

**Performance of
HA Environmental Targets and Initiatives
in 2014-15**



Background

- In **1999, HA established its Environmental Policy** to promote healthy living and a green environment.
- 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 environmental concerns and minimising impacts on the environment**, we have incorporated environmental initiatives throughout our planning and design, construction and demolition, marketing and estate management activities, and developed relevant green procurement policies.

Environmental Performance

Progress

- 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.

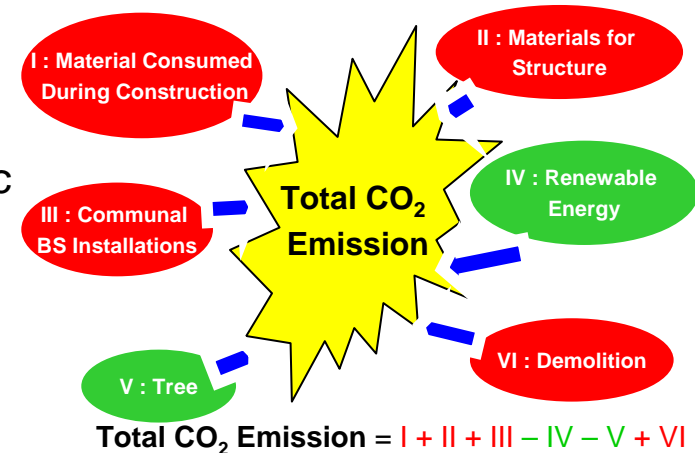
(A) Environmental Initiatives in Planning and Construction of New Housing Estates

- 1. Energy Efficiency**
- 2. Water Conservation**
- 3. Greening**
- 4. Waste Management**
- 5. Control of Hazardous Materials**
- 6. Environmental Awareness and Participation**

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

Energy Efficiency

1. We obtained energy certificates for all the newly completed public domestic blocks.
2. We explored and studied the use of more energy efficient equipment, including :
 - gearless lift system with regenerative power
 - light-emitting diode (LED) bulkheads
 - 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
 - conducting carbon emission estimation
 - energy estimation



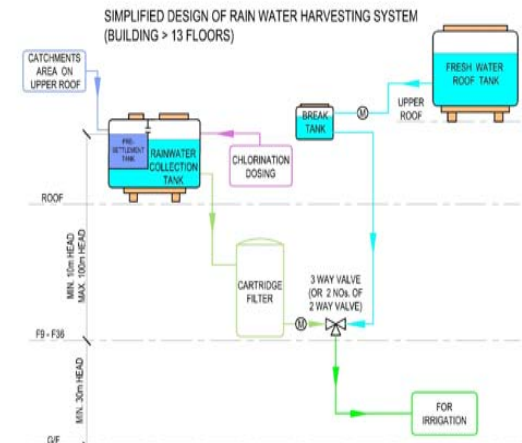
(A) Environmental Initiatives in Planning and Construction of New Housing Estates

Water Conservation

4. We used six-litre single or dual flush water-closet suite to reduce consumption of flushing water.
5. We 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, we 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. We engaged local residents and community to participate in the Action Seedling programme for early plant raising in all new housing estates.
9. We 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.



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

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
 - recycled marine mud.
11. We promulgated specification of timber door cores, requiring the use of softwood timber from sustainable source in new public housing projects.
12. We promulgated specification requiring contractors to use timber from sustainable source and no virgin forest products for temporary works during construction.



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

Control of Hazardous Materials

13. We 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.



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
 - use environment-friendly equipment and construction methods



(B) Environmental Initiatives in Existing Housing Estates

- 1. Energy Efficiency**
- 2. Water Conservation**
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- 6. Environmental Awareness and Participation**

(B) Environmental Initiatives in Existing Housing Estates

Energy Efficiency

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

Water Conservation

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

Reclaimed Rain Water Tank Room



(B) Environmental Initiatives in Existing Housing Estates

Greening

18. To create a green environment and promote tenants' environmental awareness and participation in greening, we :
 - organised tree planting days in 10 PRH estates,
 - developed community gardens in 10 PRH estates
 - organised greening activities in 20 PRH 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 20 estates.

20. We 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.



(B) Environmental Initiatives in Existing Housing Estates

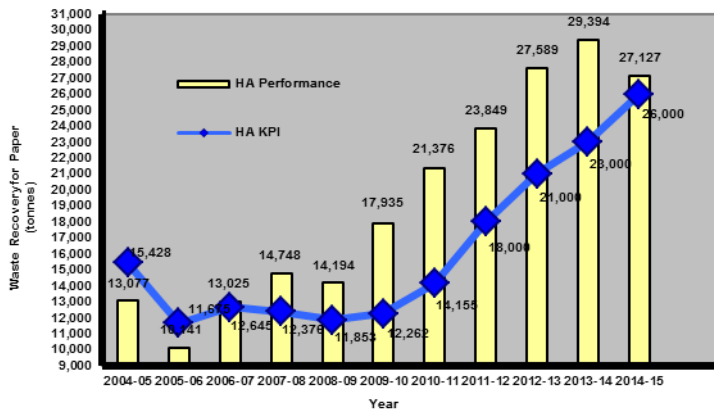
Waste Management

21. We promoted waste separation at source and environmental management initiatives by :

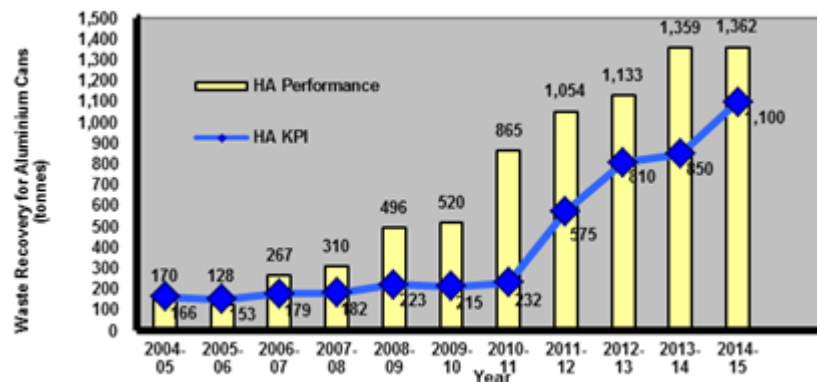
- implementing the Source Separation of Domestic Waste Programme in all estates
- setting up collection counters in all estates to collect domestic recyclables through incentive scheme

22-25. We recovered for recycling in PRH estates :

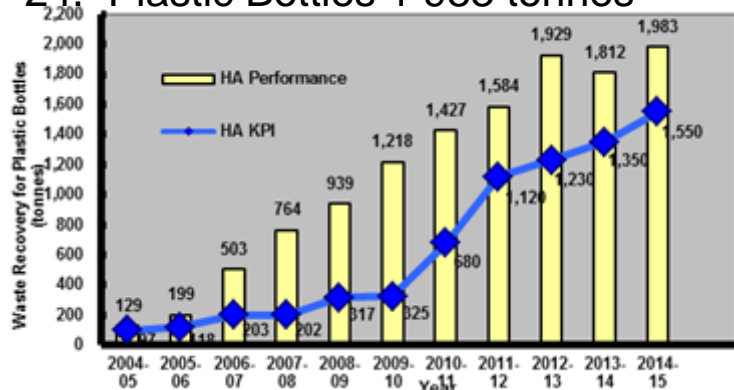
22. Paper 27 127 tonnes



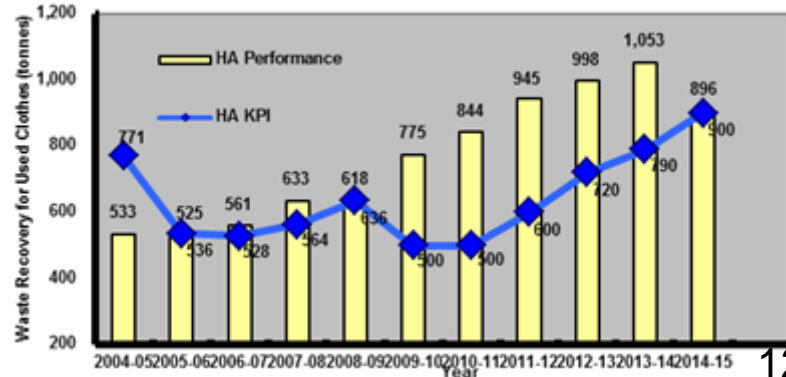
23. Aluminium Cans 1 362 tonnes



24. Plastic Bottles 1 983 tonnes



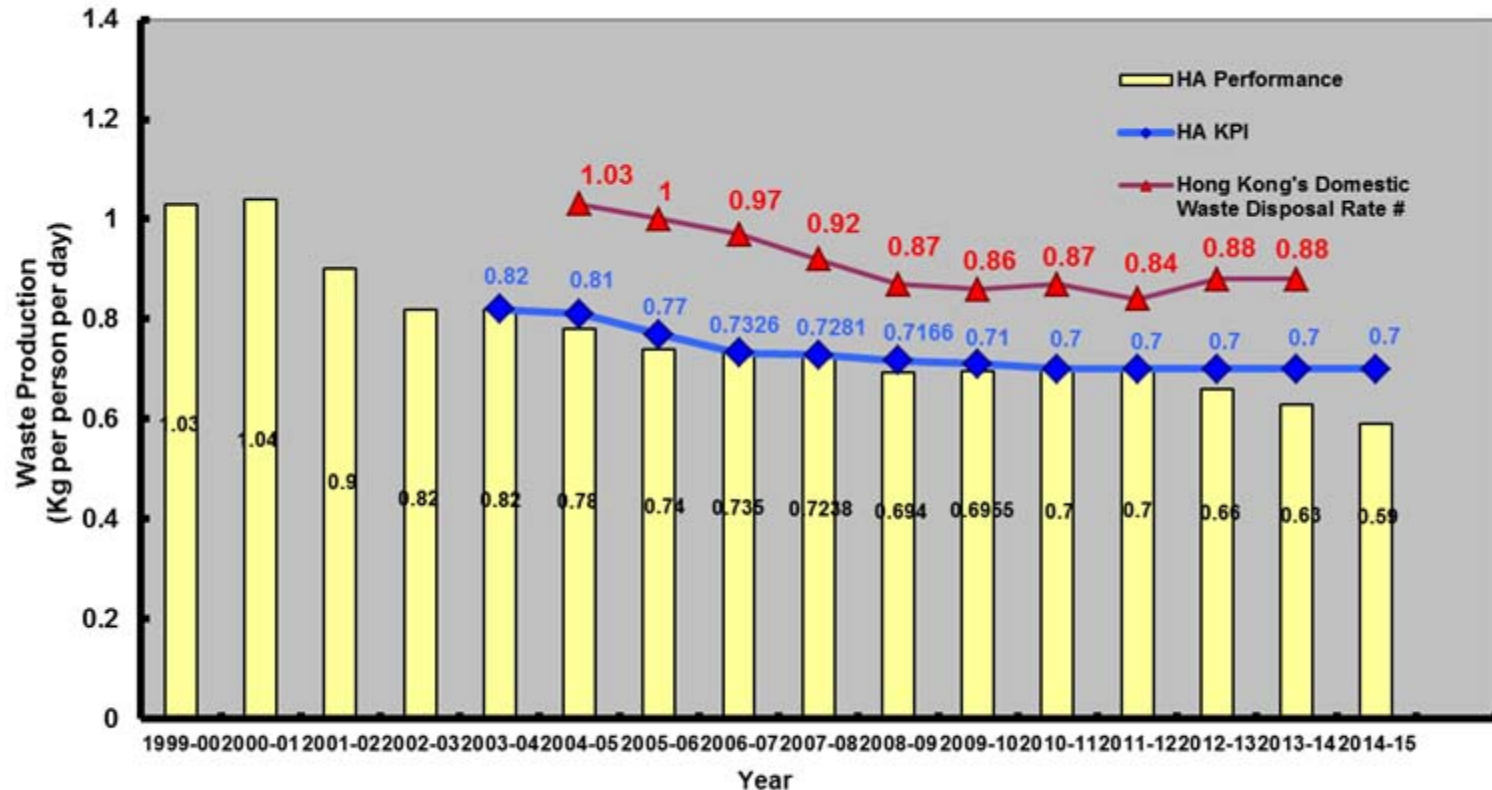
25. Used Clothes 896 tonnes



(B) Environmental Initiatives in Existing Housing Estates

Waste Management

26. We achieved the average domestic waste production of 0.59 kg/person/day from our residents through the implementation of various waste recycling and recovery initiatives in PRH estates.



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

(B) Environmental Initiatives in Existing Housing 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
 - engaging a registered asbestos contractor for emergency repair works on underground asbestos cement water-mains for all PRH estates.



Environmental Awareness and Participation

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

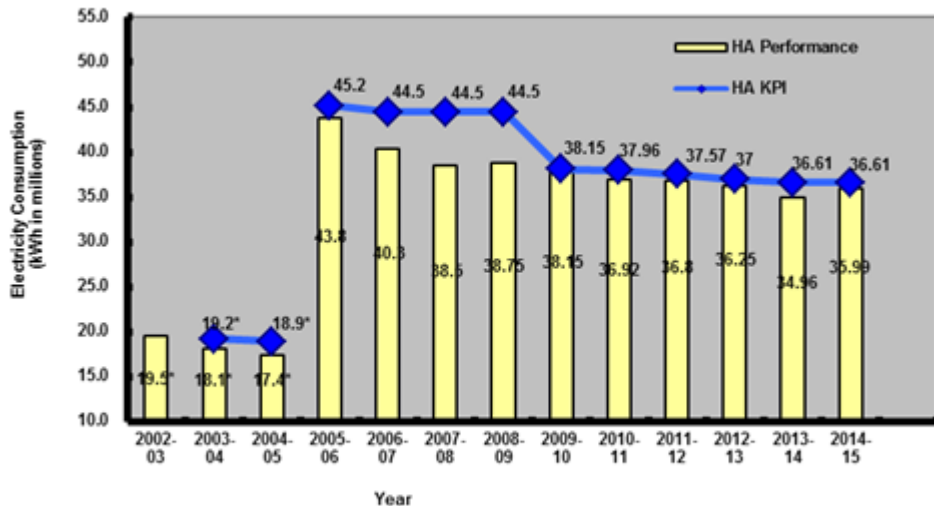
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(C) Environmental Initiatives in Office at Work

Energy Efficiency

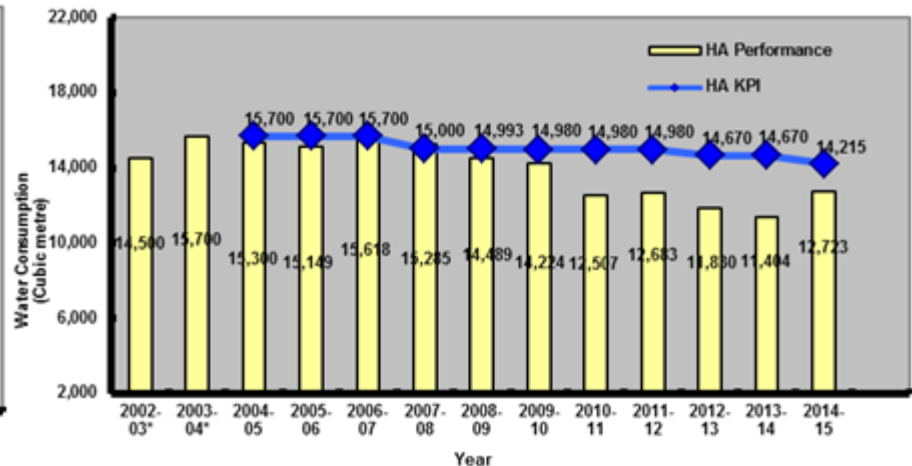
32. We consumed a total of 35 991 009 kWh of electricity, representing a decrease of about 6.6% when compared with the total electricity usage baseline in 2007-08.
33. We consumed 12 723 m³ of water, representing a decrease of 16.8% when compared with the consumption baseline in 2007-08.

Electricity Consumption



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

Water Consumption



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

Greening

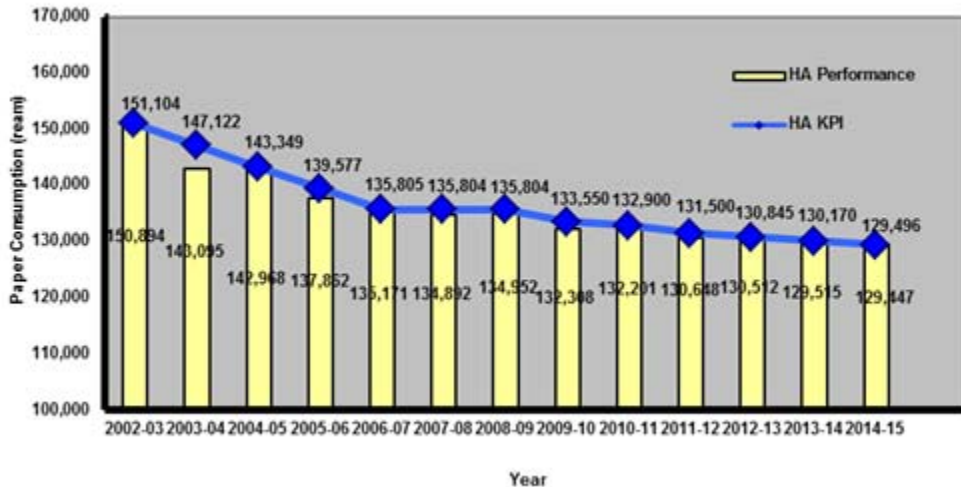
34. We arranged staff to participate in tree planting day to promote staff involvement in greening activities.

(C) Environmental Initiatives in Office at Work

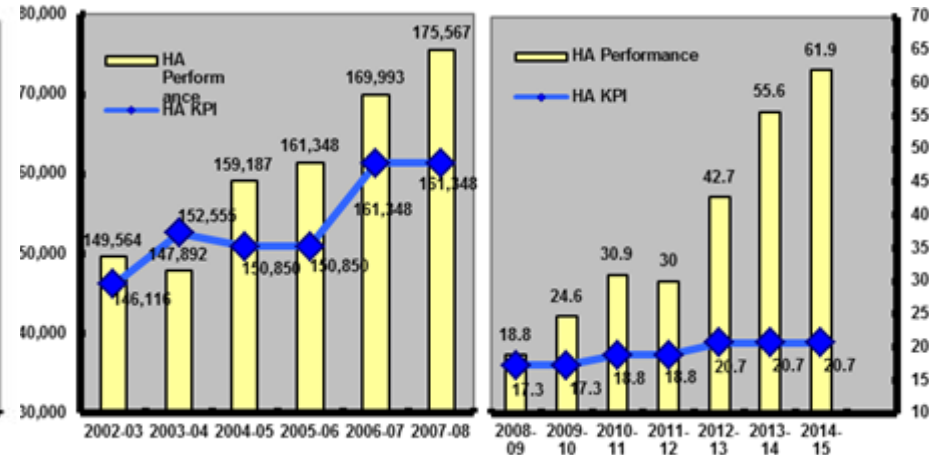
Waste Management

- 35. We consumed 129 447 reams of paper representing a decrease of 4.0% when compared with the consumption baseline in 2007-08.
- 36. We collected 61.9 kg of waste paper per staff in our offices, which is higher than the target of 20.7 kg per staff.

Paper Consumption



Waste Paper Collection



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

- 37. We have been using environment-friendly paper as a prerequisite requirement in the printing of all publicity materials.

(C) Environmental Initiatives in Office at Work

Control of Hazardous Materials

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



Environmental Awareness and Participation

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



Way Forward

We have set challenging and yet pragmatic targets to gauge our performance for 2015-16. We will continue the efforts to achieve various environmental, social and economic targets for maintaining the sustainable development of the public housing programme for Hong Kong.





Thank You