of domestic blocks of all new works projects under design.
- We continued to provide “smart meter” monitoring system with displays at the main entrance lobbies of all new domestic blocks. The system shows information and peer comparison of communal and tenants’ consumption of electricity, gas and fresh water with the aim of arousing environmental awareness of tenants.

Water Conservation

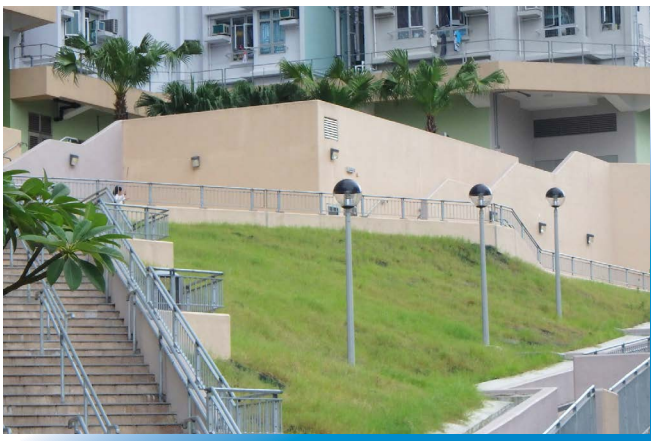
- We have installed Zero Irrigation System (ZIS) in suitable new works projects and reviewed the effectiveness of the completed installations. ZIS consists of a Sustainable Urban Drainage System and Sub-irrigation Planting System to reduce water consumption in irrigation.
- We initiated the trial use of ZIS, along with Rainwater Harvesting System and Root Zone Irrigation, in Hung Fuk Estate to conserve the water resources and better manage irrigation water use.
- In Shui Chuen O Estate, we introduced an integrated water sensitive urban design which collected rainwater at high elevations and planted slope. Collected rainwater would be treated via bio-retention and held in storage tanks for plant irrigation.



▲ Zero Irrigation System

Estate Ecology

- We have involved local residents in greening all new housing estates through the “Action Seedling” programme during the year.
- We have also introduced planting areas for community participation in three development projects to encourage residents to participate in gardening and planting works within their own estates for recreation and education purposes.
- We have carried out green treatment in five projects with formed slopes.



◀ Newly Formed Slopes After Green Treatment

Noise Control

- To minimise noise impact, we have been adopting different types of noise mitigation measures, including acoustic windows, acoustic balconies, acoustic fins and noise barriers, etc., in different projects to suit the site-specific characteristics and lessen the noise nuisance to the residents.
- We have completed the design of the second generation acoustic balconies and will implement it in new projects where necessary.

Air Quality Management

- We have completed the study on the use of bio-filtration system to reduce air pollutants in the car park at Cheung Sha Wan Estate with satisfactory result.

Initiatives in Existing Housing Estates

Green Recognition

- We have successfully obtained “Final Platinum” rating under the BEAM Plus for Existing Buildings scheme for Kwai Shing West Estate in the third quarter of 2015.



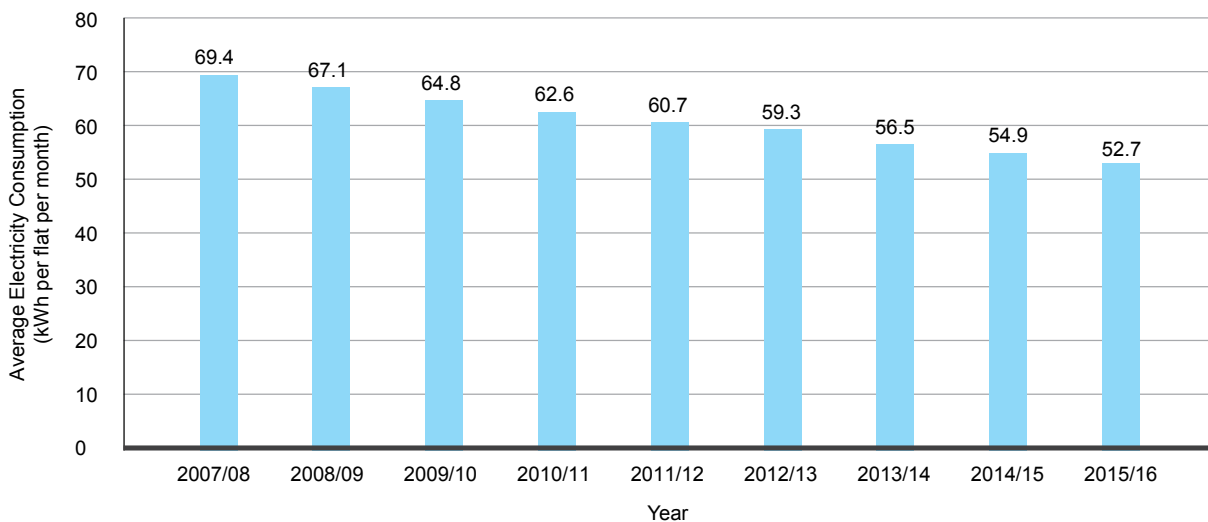
◀ Kwai Shing West Estate

- All our PRH estates obtained the ISO 14001 certifications for maintenance and property management in 2011 and 2013 respectively.
- We have progressively extended the EnMS to cover all PRH estates in two phases with the successful completion of the extended certification for Phases One and Two in August 2014 and April 2015 respectively.

Energy Consumption

- Our electricity consumption in the public areas of PRH blocks was 52.7kWh per flat per month in 2015/16, which was 4% lower than the level recorded in 2014/15.

Electricity Consumption in the Public Areas of Estate



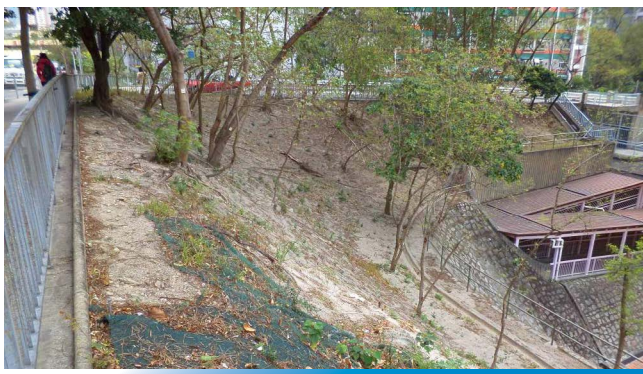
- We have planned to replace electromagnetic ballast at approximately one million light fitting in 960 PRH blocks within a period of 42 months. The replacement work for all PRH blocks was completed in September 2015.

Waste Management

- We have collected, in our estates, around 26 690 tonnes of waste paper, 2 223 tonnes of plastic bottles, 1 353 tonnes of aluminium cans and 867 tonnes of used clothes for recycling.
- All our estates have established collection counters to receive domestic recyclables from tenants with incentives, such as cash or household sundries for exchange.
- We were delighted to achieve the average domestic waste production of 0.55 kg/person/day from our residents during the year, accounting for over 6.8% decrease when compared to that of 2014/15.

Greening and Landscaping

- We have completed green treatment works such as replacing chunam surface with hydroseeding for 10 slopes at nine estates to enhance the slope appearance in our PRH estates.
- We have installed roof greening in Kwai Shing West Estate which is well received by the residents.



▲ Hydroseeding to Bare Slope Surface in Chuk Yuen South Estate Before (Left) and After Green Treatment Works (Right)

- We completed landscape improvement works to enhance greening at 20 PRH estates by introducing new varieties of plants to match the local landscape and conditions.
- We organised community garden programmes in ten estates to promote community participation in greening activities.
- We have developed and implemented a new Enterprise Tree Management System (ETrMS) to assist in monitoring our tree management work and conducting annual tree risk assessment exercise in a systematic way.

Organising Green Activities

- We have been partnering with green groups to launch a long-term estate-wide community environmental education programme, the “Green Delight in Estates” (GDE) since 2005 with the aim to foster environmental awareness of our tenants.
- In 2015/16, we completed GDE Phase 8 and had started the GDE Phase 9 with the theme of “Rehome & Reuse Resources” to encourage residents to share their excessive but useful resources to other people.
- We collaborated with our Estate Management Advisory Committee (EMAC) to organise a considerable number of activities, aiming to increase tenants’ awareness and to promote participation in the greening of PRH estates, including tree planting days in 10 estates and greening activities for residents in 20 estates.

Initiatives in Office at Work

- The HA Headquarters consumed 12 068 cubic metres of water in 2015/16. It was decreased by 21.0% as compared with the consumption of 2007/08.
- In 2015/16, the electricity consumption of our office premises was 35 511 000kWh, representing 7.9% reduction when compared to our baseline consumption figure in 2007/08.
- We had designed an “Art of Living @Home” garden for this year’s Hong Kong Flower Show, echoing the Show’s theme “Blossoms in Vivid Art 2016”. The landscape design won the Gold Award for Unique Feature (Landscape Display) in the Flower Show.



◀ Hong Kong Flower Show 2016

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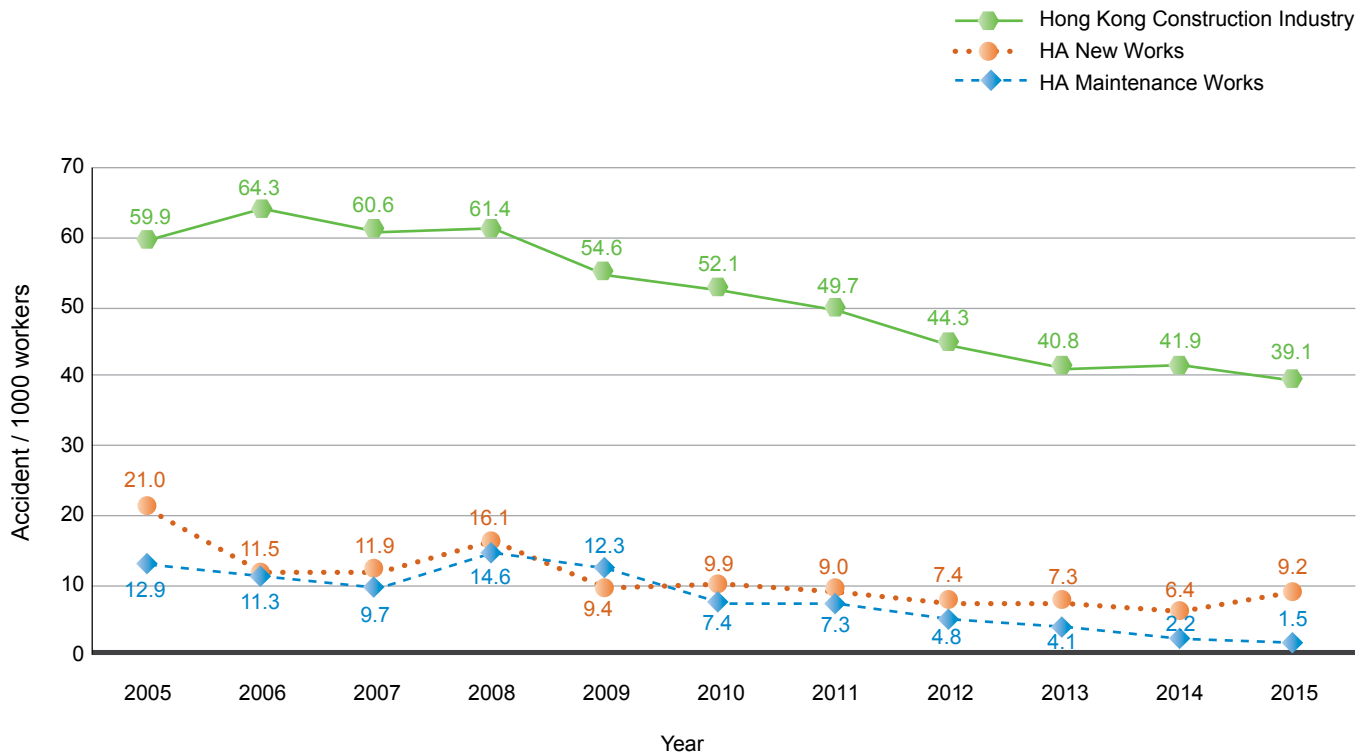
Our Social Performance

We set 22 social targets for 2015/16 and all these targets were fully met. Our social performance during the year is highlighted below:

Overview

- Housing Department (HD) successfully attained the “10 years plus Caring Organisation Logo” for the first time in early 2016.
- HA’s Development & Construction Division and Estate Management Division have continued to participate in the annual performance assessment of the Hong Kong Quality Assurance Agency’s Corporate Social Responsibility Index in 2015/16. The two divisions received the full score of 5.0, and were awarded the HKQAA CSR Advocate Mark.
- Across all our construction sites, the accident rates were 9.2 per 1 000 workers for new works contracts and 1.5 per 1 000 workers for maintenance contracts, based on the 2015 statistical data from Labour Department.

Accident Rate Compared to Local Construction Industry



Initiatives in Planning and Construction of New Housing Estates

Safety

- We made further enhancement to the Performance Assessment Scoring System in the third quarter of 2015, including improving the safety requirements and revising the programme milestone dates
- We developed a new web-based tool in the past year, namely, Occupational Injury and Disease Surveillance System (OIDSS), to strengthen accident and incident reporting. It has been fully implemented starting from May 2016.

Supporting Our Contractors

- Starting from April 2015, we have included Contractor Cooperative Training Scheme in the tenders of all building services sub-contracts.
- A total of 61 safety circulars were issued in the financial year, covering alerts, new guidelines, good practice, advice and information related to site safety and health from the Labour Department, the Occupational Safety and Health Council, and the Construction Industry Council.
- We announced the launch of the HA Occupational Injury and Disease Surveillance System, upgrading of the HA Safety Auditing System to version 1.5.1, and the revised Safety Auditing Checklist for Building Services Contractors during our Site Safety Seminar in October 2015.

Community Engagement

- For all new developments, we continued to consult district councils, organised community engagement activities to present development proposals, and obtained feedback on the planning and design of projects.

Initiatives in Existing Housing Estates

Facilities Upkeep

- To identify room for improvement through peer benchmarking, we took the initiative to conduct a review by enrolling ten selected pilot estates to the HKQAA Sustainable Building Index (SBI), with an aim to evaluate our building sustainable performance against industry best practices.
- We completed the inspection on 65 new lift installations in existing estates, and carried out 438 inspections on existing lift installations and 35 escalator installations. Audits on the safety aspect of 36 lifts works under lift addition / modernisation contracts were also conducted.
- We replaced the electrical wirings for around 1 716 flats built between 1986 and 1992 through the Rewiring inside Domestic Flats (RDF) programme. Safety related messages and videos were also developed and broadcast throughout all estates.

Community Engagement

- Approximately 450 community building campaigns and activities were co-organised by our EMACs and NGOs at estates during the year.
- EMACs collaborated with NGOs to deliver outreach services for elderly tenants. About 190 functions were held in which some 1 800 home visits to elderly tenants have been conducted under the programme of Healthy Ageing in PRH Estates 2015/16.



◀ A Partnering Function Promoting “Caring for the Elderly” through Home Visits

- We designed a number of the harmonious families schemes, including the Harmonious Families Priority Scheme, the Harmonious Families Transfer Scheme, the Harmonious Families Addition Scheme, and the Harmonious Families Amalgamation Scheme, to encourage young generations to live near to and take care of their elderly parents or dependent relatives. By the end of 2015/16, the total number of the benefited households have reached about 39 160.

Initiatives in Office at Work

Safety and Healthy Work Environment

- We organised about 230 occupational safety and health (OSH)-related training courses and seminars with over 10 000 staff attendance in 2015. Through the dedicated OSH website on intranet, we shared latest guidance and publications from the OSHC and the Labour Department with our staff.
- To upkeep staff safety awareness and to identify area for improvement in the workplace, our annual office safety inspection for over 350 offices was completed in May 2015.

Knowledge Exchange

- We have promoted our work through the HA Exhibition Centre, arranged tours, and site visits for media, local, the Mainland and overseas visitors.
- We exhibited our works entitled “Fundamentally Hong Kong? - Delta Four 1984-2044” in the 14th Venice Biennale International Exhibition in 2014. Then, we showcased the exhibits under the theme of “Home and Community” in the Hong Kong Heritage Discovery Centre from March to May 2015.
- In March 2016, we arranged a special visit for a youth supporting programme entitled “CLAP for Youth”, in which 30 senior form students visited our headquarter building. They were guided around the HA's Exhibition Centre and Building Information Modelling Centre, and invited to participate in discussion for a better understanding of different job disciplines.



▲ Visit HA Exhibition Centre



▲ Visit Hosted for the CLAP for Youth Programme

- In November 2015, at the 20th Conference of the Housing and Urban Public Corporations in Asia (A-HUC) hosted by the Korea Land and Housing Corporate in Seoul, we shared experience with the delegations of housing organisations from Japan, Singapore, and South Korea, with regard to “Housing Welfare Improvement based on the Public-Private Partnership”.

Our Economic Performance

We set 4 economic performance targets for 2015/16 and all these targets were fully met. Our economic performance in this year is highlighted below:

Financial Performance

- As at 31 March 2016, the HA's available investment funds stood at HK\$56.6 billion.
- During the year, the recurrent expenditure of the HA was HK\$16 449 million, which was HK\$535 million higher than 2014/15.

Initiatives in Planning and Construction of New Housing Estates

Planning and Design

- In 2015/16, we completed the construction of around 14 300 PRH units in a total of twelve projects.



▲ Lei Yue Mun Estate



▲ Hung Fuk Estate

- To improve the design and construction process of new housing development, we seek to adopt advanced information technologies where applicable, including Building Information Modelling, Geographic Information System, Housing Construction Management Enterprise System, Radio Frequency Identification, Development and Construction Site Mobile System.
- This year, we have conducted the pilot trial on the integration of RFID with BIM through Cloud technology in the development project at Tuen Mun Area 54 Site 2 (Yan Tin Estate), for enhancing the efficiency of logistic and supply chain management of precast construction.

Optimising Resources Use

- The HA lists of contractors, sub-contractors and service providers have been maintained per our pre-qualification requirements
- We reviewed the monitoring mechanism for contractors who are not on the HA-list and formulated a set of management procedures to review and report their service quality.
- We have continued to monitor and review the requirements for Trade Tested Worker in response to the industry trends, and to implement the streamlined Supplementary Labour Scheme (SLS) in HA's new works contracts. In the year under review, our active contractors had made ten applications to the scheme and two were successful.

Initiatives in Existing Housing Estates

Optimising the Allocation of Housing Resources

- In 2015/16, our frontline staff completed the checking of some 211 500 biennial declarations of income/assets under the Housing Subsidy Policy, Policy on Safeguarding Rational Allocation of Public Housing Resources and other tenancy management policies.
- About 2 100 households were rehoused under the Territory-wide Overcrowding Relief Transfer Scheme and the Living Space Improvement Transfer Scheme.

Maximising Resources Efficiency

- We have commenced the Total Maintenance Scheme (TMS) for over 15 estates during the year. 214 PRH estates received our Responsive In-flat Maintenance Service (RIMS) as at March 2016.
- We continued to implement the stage 2 Life Addition Programme, with two lifts completed in the year and 11 lifts under construction. We had replaced 101 lifts of over 25 years of service under Lift Modernisation Programme 2015/16.

Initiatives in Office at Work

- With the aid of latest IT services and software products, we have achieved accreditations in three main areas, namely application software development maintenance, IT services management, and information security management.
- We launched the Human Resource Management System in August 2015.
- We completed the upgrade of the aged network at Data Centre in March 2016.
- We established a common e-Services platform to provide internet services for the general public, public housing tenants and applicants. The migration to the new e-Services platform and decommission of the old platform were completed in June 2015.