

## Legislative Council Panel on Housing

### Performance of Environmental Targets and Initiatives in 2013/14

#### Purpose

This paper aims to brief members on the performance of the Hong Kong Housing Authority (HA) in respect of its environmental targets and initiatives in 2013/14.

#### Background

2. In 1999, the HA established its Environmental Policy to promote healthy living and a green environment, so as to enhance the quality of living. In addition to complying with environmental legislation and regulations, the HA has developed a strategic framework and implemented environmental management strategies for the promotion of sustainable development on various fronts, including planning and construction of new public housing estates, operation of existing estates and our office at work. With a view to addressing environmental concerns and minimising environmental impacts, we have incorporated environmental initiatives throughout our planning and design, construction and demolition, marketing and estate management activities, and developed relevant green procurement policies.

#### Progress

3. To effectively manage the overall implementation of the Environmental Policy, the HA will establish environmental targets and initiatives at the beginning of each fiscal year and review the performance quarterly. In 2013/14, we have set 40 targets covering six environmental aspects, which include energy efficiency, water conservation, greening, waste management, control of hazardous materials as well as enhancement of environmental awareness and participation. Details of our performance are listed at **Annex 1**. The statistics on the environmental performance for the nine quantifiable targets as compared with the respective key performance indicators are summarised at **Annex 2**.

## **Way Forward**

4. We have set out challenging yet pragmatic targets to gauge our performance for 2014/15. We will continue our efforts to achieve various environmental, social and economic targets, with a view to maintaining a sustainable public housing programme for Hong Kong.

5. Members are invited to note the performance of the HA in respect of its environmental targets and initiatives in 2013/14.

**Transport and Housing Bureau  
May 2014**

## **The Environmental Performance of the Hong Kong Housing Authority**

The Hong Kong Housing Authority (HA) has set 40 environmental targets for the fiscal year 2013/14 for the promotion of sustainable development on various fronts including planning and construction of new housing estates, the operation of existing estates and our office at work. The targets covered six environmental aspects, including energy efficiency, water conservation, greening, waste management, control of hazardous materials, as well as enhancement of environmental awareness and participation. In 2013/14, all targets were fully met. The details of our environmental performance are set out below.

### **(A) Environmental Initiatives in Planning and Construction of New Housing Estates**

#### ***Energy Efficiency***

1. We obtained energy certificates for all newly completed public domestic blocks.
2. We explored and studied the use of more energy efficient equipment, including lift system with regenerative power, light-emitting diode (LED) bulkheads as well as environmental lighting controls using motion-sensors and push buttons at the communal areas of domestic blocks.
3. We explored and studied the use of green design for building services equipment, including photovoltaic (PV) panel system, solar-powered lights, and conducted carbon emission estimation and energy estimation.

#### ***Water Conservation***

4. We promulgated specification on dual flush system to reduce flushing water consumption.
5. We provided rain water harvesting system in new building projects to reduce irrigation water consumption.

***Greening***

6. All newly completed planting works met the minimum of one tree per 15 public rental housing (PRH) flats target, and all new estates achieved an overall target of 30% green coverage, with a minimum of 20% at the planning brief stage.
7. We provided green treatment to all the newly formed slopes.
8. We engaged local residents and community to participate in the Action Seedling programme for early plant raising in all new housing estates.
9. We encouraged community involvement in greening of our new PRH by reserving communal planting areas at the design stage in three new PRH developments.

***Waste Management***

10. We enhanced the use of green materials and components, including pulverised fuel ash, ground granulated blastfurnace slag, recycled rock fill, recycled subbase materials, recycled rock cores, recycled glass cum aggregates as well as recycled marine mud.
11. We promulgated specification for using softwood timber from sustainable source for all cores of timber doors in new PRH projects.
12. We promulgated specification requiring contractors to use timber from sustainable source and no virgin forest products for temporary works during construction.

***Control of Hazardous Materials***

13. We implemented asbestos abatement programme under the estate redevelopment programme and asbestos removal works in five domestic blocks and one factory block to abate the remaining asbestos containing materials.

***Enhancement of Environmental Awareness and Participation***

14. We enhanced the environmental performance of contractors on site for all new building, demolition, piling and civil engineering contracts, by requiring the contractors to implement environmental management plan, as well as use environment-friendly equipment and construction methods.

**(B) Environmental Initiatives in Existing Housing Estates**

***Energy Efficiency***

15. We completed the replacement of existing light fittings equipped with electromagnetic ballast by electronic ballast in 280 existing PRH blocks.
16. We conducted carbon audit in 14 typical PRH block types for monitoring and benchmarking purposes.

**Water Conservation**

17. We studied the performance of the new rain water harvesting system for all commercial centres and PRH estates where the system was installed.

***Greening***

18. We nurtured a green environment and promoted tenants' awareness and participation in greening by organising tree planting days in 10 estates, developing community gardens in 10 estates and providing greening activities in 20 estates in collaboration with the Estate Management Advisory Committees.
19. We re-landscaped and upgraded the existing landscape facilities through the Landscape Improvement Programme in 18 estates and have set up thematic gardens at Lee On Estate and Shun On Estate.
20. We improved the appearance of 10 slopes at nine estates by providing planters along slope toe and/or improvement of slope surfaces with hydroseeding and shrubs.

***Waste Management***

21. We promoted waste separation at source and green management initiatives by implementing the Source Separation of Domestic Waste Programme in all estates, and setting up collection counters in all estates to collect domestic recyclables through incentive scheme.
22. We recovered about 29 394 tonnes paper for recycling in PRH estates.
23. We recovered about 1 359 tonnes aluminium cans for recycling in PRH estates.
24. We recovered about 1 812 tonnes plastic bottles for recycling in PRH estates.
25. We recovered about 1 053 tonnes used clothes for recycling in PRH estates.
26. We achieved the average domestic waste production of 0.63 kg/person/day from our residents through the implementation of various waste reduction and recovery initiatives in PRH estates.

***Control of Hazardous Materials***

27. We maintained the remaining asbestos containing materials in existing PRH estates in satisfactory condition by conducting two condition surveys per year and engaging a registered asbestos contractor for emergency repair of underground asbestos cement water-mains for all estates.

***Enhancement of Environmental Awareness and Participation***

28. We collaborated with green groups to conduct the estate-wide environmental awareness campaign and education programme, namely the Green Delight in Estates programme in PRH.
29. We reviewed the environmental awareness of the PRH residents by conducting survey on the residents.
30. We continued to enhance community awareness on environmental protection by organising programmes to promote environmental protection messages.

31. We promoted tenants' awareness and participation in waste separation at source, waste reduction and green management initiatives through various publicity channels.

**(C) Environmental Initiatives in Office at Work**

***Energy Efficiency***

32. We consumed a total of 34 957 181 kWh of electricity, which was reduced by about 9.3% when compared with the total electricity usage baseline of our offices in 2007/08.

***Water Conservation***

33. We consumed 11 404 m<sup>3</sup> of water in the HA Headquarters, which has decreased by 25.4% as compared with the consumption baseline in 2007/08.

***Greening***

34. We promoted staff involvement in greening activities by arranging staff to participate in tree planting day.

***Waste Management***

35. We consumed 129 515 reams of paper representing a decrease of 4.0% as compared with the consumption baseline in 2007/08.
36. We collected 55.6 kg of waste paper per staff in our offices, which is higher than the target of 20.7 kg per staff.
37. We have been using environment-friendly paper as a prerequisite requirement in the printing of all publicity materials.

***Control of Hazardous Materials***

38. We controlled hazardous materials by collecting all disposed mercury-containing lamps in HA Headquarters for special waste treatment.

***Enhancement of Environmental Awareness and Participation***

39. We followed up the HA staff survey on environmental awareness and strengthened our training and publicity on environmental issues, including producing the HA Environmental Corporate Video.
40. We continued to enhance staff environmental awareness and knowledge by organising seminars, displaying environmental issues at HA Headquarters and organising environmental campaigns.

**Trial Scheme on Food Waste Recycling**

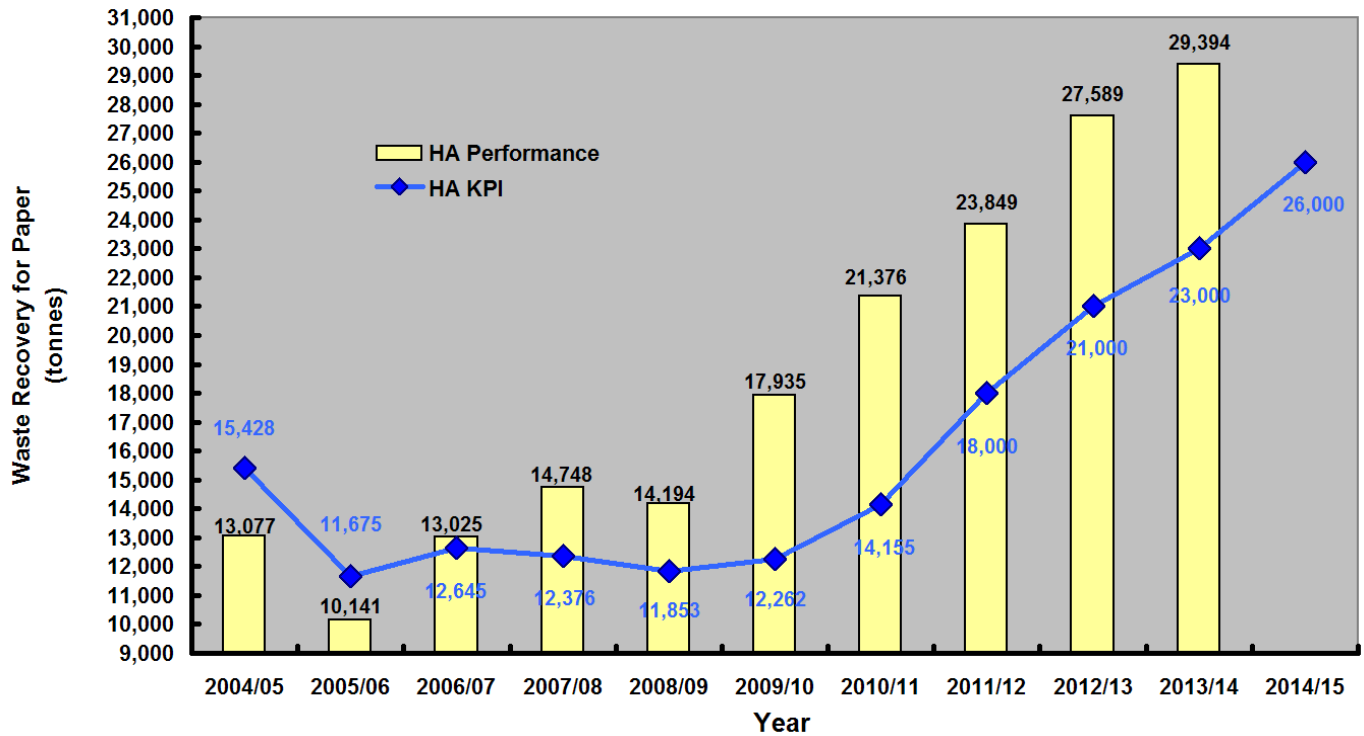
The HA has partnered with three green groups to conduct food waste recycling trial schemes in PRH estates since November 2012. 14 estates have joined in the scheme, namely Lai Kok, Tin Wah, Tin Tsz, Nam Shan, Ching Ho, Lam Tin, Grandeur Terrace, Lai On, On Yam, Sun Chui, Lei Muk Shue, Kai Tin, Tin Ching and Tsz Ching Estates. About 3 000 households have participated.



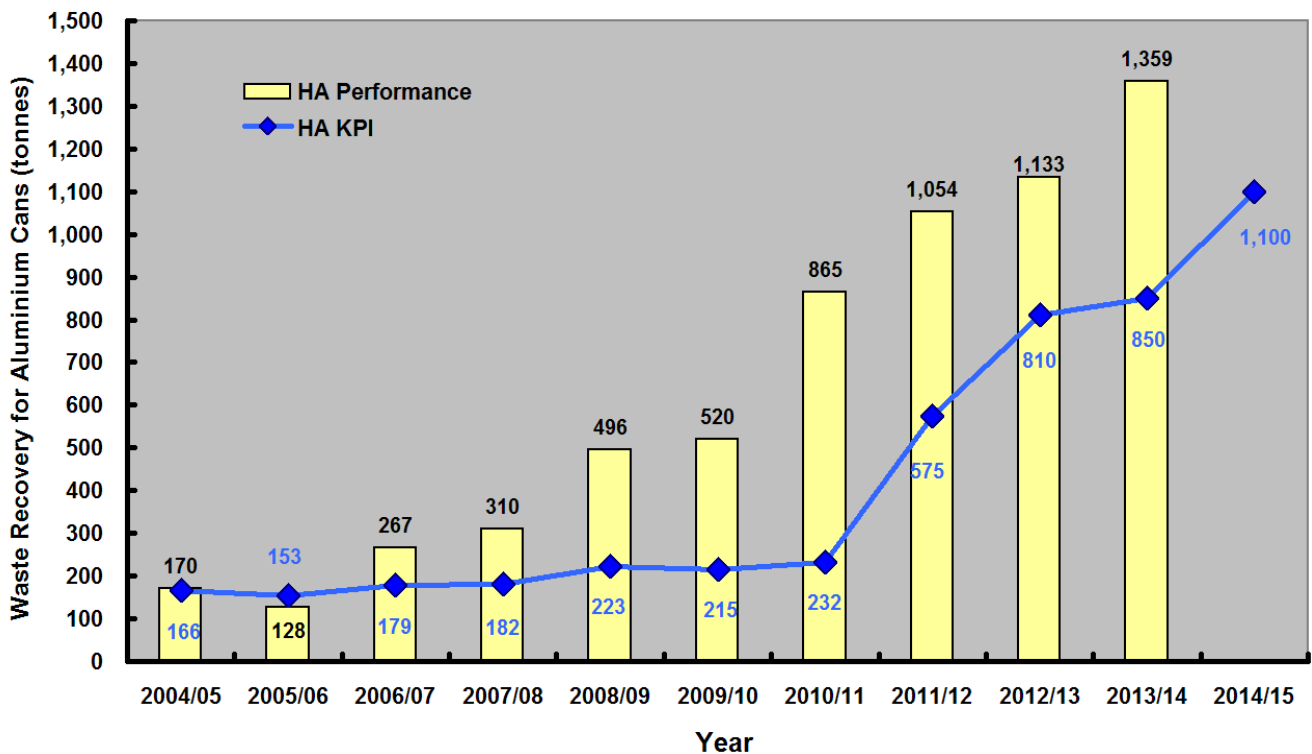
**Statistics Summary on the Environmental Performance for  
the Nine Quantifiable Targets**

**A) Housing Estates**

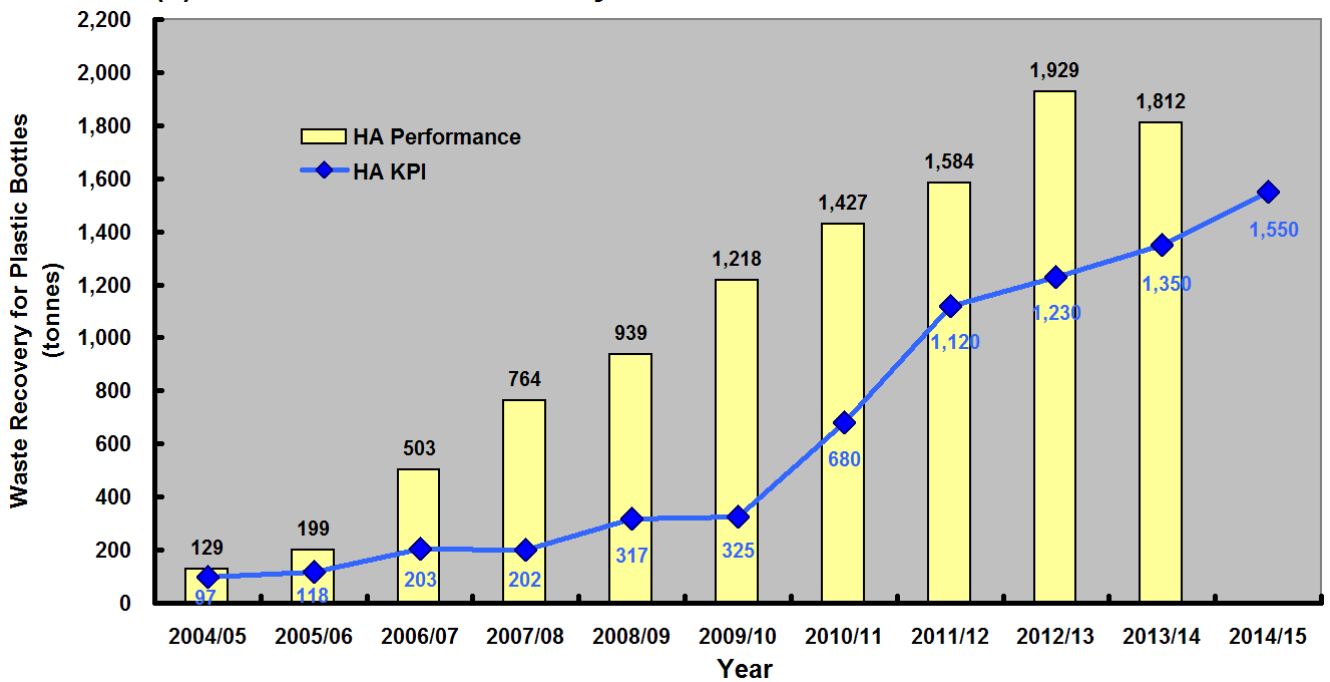
**(1) Domestic Waste Recovery for Paper**



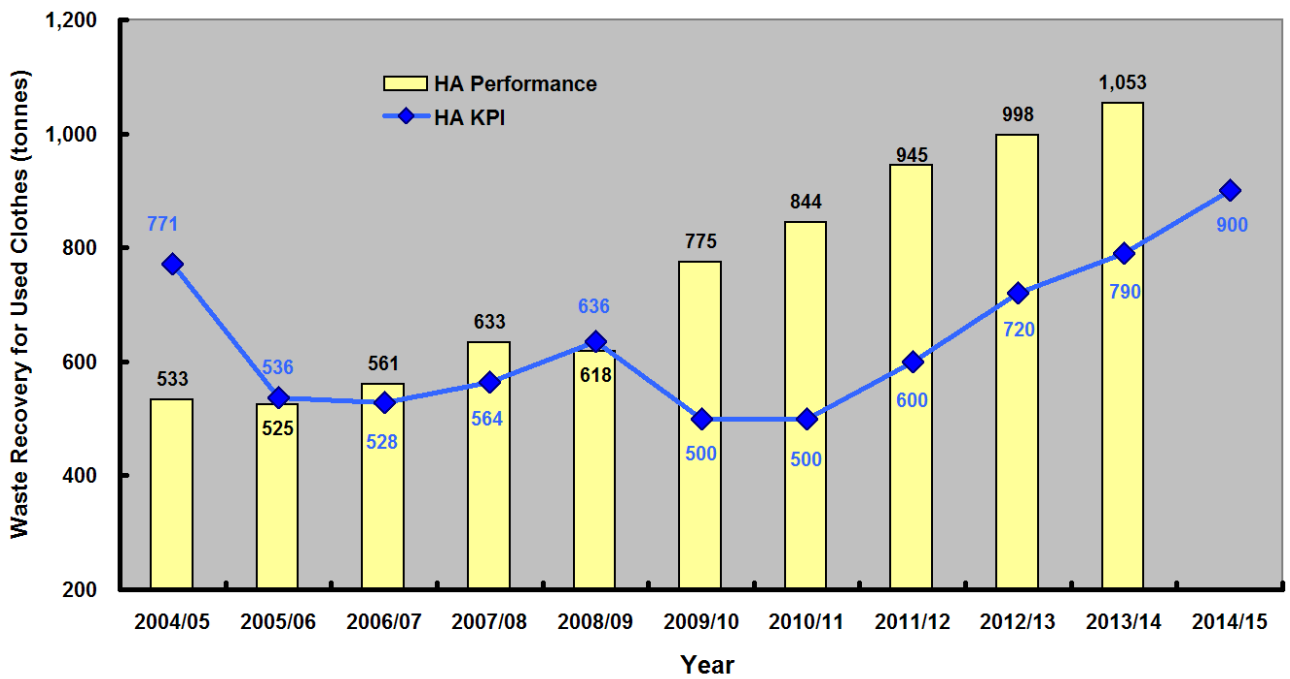
**(2) Domestic Waste Recovery for Aluminium Cans**



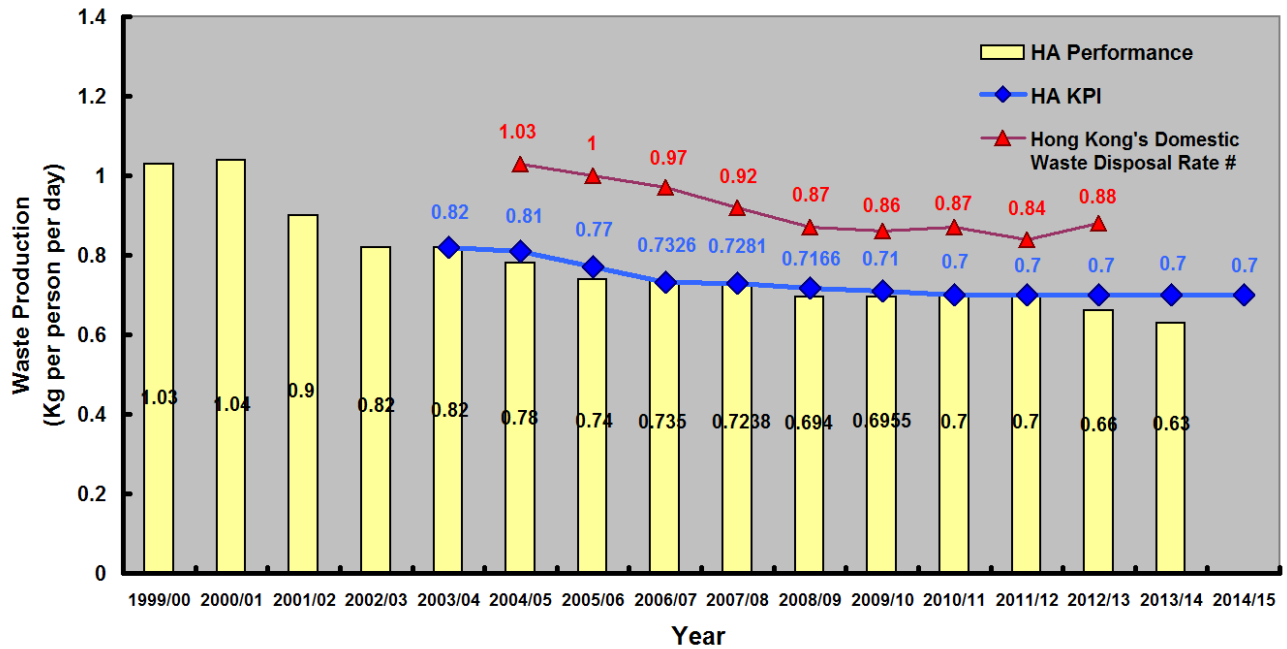
### (3) Domestic Waste Recovery for Plastic Bottles



### (4) Domestic Waste Recovery for Used Clothes



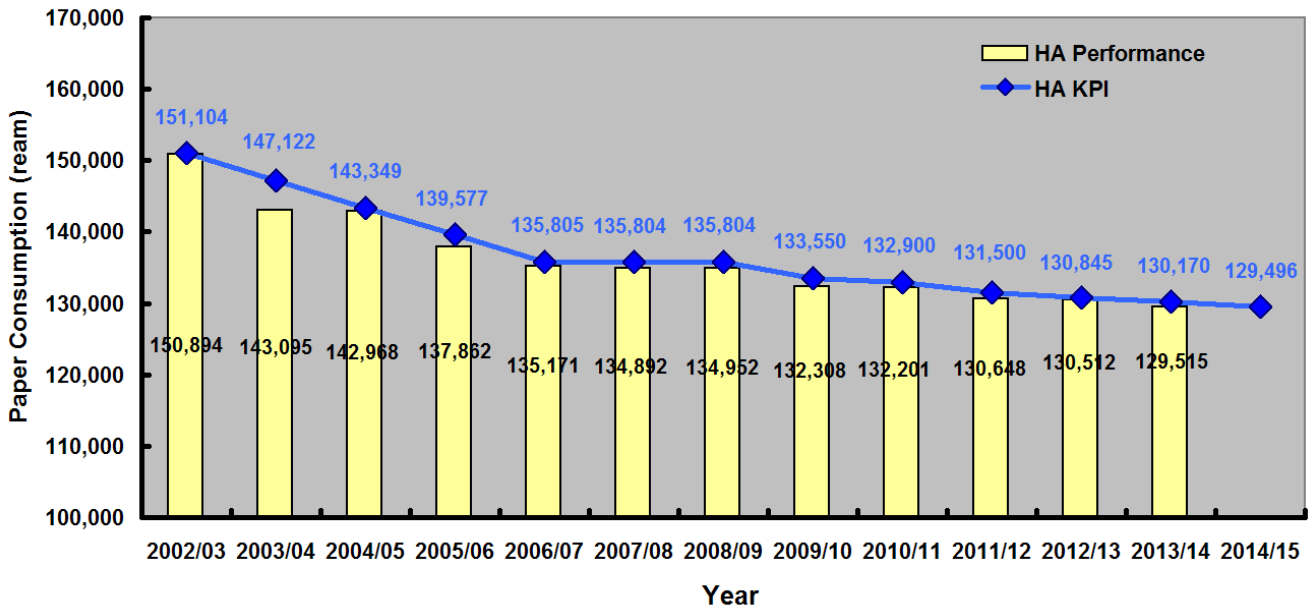
### (5) Average Domestic Waste Production



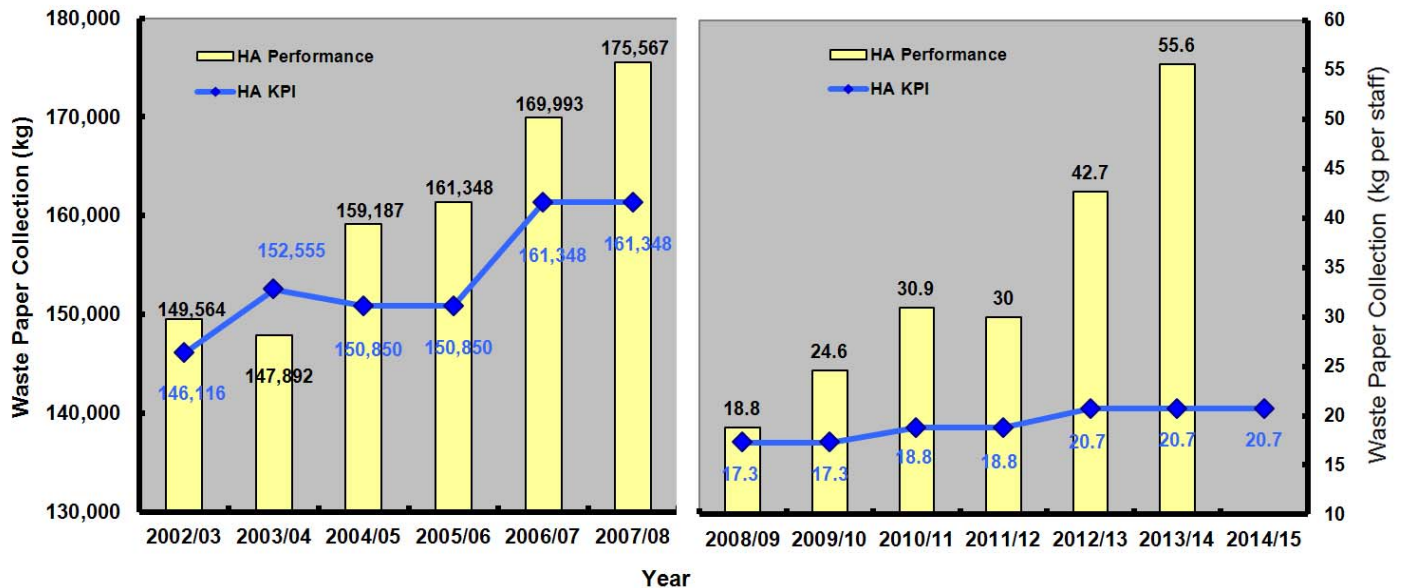
# Source : Environmental Protection Department (2014). *Monitoring of Solid Waste in Hong Kong - Waste Statistics for 2012*.

## B) Housing Authority Offices

### (6) Paper Consumption in all HA Offices

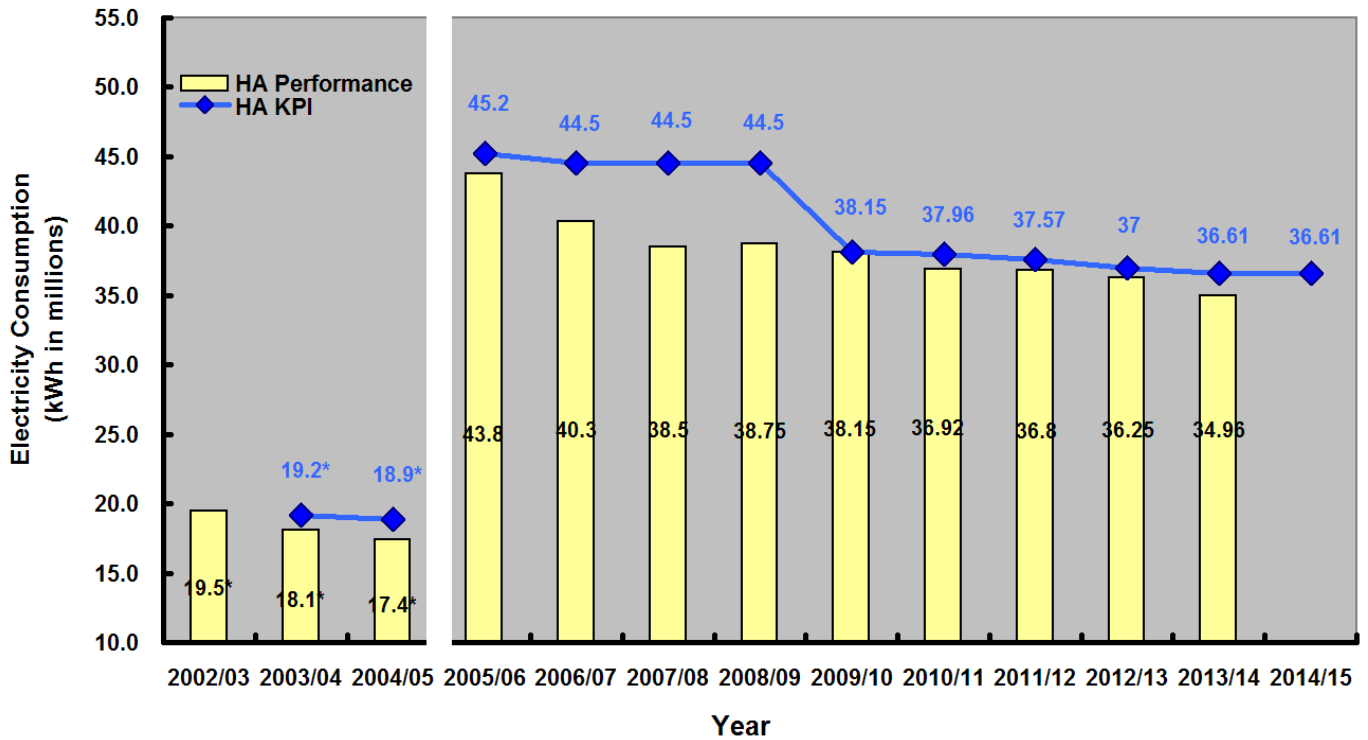


### (7) Waste Paper Collection in all HA Offices



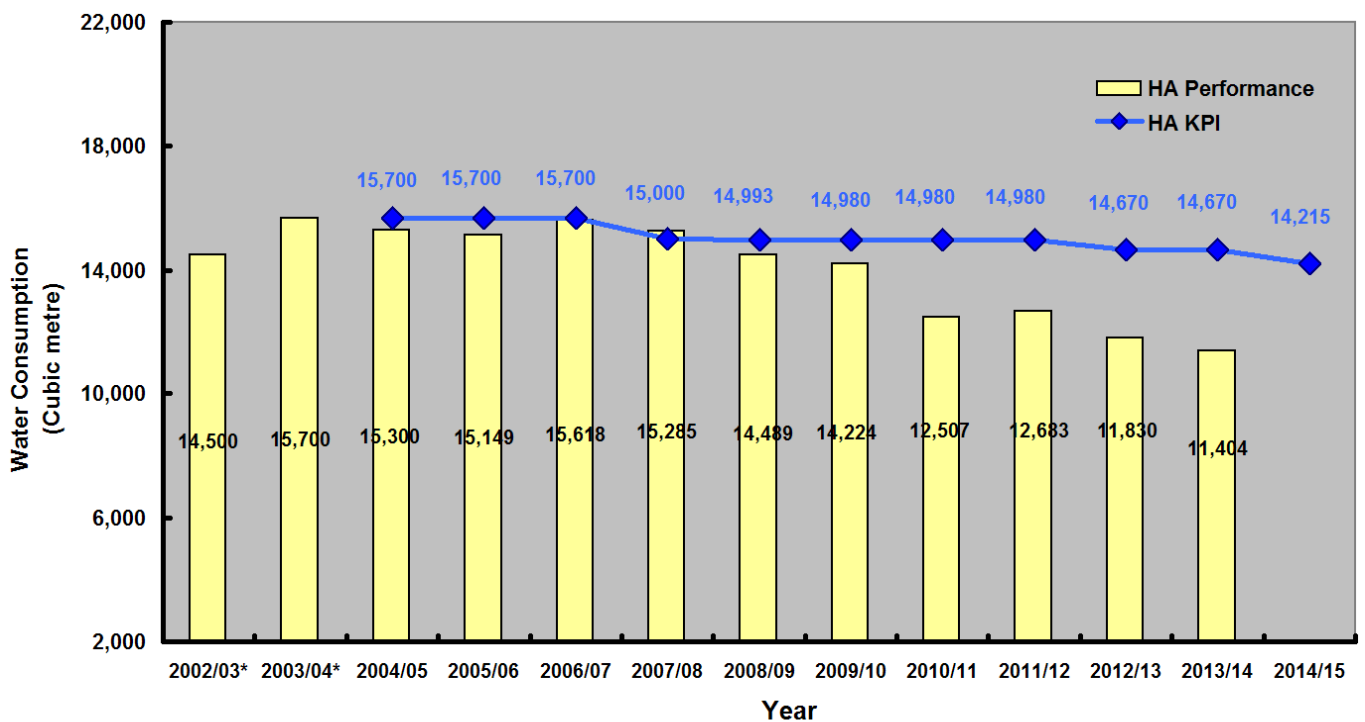
Note: Since 2008/09, waste paper collection is calculated by weight per staff instead of the overall weight

### (8) Annual Electricity Consumption in all HA Offices



\*The HA KPI & HA performance have not included the HA Offices outside HAHQs. The corresponding KPI has been set up since 2003/04.

### (9) Water Consumption in HA Headquarters



\* No official target was set for water consumption in 2002/03 and 2003/04