

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

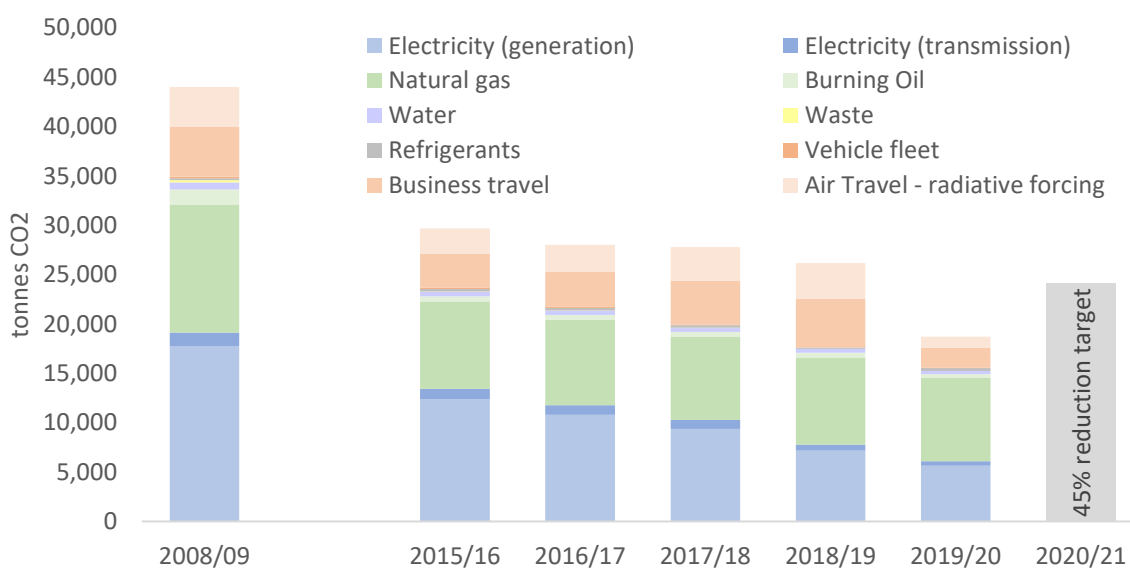
Emissions Source	2008-09	2018-19	2019-20	% change since last year	% change since baseline
Electricity (generation)	17,764	7,185	5,630	22 % ↓	68 % ↓
Electricity (transmission)	1,381	612	478	22 % ↓	65 % ↓
Natural gas*	12,937	8,791	8,415	4 % ↓	35 % ↓
Burning Oil*	1,544	486	405	17 % ↓	74 % ↓
Business travel <sup>+</sup>	5,174	4,982	2,038	59 % ↓	61 % ↓
Radiative forcing	4,045	3,597	1,126	69 % ↓	72 % ↓
Refrigerants <sup>∞</sup>	207	106	280	164 % ↑	35 % ↑
Waste <sup>#</sup>	220	21	14	30 % ↓	93 % ↓
Water	711	398	311	22 % ↓	56 % ↓
<b>Total</b>	<b>43,984</b>	<b>26,178</b>	<b>18,697</b>	<b>27 % ↓</b>	<b>57 % ↓</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 similar to the 3 years prior to 2018-19. 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 2017-19	2019-20	% change vs average last 2 years	% change since baseline
Electricity	35,809,409	30,231,324	26,687,264	12 % ↓	25 % ↓
Natural gas*	70,324,727	46,752,294	45,772,076	2 % ↓	35 % ↓
Burning Oil*	5,584,336	2,007,546	1,651,726	18 % ↓	70 % ↓

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

### 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 3% in 2019/20.

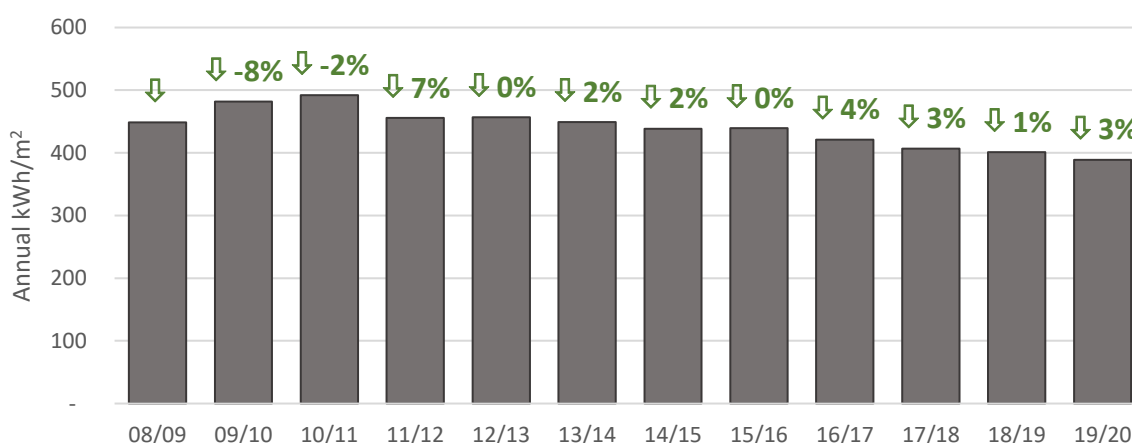


Figure 1 - Normalised primary energy use per m<sup>2</sup>