

**For Discussion
on 7 December 2015**

Legislative Council Panel on Housing

Performance of Environmental Targets and Initiatives in 2014-15

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 2014-15.

Background

2. In 1999, 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 relevant legislations and regulations, HA has developed a 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 concerns over environmental protection and minimising impacts on the environment, HA has 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, HA establishes environmental targets and initiatives each year at the beginning of the fiscal year and review the performance quarterly. In 2014-15, 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 HA's performance are listed at **Annex 1**. The statistics on the environmental performance of nine quantifiable targets as compared with respective key performance indicators are summarised at **Annex 2**.

Way Forward

4. HA has set challenging and yet pragmatic targets to gauge the performance for 2015-16. HA will continue the efforts to achieve various environmental, social and economic targets for maintaining the sustainable development of the public housing programme in Hong Kong
5. Members are invited to note the performance of HA in respect of its environmental targets and initiatives in 2014-15.

**Transport and Housing Bureau
November 2015**

The Environmental Performance of the Hong Kong Housing Authority

The Hong Kong Housing Authority (HA) has set 40 environmental targets for the fiscal year 2014-15 to promote sustainable development on various fronts, including planning and construction of new housing estates, the operation of existing estates and our office at work. These targets covered six aspects, including energy efficiency, water conservation, greening, waste management, control of hazardous materials, as well as enhancement of environmental awareness and participation. Among the 40 environmental targets, 39 of them were fully met, while the target on promoting recycling of used clothes in existing estates was not fully met by a small margin. It is worth noting that HA's keen effort in promoting waste reduction might lead to tenants making better use of their clothes, resulting in less used clothes being recycled.

The details of HA's environmental performance are set out below.

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

Energy Efficiency

1. HA obtained energy certificates for all newly completed public domestic blocks.
2. HA explored and studied the use of more energy efficient equipment, including gearless lift with regenerative power, light-emitting diode (LED) bulkheads as well as environmental lighting controls using motion-sensors and push buttons in communal areas of domestic blocks.
3. HA 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. HA used six-litre single or dual flush water-closet suite to reduce consumption of flushing water.

5. HA provided rain water harvesting system in new public rental housing (PRH) developments to reduce irrigation water consumption.

Greening

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

Waste Management

10. HA 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, etc.
11. HA promulgated specification of timber door cores, requiring the use of softwood timber from sustainable source in new public housing projects.
12. HA 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. HA implemented asbestos abatement programme under the estate redevelopment programme and conducted asbestos removal works in one building block to abate the remaining asbestos-containing materials.

Enhancement of Environmental Awareness and Participation

14. To enhance the environmental performance of contractors on site, HA required contractors to implement environmental management plan, and use environment-friendly equipment and construction methods under the contracts for all new building, demolition, piling and civil engineering.

(B) Environmental Initiatives in Existing Housing Estates

Energy Efficiency

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

Water Conservation

17. HA studied the performance of the new rain water harvesting systems installed in commercial centres and PRH estates.

Greening

18. To create a green environment and promote tenants' environmental awareness and participation in greening, HA organised tree planting days in 10 PRH estates, developed community gardens in 10 PRH estates and organised greening activities in 20 PRH estates in collaboration with Estate Management Advisory Committees.
19. HA re-landscaped and upgraded the existing landscape facilities, through the Landscape Improvement Programme in 20 estates.
20. HA improved the appearance of 10 slopes at five PRH estates by providing planters along slope toe as well as hydroseeding and stone pitching on slope surfaces.

Waste Management

21. To promote waste separation at source and environmental management initiatives, HA implemented the Source Separation of Domestic Waste Programme in all PRH estates and set up collection counters to collect domestic recyclables through an incentive scheme.
22. HA recovered about 27 127 tonnes of paper from PRH estates for recycling.
23. HA recovered about 1 362 tonnes of aluminium cans from PRH estates for recycling.
24. HA recovered about 1 983 tonnes of plastic bottles from PRH estates for recycling.
25. HA recovered about 896 tonnes of used clothes from PRH estates for recycling .
26. HA implemented various waste reduction and recovery initiatives in PRH estates, and achieved the target of reducing tenants' domestic waste production to 0.59 kg/person/day on average.

Control of Hazardous Materials

27. To maintain the remaining asbestos containing materials in existing PRH estates in satisfactory condition, HA conducted two condition surveys per year and engaged a registered asbestos contractor for emergency repair works on underground asbestos cement water-mains for all PRH estates.

Enhancement of Environmental Awareness and Participation

28. HA conducted the Green Delight in Estates programme in all PRH estates in collaboration with green groups to promote environmental awareness and conduct environmental education.
29. HA conducted survey with PRH tenants to understand their environmental awareness.
30. HA continued to organise programmes to promote environmental protection and environmental awareness in local communities.

31. HA promoted tenants' awareness and participation in waste separation at source, waste reduction and different aspects of environmental management initiatives through various publicity channels.

(C) Environmental Initiatives in Office at Work

Energy Efficiency

32. HA offices consumed a total of 35 991 009 kWh of electricity, representing a decrease of about 6.6% when compared with the total electricity usage baseline in 2007-08.

Water Conservation

33. HA Headquarters consumed 12 723 m³ of water, representing a decrease of 16.8% when compared with the water consumption baseline in 2007-08.

Greening

34. HA arranged staff to participate in tree planting day to promote staff involvement in greening activities.

Waste Management

35. HA consumed 129 447 reams of paper, representing a decrease of 4.0% when compared with the consumption baseline in 2007-08.
36. HA collected 61.9 kg of waste paper per staff in its offices, which is higher than the target of 20.7 kg per staff.
37. HA has been using environment-friendly paper as a prerequisite requirement in the printing of all publicity materials.

Control of Hazardous Materials

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

Enhancement of Environmental Awareness and Participation

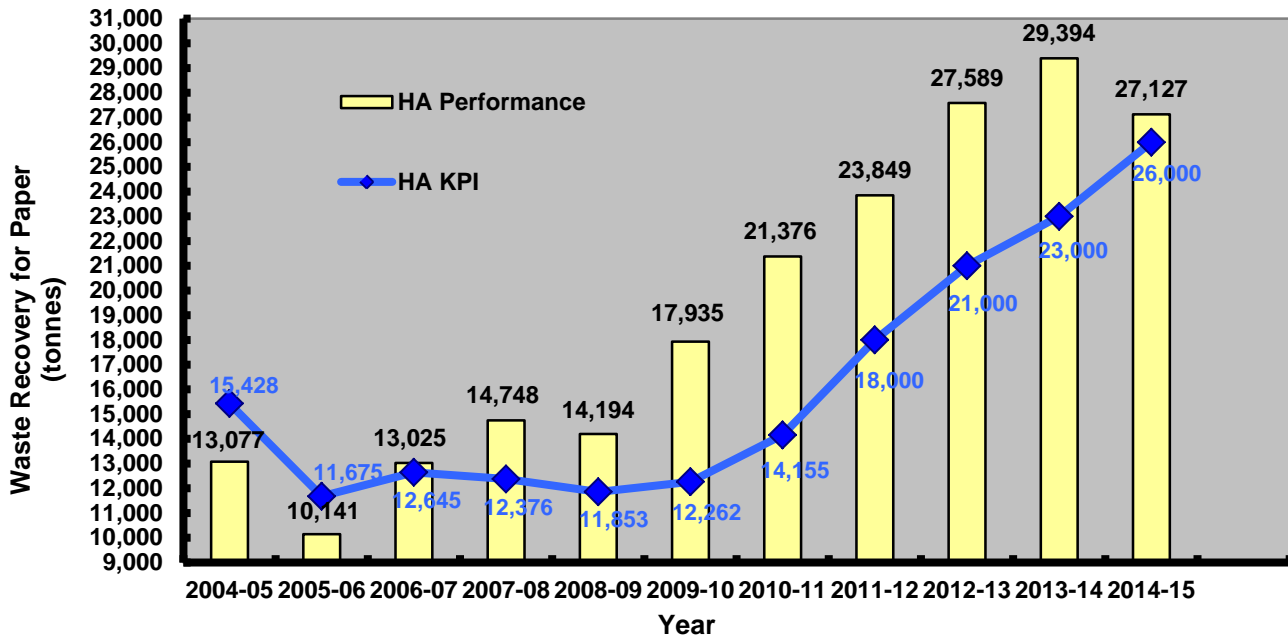
39. As a follow-up to the staff survey on environmental awareness, HA strengthened training and publicity on environmental protection, including promoting the HA Environmental Corporate Video.
40. HA continued to organise seminars, display information on environmental issues at HA Headquarters and organise environmental campaigns to enhance environmental awareness and knowledge among staff members.

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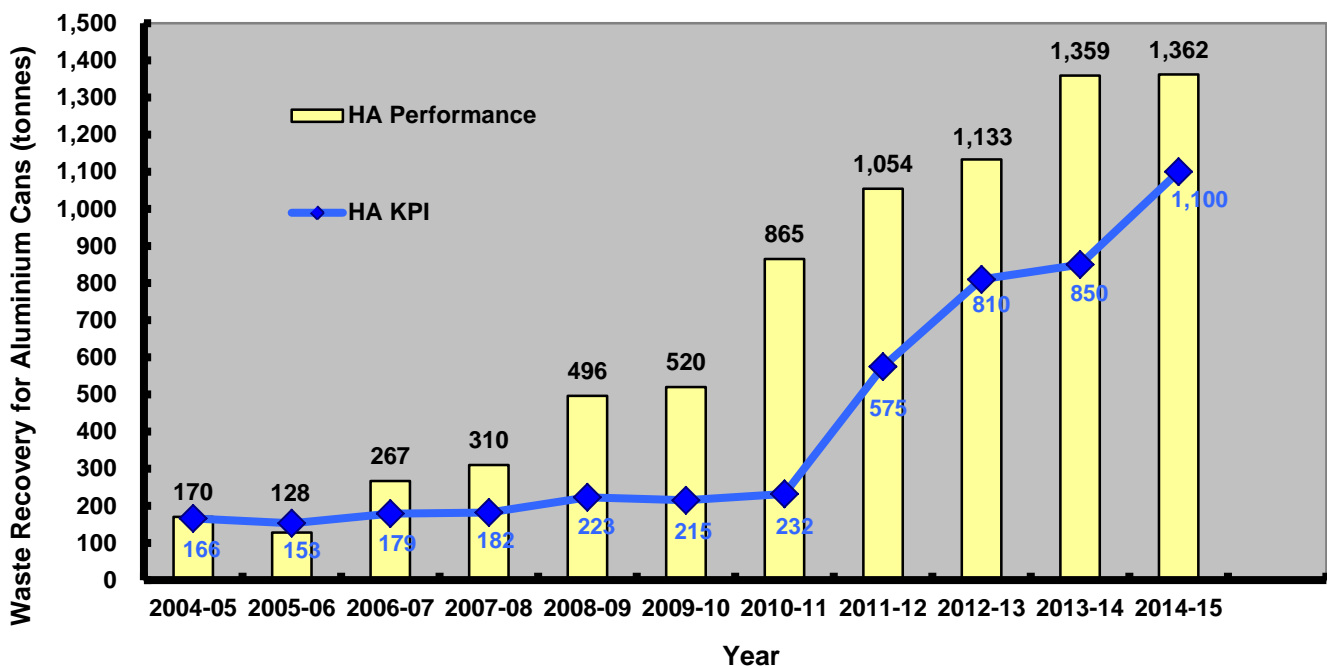
**Summary on the Statistics about the Environmental Performance for
Nine Quantifiable Targets**

A) Public Rental Housing Estates

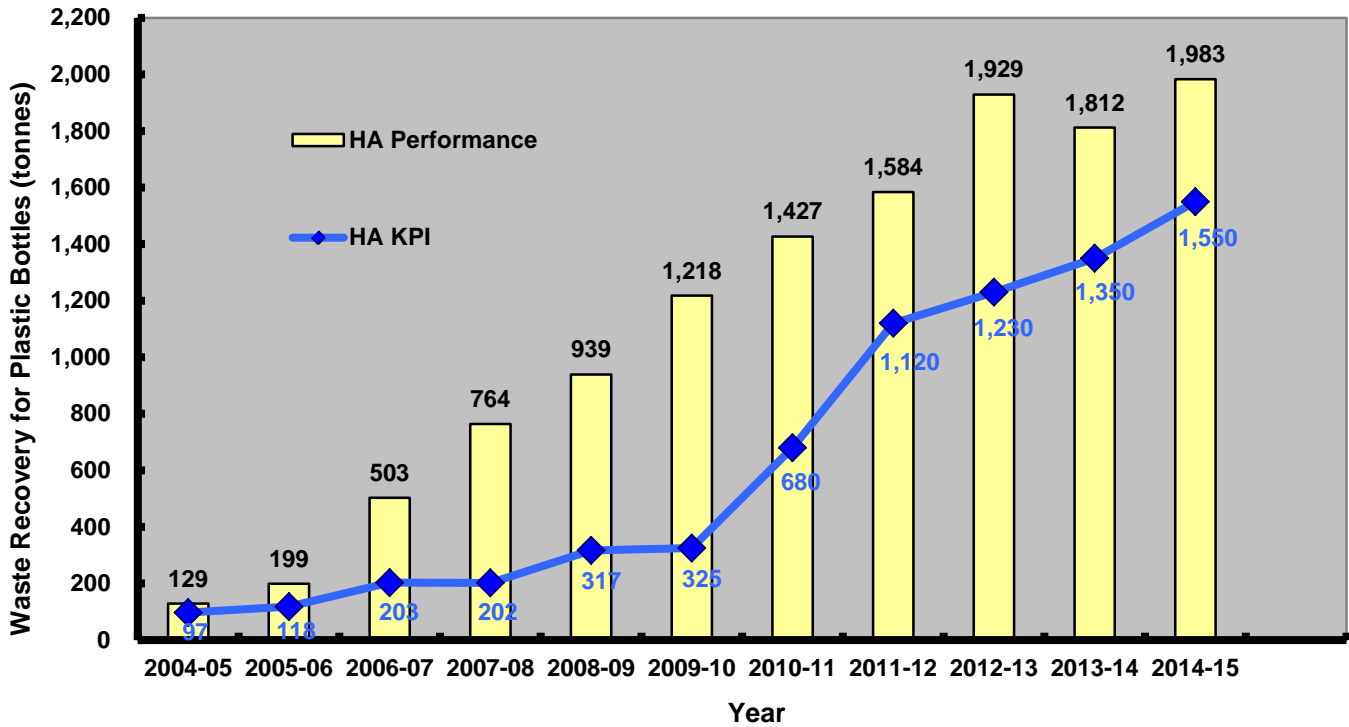
(1) Domestic Waste Recovery for Paper



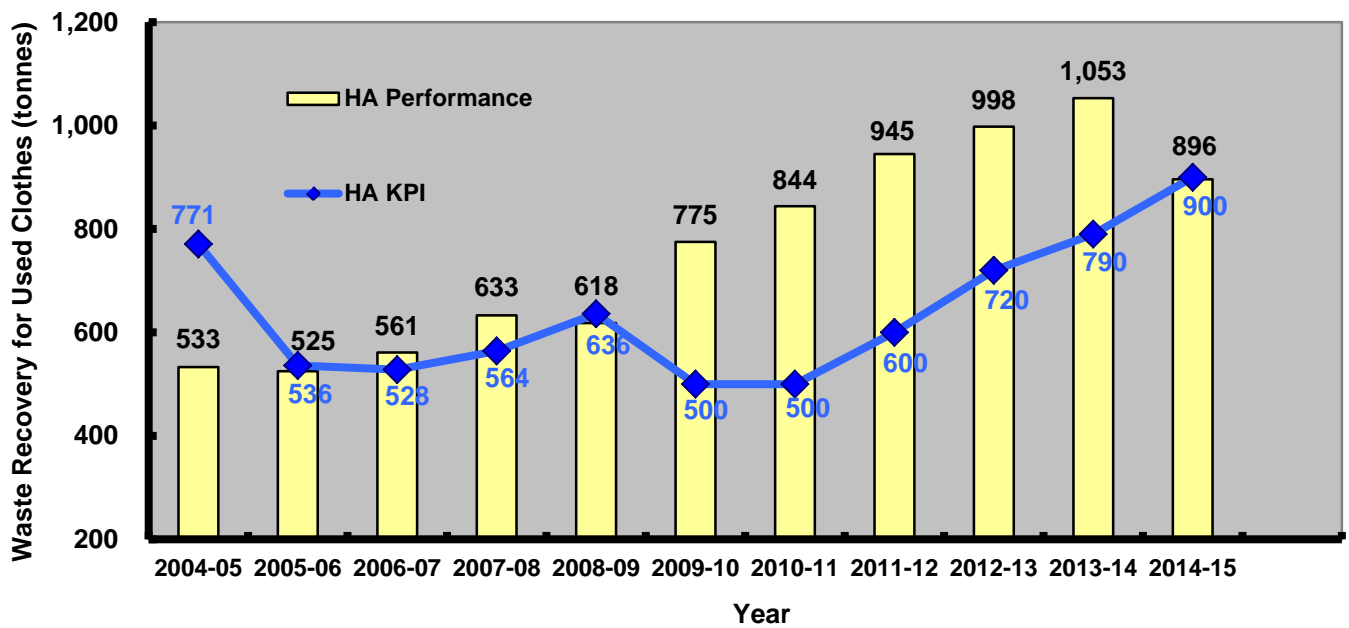
(2) Domestic Waste Recovery for Aluminium Cans



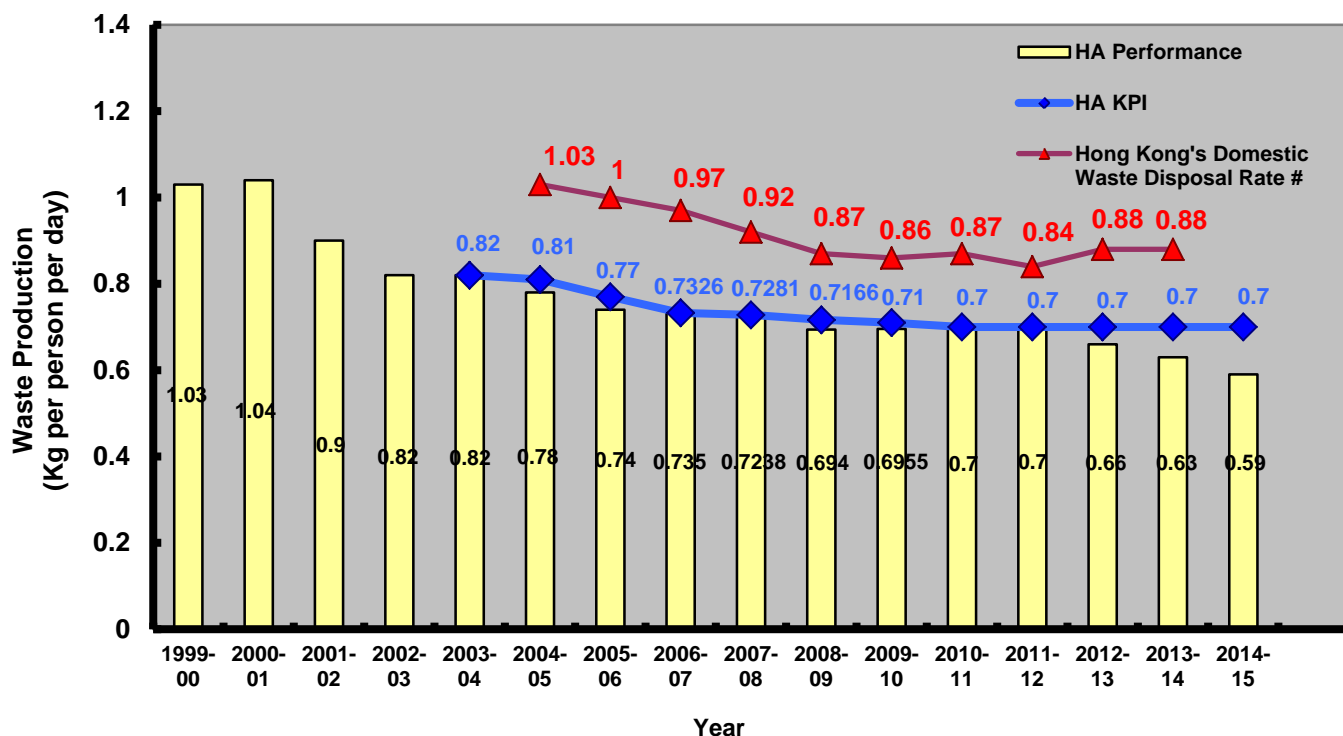
(3) Domestic Waste Recovery for Plastic Bottles



(4) Domestic Waste Recovery for Used Clothes



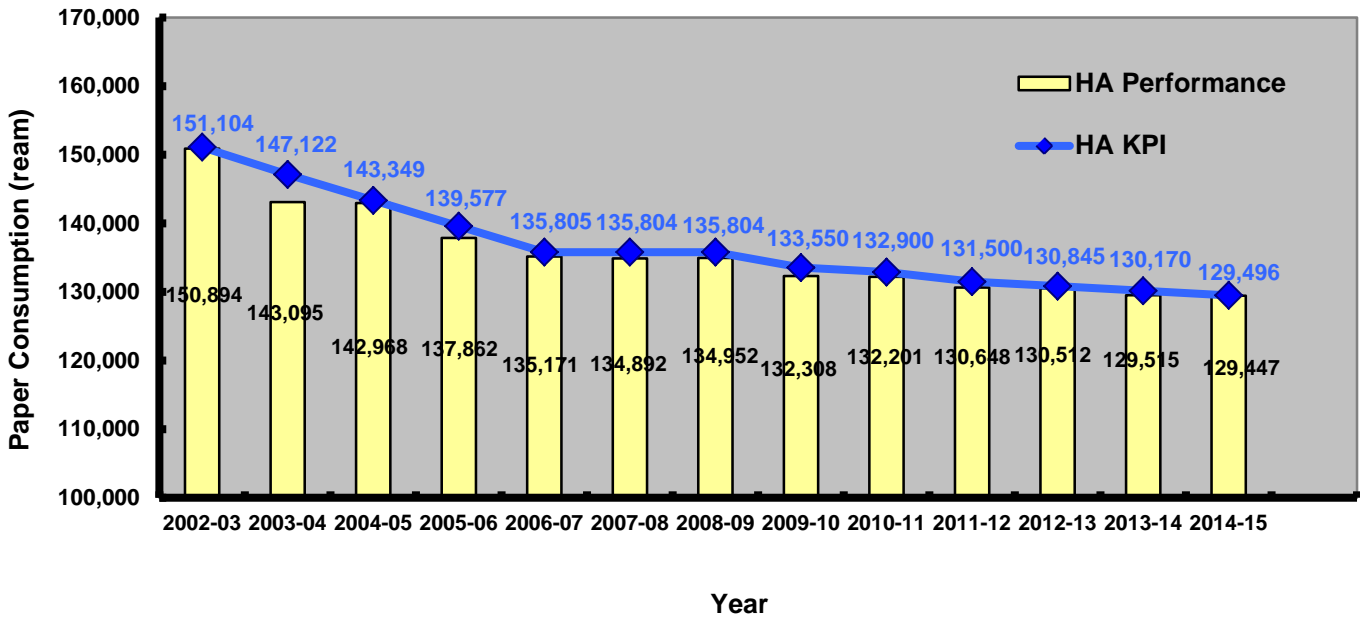
(5) Average Domestic Waste Production



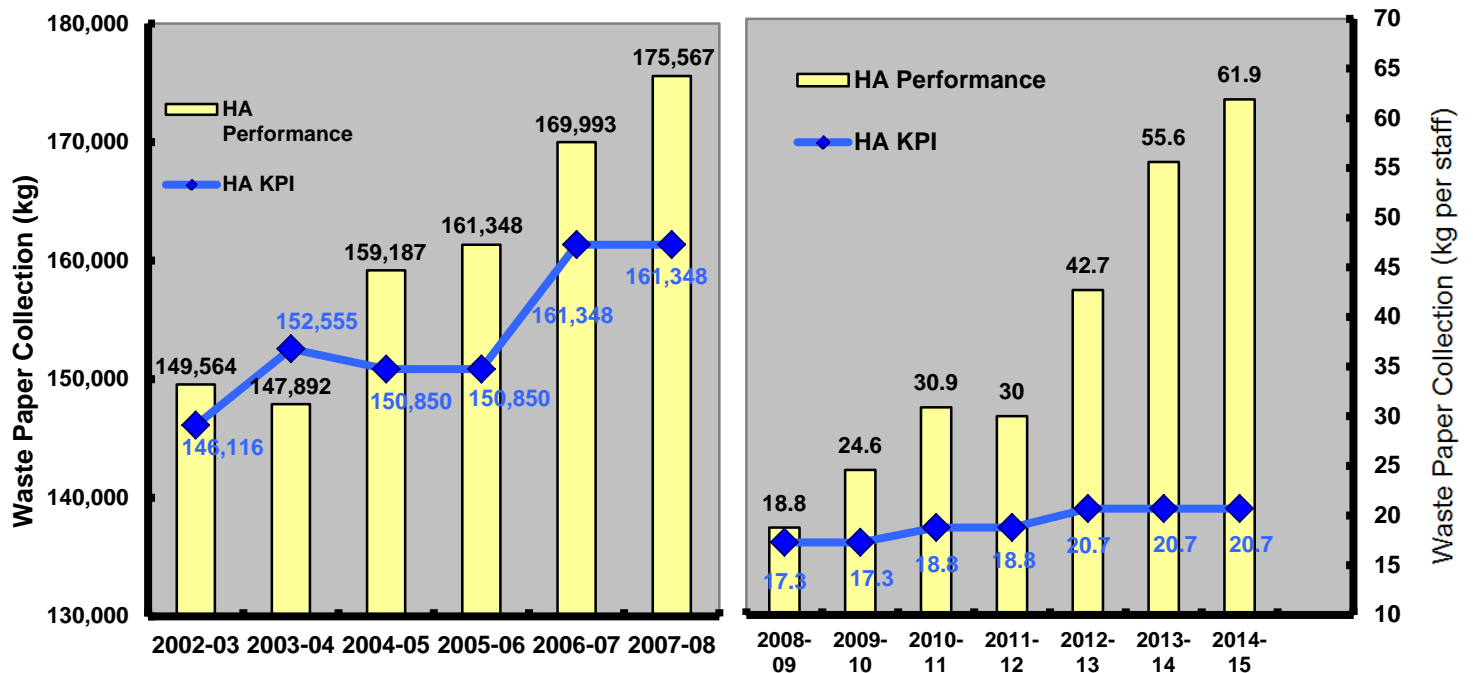
Source : Environmental Protection Department (2015). *Monitoring of Solid Waste in Hong Kong - Waste Statistics for 2013*.

B) Housing Authority Offices

(6) Paper Consumption in all HA Offices

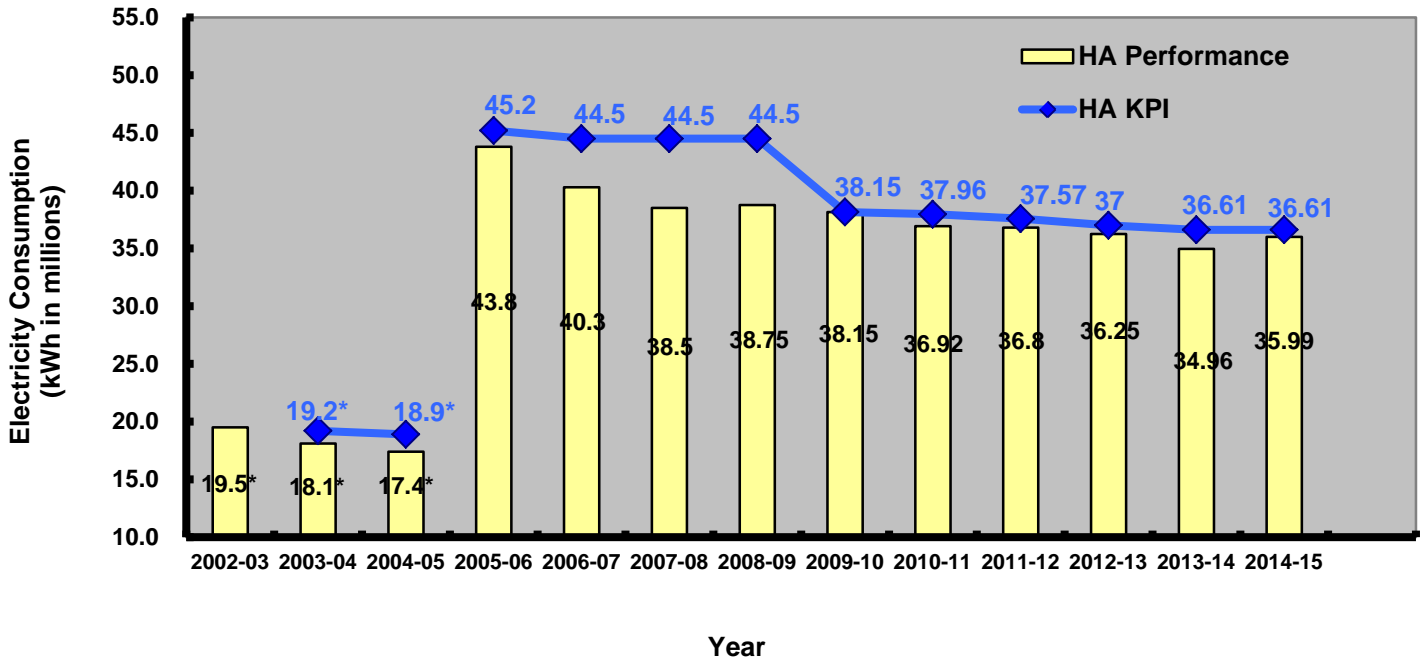


(7) Waste Paper Collection in all HA Offices



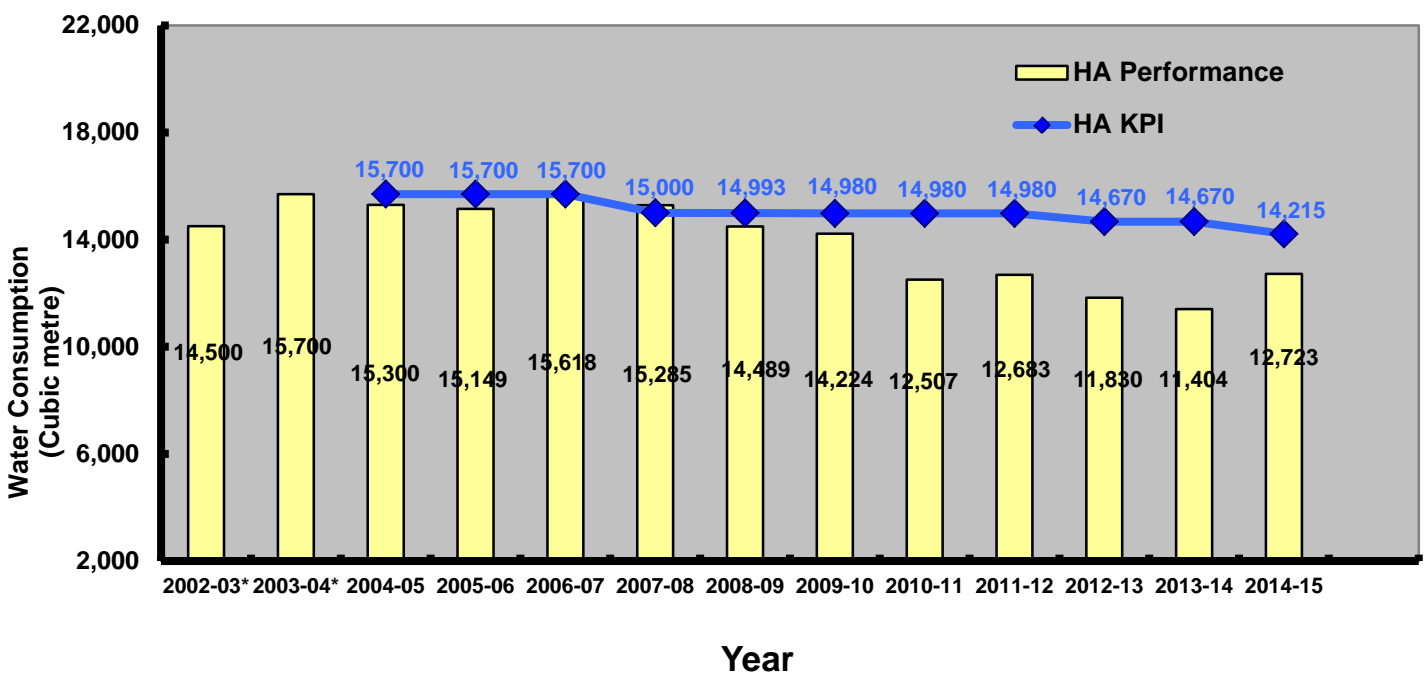
Note: Since 2008-09, waste paper collection is calculated on the basis of weight per staff instead of the overall weight

(8) Annual Electricity Consumption in all HA Offices



*The HA KPI & HA performance have not included the HA Offices outside HAHQ. 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