

## Energy Consumption

The table below shows the gas, oil and electricity consumption from properties in the managed portfolio.

	Year Ended 31 March 2006		Year Ended 31 March 2007		Year Ended 31 March 2008		Year Ended 31 March 2009	
	Annual Consumption (kWh)	Normalised Annual Consumption (kWh per m <sup>2</sup> )	Annual Consumption (kWh)	Normalised Annual Consumption (kWh per m <sup>2</sup> )	Annual Consumption (kWh)	Normalised Annual Consumption (kWh per m <sup>2</sup> )	Annual Consumption (kWh)	Normalised Annual Consumption (kWh per m <sup>2</sup> )
Natural Gas	10,639,871	105.05	5,975,798	58.66	7,339,492	72.23	6,897,585	73.18
Oil	1,452,363	76.31	1,320,055	65.12	1,580,387	68.38	1,961,394	84.13
<b>Total Fossil Fuels (Scope 1)</b>	<b>12,092,234</b>	<b>181.36</b>	<b>7,295,853</b>	<b>123.78</b>	<b>8,919,879</b>	<b>140.61</b>	<b>8,858,978</b>	<b>157.31</b>
Brown Electricity	8,963,606	68.56	9,054,595	65.23	7,474,835	51.61	4,431,151	37.30
Green Electricity	-	-	-	-	35,849	47.11	1,751,141	61.65
<b>Total Electricity (Scope 2)</b>	<b>8,963,606</b>	<b>68.56</b>	<b>9,054,595</b>	<b>65.23</b>	<b>7,507,684</b>	<b>51.59</b>	<b>6,182,292</b>	<b>42.00</b>
<b>Total</b>	<b>21,055,840</b>	<b>161.05</b>	<b>16,350,448</b>	<b>117.79</b>	<b>16,427,563</b>	<b>112.88</b>	<b>15,041,270</b>	<b>102.17</b>

The total kWh consumption of gas and oil is the amount used to supply Landlord boilers providing heating to the common and tenanted areas at all properties where the Landlord is in control of the heating plant and energy use rather than the occupier. This corresponds to the Scope 1 emissions classification in the Green House Gas Protocol reporting standard.

The total kWh consumption of electricity is the amount used to supply Landlord plant (eg lifts and HVAC plant serving common and tenanted areas), common area lighting and power, at all properties where the Landlord is in control of this energy use, rather than the occupier, including electricity use at our Head Office. This corresponds to the Scope 2 emissions classification in the Green House Gas Protocol reporting standard.

Where reporting energy usage within Joint Ventures, 50% of the total energy usage and 50% of the property area is used to reflect the share of ownership.

### **Reporting years ending 31 March 2008 and 31 March 2009**

#### **Gas**

Gas consumption has decreased by 6% in the year 1 April 2008 to 31 March 2009 due to the sale of one large property in September 2008. When the normalised figures are analysed gas consumption has increased by 1% due to increased occupancy in some properties during the year to 31 March 2009 and the improvements made in data collection at a number of properties which were acquired in the year ending 31 March 2008.

#### **Oil**

Oil consumption has increased by 24% in the year 1 April 2008 to 31 March 2009 due to 2 properties being partly vacant during the winter months. Because the heating systems at these properties are old it was not possible to isolate the vacant floors from the occupied floors. As vacant areas have a lower base temperature more energy is used to heat these spaces. One property also had an increase in oil use because it was purchased in April 2007 with a full tank, this was not accounted for in last year's figures.

#### **Electricity**

Annual electricity consumption has decreased by 18% in the year 1 April 2008 to 31 March 2009. Normalised consumption has decreased by 19%. The decrease can be explained by the disposal of three large properties during the year ending 31 March 2008 and one property in September 2008; these properties were more energy intensive. Properties acquired during the year to 31 March 2009 are less energy intensive, some of which have residential elements. Two new properties that were acquired in the year to 31 March 2009 were largely vacant when they were included in the portfolio and consumed less energy.

The key success during this reporting year is the increase in purchased green electricity from 0.5% to 28% of the total electricity consumed. This is due to the price of green electricity falling in comparison to brown electricity and being more readily available to purchase on renewal of our existing contracts.

### **Reporting years ending 31 March 2007 and 31 March 2008**

The increase in gas and oil consumption can predominantly be explained by the increased number of properties that entered the managed portfolio during the year 1 April 2007 to 31 March 2008 as a result of new purchases and the completion of developments. In addition, the increased occupancy of properties on completion of refurbishment schemes during the year resulted in increased gas consumption at those properties. This mirrors the decrease seen in the previous reporting period.

The increase in oil consumption has been slightly offset by improvements made in the operation of oil boilers during the year 1 April 2007 to 31 March 2008.

The decrease in electricity consumption can be predominantly explained by the improvements made in taking accurate meter readings and the installation of more submeters during the year 1 April 2007 to 31 March 2008, allowing for Landlord and tenant usage to be separated.

There is a decrease in carbon emissions because the electricity consumption has decreased, even though gas and oil consumption has increased. In addition some properties were switched to green electricity contracts during the year 1 April 2007 to 31 March 2008 with zero carbon emissions.

### **Reporting years ending 31 March 2006 and 31 March 2007**

The overall decrease in energy consumption over the reported periods can be explained, predominantly by the number and size of properties that entered the development portfolio between 1 April 2006 and 31 March 2007.

Although normalisation accounts for disposal and acquisitions, it does not take into consideration the gradual termination of leases prior to a refurbishment or development. In the case of the year 1 April 2006 to 31 March 2007 many of the affected properties entered the development portfolio prior to the heating season. This is reflected in the marked reduction in gas consumption when compared with the previous year.

## Carbon Emissions

The table below shows the carbon emissions resulting from the energy consumption reported above.

	Year Ended 31 March 2006		Year Ended 31 March 2007		Year Ended 31 March 2008		Year Ended 31 March 2009	
	Annual CO <sub>2</sub> Emissions (tonnes)	Normalised Annual CO <sub>2</sub> Emissions (kg per m <sup>2</sup> )	Annual CO <sub>2</sub> Emissions (tonnes)	Normalised Annual CO <sub>2</sub> Emissions (kg per m <sup>2</sup> )	Annual CO <sub>2</sub> Emissions (tonnes)	Normalised Annual CO <sub>2</sub> Emissions (kg per m <sup>2</sup> )	Annual CO <sub>2</sub> Emissions (tonnes)	Normalised Annual CO <sub>2</sub> Emissions (kg per m <sup>2</sup> )
Natural Gas	2,192	21.64	1,231	12.08	1,495	14.72	1,405	14.91
Oil	385	20.22	350	17.26	419	18.15	521	22.33
<b>Total Fossil Fuels (Scope 1)</b>	<b>2,577</b>	<b>41.86</b>	<b>1,581</b>	<b>29.34</b>	<b>1,915</b>	<b>32.87</b>	<b>1,926</b>	<b>37.24</b>
Brown Electricity	4,785	36.60	4,858	35.00	4,039	27.90	2,395	20.16
Green Electricity	-	-	-	-	-	-	-	-
<b>Total Electricity (Scope 2)</b>	<b>4,785</b>	<b>36.60</b>	<b>4,858</b>	<b>35.00</b>	<b>4,039</b>	<b>27.89</b>	<b>2,395</b>	<b>22.70</b>
<b>Total</b>	<b>7,361</b>	<b>56.30</b>	<b>6,439</b>	<b>46.39</b>	<b>5,954</b>	<b>40.91</b>	<b>4,321</b>	<b>29.35</b>

We have recalculated the carbon emissions for all previous reporting periods with the updated CO<sub>2</sub> conversion factors for each year as specified in DEFRA guidelines published in June 2009.

Electricity purchased on green tariff contracts is currently Climate Change Levy exempt and therefore we have used a CO<sub>2</sub> conversion factor of zero.

There has been a 27% decrease in total carbon emissions in the year 1 April 2008 to 31 March 2009. This is partly due to the decrease in overall energy consumption but predominantly as a result of the increase in purchased green electricity.

## Normalisation Calculation

Resource usage per m<sup>2</sup> is calculated using the gross internal floor area value of the properties reporting each resource.

The data is normalised to account for the disposal and acquisition of properties during each reporting period.

In order to calculate total normalised energy consumption and therefore carbon emissions for each reporting period we have used the GIFA for properties consuming electricity. This prevents double counting where a single property may use gas/oil and electricity.

The floor areas using each fuel type in each reporting period are shown in the table below.  
(Normalised GIFA in m<sup>2</sup>)

	<b>Year Ended 31 March 2006</b>	<b>Year Ended 31 March 2007</b>	<b>Year Ended 31 March 2008</b>	<b>Year Ended 31 March 2009</b>
Natural Gas	101,284	101,872	101,618	94,254
Oil	19,032	20,271	23,113	23,314
<b>Total Fossil Fuels</b>	<b>120,316</b>	<b>122,143</b>	<b>101,641</b>	<b>117,568</b>
Brown Electricity	130,741	138,810	144,772	118,805
Green Electricity	-	-	761	28,406
<b>Total Electricity</b>	<b>130,741</b>	<b>138,810</b>	<b>145,533</b>	<b>147,212</b>
<b>Total</b>	<b>130,741</b>	<b>138,810</b>	<b>145,533</b>	<b>147,212</b>

## CO<sub>2</sub> Conversion

The table below shows the conversion factors used for each fuel type.

Reporting Year	Fuel Type	Updated Conversion Factor	Original Conversion Factor
2005 – 2006	Natural Gas	0.206	0.19
	Gas Oil	0.265	0.25
	Electricity	0.53377	0.44
2006 – 2007	Natural Gas	0.206	0.19
	Gas Oil	0.265	0.25
	Electricity	0.53655	0.44
2007 – 2008	Natural Gas	0.20374	0.19
	Gas Oil	0.26542	0.25
	Electricity	0.54055	0.44
2008 – 2009	Natural Gas	0.20374	
	Gas Oil	0.26542	
	Electricity	0.54055	

Carbon emissions reported previously using the original conversion factors are shown in the table below.

	Year Ended 31 March 2006		Year Ended 31 March 2007		Year Ended 31 March 2008	
	Annual CO <sub>2</sub> Emissions (tonnes)	Normalised Annual CO <sub>2</sub> Emissions (kg per m <sup>2</sup> )	Annual CO <sub>2</sub> Emissions (tonnes)	Normalised Annual CO <sub>2</sub> Emissions (kg per m <sup>2</sup> )	Annual CO <sub>2</sub> Emissions (tonnes)	Normalised Annual CO <sub>2</sub> Emissions (kg per m <sup>2</sup> )
Natural Gas	2,022	19.96	1,135	11.19	1,395	13.72
Oil	363	19.08	330	16.25	395	17.10
<b>Total Fossil Fuels (Scope 1)</b>	<b>2,385</b>	<b>39.04</b>	<b>1,465</b>	<b>27.44</b>	<b>1,790</b>	<b>30.82</b>
Brown Electricity	3,944	30.17	3,984	28.74	3,287	22.71
Green Electricity	-	-	-	-	-	-
<b>Total Electricity (Scope 2)</b>	<b>3,944</b>	<b>30.17</b>	<b>3,984</b>	<b>28.74</b>	<b>3,287</b>	<b>22.71</b>
<b>Total</b>	<b>6,329</b>	<b>-</b>	<b>5,449</b>	<b>-</b>	<b>5,077</b>	<b>-</b>