

Annual Greenhouse Gas Report: 2019-20

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. In 2018/19 Bedford Borough Council exceeded this target on its own operated Council buildings and achieved a 62% carbon reduction.

In March 2019, the Council signed a Climate Emergency declaration and pledged to become carbon neutral by 2030. This resulted in a revised baseline requirement for the Council, which focuses on:

- a. Council Owned Buildings
- b. Council Owned Transport
- c. Council staff business travel

Council Controlled	2018/19 Tonnes of CO ₂
Council buildings (electric and heating fuel)	4,953 tonnes
Owned Transport (fleet and social care)	2,159 tonnes
Business travel (scope 3 indirect, inc. air, rail)	164 tonnes
Total Tonnes	7,276 tonnes

This baseline was set in early 2019, it excludes schools and outsourced emissions and was based on data available at the time.

Since this baseline was set, it is proposed that an annual reconciliation of the existing data is completed to ensure any data management issues are resolved, i.e. the completeness of the baseline inventory and problems with basic data availability at the time of completion. This may impact on the emissions achievements that are presented, but it will be a far more accurate representation of the Council’s carbon footprint as a whole when the target year of 2030 is reached.

It is recommended that the following occurrences that affect emissions will trigger base year data recalculation i.e. acquisitions/divestitures, outsourcing/insourcing, changes in reporting boundaries or calculation methodologies.¹

This report summarises the Council's actual carbon emissions for 2019/20 as per the original [DEFRA](#) guidance on how to measure and monitor greenhouse gas emissions and will also present the carbon emissions against the [Carbon Neutral](#) target separately.

Both reports will show the revised 2018/19 baseline year data alongside the original data to show where there are differences. Going forward in future reports, only the revised data will be shown.

DEFRA report

Scopes	Overall emissions for 2019/20		
	Global tonnes of CO ₂ e		
	2018/19	2018/19 (Revised)	2019/20
Scope 1	8,329	8234	8567
Scope 2	6,455	6350	5560
Scope 3	2,779	2840	2458
Out of scopes (biomass)	-	-	
Total gross emissions	17,563	17,424	16,585
Carbon offsets	0	0	
Green tariff	0	0	
Total net emissions	17,563	17,424	16,585
Intensity measurement “Tonnes of CO ₂ e per head of population”	0.10	0.10	0.10
Overall Percentage saving			5%

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 and where the Council does not receive or pay the energy bills.

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.

¹https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/69282/pb13309-ghg-guidance-0909011.pdf page 26

	GHG emissions 2018-19 in tonnes of CO ₂ e	GHG emissions 2018-19 in tonnes of CO ₂ e Revised	GHG emissions 2019-20 in tonnes of CO ₂ e
Scope 1			
Gas consumption	5,178	5,277	5,591
Heating Oil consumption	921	727	670
Owned transport	2,159	2,159	2,193
LPG	71	71	113
Total Scope 1	8,329	8,234	8,567
Scope 2			
Purchased electricity	6,455	6,350	5,560
Total Scope 2	6,455	6,350	5,560
Scope 1+2 saving			3%
Significant Scope 3			
Business travel	164	225	172
Outsourced activities	2,615	2,615	2,286
Total Significant Scope 3	2,779	2,840	2,458

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 2018-19 in tonnes of CO ₂ e	GHG emissions 2018-19 in tonnes of CO ₂ e Revised	GHG emissions 2019-20 in tonnes of CO ₂ e	% Saving
TOTAL building emissions *excluding Scope 3	12,625	12,424	11,933	4%
Schools	7,672	7,145	6,798	5%
All other Council buildings*	4,953	5,279	5,135	3%

*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

The Council's estate changes quite frequently. Despite the Council closing a number of buildings as part of its modernisation programme, many sites have also 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 deemed as scope 3 as these are outsourced - the emissions are 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).

Information about successful projects the Council has implemented can be found here.

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

Since the Council declared a Carbon Emergency in March 2019, the Council has set a new baseline year and target of becoming Carbon Neutral on its own emissions by 2030.

Council Carbon Neutral Scope

	2018/19 Tonnes CO ₂	2018/19 Tonnes CO ₂ Revised	2019/20 Tonnes CO ₂	Increase / Decrease %
Council buildings (scope 1 and 2)	4,953	5,279	5,135	-3%
Owned Transport	2,159	2,159	2,193	+2%
Business travel (scope 3)	164	225	172	-24%
Total Tonnes	7,276	7,663	7,501	-2%

The baseline data was reviewed and the following amendments were made:

- Inclusion of buildings that should have been on the baseline where the Council pays the energy bills but recharges the tenants
- Inclusion of any missing data that has now been made available
- Recalculation of the car business mileage found an error in one formula on medium petrol cars
- Removal of long term estimated data, where data has not been available for sites such as academies not on our corporate energy contract, it was determined that these estimates and inaccurate figures should be removed from the baseline.

Should any missing data become available in the future the baseline will be reviewed, and if necessary, recalculated to reflect the accurate data. More information about recalculation can be found [here](#)

The below table highlights the four largest savings at our sites, totalling up to 281 tonnes of carbon saved.

Site	Fuel Type	2018/19 kWh	2018/19 GHG Emissions (kg)	2019/20 kWh	2019/20 GHG Emissions (kg)	2018/19 - 2019/20 Saving kWh	2018/19 - 2019/20 Saving (kg)	CO ₂ tonnes Savings
Bedford I-Lab	Electricity	535,651	151,627	504,667	128,993	-30,984	-22,634	22.6
Borough Hall	Electricity	2,637,820	746,688	2,436,348	622,731	-201,472	-123,957	123.9
Street Lighting	Electricity	3,277,654	927,806	3,197,688	817,329	-79,966	-110,477	110.5

The Higgins Art Gallery & Museum							-23,510	23.5
	Electricity	473,243	133,961	432,123	110,451	-41,120		

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 2019 by Defra and are available at:

<https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2019>

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.

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 2019 to 31st March 2020

Geographic Breakdown

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

Base Year

Our base year is 1st April 2018 to 31st March 2019.

Targets

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.

2019/20 - mid-year 2019 population estimate (taken from WasteDataFlow) is 171,623.

External Assurance Statement

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

Carbon Offsets

We have not purchased any carbon offsets.

Recalculation Policy for Baseline emissions

For consistent tracking of performance over time, the Council may need to recalculate the base year so that accurate comparison of the current emissions and historic emissions can occur. This baseline recalculation policy explains the basis and context for any recalculations.

Recalculation of our base year emissions may occur in the following cases:

- Structural changes that have a significant impact on the council's base year emissions, such as the transfer of ownership or control of emission-releasing activities or operations from the council to another. While a single structural change might not have a significant impact on the base year emissions, the cumulative effect of a number of minor structural changes can result in a significant impact. Structural changes include: – Mergers, acquisitions, and divestments – Outsourcing and insourcing of emitting activities
- Changes in calculation methods or improvements in the accuracy of emission factors or activity data that result in a significant impact on the base year emissions data
- Discovery of significant errors, or a number of cumulative errors, that are collectively significant.

The Council will not recalculate baseline emissions in the following cases:

- Economic growth or decline – refers to changes in production output, and closures and openings of operating units owned or controlled by our organisation
- Outsourcing or insourcing of emitting activities – Structural changes due to “outsourcing” or “insourcing” do not trigger base year emissions recalculation if our organisation is reporting its other indirect (scope 3) emissions from relevant outsourced or insourced activities. Only where the

emitting activities move outside the scope of our reported GHGs, or emitting activities move within the scope of our reported GHGs, will we include them.

- Operations acquired or sold that did not exist in the base year – we will not recalculate our base year where the council acquires (or insource) and divest (or outsource) operations that did not exist in our base year and where data is unavailable for that year.