

## Emissions breakdown compared with baseline and last year (tCO<sub>2</sub>)

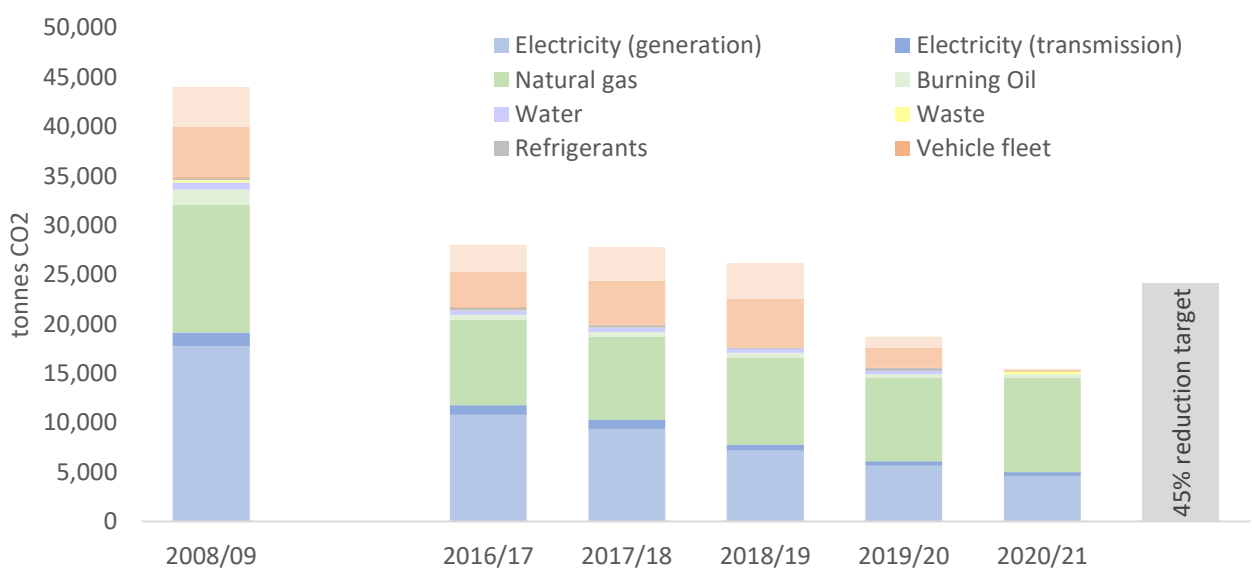
Emissions Source	2008-09	2019-20	2020-21	% change since last year	% change since baseline
Electricity (generation)	17,764	5,630	4,603	18 % ↓	74 % ↓
Electricity (transmission)	1,381	478	396	17 % ↓	71 % ↓
Natural gas*	12,937	8,415	9,548	14 % ↑	26 % ↓
Burning Oil*	1,544	405	371	8 % ↓	76 % ↓
Business travel <sup>†</sup>	5,174	2,038	155	92 % ↓	97 % ↓
Radiative forcing	4,045	1,126	26	99 % ↓	98 % ↓
Refrigerants <sup>∞</sup>	207	280	94	67 % ↓	55 % ↓
Waste <sup>#</sup>	220	14	14	1 % ↓	94 % ↓
Water	711	311	286	8 % ↓	60 % ↓
<b>Total</b>	<b>43,984</b>	<b>18,697</b>	<b>15,494</b>	<b>17 % ↓</b>	<b>65 % ↓</b>

\* Emissions for gas and oil have been degree day adjusted to enable comparison across different financial years

<sup>†</sup> Business travel includes vehicle fleet

<sup>∞</sup> Emission level tends to be more variable year to year. 43% of 2019-20 emissions due to one event.

<sup>#</sup> Emissions from construction waste are not included, due to their wide annual variability and small impact. Analysis indicates construction waste emissions over the last 5 years range between 1.9 tCO<sub>2</sub> and 15.5 tCO<sub>2</sub>/annum.



## Energy breakdown compared with baseline and last year (kWh)

### Delivered Energy (including self-generation)

Energy Source	2008-09	Average 2018-20	2020-21	% change vs average last 2 years	% change since baseline
Electricity	35,809,409	28,416,300	25,562,019	10 % ↓	29 % ↓
Natural gas*	70,324,727	46,780,162	51,918,871	11 % ↑	26 % ↓
Burning Oil*	5,584,336	1,811,811	1,503,368	17 % ↓	73 % ↓

\* Consumption for gas and oil have been degree day adjusted to enable comparison across different financial years. The response to COVID-19 had significant impacts, reducing electricity and oil use in 2020-21 compared to the average of the previous 2 years but increasing gas use because of alterations in ventilation strategy in many buildings.

### Primary Energy

Electricity, oil and gas have a variety of impacts and efficiency and transmission losses, meaning it is not logical to simply add kWh consumption of these different utilities together. We therefore use Primary Energy Factors to convert supplies to the equivalent energy required at source, therefore accounting for inefficiencies and transmission losses.

To track continual progress in energy consumption, we then normalise this consumption against weather (heating degree days), and against floor area (m<sup>2</sup>), and compare this to the average of the previous 2 years. Figure 1 illustrates our primary energy consumption has fallen continuously since 2010/11 (when we first published our carbon management plan), and fell by 9% in 2020/21.

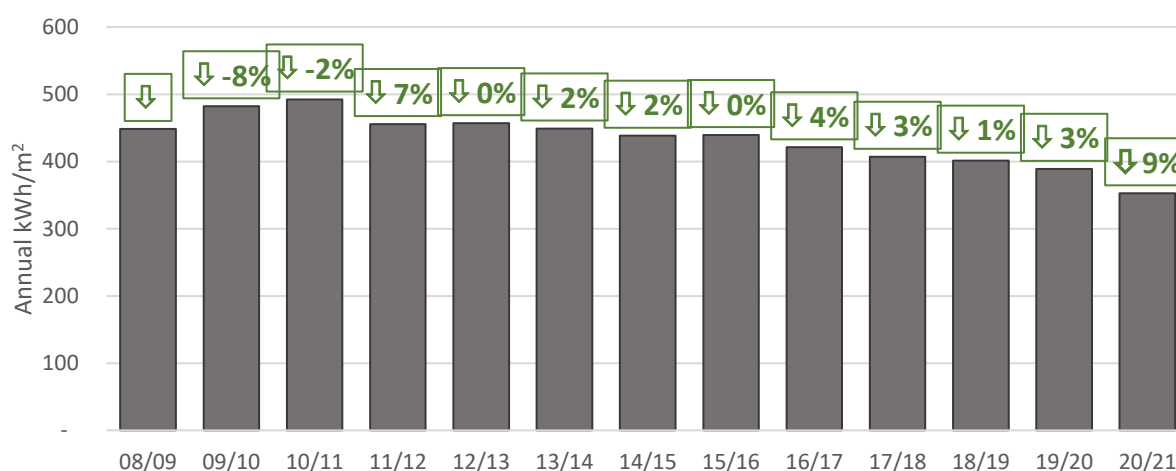


Figure 1 - Normalised primary energy use per m<sup>2</sup>