Annual Greenhouse Gas Report: 2021-22

Bedford Borough Council acknowledges the carbon dioxide (CO_2) 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 new baseline was set in early 2019 and the further reductions covered in this report build on the 62% carbon reduction already achieved in previous years, 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 2021/22 as per the original DEFRA guidance on how to measure and monitor greenhouse gas emissions and then further in the report present the carbon emissions against the Carbon Neutral target separately.

DEFRA report

Scopes	Global tonnes of CO_2e			
	2018/19 Baseline	2019/20	2020/21 (revised)	2021/22
Scope 1	8,308	8,535	8,206	8,489
Scope 2	6,350	5,550	4,305	4,361
Scope 3	2,840	2,458	623	1,996
Out of scopes (biomass)	**-**			
Total gross emissions	**17,498**	**16,543**	**13,134**	**14,846**
Carbon offsets	0	0	0	0
Green tariff	0	0	0	2,227*
Total net emissions	**17,498**	**16,543**	**13,134**	**14,846**
Intensity measurement "Tonnes of CO_2e per head of population"	0.10	0.10	0.08	0.085
Overall Percentage saving to Baseline	**-**	**5%**	**25%**	**15%**

*see Green Electricity on page 6.

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.

[1] https://www.gov.uk/government/publications/guidance-on-how-to-measure-and-report-your-greenhouse-gas-emissions

	GHG emissions 2018-19 in tonnes of CO_2e Baseline	GHG emissions 2019-20 in tonnes of CO_2e	GHG emissions 2020-21 in tonnes of CO_2e (revised)	GHG emissions 2021-22 in tonnes of CO_2e
Scope 1				
Gas consumption	5,277	5,591	5,515	5,530
Heating Oil consumption	802	675	541	580
Owned transport	2,159	2,177	2,051	2,263
LPG	71	92	99	116
Total Scope 1	**8,308**	**8,535**	**8,206**	**8,489**
Scope 2				
Purchased electricity	6,349	5,550	4,305	4,361
Total Scope 2	**6,349**	**5,550**	**4,305**	**4,361**
Scope 1+2 saving to Baseline	**-**	**4%**	**15%**	**12%**
Significant Scope 3				
Business travel	225	172	3	100
Outsourced activities	2,615	2,286	620	1,896
Total Significant Scope 3	**2,840**	**2,458**	**623**	**1,996**

Schools are included within our Scope 1 (gas and oil) and Scope 2 (electricity) emissions in the table above. The breakdown of school emissions against non-school emissions is illustrated below (Scope 3 emissions and transport have been excluded):

	GHG emissions 2018-19 in tonnes of CO_2e Baseline	GHG emissions 2019-20 in tonnes of CO_2e	GHG emissions 2020-21 in tonnes of CO_2e (revised)	GHG emissions 2021-22 in tonnes of CO_2e	% Increase/Decrease from baseline
TOTAL building emissions *excluding Scope 3	**12,499**	**11,908**	**10,460**	**10,588**	**-15%**
Schools	7,220	6,799	5,980	5,952	-18%
All other Council buildings*	5,279	5,108	4,480	4,636	-12%

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 Baseline	2019/20 Tonnes CO_2	2020-21 Tonnes CO_2 (revised)	2021-22 Tonnes CO_2	Increase/Decrease in % to Baseline
Council buildings (Scope 1 and 2)	5,279	5,108	4,480	4,636	-12%
Owned Transport	2,159	2,177	2,051	2,263	+5%
Business travel (Scope 3)	225	172	3	100	-56%
Total Tonnes	**7,663**	**7,457**	**6,534**	**6,999**	**-9%**

Should any missing data become available in the future the baseline will be reviewed, and if necessary, recalculated to reflect the accurate data in the following report. More information about recalculation can be found here. The data from previous years will be reviewed year on year to ensure that any errors are corrected and the figures are updated accordingly.

COVID-19 Impacts

2021 saw the continuation of the worldwide pandemic COVID-19, but with the introduction of the vaccines the UK began to open up a bit more. The spotlight was brought back to Climate Change at last year's Climate Change Conference (COP26) hosted in Glasgow. This gave us a chance to reflect on the consequences of the pandemic and observe some of the positive improvements to pollution levels, wildlife and general carbon emissions. Needless to say, COVID-19 has a dark cost to our lives, healthcare systems, and mental health of people around the world. Nevertheless, it has also shown that communities can make a difference when they take care of each other, and this could be an invaluable lesson when we face climate change.

As a result of the pandemic throughout 2020-21, Bedford Borough Council's carbon emissions were significantly reduced due to the shift towards more home working and schools closing for

short periods. As economic activity has increased the world has opened up a bit more in 2021-22 and people have returned back to offices and schools, this has unsurprisingly caused the Council's emissions to show an increase from last year. However, the overall emissions are still on a downwards trend from the 2018/19 baseline target. With the introduction of Agile Working Policies and the increased take up in web based conferences and meeting, it is hoped that this will continue to negate the need for cross-country travel.

Owned Transport has slightly increased due to the pandemic with the Council changing the way it had to deliver key frontline services, single crewed vehicles and extra vehicles to make sure key staff could be transported safely.

Carbon efficiency projects have started to resume this and an ongoing review of the Council's estate, assets and fleet is underway. 2022/23 will bring its own challenges through the energy crisis as energy prices are rising. At a time when there is a severe worldwide shortage of fossil fuels, the commitment of Bedford Borough Council commitment to renewable energy has been shown to be a wide investment.

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 2021 by Defra and are available at:

https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2021

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 2021 to 31st March 2022

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 CO_2e per head of population" based on mid-year population statistics.

2021/22 - mid-year 2021 population estimate (taken from WasteDataFlow) is 174,687.

External Assurance Statement

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

Carbon Offsets

We have not purchased any carbon offsets.

Green Electricity

The Council has purchased 100% Green Electricity from REGO backed certificates from 1st April 2021 on its own corporate estate.

Green electricity purchased through the grid should use the grid emission factors as these factors take into account the efficiencies made in the national infrastructure (e.g. from electricity produced from green sources). Annex G (pg 100 of the pdf) of [Defra's 'Environmental reporting guidelines'](#) contains further information on how to account for renewable electricity that you have generated and exported to the national grid/third party.

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.