

Annual Greenhouse Gas Report: 2018-19

Bedford Borough Council acknowledges the carbon dioxide (CO₂) emissions generated through the delivery of our services and the resulting contribution they make towards climate change.

Acknowledging and understanding the need to do as much possible locally to reduce the effects of climate change; we want to demonstrate leadership by “getting our own house in order” by reducing both our direct and indirect carbon dioxide emissions as efficiently and effectively as possible.

Adopted in March 2011, Bedford Borough Council’s Carbon Management Plan sets out a programme of action for the Council to achieve its aspirational 40% carbon reduction target. This document can be found at:

<https://www.bedford.gov.uk/environmental-issues/sustainability2/sustainability-strategies-and-policies/>

In 2017/18 Bedford Borough Council exceeded this target on its own operated Council buildings and achieved a 53% carbon reduction. The Council is now looking to extend this further and reach carbon neutrality by 2030.

This report summarises the Council’s actual carbon emissions for 2018/19. It goes on to examine the achievements we have made for those sites originally included in our baseline year- 2009/10. It follows guidance provided by Defra on how to measure and monitor greenhouse gas emissions.

Overall emissions for 2018/19		
Scopes	Global tonnes of CO ₂ e	
	2009/10 (baseline year)	2018/19
Scope 1	12,613	8,329
Scope 2	13,693	6,455
Scope 3	651	2,779
Out of scopes (biomass)	-	-
Total gross emissions	26,957	17,563
Carbon offsets	0	0
Green tariff	0	0
Total net emissions	26,957	17,563
Intensity measurement “Tonnes of CO ₂ e per head of population”	0.17	0.10
Overall Percentage saving		35%

Operational Scope

We have measured Scope 1 and 2 emissions for all properties and vehicles we fully own and control. Our reported Scope 1 and 2 emissions also include emissions from those properties that we lease in from others, where we are delivering a service, but not including buildings that are leased out or outsourced.

In line with previous NI185 reporting and the baseline within our Carbon Management Plan, we have also measured significant Scope 3 emissions, which does include the outsourced buildings and business travel which is in line with Defra guidance.

	GHG emissions 2009-10 in tonnes of CO ₂ e	GHG emissions 2018-19 in tonnes of CO ₂ e
Scope 1		
Gas consumption	8,012	5,178
Heating oil consumption	1,733	921
Owned transport	2,859	2,159
LPG	9	71
Process emissions	N/A	N/A
Fugitive emissions	N/A	N/A
Total Scope 1	12,613	8,329
Percentage saving		34%
Scope 2		
Purchased electricity	13,693	6,455
Total Scope 2	13,693	6,455
Percentage saving		53%
Scope 1+2 saving		44%
Significant Scope 3		
Business travel	508	164
Outsourced activities	143	2,615
Employee commuting	-	-
Waste Disposal	-	-
Product in use	-	-
Total Significant Scope 3	651	2,779
Out of Scope (biomass)	-	-

Schools are included within our Scope 1 (gas and oil) and Scope 2 (electricity) emissions in the table above.

The breakdown of school's emissions against non-schools emissions is illustrated below (scope 3 emissions and transport have been excluded):

	GHG emissions 2009-10 in tonnes of CO ₂ e	GHG emissions 2018-19 in tonnes of CO ₂ e	% Increase/ Decrease
TOTAL building emissions *excluding Scope 3	23,447	12,625	46% decrease
Schools	10,379	7,672	26% decrease
All other Council buildings*	13,068	4,953	62% decrease

* For the purpose of the government's requirements on the calculation of the greenhouse gas report, contracted services and outsourced buildings are not required to be reported as Scopes 1 and 2 and are not calculated within the figure for 'Council buildings' in the above table.

Changes in Emissions

Stationary Sources

Since 2009/10, the Council's estate has changed quite significantly. Despite the Council closing a number of buildings as part of its modernisation programme, many sites have been handed back to the Council (e.g. care homes) and some sites continue to grow and expand (e.g. schools).

Leisure sites are managed by a third party (as of 1st February 2014) and the resulting emissions are now deemed as scope 3 - the emissions are now the responsibility of Fusion Lifestyle Limited and have not been included within Scopes 1 and 2 (albeit Bedford Borough Council continues to monitor consumption and emissions).

Despite such changes within the Council's own building estate, significant progress has been made in reducing carbon emissions- this is largely the result of its highly successful RE:FIT programme and continuation of other invest to save schemes. More information about successful projects the Council has implemented can be found here.

<https://www.bedford.gov.uk/environmental-issues/sustainability2/sustainability-projects/>

The Council aspired to achieve a 40% carbon reduction saving on its buildings and this year we have seen the Council overachieve on this target. In using the guidelines from Defra, the Council has achieved a 62% carbon saving on its own buildings. Schools have also seen an increase in their savings, up to 26% compared to the 2009/10 baseline.

The most significant savings can be seen from the Half Hourly Street Lighting where continued improvements to the street lamps has saved 2,400,574 kWh since 2009/10 or 42% in electricity consumption which is equivalent to 1,876 tonnes of carbon. Compared to the previous year the carbon emissions from this project alone have reduced by 15.6%. The ongoing upgrades to street lighting across the Borough have made a significant impact to the Council's footprint and will continue to do so over the next couple of years.

REFIT tranche 1 projects were signed off in July 2016 and the savings from each site were being realised fully in the 2017/18 reporting period. Further projects under Tranche 2 began to be installed by in house teams; this included lighting upgrades at Lurke Street, Queen Street and Riverstreet Multi-storey Car Parks. Already huge savings can be seen at these sites with Queen Street saving 52% of its electricity consumption compared to 2016/17. Lurke Street has been equally successful saving 55% compared to 2016/17.

Lighting works at Borough Hall were completed towards the end of 2018 so savings from these projects should be realised in 2019/20. Bedford Borough Council continues to push energy efficiency measures forward under Tranche 2. Further lighting upgrades and improved heating controls are scheduled to be completed in 2019, leading to further reduction in Council building's energy consumption.

Transport

The carbon saving achieved on transport alone is 32% against 2009/10 levels. This saving has improved compared to previous years due to a decrease in business mileage and passenger transport, however rail travel has increased.

Approach

We have followed the Governments Guidance published by Defra on how to measure and report greenhouse gas emissions. This is available at:

<https://www.gov.uk/government/publications/environmental-reporting-guidelines-including-mandatory-greenhouse-gas-emissions-reporting-guidance>

The emission factors used to produce this Greenhouse report are those provided for 2018 by Defra and are available at:

<https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2018>

The UK electricity factor is prone to fluctuate from year to year as the fuel mix consumed in UK power stations (and auto-generators) and the proportion of net imported electricity changes. These annual changes can be large as the factor depends very heavily on the relative prices of coal and natural gas as well as fluctuations in peak demand and renewables.

In the 2017 GHG Conversion Factors, there was a 15% decrease in the UK electricity CO₂e factor compared to the previous year because there was a decrease in coal generation, and an increase in gas and renewables generation. In the 2018 update from DEFRA, the CO₂e factor has decreased again (compared with 2017) by 19% due to a decrease in coal generation and an increase mainly in natural gas, and to a much lower extent, renewable generation.

Organisational Boundary

We have used the Financial Control approach as recommended within the Defra guidance. Further detail on which operations or activities have been included within our organisational boundary for the purposes of compiling this report is provided under 'Operational Scope' below.

Company Information

Bedford Borough Council is a unitary authority in Bedfordshire.

Registered address: Bedford Borough Council, Borough Hall, Cauldwell Street, Bedford, MK42 9AP

Reporting Period

1st April 2018 to 31st March 2019

Geographic Breakdown

All of our operations and activities are carried out in the UK.

Base Year

Our base year is 1st April 2009 to 31st March 2010.

Targets

Bedford Borough Council set an aspirational target to reduce its carbon emissions by 40% from its baseline year by March 2015. This target is outlined within the Council's Carbon Management Plan.

The Council has now declared a Climate Emergency and within that has pledged to become Carbon Neutral by 2030. This target includes Council Owned Buildings, Council Owned Transport and Business Mileage.

Intensity Measurement

Bedford Borough Council exists to deliver services for the people of Bedford Borough and therefore we have used an intensity measurement of “tonnes of CO₂e per head of population” based on mid-year population statistics.

2018/19 - mid-year 2018 population estimate (taken from WasteDataFlow) is 169,912.

External Assurance Statement

We have not received an independent external assurance over our reported emissions.

Carbon Offsets

We have not purchased any carbon offsets.

For further information please contact:

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