

Annual Greenhouse Gas Report: 2015-16

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: http://www.bedford.gov.uk/environment_and_planning/sustainability/what_is_the_council_doing/carbon_management_programme.aspx

This report summarises the Council’s actual carbon emissions for 2015/16. It goes onto 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 2015/16		
Scopes	Global tonnes of CO ₂ e	
	2009/10 (baseline year)	2015/16
Scope 1	12,613	9,351
Scope 2	13,693	11,488
Scope 3	651	3,232
Out of scopes (biomass)	-	-
Total gross emissions	26,957	24,071
Carbon offsets	0	0
Green tariff	0	0
Total net emissions	26,957	24,071
Intensity measurement “Tonnes of CO ₂ e per head of population”	0.17	0.146

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.

In line with previous NI 185 reporting and the baseline within our Carbon Management Plan, we have also measured significant Scope 3 emissions.

	GHG emissions 2009-10 in tonnes of CO ₂ e	GHG emissions 2015-16 in tonnes of CO ₂ e
Scope 1		
Gas consumption	8,012	5,774
Heating oil consumption	1,733	1,287
Owned transport	2,859	2,243
LPG	9	47
Process emissions	N/A	N/A
Fugitive emissions	N/A	N/A
Total Scope 1	12,613	9,351
Scope 2		
Purchased electricity	13,693	11,488
Total Scope 2	13,693	11,488
Significant Scope 3		
Business travel	508	206
Outsourced activities	143	3,026
Employee commuting		
Waste Disposal	-	-
Product in use	-	-
Total Significant Scope 3	651	3,232
Out of Scope (biomass)	-	17

Schools are included within our Scope 1 (gas and oil) and Scope 2 (electricity) emissions. The breakdown of schools emissions against non-schools emissions is illustrated below (scope 3 emissions have been excluded):

	GHG emissions 2009-10 in tonnes of CO ₂ e	GHG emissions 2015-16 in tonnes of CO ₂ e	% Increase/ Decrease
TOTAL building emissions *excluding Scope 3	23,447	18,596	21% decrease
Schools	10,379	10,280	1% decrease
All other Council buildings	13,068	8,316	36% decrease*

* the Council's leisure sites are now being 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 here (albeit Bedford Borough Council continues to monitor consumption and emissions).

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).

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 other invest to save schemes. Please refer to http://www.bedford.gov.uk/environment_and_planning/sustainability/energy_and_carbon_management/refit.aspx for more information.

Borough Hall has achieved considerable carbon savings as a result of significantly reducing electricity usage and from converting from oil to operate on gas and biomass. Since 2009/10, a 36% carbon saving has been seen on electric, whilst a 43% saving has resulted from converting from oil to gas. Further carbon savings will be achieved in 2016/17 as the biomass boiler becomes the lead boiler during the heating season. 2015/16 projects which have contributed to the ongoing reduction in emissions includes the replacement of chiller coils, LED lighting and daylight sensing and the installation of Voltage Optimisation technology. Other efficiency projects undertaken across the portfolio such as zoning of heating and insulation projects have also been completed.

Transport

The carbon saving achieved on transport alone is 28% against 2009/10 levels. This is a result of utilising more efficient vehicles, optimising routes for fleet vehicles and reducing business mileage.

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 2015 by Defra and are available at:

<http://www.ukconversionfactorscarbonsmart.co.uk/>

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 2015 to 31st March 2016

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.

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.

2015/16 - mid-year 2015 population estimate (taken from WasteDataFlow) is **163,924**.

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:

Energy Team

Bedford Borough Council

Tel: 01234 718286

Email: energy.team@bedford.gov.uk