



Historic Royal Palaces is the independent charity that looks after:

**Tower of London**  
**Hampton Court Palace**  
**Banqueting House**  
**Kensington Palace**  
**Kew Palace**

We help everyone explore the story of how monarchs and people have shaped society, in some of the greatest palaces ever built

We raise all our own funds and depend on the support of our visitors, members, donors, sponsors and volunteers.

## SUSTAINABILITY REPORT

2012/13



## Sustainability Report 2012/13

Historic Royal Palaces is committed to the values of sustainability in the work it undertakes to help everyone explore the palaces and estates it looks after and in the management of its operations.

Conservation is at the heart of HRP's mission, so managing the palaces and the estate with as little environmental impact as possible is important to us. Through our conservation work, we give our buildings, interiors, collections, designed historic landscapes and natural landscapes, species and habitats a future as long and valuable as their past, for the benefit of future generations.

### About the data

As this is the first year we are publishing our records and actions on the sustainability topic, there are limitations with the availability and accuracy of HRP's financial and non-financial sustainability data. In the coming year, HRP will be working with internal and external stakeholders to improve the data gathering process and refine the quality of its information in this area.

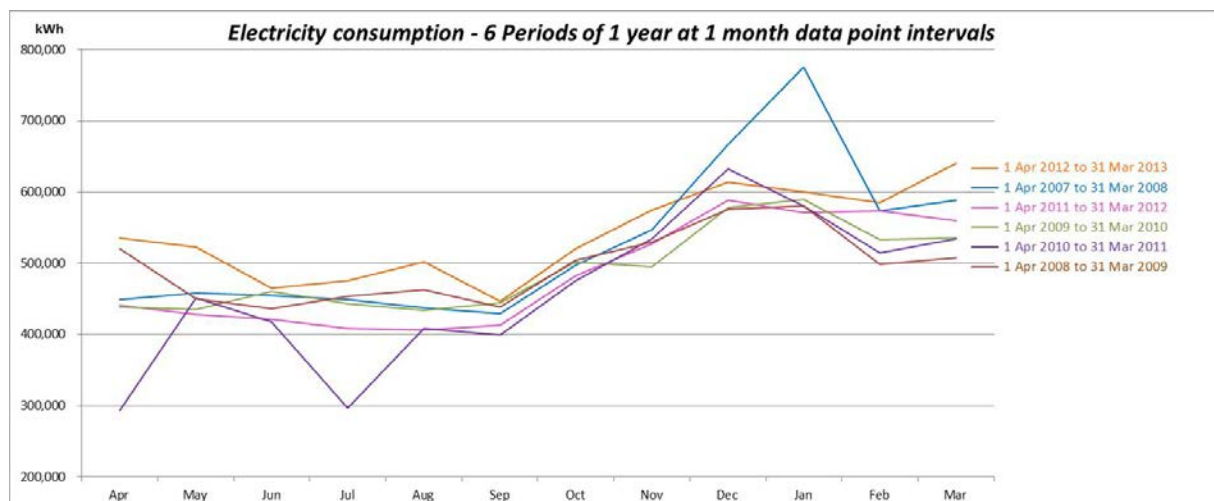
### Energy reduction

Energy reduction in prestigious historic buildings is always a challenging task. Nevertheless over the years, a number of initiatives have been implemented to drive reductions in consumption of electricity and gas.

#### Electricity

The table and graph below shows trends in electricity consumption over the last 6 years.

Electricity in KWh	1 Apr 2007 to 31 Mar 2008	1 Apr 2008 to 31 Mar 2009	1 Apr 2009 to 31 Mar 2010	1 Apr 2010 to 31 Mar 2011	1 Apr 2011 to 31 Mar 2012	1 Apr 2012 to 31 Mar 2013
Total 5 Palaces	6,326,993	5,959,808	5,890,131	5,539,530	5,821,539	6,481,160
<b>YoY percentage change increase/(reduction)</b>		<b>-6%</b>	<b>-1%</b>	<b>-6%</b>	<b>5%</b>	<b>11%</b>



Energy savings on electricity were achieved in the first 4 years, with reduction in consumption of 12% during the period.

This was achieved by:

- continual improvements in shut down procedures at nights and week-ends,
- installation of inverters on motors in plant rooms,



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- increased use of low energy lighting and conversion to LED lighting (e.g. 80% coverage at the White Tower),
- upgrades in the lighting controls across the estate.

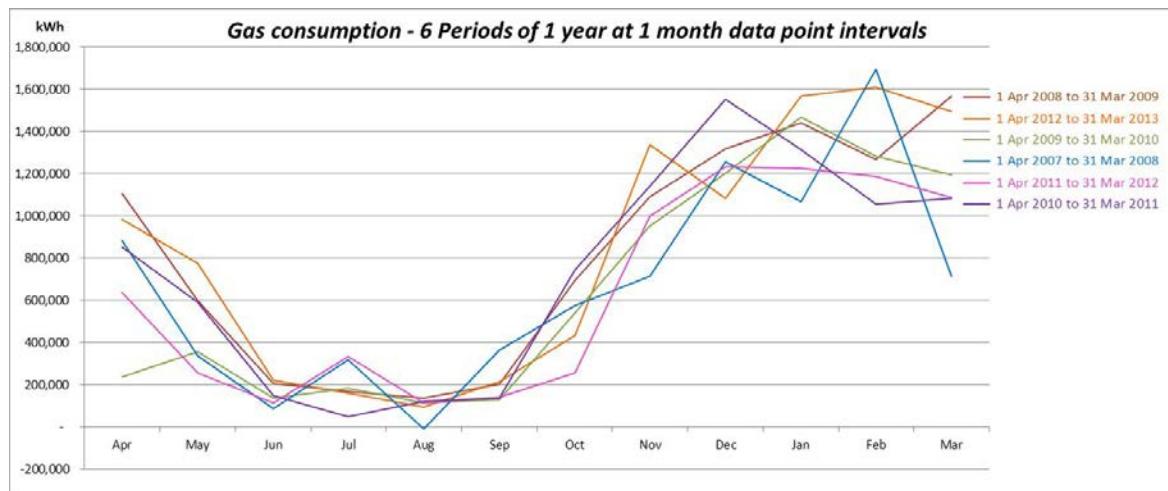
Recent increases in consumption are explained by a combination of changes in activity at the Tower, Hampton Court and Kensington in particular.

- In all three cases we have significantly changed our catering provision. We have opened brand new catering outlets - café at Kensington Palace and restaurant at the Tower of London - and have taken responsibility for electric consumption at the kitchen of our main outlet at Hampton Court.
- We also continue to open more spaces for public routes and staff offices and we use more audio visual equipment for our exhibitions and events.
- At the Tower, we provided generators for the 2012 summer moat events.
- The Olympics factor for an increase during August at Hampton Court as a lot of the equipment was powered via generator. More generally colder and longer winters have also had an impact on electric consumption through the provision of portable office radiators.

### Gas

The table and graph below shows trends in gas consumption over the last 6 years (no gas consumption at Kew).

Gas in KWh	1 Apr 2007 to 31 Mar 2008	1 Apr 2008 to 31 Mar 2009	1 Apr 2009 to 31 Mar 2010	1 Apr 2010 to 31 Mar 2011	1 Apr 2011 to 31 Mar 2012	1 Apr 2012 to 31 Mar 2013
Total 4 Palaces	8,014,730	9,809,478	7,806,417	8,798,901	7,588,388	9,980,361
<b>YoY percentage change increase/(reduction)</b>		<b>22%</b>	<b>-20%</b>	<b>13%</b>	<b>-14%</b>	<b>32%</b>



Working closely with British Gas, HRP has targeted reduction in consumption of gas by implementing the following initiatives:

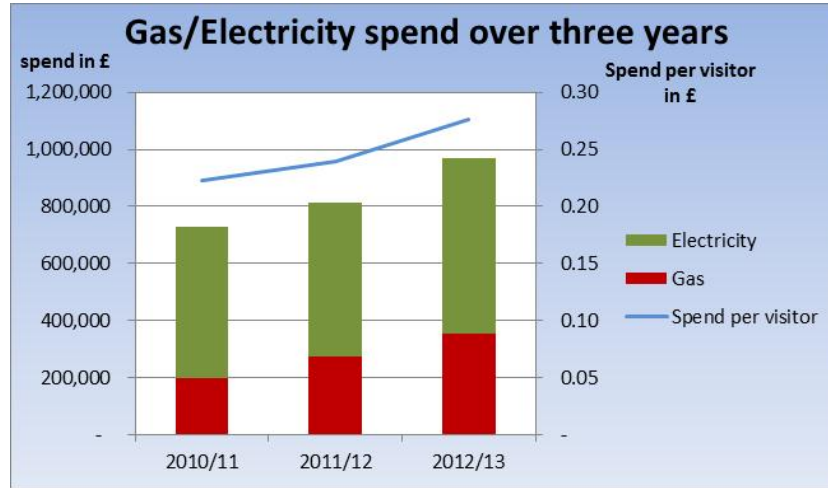
- draught proofing of historic windows at Hampton Court,
- roof space insulation installed at all three major palaces and lagging on pipes,
- optimisation of boilers' timers at the Tower of London and Hampton Court.



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However due to the fact that heating is heavily reliant on gas and electricity, consumption of both is still largely dependent on the severity and length of winter.

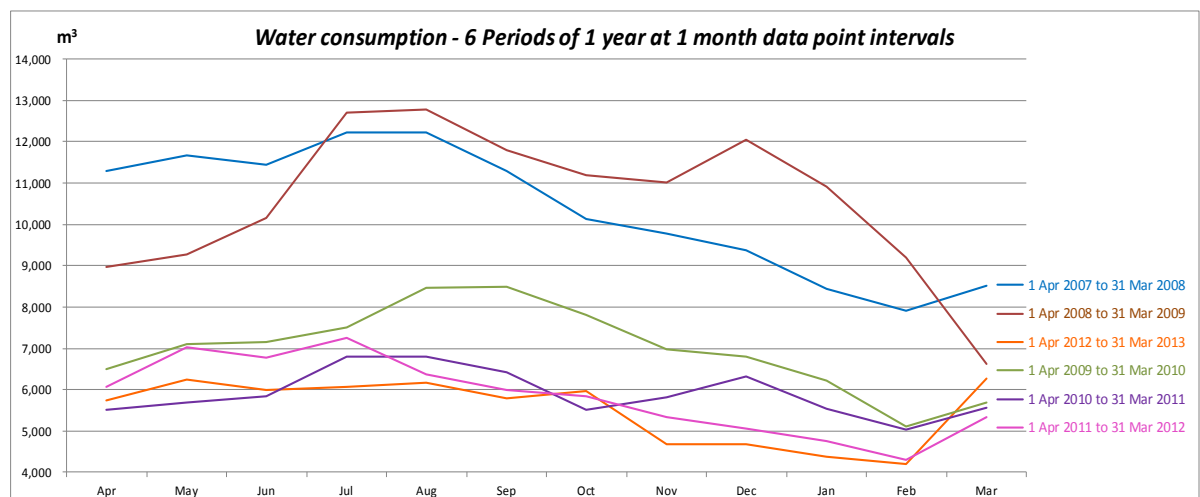
Spend on gas and electricity has increased pushed by volume and unit costs, although at a lower pace than the growth in our visitor numbers.



### Water

The table and graph below shows trends in water consumption over the last 6 years (excluding Kew which is the responsibility of RBGK and Kensington due to significant gaps in data).

Water in m <sup>3</sup>	1 Apr 2007 to 31 Mar 2008	1 Apr 2008 to 31 Mar 2009	1 Apr 2009 to 31 Mar 2010	1 Apr 2010 to 31 Mar 2011	1 Apr 2011 to 31 Mar 2012	1 Apr 2012 to 31 Mar 2013
Total 3 Palaces	124,283	126,677	83,820	70,837	70,097	66,160
<b>YoY percentage change increase/(reduction)</b>		<b>2%</b>	<b>-34%</b>	<b>-15%</b>	<b>-1%</b>	<b>-6%</b>



Consumption of water has dropped steadily - almost 50% over the last five years thanks to a mix of initiatives across HRP.

The installation of automated meter readings across the main palaces has enabled close monitoring of water leaks and allowed for prompt repair.



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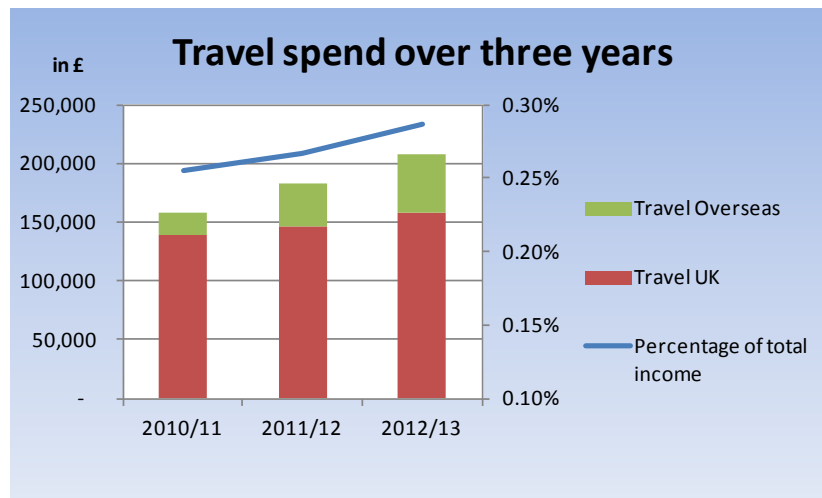
At the Tower of London, grey water is used to irrigate the lawns in the moat and flush some of the public toilets. Half the visitor toilets have been fitted with sensor taps. Working with Thames Water, the water pressure was reduced at the taps, thereby reducing overall consumption.

At Hampton Court, rain water and river water is used for the majority of irrigation and visitor urinals are either waterless or fitted with an electrical controller. The refurbishment at KP has allowed the introduction of sensor mixer taps and low flush toilets in all public areas.

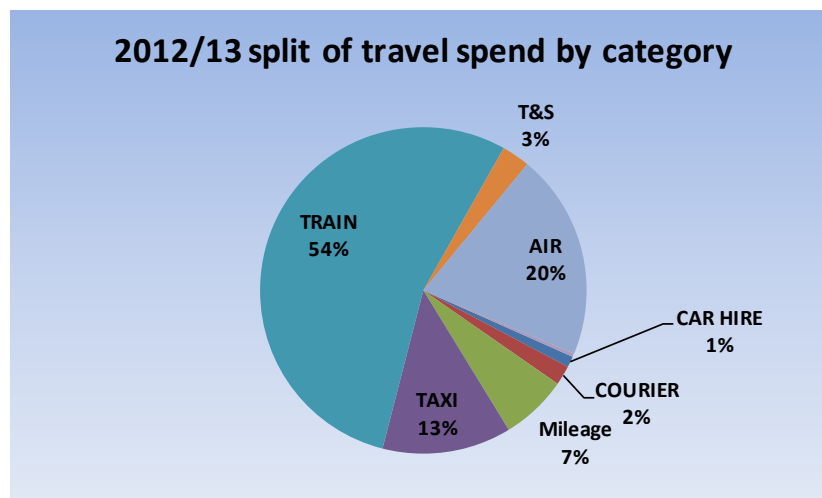
### Travel

Staff travel spend has increased by circa 15% year on year over the last three years. This was primarily driven by overseas travel and has a direct correlation with the increased foreign travel trade activity and our fundraising efforts outside of the UK.

However travel remains a small proportion of our total spend and as a percentage of total income it has marginally increased from 0.25% in 2010/11 to 0.29% in 2012/13.



Despite an increase in overseas travel over the last two years, the majority of staff travel remains low impact for the environment - 54% by train and the proportion is increasing year on year.



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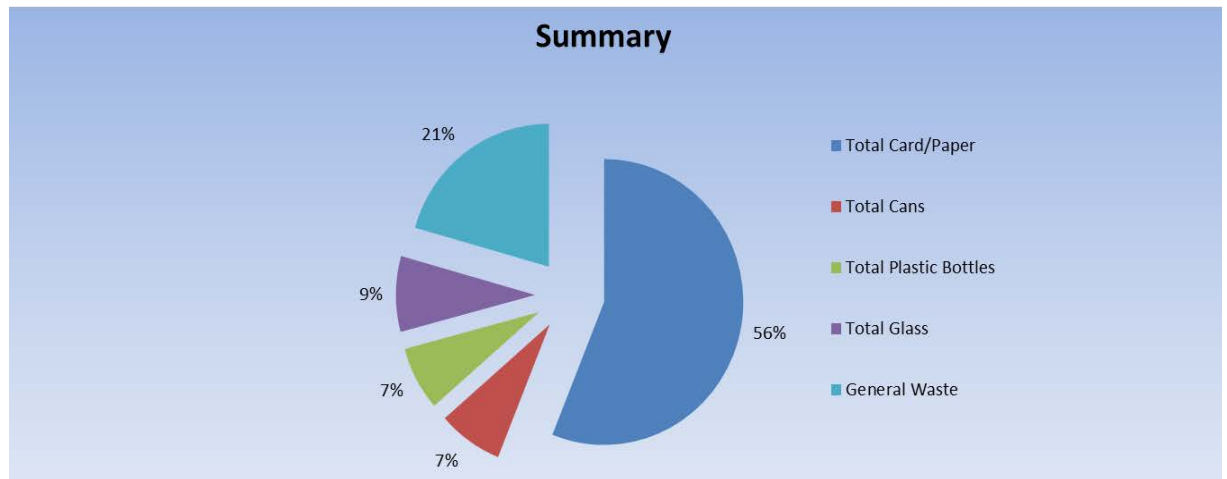
### Waste management

Considerable emphasis has been placed on waste management and increased re-use and recycling over the last few years. This has resulted in all palaces reaching greater than 80% waste recycling.

HRP (all palaces excl. Kew)	2006 (in tonnes)	2007 (in tonnes)	2008 (in tonnes)	2009 (in tonnes)	2010 (in tonnes)	2011 (in tonnes)	2012 (in tonnes)
<b>Total Waste</b>	773	782	1112	1045	972	904	942
<b>Total Amount Recycled</b>	168	259	359	843	824	789	818
<b>Total % of Waste Recycled</b>	22%	33%	32%	81%	85%	87%	87%

Figures above are sourced from our contractor, MITIE.

Total waste recorded in 2012 in further split as follows:



The following initiatives have contributed to this achievement to date:

- installation of dedicated well sign-posted recycling points in staff and public areas,
- recycling stations provided at large-scale events such as the Music and Food festivals
- specific cardboard collection from all the retail shops and compacting at the Retail Warehouse for recycling,
- encouraging staff to take responsibility for and participate in good environmental practices.

The Gardens and Estates department recycle 100% of their green waste which is shredded and never taken off site. This in turn also reduces the need for transportation off site. We are also increasing shredding of waste paper on site to add to the green waste for compost which is gradually more peat-free. In addition, a dedicated skip is available for collecting used plastic flower pots and trays, and oil is stored and then taken off site for professional recycling.

Recovered timber is collected at Hampton Court in a separate area for use as fire wood on the Tudor Kitchens Great Fire.

Construction waste is collected in skips for all projects and segregated either on-site or off-site at dedicated facilities.

Used computer, photocopier and printer cartridges are recycled at all palaces and an approved contractor removes equipment to comply with the waste Electrical and Electronic Equipment Regulations (WEEE).



### Biodiversity

Maintaining and encouraging diverse ecosystems within Home Park and the palaces' gardens is a vital part of the management of HRP estate. We seek to enhance the biodiversity value of the estate through sympathetic management. This includes a commitment to the sustainable management of habitats of wildlife conservation importance by:

- leaving fallen timber and deadwood on site to create habitats for saproxylic species,
- no longer adding chemical controls to waterways and water features,
- introducing reed beds and marginal aquatic planting for filtering and habitat creations.

We also regularly conduct targeted surveys and biological recording of key habitats and species to monitor change and the impact of management practices and activities. Recent surveys have been conducted for invertebrates, bats, amphibians, reptiles, birds and fungi. These surveys help to influence management practices.

Historic Royal Palaces works in partnership with a number of local wildlife conservation groups and organisations which enable us to share knowledge of best practice to help coordinate effective working.

We are pleased to report that Home Park is currently being considered by Natural England (England's statutory nature conservation body) to become a Site of Special Scientific Interest (SSSI) in recognition of the acid grassland and veteran tree assemblage which exist on site. The timescale for confirmation of this procedure has not yet been confirmed. The designation will include Home Park but may exclude the 'Flower Show' site footprint.

### The future

The HRP Sustainability Group was re-launched in 2012 under the chair of the Palaces Group Director. It comprises of key decision-makers who control both budgets and processes across the organisation. As a result of a thorough review of our activities, departments built bespoke sustainability action plans which are currently being implemented.

In 2013/14, we are investing in a detailed environmental assessment which will review where the major impacts are across the organisation, inform a renewed vision and specific strategies to reduce those impacts and produce a model for ongoing assessment of our carbon footprint. The Sustainability Group will make recommendations to the Executive Board for cost effective and impactful improvements in the winter of 2013.

