

Report on Greenhouse Gas Emissions from Hinckley and Bosworth
Borough Council's own estate and operations
(The successor to National Indicator 185)
For year 2017-18

Table 1

GHG emissions data for period 1 April 2017 to 31st March 2018		
	Tonnes of CO₂e	
	2015-16	2017-18
Scope 1*	1,801	1,610
Scope 2*	705	372
Scope 3*	178	170
Total gross emissions	2,684	2,153
Carbon offsets	0	0
Green Tariff	-264	-230
Total net annual emissions	2,420	1,923
Intensity measurement	23 TCO₂e per 1000 population	19.6 TCO₂e per 1000 population
Intensity measurement	6.5 TCO₂e per employee	5.51 TCO₂e per employee

1. Information

Hinckley and Bosworth Borough Council is a District Council located in the south east of Leicestershire. The main council offices are located at Hinckley Hub, Rugby Road, Hinckley. The population of 110,100 (2017 ONS) lives mainly in the urban settlements of Hinckley, Burbage, Barwell and Earl Shilton along with the larger villages of Market Bosworth, Markfield, Groby and Ratby (84%). The rest of the 29,735 hectares is predominately rural. The council provides the green space, street cleansing, refuse and recycling service and housing maintenance in house with an external private partner providing dry recycling. The council has retained its housing stock of 3,359 dwellings including 11 Sheltered Housing complexes. The Hinckley Leisure Centre is owned by HBBC but operated by a private company (People for Places).

The Department of Energy and Climate Change (DECC) and the Department for the Environment, Food and Rural Affairs (DEFRA) require reporting of Greenhouse Gas (GHG) emissions for 2017-18 in Tonnes of Carbon Dioxide Equivalent (TCO₂e) as displayed above. <https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2017>.

2. Reporting period

1 April 2017 – 31 March 2018. Also included is the data from 1 April 2015 – 31 March 2016.

3. Change in emissions

Our reported net GHG emissions have decreased by 20.5% against 2015-16 and gross emissions GHG decreased by 37.4% against our base line year of 2009-10. This is mainly due to significantly reduced emissions both from gas and electricity from the new Hinckley Leisure Centre and transport related emissions. Employee business travel emissions increased by 42.1% with a significant shift from small petrol to small diesel and medium petrol mileage. The new Hinckley Leisure Centre, operated by PFP from May 2016, significantly reduced electricity and gas consumption compared to the old centre achieving a 35% total reduction in emissions.

4. Our approach

We developed a Carbon Management Plan (CMP) in 2009 as part of the Carbon Trust Local Authority Carbon Management Programme. The CMP outlined the council's approach to reducing its emissions and set an original target of reducing carbon dioxide (CO₂) emissions by 20% by 2013/14, relative to the baseline year 2008/09. These emissions were calculated using the Government's NI 185 spreadsheet and measure only CO₂ emissions. The target was revised in March 2012 to achieve the target by 2016, which was achieved. A further stretching target was then set to achieve a 35% reduction by 2020 (c.f. 2008-09). Using the data collected to report this provides the data for the Greenhouse Gas Emission reporting within this document. The scope of the activities covered is reported below.

The Greenhouse Gas emissions reported in this document include not only CO₂, but also methane (CH₄) and nitrous oxide (N₂O) equivalents, as set out by DECC/DEFRA guidelines¹. Units are represented as tonnes of CO₂ equivalents (TCO₂e).

5. Organisational boundary

We have used the financial control approach. Emissions from the council's main contractors have been included as Scope 3 emissions as they are currently not under direct financial control and are therefore reported as Scope 1 emissions.

6. Operational scopes

We have measured our Scope 1, 2 and significant Scope 3 emissions which are given in Table 2.

¹

Table 2 Operational scope

All 2017-18 figures for electricity DCF Carbon Factors 2017. Transmission and distribution losses for electricity have not previously been reported within Scope 2 and therefore no adjustment is made.

	TCO ₂ e			
	2015-16	2017-18	% Change	State specific exclusions/inclusions
Scope 1 Direct				
Gas consumption	1,158	922	-20.4%	Includes Hinckley Leisure Centre. Owned and maintained by HBBC but operated by PFP.
Owned and controlled council Transport	643	688	+7%	
Fugitive emissions				Emissions from air conditioning and refrigeration units in office buildings excluded as data not collected in 2009/10 and very limited across estate.<0.5%
Total	1,801	1,610	-10.6%	
Scope 2 Indirect				
Electricity				
HBBC	331	230	-30.6%	
PFP	374	143	-61.8%	Hinckley Leisure Centre
Total	705	372	-47.1%	
Scope 3 Indirect				
Staff business travel	44	63	+42.1%	
Employee commuting				Figure not calculated as data is not captured and therefore unavailable.
Contractors transport	134	107	-20.7%	Palm (dry recycling) relocated base
Waste disposal				Figure not calculated as data is not captured and therefore unavailable.
Total	178	170	-4.6%	
Total Gross Emissions	2,684	2,153	-19.8%	
% change from base year 2009-10 3438T CO₂e	-21.9%	-37.4%		Note green tariff reduction will be applied to Gross to obtain Net.
FTE Employees	373	391	+4.8%	
Population (mid year ONS estimate '000)	105	110.10	+4.8%	

7. Geographic breakdown

All direct emissions are located within the borough except for transport beyond borough boundaries.

8. Base year

Our base year for this report is the financial year 2009/10. Our carbon footprint has been restated for all years in order to account for material changes to the conversion factors provided by Defra for company reporting purposes.

Our base year recalculation policy is to recalculate our base year and the prior year emissions for relevant significant changes in operations which meet our significance threshold of 5% of total base year emissions. Base year figures recalculated in 2014 for transport corrections identified following housing repairs services being brought in-house.

9. Targets

The council set a target in 2008 of reducing carbon dioxide (CO₂) emissions by 20% by 2013/14, relative to the baseline year 2008/09. These emissions were calculated using the Government's NI 185 spreadsheet and measure only CO₂ emissions. This was revised in March 2012 to 20% by 2016. This target was met and a new target of 35% reduction by 2020 set in 2016. This has been exceeded as the NI185 figures for 17-18 show 40.2% gross and 41.4% weather corrected reductions from 2008-09. The gross GHG emissions show a 37.4% reduction on 2009-10 base year.

10. Intensity measurement

We have chosen two intensity measures to reflect the number of staff providing services and also the population they are provided to.

11. External assurance statement

As a small, rural local authority with relatively low emissions we have not sought an independent external assurance statement.

12. Carbon offsets

Our energy consumption falls well below the threshold required for participation in the Carbon Reduction Commitment Scheme and we have therefore not purchased any carbon credits to offset our emissions.

13. Green Tariffs

We purchased 0.65GWh of green electricity under contract to Total Gas & Power equating to a reduction of 230TCO₂e. This is 100% of grid electricity purchased. The HLC generated 0.6GWh from gas powered CHP displacing a notational 210 TCO₂e. The PV panels on the Hinckley Hub generated 28,786kWh during the year thereby reducing our gross emissions by 10.1 TCO₂e. As this reduced demand from the grid and was not exported this is therefore not claimed in the net emissions figure.

14. Further information

For further information please contact esadmin@hinckley-bosworth.gov.uk 01455 238141.

15. Glossary

CO₂ - Carbon dioxide

CO₂e - Carbon dioxide equivalents

DEFRA - Department for Environment, Food and Rural Affairs

DECC - Department of Energy and Climate Change

GHG - Greenhouse Gas

NH₄ - Methane

N₂O - Nitrous Oxide

Table 3 Scope of data collection

Scope 1 &2 Gas and Electricity	Offices : Hinckley Hub Jubilee Building Hinckley Leisure Centre Sheltered Housing complexes (communal areas, external lighting and heating) Homeless accommodation Community centres and houses Park pavilions and changing rooms Market lighting and power Car park ticket machines and lighting Leachate pumping station Public toilets Cemeteries
Scope 1 Transport	Refuse/Recycling fleet Grounds Maintenance vehicles Housing Repairs
Scope 3 Transport	Casual and essential users on council business Palm Recycling Limited fleet (dry recycling)