

Greenhouse Gas Emissions from Local Authority own estate and operations (Successor to National Indicator 185)

Warwick District Council

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Introduction

Warwick District Council has been assessing its carbon dioxide emissions as part of its own carbon management programmes since 2007. More recently it has been complying with National Indicator 185 requirements to monitor the annual carbon dioxide (CO₂) emissions from its operations. Now NI 185 reporting has been replaced by a Department of Environment & Climate Change (DECC) request for each local authority to publish its greenhouse gas emission (GHG) figures as CO₂ equivalent.

The areas that contribute to the bulk of our emissions are:

- Heating and electricity consumption in our operational sites (e.g. office buildings, depots, leisure centres, car parks, sports pavilions, public conveniences and other miscellaneous sites)
- Fuels consumed in our fleet vehicles (e.g. refuse trucks and vans), non-road going vehicles and plant (e.g. lawnmowers, chippers, and portable heaters)
- Travel for work purposes (e.g. fuel consumed in staff-owned vehicles and from the use of public transport)
- Operational waste deposited in landfill sites
- Water consumption

A summary of GHG emissions included in this report are as follows:

| GHG emissions data for period 1 April 2012 to 31 March 2013 | |
|--|----------------------------------|
| | Tonnes of CO₂e |
| | 2012/13 |
| Scope 1 | 2,259 |
| Scope 2 | 3,252 |
| Scope 3 | 864 |
| Total annual net emissions | 6375 |

** see Sections 4 and 5 below for scope of emissions coverage in this report*

1. Organisation Information

Warwick District Council is a non-metropolitan district council as defined by Section 1(4) and Schedule 1 Part II of the Local Government Act 1972. The Local Authority main contact details are: Warwick District Council, Riverside House, Milverton Hill, Royal Leamington Spa, CV32 5HZ.

2. Reporting period

1 April 2012 – 31 March 2013.

3. Approach

We have followed the Government's Guidance on how to measure and report greenhouse gas emissions as outlined in communications from the Department of Energy and Climate Change. (*"Guidance on how to measure and report your greenhouse gas emissions"*, Defra, September 2009)

4. Organisational boundary

We will report on the following emissions sources in our GHG report in the initial reporting years based on higher accuracy and availability of data:

- Electricity and gas consumed in our operational buildings and other sites
- Fuel consumption from contractors' fleet vehicles, non-road going vehicles and Plant
- Kilometres travelled in staff-owned vehicles for business/commuting purposes

In future years, as data quality and availability improves through more comprehensive monitoring, we propose to expand the scope to cover other emissions sources across the Council estate and operations (e.g. operational waste deposited in landfill sites).

5. Operational scopes

We have measured our scope 1, 2 and significant scope 3 emissions covering the areas outlined in the organisational boundary (see above). Further details as follows:

Scope 1: emissions are from combustion in owned or controlled boilers, furnaces, vehicles and plant. Therefore we have included natural gas, gasoil, kerosene and liquid petroleum gas, which are used to heat our buildings and also to power non-road going vehicles and plant.

Scope 2: emissions are from purchased electricity for our buildings and other electricity consuming sites (e.g. Car parks)

Scope 3: emissions are from the kilometres travelled for business/commuting purposes in employee-owned vehicles, and from the commercial vehicles that refuse and grounds-maintenance contractors operate on our behalf.

Excluded emissions cover the following areas:

- **Domestic buildings:** Energy consumed in Domestic housing stock
- **Operational Waste deposited in landfill:** has not been included due to insufficient data
- **Perfluorocarbons (PFC), Hydrofluorocarbons (HFC) and Sulphur Hexafluoride (SF₆)** have not been included in this report as Warwick District Council has minimal recorded emissions activity in these areas
- **Avoided emissions from on-site renewable energy:** have not been included as existing systems are small scale and unmetered

Where possible we will work towards including the excluded emissions in future years. The existing Carbon Management Strategy is to be reviewed and refreshed during 2013/14- as part of work led by the Council's newly appointed Sustainability – Climate Change Officer - where consideration will be given to both expanding the scope of emissions to include in the next phase of the strategy, and improving the quality of data collection in general.

Table 2 shows our gross GHG emissions in **2008/09** were **5461** tonnes CO_{2e}

| Table 2: GHG emissions for period 1 April 2008 to 31 March 2009 | | |
|---|-------------|---|
| | Total Units | GHG emissions in tonnes of CO _{2e} |
| Scope 1 | | |
| Gas Consumption (kWh) | 8,396,133 | 1,553 |
| Kerosene (litres) | N/A | |
| LPG (litres) | N/A | |
| Total Scope 1 | | 1,553 |
| Scope 2 | | |
| Purchased Electricity (kWh) | 5,215,872 | 2,728 |
| Scope 3 | | |
| Average petrol car (km) | 576,699 | 119 |
| Vehicle Fleet (km) | 706,653 | 1,061 |
| Total Scope 3 | | 1,180 |
| Total tonnes of CO_{2e} | | 5,461 |

Table 3 shows our gross GHG emissions in **2012/13** were **6375** tonnes CO_{2e}

| Table 3: GHG emissions for period 1 April 2012 to 31 March 2013 | | |
|---|-------------|---|
| | Total Units | GHG emissions in tonnes of CO _{2e} |
| Scope 1 | | |
| Gas Consumption (kWh) | 10,492,028 | 1,943 |
| Kerosene (litres) | 32,017 | 81 |
| LPG (litres) | 153,258 | 235 |
| Total Scope 1 | | 2,259 |
| Scope 2 | | |
| Purchased Electricity (kWh) | 6,248,498 | 3,252 |
| Scope 3 | | |
| Gas Consumption (kWh) | 10,492,028 | 201 |
| Kerosene (litres) | 32,017 | 17 |
| LPG (litres) | 153,258 | 29 |
| Water Supply (M ³) | 66194 | 22 |
| Average petrol car (km)* | 508,308 | 119 |
| Vehicle Fleet (km)* | 662,491 | 476 |
| Total Scope 3 | | 864 |
| Total tonnes of CO_{2e} | | 6375 |

(* estimated)

6. Base Year

It is proposed that our base year for this GHG reporting process is to be 2008/09.

7. Targets

Our emissions reduction target for this GHG reporting process is to implement measures to reduce our GHG emissions, scopes 1, 2, and 3 (as outlined in Sections 4 and 5 above) by a minimum of 3% year on year.

8. Intensity measurement

We have not chosen an intensity measurement as yet due to the varied nature of operations as a local authority but will consider appropriate measurements in future reporting years to add further context to reported data.