

**For discussion  
on 4 May 2020**

**Legislative Council Panel on Housing  
Performance of Environmental Targets and Initiatives in 2019-20**

**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 2019-20.

**Background**

2. To enhance the quality of living for its tenants, HA established its Environmental Policy in 1999 to promote healthy living and a green environment. Apart from complying with relevant legislation and regulations, HA has also developed a strategic framework and implemented environmental management strategies for the promotion of sustainable development on multiple fronts, including planning and construction of new public housing, operation of existing estates and HA's own offices at work. With a view to addressing concerns over environmental protection and minimising impacts on the environment, HA has incorporated environmental initiatives throughout its planning and design, construction and demolition, estate management and promotional activities, and developed relevant green procurement policies.

**Progress**

3. HA establishes annual environmental targets and initiatives at the beginning of each fiscal year, and reviews its performance quarterly, to effectively manage the overall implementation of its environmental policy. In 2019-20, HA set 41 targets covering six aspects, including energy efficiency, water conservation, greening, waste management, control of hazardous materials, as well as enhancement of environmental awareness and participation in environmental protection initiatives. Details of HA's performance are listed at **Annex 1**. The statistics on the environmental performance of the nine quantifiable targets as compared with respective key performance indicators are at **Annex 2**.

## **Way Forward**

4. HA has set pragmatic and progressive targets regarding the environmental protection work of 2020-21 to gauge the performance for the year. HA will continue its efforts to achieve various environmental, social and economic targets, to facilitate sustainable development of the public housing programmes.

5. Members are invited to note the performance of HA in respect of its environmental targets and initiatives in 2019-20.

**Transport and Housing Bureau**  
**April 2020**

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

The Hong Kong Housing Authority (HA) has set 41 environmental targets for the fiscal year 2019-20 to promote sustainable development on various fronts, including planning and construction of new public housing, the operation of existing estates and HA's own offices at work. These targets cover six aspects, including energy efficiency, water conservation, greening, waste management, control of hazardous materials, as well as enhancement of environmental awareness and participation in environmental protection initiatives. In the fiscal year 2019-20, all targets were met. Details of HA's environmental performance in 2019-20 are set out below.

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

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

1. Regarding the building services installation in communal areas of new public rental housing (PRH) and subsidised sale flat (SSF) developments, HA set the designed average electricity consumption to not exceeding 24kWh per m<sup>2</sup> per annum.
2. HA continued using energy efficient equipment, including using gearless lifts, regenerative power for lifts of 8kW or above, and using light-emitting diode (LED) bulkhead lightings, LED exit signs and directional signs, and environmental lighting controls in communal areas of all domestic blocks.
3. HA adopted green design for building services equipment in both PRH and SSF developments, and conducted carbon emission estimation and energy estimation.

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

4. HA used six-litre single or dual flush water-closet suite in both PRH and SSF developments, to reduce consumption of flushing water.
5. HA provided Zero Irrigation System or other types of irrigation system in all new building projects, to reduce consumption of irrigation water.

## ***Greening***

6. For all newly completed planting works, HA met the target of planting a minimum of one tree per 15 public housing flats and conducted annual tree survey. All new public housing developments achieved at least 20% green coverage, and sites exceeding two hectares achieved 30% green coverage.
7. All the newly formed slopes were provided with green treatment.
8. To promote community engagement in early greening of the new PRH estates, HA arranged Action Seedling programmes to distribute seedlings or pot plants to local residents and community for their nursing before the completion of all new PRH estates, and for transplanting into the planting areas of the completed estates.
9. HA introduced communal planting areas or community farms during the design stage of all new PRH projects with site area larger than two hectares, to encourage PRH residents to participate in gardening and planting in their own estates for recreation and education purposes.

## ***Waste Management***

10. HA continued to use various green materials and components, including pulverised fuel ash, ground granulated blast furnace slag, recycled rock fill, recycled sub-base materials, recycled rock cores and recycled glass cum aggregates, etc.
11. Regarding timber doors in new public housing developments of HA, apart from using softwood from only sustainable forest sources, at least 50% of all timber used was from sustainable forest sources, to meet the requirement of the *Building Environmental Assessment Method Plus (New Building)* on sustainable forest products.
12. HA required contractors to use timber from sustainable sources, and that no virgin forest products shall be used for temporary works during construction.

## ***Control of Hazardous Materials***

13. HA continued to abate existing asbestos-containing materials in its construction sites, and implement proper asbestos removal works in demolition.

## ***Enhancement of Environmental Awareness and Participation in Environmental Protection Initiatives***

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

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

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

15. HA conducted carbon audit in 14 PRH blocks of typical block types for monitoring carbon emission and benchmarking purposes.

#### ***Greening***

16. To promote a green environment, raise tenants' environmental awareness and encourage their participation in greening, HA collaborated with Estate Management Advisory Committees (EMACs) to organise community garden activities in 10 PRH estates, greening activities in 20 PRH estates and 10 tree planting days.
17. To improve the quality of landscape and upgrade the existing landscape facilities, HA completed Landscape Improvement Programme in 20 PRH estates.
18. HA improved the appearance of 10 slopes at seven PRH estates by providing hydroseeding, stone pitching and toe planters.

#### ***Waste Management***

19. To promote waste separation at source and environmental management initiatives, HA implemented the Source Separation of Domestic Waste Programme and set up collection counters in all PRH estates, to collect domestic recyclables through an incentive scheme.
20. HA recovered about 29 908 tonnes of waste paper from PRH estates for recycling, which was more than the annual target of 26 500 tonnes.
21. HA recovered about 2 130 tonnes of aluminium cans from PRH estates for recycling, which was more than the annual target of 1 350 tonnes.

22. HA recovered about 2 282 tonnes of plastic bottles from PRH estates for recycling, which was more than the annual target of 1 750 tonnes.
23. HA recovered about 949 tonnes of used clothes from PRH estates for recycling, which was more than the annual target of 850 tonnes.
24. HA promoted waste reduction through various publicity campaigns and activities, and the average domestic waste production of tenants in 2019-20 was 0.59 kg per person per day, which was within the 0.70 kg target.
25. HA arranged for non-governmental organisations to carry out publicity activities in various PRH estates to promote the recycling of glass bottles.
26. HA promoted the Rechargeable Battery Recycling Programme in all PRH estates.

### ***Control of Hazardous Materials***

27. HA implemented the asbestos abatement programme in PRH estates, which included promulgating the location of Asbestos Containing Materials (ACM), explaining the proper handling of the ACM, and publicising such information; enhancing regular monitoring system on ACM, formulating the asbestos removal programme, etc.

### ***Enhancement of Environmental Awareness and Participation in Environmental Protection Initiatives***

28. HA conducted the Green Delight in Estates programme in various PRH estates in collaboration with green groups, to enhance environmental awareness and promote environmental education.
29. HA conducted survey among PRH tenants to understand and assess their environmental awareness.
30. HA continued to organise activities to promote environmental protection, to enhance environmental awareness in the community.
31. Through various publicity channels such as Estate Newsletters and Housing Channel, HA promoted tenants' awareness and proactive participation in waste separation at source, waste reduction and environmental management initiatives in all PRH estates.

## **(C) Environmental Initiatives in HA's Own Offices at Work**

### ***Energy Efficiency***

32. HA offices consumed 3 495.69 kWh of electricity per staff per annum, meeting the target of not more than 3810.17 kWh per staff.

### ***Water Conservation***

33. HA Headquarters consumed 2.80 m<sup>3</sup> of water per staff per annum, meeting the target of not more than 3.21 m<sup>3</sup> per staff.

### ***Greening***

34. HA arranged staff to participate in greening activities, such as the HA Headquarters Organic Farm Planting Scheme, etc.

### ***Waste Management***

35. HA consumed 12.87 reams of paper per staff per annum, meeting the target of not more than 14.45 reams per staff.

36. HA collected 38.8 kg of waste paper per staff per annum in its offices, meeting the target of not less than 37 kg per staff.

37. For printing publicity materials, HA continued to use only environment-friendly paper.

### ***Control of Hazardous Materials***

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

### ***Enhancement of Environmental Awareness and Participation in Environmental Protection Initiatives***

39. HA continued to strengthen training and publicity on environmental protection, including incorporating the HA Environmental Corporate Video into the induction course for all new staff.

40. HA organised 16 seminars and two environmental campaigns, to enhance environmental awareness and knowledge of its staff.

41. HA organised three displays of environmental issues at HA Headquarters to promote environmental message to its staff.

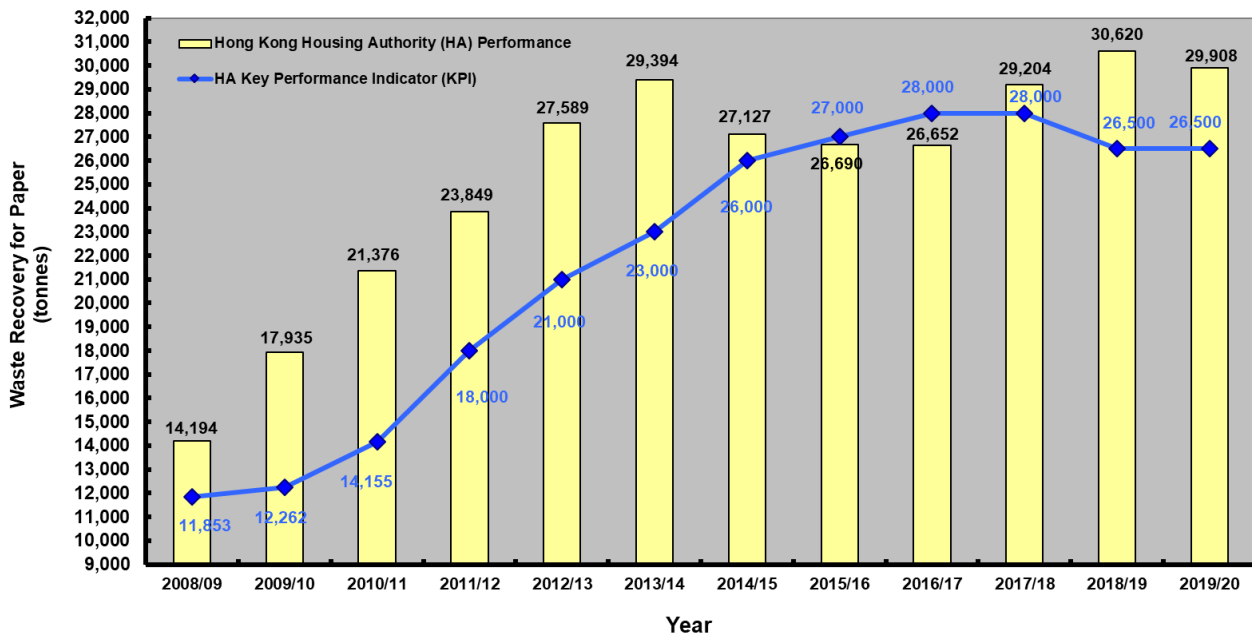
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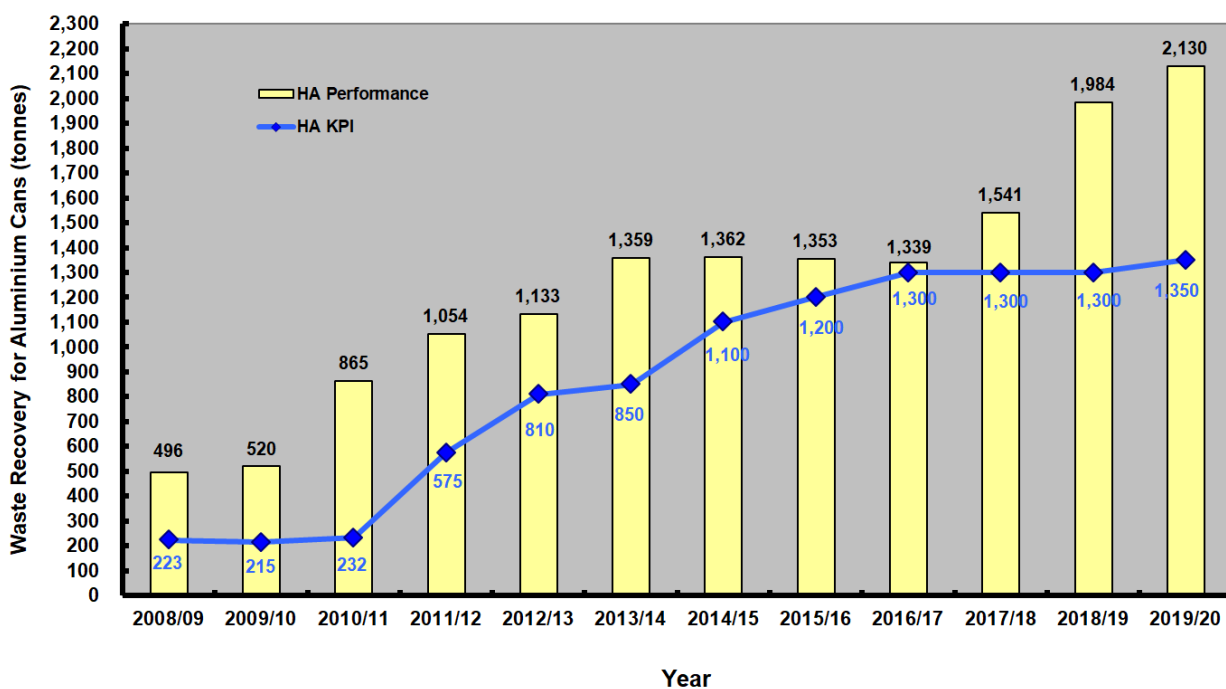
**Summary on the Statistics about the Environmental Performance for  
the Nine Quantifiable Targets**

**A) Public Rental Housing Estates**

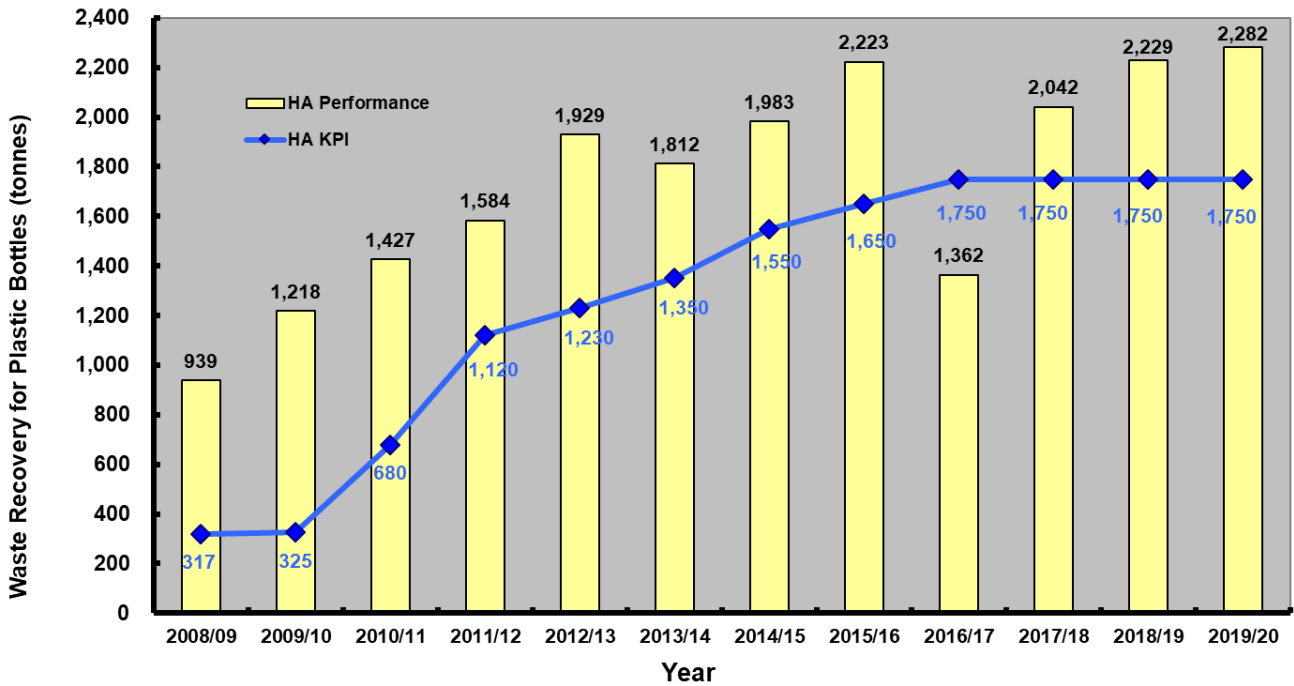
**(1) Domestic Waste Recovery for Paper**



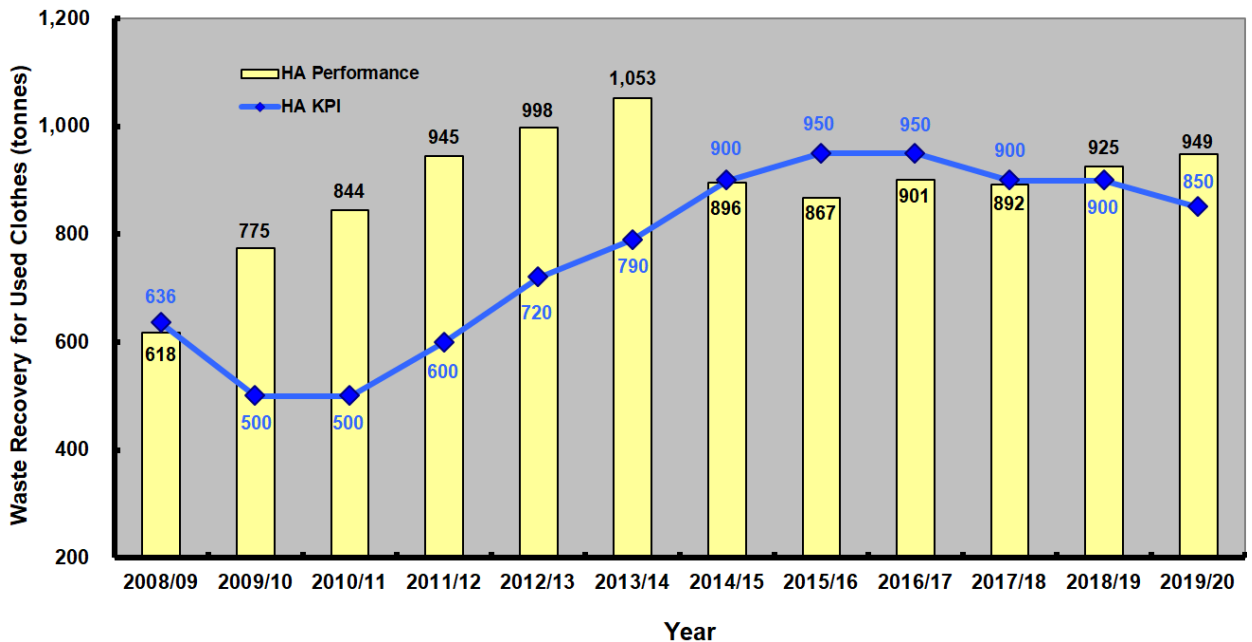
**(2) Domestic Waste Recovery for Aluminium Cans**



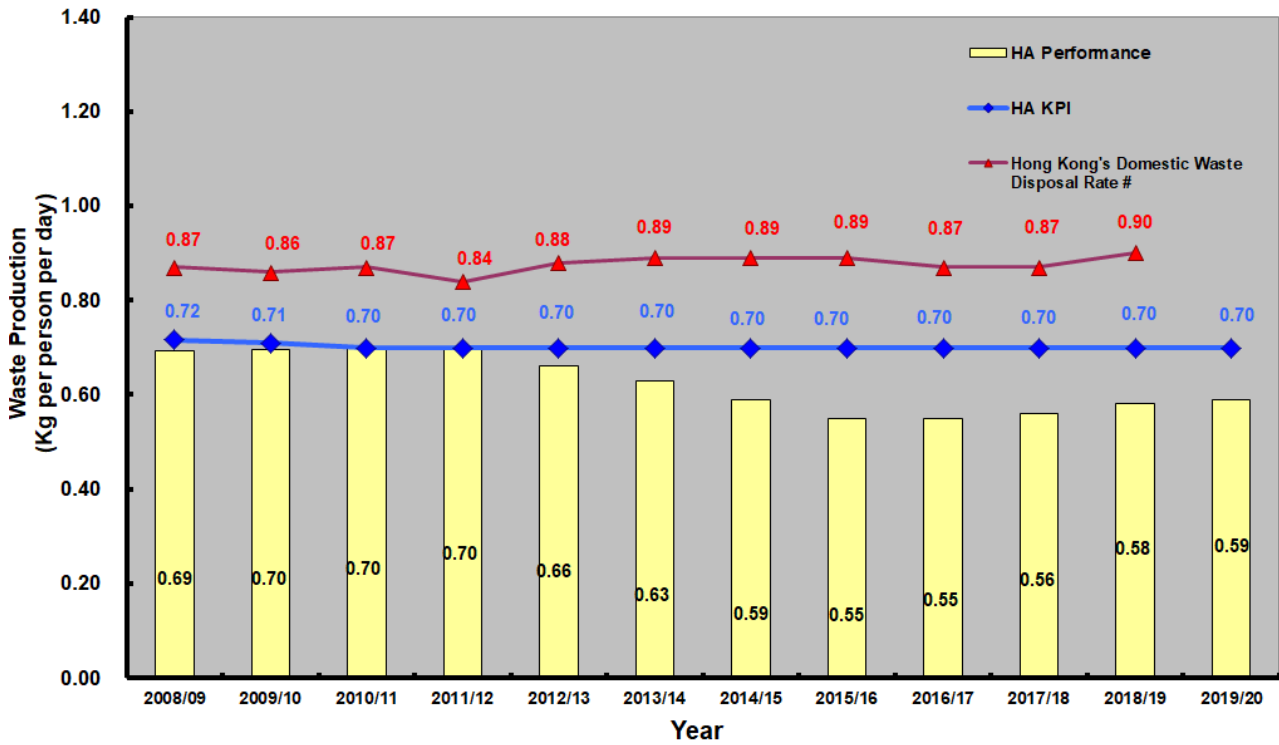
**(3) Domestic Waste Recovery for Plastic Bottles**



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



(5) Average Domestic Waste Disposal

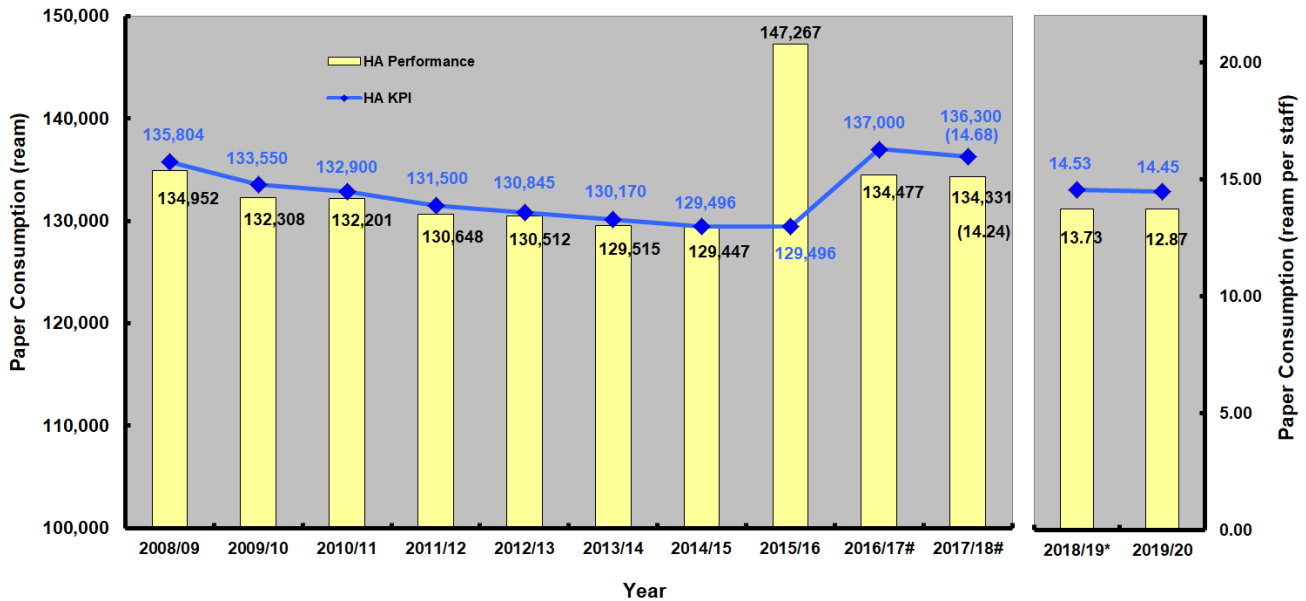


# Source: Environmental Protection Department. *Monitoring of Solid Waste in Hong Kong – Waste Statistics for 2018.*

Note: According to the classification adopted by the Environmental Protection Department, domestic waste refers to household waste, waste generated from daily activities in institutional premises (e.g. schools, government offices) and refuse collected from public cleansing services. The domestic waste production recorded by HA only covered the domestic waste generated in its estates, and waste collected in the common area of shopping centres.

## B) HA Offices

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

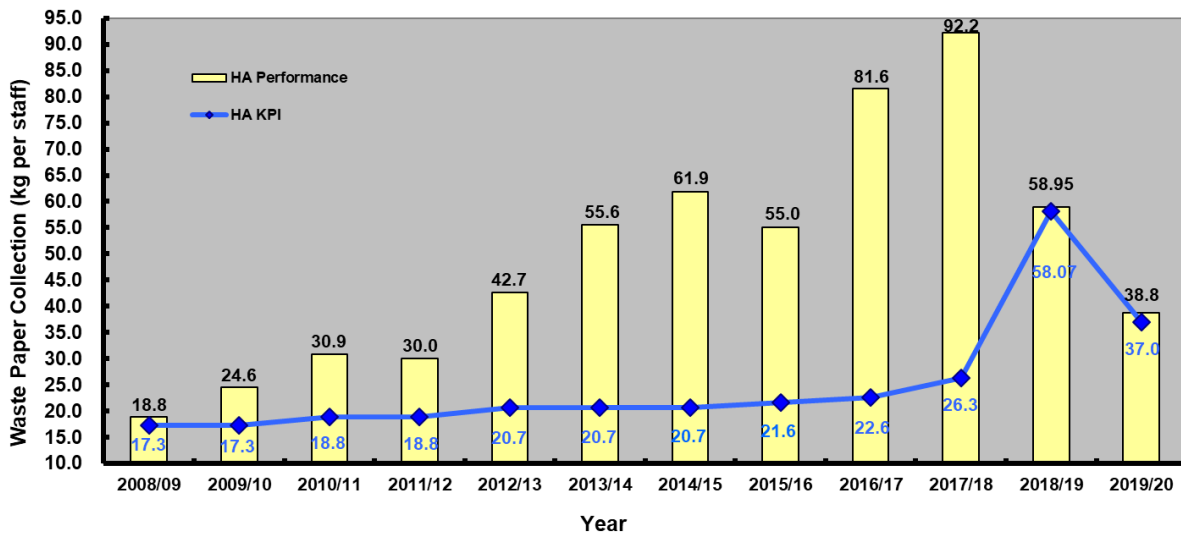


# Considering HA's increase in manpower and business activities in recent years, the Finance Committee of HA endorsed in 2016 and 2017 the revision of the target for 2016-17 and 2017-18, taking manpower expansion into account.

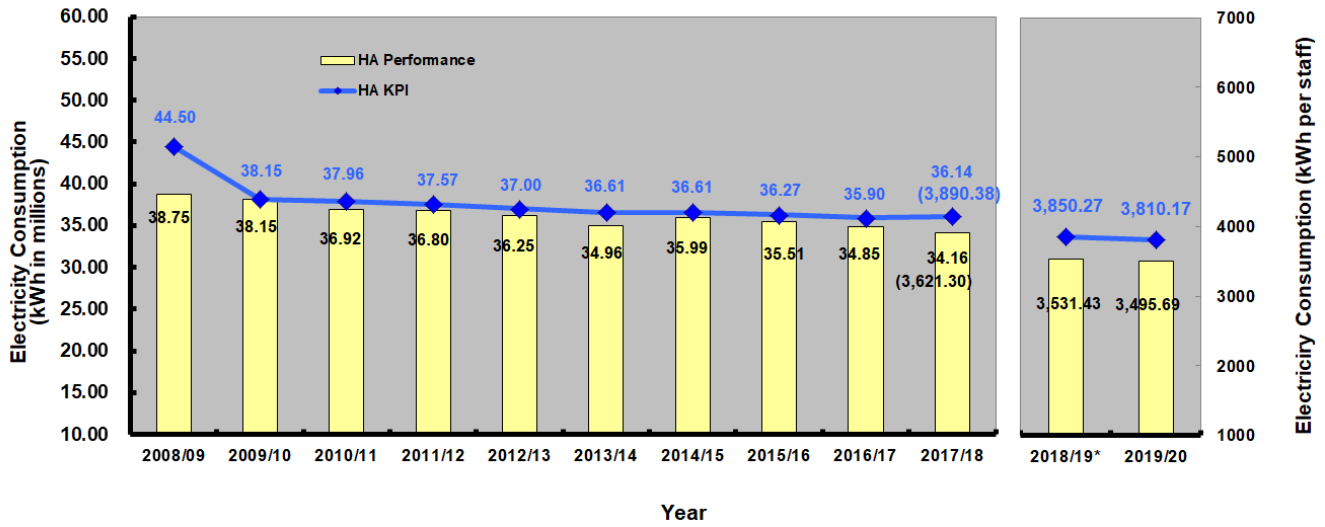
\* Since 2018-19, the KPI was changed to "per capita" approach instead of total paper consumption.

( ) Paper consumption (ream per staff)

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



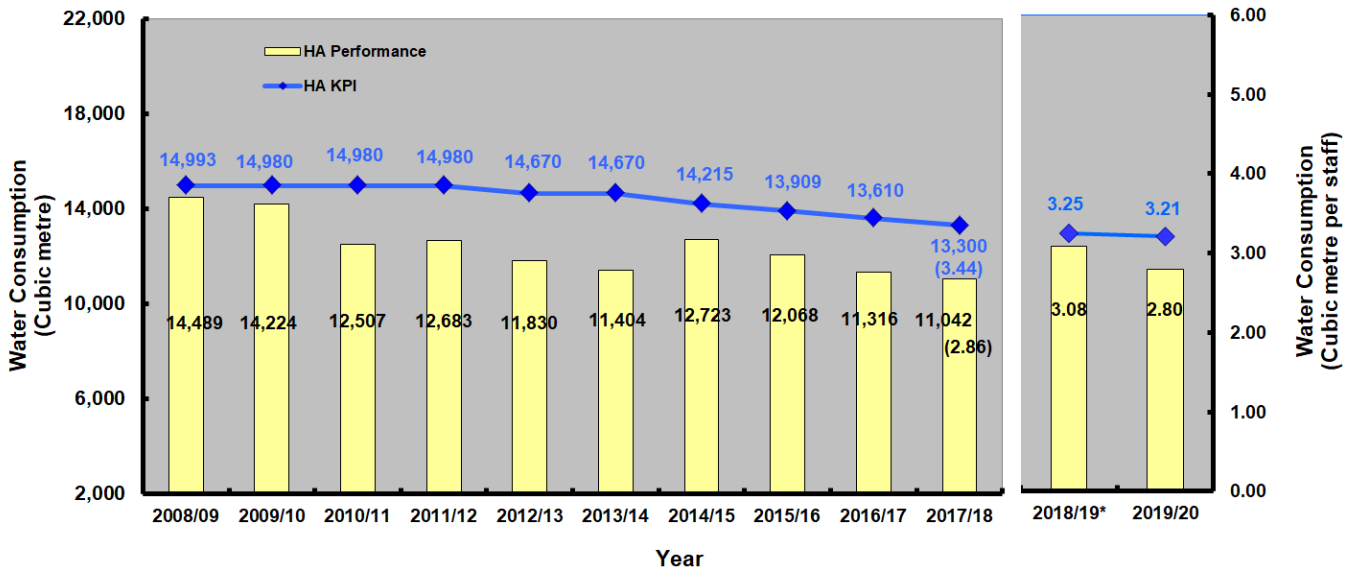
**(8) Annual Electricity Consumption in all HA Offices**



\* Since 2018-19, the KPI was changed to "per capita" approach instead of total electricity consumption.

( ) Electricity Consumption (kWh per staff)

**(9) Water Consumption in HA Headquarters#**



\* Since 2018-19, the KPI was changed to "per capita" approach instead of total water consumption.

# Including HAHQ Blocks 1 to 4

( ) Water Consumption (Cubic metre per staff)