

GRAVESHAM BOROUGH COUNCIL - GREENHOUSE GAS EMISSIONS REPORT

Local Authority information

Kent has a two tier council system and Kent County Council (KCC) covers the whole of Kent (except Medway) and Gravesham is one of the 12 district councils in Kent.

Gravesham Borough Council (GBC) is a local authority constituted under the Local Government Act 1972. The main office is located at the Civic Centre, Windmill Street, Gravesend, Kent DA12 1AU.

Reporting Period

2018-2019

Introduction

The UK was the first country in the world to introduce a long-term, legally binding framework to tackle the dangers of climate change. The Climate Change Act 2008 has key provisions that set out legally binding targets to reduce greenhouse gas (GHG) emissions. This includes: 34% reduction in greenhouse gas emissions by 2020; 50% reduction by 2025 and 80% reduction 2050 (from 1990 levels).

To help with the UK target and reporting, we have followed the Government's Guidance on how to measure and report Greenhouse Gas Emissions as outlined in communications from the Business, Energy, Industry and Strategy (BEIS) (Guidance on how to measure and report greenhouse gas emissions is from DEFRA September 2009).

Government requested that, from the end of July 2011, local authorities start to publish energy performance data in a new format. The effect of this change is that energy use data from this date will represent all greenhouse gas emissions, rather than just carbon dioxide emissions. This will change with the new Climate Emergency guidance that will be in place for the 2019/2020 reporting period.

This seventh report has been compiled to continue monitoring carbon reduction. The report represents an account of the GHG Emissions by the Council as a result of its own operations and service delivery. Whilst government has not requested a report in recent years on this performance, this will form the basis for delivery of the Climate Emergency Declaration from this Council.

The data reported here relates to the reporting period 1 April 2018 to 31 March 2019 and we have used the web based tool developed by Carbon Smart, using conversion factors calculated by Ricardo – AEA. We have used the appropriate year's conversion factors. The changes in the UK electricity conversion factors have been taken into account and the baseline data has been recorded in accordance with the Government's National Indicator 185 (NI185) spread sheet. The NI185 was the government's method to track national progress on the Carbon Reduction Commitment (CRC).

We have followed the Government guidance on how to measure and report greenhouse gas emissions. It recommends identifying and categorising emissions released into three groups or scopes. There are different activities included in each scope:

Scope 1 (direct emissions)	Emissions resulting from gas usage in Council owned buildings and emissions from Council owned vehicles and contractors vehicles
Scope 2 (energy indirect)	Emissions resulting from electricity usage in council owned buildings
Scope 3 (other indirect)	Emissions resulting from business travel / mileage and Transmission and Distribution of

electricity from GBC buildings

Base Year

The baseline year used for the Greenhouse Gas Report is 2008 – 2009. We calculated our energy usage using the NI185 National Performance Indicator data set. CO₂e data has been recalculated using the GHG emissions factors published on the BEIS website. All years have been re-baselined in accordance with BEIS guidance. This does not include Scope 3 Business Travel / Mileage as this was not recorded as base year figures.

Targets

Following the commitment to Climate Local Kent and the Kent Environment Strategy, a county-wide pledge to reduce emissions and build resilience to a changing climate and severe weather occurrences, we will work towards a 34% reduction in emissions by 2020 (2.6% annually)(DECC baseline of 2005, 2.6 * 13 = 33.8). This Target will change for the 2019/2020 reporting to develop the new Climate Emergency Declaration that this Council has set for 2030 and 2025.

If we compare the Kent 2020 target of 34% level of emission, Gravesham have already achieved a decrease of 39.10%. This decrease reflects the continued work that this Council undertakes to reduce carbon emissions.

Carbon Offsets and Green Tariffs

The Council did not purchase any carbon offsets or green tariffs during this reporting period.

Approach

Consumption data from energy bills have been used to determine the electricity and gas consumption of the buildings the Council operates from and over which it has direct control.

For the Council owned vehicles fleet, fuel data is provided by the Council's Fuel Management System, Merridale. For business mileage undertaken by private car, mileage data is collected by travel expense claim forms submitted to the Council's payroll. The 2008/2009 and 2009/2010 years do not include Scope 3 as this was a discretionary element relating to business mileage and transmission and distribution of electricity.

We have totalled our energy usage / distance travelled under each scope, using the appropriate conversion factors, we have converted our energy usage to tonnes of CO₂e, and these figures have been carried forward to the table of GHG emissions shown below.

Green House Gas Emissions for period 1 April 2018 to 31 March 2019 (tonnes of CO ₂ e)						
	Scope 1 (direct emissions)	Scope 2 (energy indirect)	Scope 3 (other indirect)	Total annual net emissions	Carbon off-sets/ green tariff	Total Annual net Emission
2018/2019	3359.87	1670.32	157.41	5187.60	0	5187.60
2017/2018	3181.78	2150.33	219.09	5551.20	0	5551.20
2016/2017	3466.11	2280.45	230.67	5977.23	0	5977.23
2015/2016	1118.19	2223.42	227.27	3568.88	0	3568.88
2014/2015	2164.43	3102.56	286.23	5553.22	0	5553.22
2013/2014	2739.67	2879.73	270.58	5889.98	0	5889.98

2012/2013	3142.04	3592.24	318.98	7053.26	0	7053.26
2011/2012	2979.88	3430.58	341.69	6752.15	0	6752.15
2010/2011	3449.96	3587.41	335.45	7372.82	0	7372.82
2009/2010	3771.44	3446.78	272.92	7491.14	0	7491.14
2008/2009	4571.68	3623.36	281.75	8476.79	0	8476.79

Breakdown							
	Scope 1 Gas / Fleet Vehicles	Scope 2 Electricity	Scope 3 Business travel/staff mileage / Electricity Transmission & Distribu- tion	Total an- nual net Emissions	Carbon offsets / Green Tariff	Total an- nual net Emission	Decrease to base- line
2018/2019	2156.05 1203.83	1670.32	15.60 141.80	5187.60	0	5187.60	
2017/2018	2215 966.78	2150.33	18.04 201.05	5551.20	0	5551.20	36%
2016/2017	2281.83 1184.28	2280.00	17.45 213.22	5977.23	0	5977.23	31%
2015/2016	726.28 391.91	2223.42	26.16 201.11	3568.88	0	3568.88	58%
2014/2015	1599.76 564.67	3102.56	30.04 256.19	5553.22	0	5553.22	35%
2013/2014	2138.78 600.89	2879.73	24.36 246.22	5889.98	0	5889.98	31%
2012/2013	2442.11 699.93	3592.24	35.2 283.78	7053.26	0	7053.26	16.79%
2011/2012	2373.48 606.4	3430.58	48.57 293.12	6752.15	0	6752.15	20.35%
2010/2011	2763.49 686.47	3587.41	46.57 288.88	7372.82	0	7372.82	13.02%
2009/2010	2724.6 1046.84	3446.78	n/a 272.92	7491.14	0	7491.14	11.63%
2008/2009	3038.07 1533.61	3623.36	n/a 281.75	8476.79	9	8476.79	

Change in emissions

The data for year-end reporting (2017/2018) against baseline, shows a **decrease** in carbon emission of **39.10%** which can be attributed to the following factors:

Energy use has considerably decreased, in particular electricity. The Council is delivering a programme of change on lighting. LED/smart lighting is being implemented.

Business car mileage has continued to decrease since 2016. Lease cars, including pool cars are renewed every 3 years with tax incentive for staff to choose cars with lower emissions.

Fleet vehicle mileage has increased due to the new recycling system in place. However, the new fleet continues to lower emission due to its efficiency.

The overall carbon emissions figure has decreased since baseline years and shows an achievable overall figure for the 2020 target for Gravesham.

Car mileage was omitted from 08/09 and 09/10 data and have only been included from 2010-11 onwards.

ORGANISATIONAL BOUNDARIES

We have used the financial control approach. It should be noted that Gravesham Borough Council has leased the management of its Leisure Centres to a private management organisation. The total emissions have continued to be included in this reporting year, 2018/2019 as from subsequent baseline year.

INTENSITY MEASUREMENT

In accordance with guidance and good practice, we have chosen Tonnes of CO₂e per square metre of corporate building space as this metric will be a valuable comparator.

Intensity measurement comparison to date	
2018/2019	2008/2009
5187.60/27166.5 – giving a measurement of 0.190 tonnes CO ₂ e per m ² or approximately 190.0 Kg CO ₂ e per m ²	8476.79/27165.5 – giving a measurement of 0.312 tonnes CO ₂ e per m ² or approximately 312.0 Kg CO ₂ e per m ²
This equates to a decrease of 39.10% between 2018/19 to the baseline year.	

The intensity is used for only those corporate buildings that have bearing on occupied use and does not include areas for example of: Car Parks, certain recreational areas, clock towers, Pontoon, Air Station.

ASSURANCE STATEMENT

All data used to calculate our GHG report has been carefully filed and stored and may be audited if necessary.