

**The Household of Their Royal Highnesses  
The Prince of Wales and The Duchess of Cornwall  
Carbon Report for the year ended 31 March 2010**

# Foreword

## The Carbon Report in context

His Royal Highness The Prince of Wales has been a leader in helping to foster good sustainability practice for nearly 40 years. As part of the Household's role in supporting the Prince and his family in all their activities, it is committed to monitoring, reporting on, and continually improving its sustainability performance.

The 2010 Annual Review includes a sustainability account which combines financial and non-financial information to provide a balanced picture of the Household's overall performance including its carbon emissions that arise as a result of its work. This Carbon Report provides further information on how its carbon emissions are calculated. It also includes an external assurance report which presents positive assurance, as defined by international assurance standards, over the Household Carbon Statement for the year ended 31st March 2010.

## Roles and Responsibilities

The Senior Management of the Household are responsible for preparing the Carbon Report including the Carbon Statement in accordance with the Household's Carbon Reporting Policy, and for defining the boundaries of operations and the determination of methods and conversion factors used. In preparing the Carbon Report, the Senior Management are required to:

- ensure that the Carbon Reporting Policy is appropriate and applied consistently;
- keep proper records that disclose with reasonable accuracy the carbon emissions of the Household;
- make judgements and estimates that are reasonable and prudent; and
- take reasonable steps for the prevention and detection of fraud and other irregularities.

## Overview of the Carbon Report

The four main sections of this document should all be read together to gain a full understanding of the Household's carbon emissions:

**Introduction** – provides narrative details of the Household's carbon performance for the year;

**Household's Carbon Statement** – sets out this year's carbon emissions data alongside prior year data and 2007 baseline data;

**Carbon Reporting Policy** – explains the basis for preparing the Household's carbon emissions data; and

**Assurance Report** – the external assurance report prepared by PricewaterhouseCoopers LLP, a leading firm of independent accountants, on the Household's Carbon Statement.

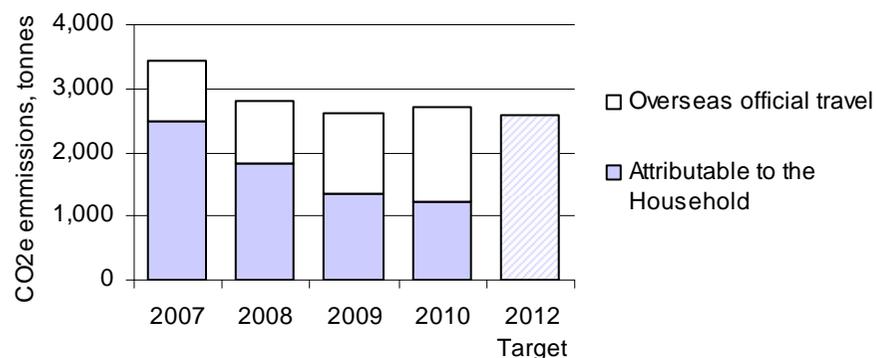
Senior Management confirm that they have carried out their responsibilities as set out above and have approved the Carbon Report.

2nd July 2010

## Introduction

The Household strives to minimize its carbon emissions, which arise primarily from travel, heating and electricity use. Emissions arising from the Home Farm at Highgrove are reported in the Annual Review but are outside of the scope of this report.

Emissions from sources under the Household's direct control have fallen by 8% this year and a total of 50% since 2007. However, due to increases in emissions as a result of official overseas travel, outside of the Household's direct control, the total emissions have increased by 4.4%. The Household remains on track to meet its target to cut total carbon emissions by 25% against 2007 levels by 2012.



### Travel

The majority of carbon emissions from travel arise from overseas trips undertaken by Their Royal Highnesses at the request of the Foreign and Commonwealth Office over which the Household has no direct control. As a result of several European visits (including to Denmark, France, Germany, Italy, Poland, Czech Republic and Hungary) and two long-haul overseas trips (to Canada and Afghanistan) emissions from this source increased this year by 18%.

Emissions from official UK travel by air and rail, which is directly under the Household's control, fell by 29% this year due to the use of smaller aircraft, fewer supporting staff flights and greater use of the Royal Train.

The Household endeavours to minimize the environmental impact of travel during the planning process taking into account security, logistical, cost and other considerations.

### Energy use

Energy use encompasses heating, hot water and electricity use for all the offices and residences. The Household aims to reduce its carbon emissions from energy use by increasing energy efficiency and through greater use of renewable energy.

The Household continues to reduce its reliance on energy from fossil fuels through measures such as the use of energy efficient boilers at Clarence House, woodchip boilers at Highgrove, Birkhall and Llwynywermod, and heat pumps at Highgrove. Net emissions from energy use have decreased by 9%. To help promote energy efficiency, staff receive a regular report on their energy use. This is supported by other measures including electricity monitors and "Smart Meters" which provide detailed information on electricity use.

## Carbon Statement

The table below sets out the Household's carbon emissions.

Year to 31st March	2010 <sup>1</sup>	2009	2008	2007
CO <sub>2</sub> e equivalent emissions	tonnes	tonnes	tonnes	tonnes
<b>Attributable to the Household</b>				
Official UK travel	287	405	466	565
Other travel	468	413	711	1,014
Subtotal – UK and other travel	755	818	1,177	1,579
Emissions from energy use	768	801	856	932
Electricity from renewable sources <sup>2</sup>	(284)	(271)	(200)	(15)
Subtotal – energy use	484	530	656	917
<b>Attributable to the Household</b>	<b>1,239</b>	<b>1,348</b>	<b>1,833</b>	<b>2,496</b>
<b>Official overseas travel</b>	<b>1,479</b>	<b>1,253</b>	<b>962</b>	<b>929</b>
<b>Household CO<sub>2</sub>e emissions<sup>3</sup></b>	<b>2,718</b>	<b>2,601</b>	<b>2,795</b>	<b>3,425</b>

1. The PricewaterhouseCoopers LLP assurance report for year-ended 31 March 2010 is on page 6.

2. See reporting policy note on page 5.

3. In accordance with Defra Guidance, September 2009, the table above excludes direct emissions from the use of biofuels (bio-diesel and woodchips). The gross direct emissions from biofuels were 456 CO<sub>2</sub>e tonnes in 2010, (2009: 360t and 2008: 93t). See the reporting policy note on page 3 for a more detailed explanation.

# Carbon Reporting Policy

## General accounting policies

This Carbon Reporting Policy (CRP) supports the preparation and reporting of the Carbon Statement of The Office of Their Royal Highnesses The Prince of Wales and The Duchess of Cornwall (the Household) for the year ending 31st March 2010. The Duchy of Cornwall and the Prince's Charities are separate organisations and are outside of the scope of this Policy.

The CRP focuses exclusively on the accounting and reporting of carbon emissions, it does not cover financial accounting and reporting policies.

### Carbon Reporting Principles

In preparing the CRP, consideration has been given to the World Resources Institute / World Business Council for Sustainable Development Greenhouse Gas Protocol: A Carbon Reporting and Accounting Standard, March 2004 as well as the Accounting Standards Board Statement of principles for financial reporting and other generally accepted reporting and accounting principles. The most pertinent principles are with respect to:

*Information Preparation* - the primary principles are relevance (to users) and reliability (taking into account purpose) including completeness and material accuracy.

*Information Reporting* - the primary principles are comparability / consistency (with other data including prior year) and understandability / transparency (clarity to users).

### Reporting scope – inclusions and exclusions

The Carbon Statement relates to carbon dioxide emissions arising as a result of Their Royal Highnesses' official duties and private engagements, and those arising from the operations of the Household in support of these activities. The official duties of Prince William and Prince Harry, which are undertaken on behalf of Their Royal Highnesses, are also within the scope of reporting. The carbon dioxide emissions arising from The Prince of Wales' charities projects are outside of the scope of reporting. The scope also excludes the activities of third party contractors.

### Conversion factors and fuel use calculation

The carbon dioxide emissions associated with the activities noted above have been determined on the basis of measured or estimated energy and fuel use, or distances travelled, multiplied by the relevant carbon conversion factors as explained below. Where possible fuel or energy use is based on direct measurement, purchase invoices or actual mileage data, in other cases it has been necessary to obtain estimations. Specific estimations have been made in the following circumstances:

- Certain aircraft using the fuel use estimation methodology set out in "Revision to the Method of Estimating Emissions from Aircraft in the UK Greenhouse Gas Inventory, Report to Global Atmosphere Division, Defra, 2004" (Defra 2004).
- Certain aircraft using fuel consumption estimates obtained from the aircraft operators and other independent data sources based on average hourly fuel use, distance travelled and speed;
- The Royal Train using fuel consumption data obtained from the train operator;
- Yacht - using data obtained from third party sources;
- Public transport and taxis based on expenditure, using standard tariff information.
- Wood chips – estimated using heat meter readings or records of fuel use.

The conversion factors for converting fossil fuel use or distances travelled, as applicable, into carbon emissions have been taken from "Guidelines to Defra / DECC's GHG conversion factors for company reporting, Annexes updated September 2009" (Defra 2009). Where conversion factors change from prior years, those changes are not applied retrospectively to comparative periods.

Two forms of biofuels are used – biodiesel (in the Royal Train and cars) and wood chips (in boilers). It is generally accepted that net direct emissions from combustion are zero as this carbon dioxide would have been emitted anyway when the wood or fuel decayed naturally at the end of its life. In accordance with Defra Guidance, September 2009, the direct emissions from combustion are now reported separately from the Household's other emissions. Conversion factors for direct emissions are taken from Biomass Energy Centre (BEC) - <http://www.biomassenergycentre.org.uk> (June 2010).

See the detailed accounting policy notes below for further details.

# Travel

## Scope

Reported carbon emissions include:

- *Official overseas travel*: engagements undertaken on behalf of the Foreign and Commonwealth Office and supporting reconnaissance visits;
- *Official UK travel*: engagements in the UK undertaken in support of The Queen and reconnaissance visits;
- *Other travel*: including general staff travel between residences and offices, staff commuting and Their Royal Highnesses' private travel;

## Reporting Methods

### Flights

Includes air travel for official and private engagements undertaken by Their Royal Highnesses and all flights taken by Household staff including those for reconnaissance visits and when in attendance to Their Royal Highnesses. Any positioning and repositioning flights are included where appropriate.

For scheduled flights carbon conversion factors for domestic and international (short haul and long haul) flights are taken from Defra 2009.

For non-scheduled flights emissions are calculated on the basis of distance travelled and fuel consumption for each type of aircraft used. Fuel consumption is estimated according to the methodology set out in Defra 2004 where the data are available. For other aircraft, fuel consumption is based on the best-available per-hour consumption data obtained from the aircraft manufacturers or operators.

An allowance of a factor of two has been applied to all aircraft travel, excluding helicopters, to account for the increased impact of aviation due to non-carbon dioxide emissions and emissions at altitude.

### Royal Train

Includes all travel on the Royal Train where appropriate. Any positioning and repositioning journeys are included. Emissions are calculated on the basis of distance and fuel consumption provided by the train operating company.

The locomotive of the Royal Train has, since September 2007, been powered by biodiesel made from used cooking oil. Lifecycle carbon dioxide emissions have been included using the methodology set out in "Carbon and Sustainability Reporting Within the Renewable Transport Fuel Obligation Requirements and Guidance" (Department for Transport 2008).

### Yacht

Includes yacht travel. Positioning and repositioning journeys are included where appropriate. Emissions are calculated on the basis of distance and fuel consumption.

### Car use

Includes all car journeys made in conducting Household activities. This includes use of fleet, private and hire cars by Their Royal Highnesses and Household staff.

Activity data for car use are obtained from the accounts reporting system and consolidated through the carbon reporting processes. Expenditure on fuel is converted to fuel use by dividing by average fuel prices for the year. Where biodiesel has been used in cars the lifecycle carbon dioxide emissions from such use have been included in the Carbon Statement following the methodology set out in "Carbon and Sustainability Reporting Within the Renewable Transport Fuel Obligation Requirements and Guidance" (Department for Transport 2008).

### Public transport and taxis

Includes the use of all public transport and commercial taxis by the Household.

### Staff commuting

Includes the carbon emissions from staff commuting based on a staff survey completed in May 2009 that was updated in April 2010 for changes in staff. Emissions are calculated on the basis of the distance travelled, mode of transport and the conversion factors from Defra 2009.

# Energy

## Scope

The scope includes energy use relating to official and private residences and offices including electricity, gas and oil consumption. The Carbon Statement covers the following residences and offices of the Household:

- Clarence House
- Highgrove, excluding Home Farm
- Birkhall
- Raymill
- Llwynywermod
- Other properties used for staff accommodation

Where appropriate, emissions from shared office space are determined on the basis of the leased floor area. Emissions from residences of permanent staff where the Household is not responsible for the payment of utility bills are excluded. Emissions relating to on-site holiday lets are included.

## Reporting methods

### *Electricity*

Includes electricity supplied via the Grid (including supplies from Combined Heat and Power plants) and used by the Household at the properties within the scope of reporting. Electricity consumption is obtained from a combination of actual meter readings and invoiced totals. Where readings and invoiced totals do not coincide with 31st March, an appropriate extrapolation is made.

Emissions are calculated on the basis of energy consumed multiplied by the conversion factors from Defra 2009. For supplies of electricity from renewable sources which are climate change levy exempt where appropriate or confirmed by the utility supplier to be on a 100% renewable tariff, we have reported the electricity consumed initially at a Grid average conversion factor, but then reduced to zero emissions.

### *Gas*

Includes all mains and other gas supplied to the Household.

Emissions are calculated on the basis of total mains gas and other gas deliveries multiplied by the conversion factors from Defra 2009. Gas consumption is obtained from

a combination of actual meter readings and invoiced totals. Where readings and invoiced totals do not coincide with 31st March, an appropriate extrapolation is made.

### *Oil*

Emissions are calculated on the basis of oil delivered multiplied by the conversion factors from Defra 2009.

### *Wood chip*

Direct emissions from the combustion of woodchips are based on estimates of energy used from heat meter readings where available or records of fuel use. As wood fuel is not as homogeneous as fossil fuels and the energy content varies according to moisture content and wood type, estimates of CO<sub>2</sub> emissions are subject to greater margins of error than for fossil fuels.

Indirect (lifecycle) emissions arising from the transportation and production of wood chips are not considered material as wood chips are sourced mainly from local estates.

# Independent Assurance Report

## on the Carbon Statement for the year ended 31 March 2010 to the Household of Their Royal Highnesses The Prince of Wales and The Duchess of Cornwall



We have been engaged by the Senior Management of the Office of Their Royal Highnesses The Prince of Wales and The Duchess of Cornwall (the “Household”) to perform an independent reasonable assurance engagement in respect of the Household’s statement of carbon dioxide emissions for the year ended 31 March 2010, which comprises the Carbon Statement and the accompanying Carbon Reporting Policy contained within the Household’s Carbon Report for the year ended 31 March 2010 and on the website [www.princeofwales.gov.uk](http://www.princeofwales.gov.uk).

### Respective responsibilities of Senior Management and PricewaterhouseCoopers LLP

Senior Management are responsible for preparing the Carbon Statement on page 2 in accordance with the criteria set out in the Household’s Carbon Reporting Policy set out on pages 3 to 5 of the Carbon Report and for the development of the Carbon Reporting Policy as set out in the Statement of Roles and Responsibilities on page 1.

Our responsibility is to form an independent opinion, based on our assurance procedures, on whether the Carbon Statement is fairly stated, in all material respects, in accordance with the Carbon Reporting Policy.

We are in compliance with the applicable independence and competency requirements of the Institute of Chartered Accountants in England and Wales (ICAEW) Code of Ethics. Our team comprised assurance practitioners and relevant subject matter experts.

This report, including the opinion, has been prepared for the Household to assist the Senior Management in reporting the Household’s carbon dioxide emissions. We permit the disclosure of this report by Senior Management within the Carbon Report for the year ended 31 March 2010 and on the website [www.princeofwales.gov.uk](http://www.princeofwales.gov.uk) to enable Senior Management to demonstrate they have discharged their governance responsibilities by commissioning an independent assurance report in connection with the Carbon Report. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Senior Management as a body and the Household for our work or this report save where terms are expressly agreed and with our prior consent in writing.

We read the other information included within the Carbon Report and consider whether it is consistent with the Carbon Statement. We consider the implications for our report if we become aware of any apparent misstatements or material inconsistencies with the Carbon Statement. Our responsibilities do not extend to any other information.

### Assurance work performed

We conducted our reasonable assurance engagement in accordance with International Standard on Assurance Engagements 3000 (Revised) – “Assurance Engagements other than Audits or Reviews of Historical Financial Information” issued by the International Auditing and Assurance Standards Board.

Our work included examination, on a test basis, of evidence relevant to the Carbon Statement. It also included an assessment of the significant estimates and judgements made by Senior Management in the preparation of the Carbon Statement. We planned and performed our work so as to obtain all the information and explanations which we considered necessary in order to provide us with sufficient evidence on which to base our opinion in respect of the Carbon Statement.

Our work included the following procedures:

- Making enquiries of relevant management.
- Evaluating the design and implementation of the key processes and controls for managing and reporting the carbon dioxide emissions data.
- Testing the preparation and collation of the carbon dioxide emissions data including review of the underlying input information.
- Undertaking analytical procedures over the reported carbon dioxide emissions data.

### Inherent limitations

Non-financial performance information is subject to more inherent limitations than financial information, given the characteristics of the subject matter and the methods used for determining such information. The absence of a significant body of established practice on which to draw allows for the selection of different but acceptable measurement techniques which can result in materially different measurements and can

affect comparability. The precision of different measurement techniques may also vary. Furthermore the nature and methods to determine such information, as well as the measurement criteria and precision thereof, may change over time. It is important to read the Carbon Statement in the context of the Carbon Reporting Policy set out on pages 3 to 5 of the Carbon Report.

In particular, the conversion of fuel used to carbon emissions is based upon, inter alia, information and factors derived by independent third parties as explained in the Carbon Reporting Policy. Our assurance work has not included examination of the derivation of those factors and other third party information.

### **Conclusion**

Based on the results of our procedures, in our opinion, the Carbon Statement for the year ended 31 March 2010 is fairly stated, in all material respects, in accordance with the Carbon Reporting Policy.

A handwritten signature in blue ink that reads "PricewaterhouseCoopers LLP". The signature is written in a cursive, flowing style.

PricewaterhouseCoopers LLP  
Chartered Accountants  
London, 2nd July 2010