

WIRRAL COUNCIL

GREENHOUSE GAS EMISSIONS REPORT 2014/15

22 July 2014

Background

The purpose of this report is to allow information on Wirral Council's Green House Gas (GHG) Emissions to be published in the format requested by the Department of Energy and Climate Change (DECC) as part of the single list of Central Government requirements from Local Government (2011/12), for data reference 067-00 "Emissions from Local Authority own estate and operations".

The reporting of GHG emissions is part of the Council's coordinated actions on climate change and energy management. Wirral Council has a long held commitment to action on climate change both cutting emissions and adapting to unavoidable changes in the climate.

The Council was an early signatory to the Nottingham Declaration on Climate Change and adopted its first strategy on climate change in 2007. In 2013, the Council reaffirmed its commitment to action by signing up to Local Government Association's Climate Local initiative – the successor initiative to Nottingham Declaration programme. In 2014 the Council endorsed a new climate change strategy for Wirral. The Council maintains an ongoing commitment to energy management to help manage costs and ensure services are delivered in an efficient cost effective manner. Wirral Council is a full participant in the Government's Carbon Reduction Commitment Energy Efficiency Scheme (CRCEES).

The Council's initial target to reduce its carbon emissions by 20% by 2010 was achieved early. Subsequently the Council adopted the 'CRed' target of a 60% reduction by 2025. To help meet its emission reduction ambitions Wirral Council introduced a carbon budget from April 2011. This budget enables service managers to plan for CO2 reductions at a departmental and operational level. It helps ensure that carbon management is integrated into mainstream financial planning and business planning activities across the organisation.

Beyond managing its own carbon emissions the Council works to influence residents, communities and both the public and private sectors to encourage them to achieve their own reductions. The Council supports the Wirral Climate Change Group as a forum for co-ordinating action on climate change across Wirral. This group developed the current climate change strategy for Wirral and maintains a rolling action plan in support of its implementation.

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Scope of Report & Specific Exclusions

This report is based on the scope for reporting stationary and transport figures specified for the National Indicator (NI) 185 2008/09 Baseline year. Elements excluded in 2008/09 are similarly excluded from subsequent years, as per the NI Guidance. The reasons for exclusion generally include instances in which data were either unreliable or not available for the NI baseline year. This approach ensures that the reported years are consistent in scope.

The report covers all Wirral Council owned and operated buildings over which it exercises direct control including Schools. Social housing is excluded.

Fleet Transport is included, as is business travel based on private vehicle mileage. Business travel by other means (Bus, train, aircraft etc.) is excluded as the information was not available in a consistent form. Commuting and Contractor mileage is also excluded for this reason.

GHG emissions data for period 1 April 2013 to 31 March 2014			
	Global tonnes of CO₂e		
	Current Year 2014/15	Prior Year 2013/14	Base Year 2008/09
Scope1	11,358	13,390	20,606
Scope 2	19,545	18,120	27,598
Scope 3	7,551	4,765	7,514
Total gross emissions	38,454	36,275	55,718
Carbon Offsets	0	0	0
Green tariffs	(17,998)	(16,146)	(28,902)
Total annual net emissions	20,456	20,129	26,816
Intensity measurement 'Tonnes of CO₂e per £m Total Income'	112.1	104.4	157.30

1. Company Information

- 1.1. Wirral Council is the ninth largest Metropolitan district in the country, and the third largest in the north west of England.
- 1.2. Wirral Council is based at: Wallasey Town Hall, Brighton Street, Wallasey, Wirral, CH44 8ED

2. Reporting Period

- 2.1. The reporting period is the financial year from 1 April 2014 to 31 March 2015.
- 2.2. This report includes information derived from consumption data prepared for National Indicators 185 & 194 for the 2008/09 financial years. Information for subsequent years was derived in an identical manner to ensure consistency.

3. Change in Emissions

- 3.1. Gross emissions have increased by 2,179 tonnes (6.01%) from 2013/14. In the 2014 GHG Conversion Factors there was an 11% increase in the UK electricity factor from the previous year because there was a significant increase in coal powered electricity generation share in 2012 (the inventory year for which the 2014 GHG Conversion Factor was derived).
- 3.2. Scope 3 emissions rose by 58.47%. This is attributed to the changes in the 2014 conversion factors, including the Well-To-Tank component. Emission factors for methane (CH₄) and nitrous oxide (N₂O) have been updated using the 2006 IPCC Guidelines for National Greenhouse Gas Inventories. This has caused large variances to the CH₄ and N₂O emission factors for fuels reported when compared to previous years.
- 3.3. The energy use from which the emissions are calculated reduced by 7.97 % from 2013/14 to 2014/15. Contributory factors are: a reduction in staff numbers; energy efficiency initiatives; continued rationalisation of the Council's estate; generally milder weather, and the disposal of redundant properties.

4. Approach

- 4.1. The Government publication "Environmental reporting Guidelines: Including mandatory greenhouse gas emissions reporting guidance" (DEFRA 12 June 2013) has been used to prepare this report.
- 4.2. As requested by DECC in their e-mail dated 14 April 2014, the DEFRA web based tool was used to obtain the conversion factors used to calculate emissions in kg CO₂e (Carbon Dioxide Equivalent) using 2014 data. WTT (Well to Tank) conversion factors to quantify Scope 3 emissions associated with energy use were obtained using the same tool.

5. Organisational Boundary

- 5.1. The organisational boundary has been established using the financial control approach for all sites that were reported for National Indicators (NI's) 185 & 194 to ensure consistency.
- 5.2. Schools that have converted to Academies are excluded as the Council does not exercise financial control.

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6. Operational Scopes

6.1. Scope 1, Scope 2 and significant Scope 3 emissions have been measured and are reported.

Scope 1 (in metric tonnes CO ₂ e)	2014/15	Exclusions	% of activity data that is estimated	2013/14	2008/09 (Baseline)
Oil	450	0	0	1,209	3,013
Gas	10,442	0	6.99***	11,780	16,202
Fleet	466	0	0	401	1,391
Process	0	*	100	0	0
Fugitive	0	**	100	0	0
TOTAL				13,390	20,606

* Not Applicable – Wirral Council operates no industrial processes.

** Emissions from air-conditioning and refrigeration units are excluded due to the cost of data collection and resource scarcity. These types of unit are not installed in all buildings.

*** Percentage of annual consumption reported for CRC as estimated.

Scope 2 (in metric tonnes CO ₂ e)	2014/15	Exclusions	% of activity data that is estimated	2013/14	2008/09 (Baseline)
Grid Electricity	19,545	0	4.34*	18,120	27,598
TOTAL	19,545			18,120	27,598

* Percentage of annual consumption reported for CRC as estimated.

Scope 3 (in metric tonnes CO ₂ e)	2014/15	Exclusions	% of activity data that is estimated	2013/14	2008/09 (Baseline)
Fuel & Energy not in 1 & 2 (WTT)	6,539	0	5.7	3,672	6,000
Business travel	745	0	0	768	1,189
Water	267	0	0*	325	325
TOTAL	7,551			4,765	7,514

* Waste water component included.

6.2. The updated guidance that has been published recommends the inclusion of a number of new Scope 3 emissions that may be included. Wirral council is evaluating the relevance of each to its operations and will develop suitable strategies for their inclusion as resources permit. The strategies will include the development of reliable baseline figures and consistent measurement methods.

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7. Geographic Breakdown

7.1. All Wirral Council's activities are UK based.

Geographical breakdown			
2013/14	Tonnes of CO ₂ e		
	Scope 1	Scope 2	Scope 3
Total Global	11,358	19,545	7,551
UK	11,358	19,545	7,551

8. Base year

- 8.1. A base year of 2008/09 (01/04/08 to 31/03/09) has been selected. This was the baseline year for NI's 185 and 194 for which energy data was submitted to DECC, verified by their agents and returned to the Council.
- 8.2. The Energy consumption information for 2008/09, previously used to calculate CO₂ emissions has been used to calculate greenhouse gas (GHG) emissions expressed as CO₂e (carbon dioxide equivalent).
- 8.3. Guidance for both GHG reporting and CRC has changed significantly in 2013. Like most local authorities Wirral Council is undergoing a transformation in response to budgetary constraints. This is likely to significantly alter Council Activities and Estate. Combined these factors together with the need to consider expanding reporting of Scope 3 emissions means that reviewing baseline and scope reported has been postponed in order to be able to report in an efficient and consistent manner.

9. Targets

- 9.1. Wirral Council manages emissions using a Carbon Budget. Corporate targets are set with the long-term goal of reducing the Council's CO₂ emissions by 60% by 2025 and to adapt to the changes in climate that will occur.
- 9.2. In order to ensure this target is met, the Council produces an Annual Carbon Budget report to set annual reduction targets and to report progress. Elected Members have directed that this report is presented with the Financial Budget each year
- 9.3. The most recent Carbon Budget Report (Budget Cabinet 12 February 2014 – Minute 148 refers) reported a 28.36% reduction in CO₂ emissions against the 2008/09 baseline.

10. Intensity Measurement

- 10.1. The intensity measurement used is “Tonnes of CO₂e per £m Total Income”. The income figure is obtained from the Council’s “Financial Monitoring – Revenue (Month 9)” report.
- 10.2. The intensity measurement has risen for 2013/14 because the rate of reduction in income (approximately 8.7%) is greater than the rate of reduction in energy use. The 10% increase in the conversion factors for grid electricity to reflect a greater use of coal for generation has also had a deleterious effect.

11. External Assurance Statement

- 11.1. No external independent assurance statement has been commissioned to cover the reporting period.

12. Carbon Offsets

- 12.1. Wirral Council has not purchased any carbon credits over the reporting period.
- 12.2. Wirral Council has had no involvement in the Woodland Carbon Units scheme to date.

13. Electricity

Electricity purchased for own use or consumption: 39,646 MWh
Green Electricity Purchased: 36,415 MWh
GHG Reduction due to purchase of ‘green’ electricity: 17,998 CO₂e

- 13.1. Over the 2014/15 financial year Wirral Council purchased electricity for approximately 403 reportable supply points including 6 un-metered MPAN’s (Meter Point Administration Numbers). Wirral Council purchases energy under a managed supply arrangement. Prices are updated from 1 October each year and the proportion of electricity that is Climate Change Levy exempt is specified in the contract documents provided by each supplier.
- 13.2. All 6 un-metered MPAN’s are supplied by EDF. For the period 1 April 2014 to 31 March 2013 the supplies were 100% CCL exempt apart from a single account that accounts for 0.04% of street lighting energy consumption.
- 13.3. All Half Hourly Metered (HHM) sites supplied by EdF and covered by this GHG report are supplied with 100% Green Electricity apart from one school that has a 100 % brown tariff. The school is exempt from Climate Change Levy because of its charitable status.

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- 13.4. Reported Non Half-Hourly (NHH) electricity is supplied by British Gas Business. For the period 1 April 2014 to 30 September 2014, 53% of the accounts were supplied green electricity. For the period 1 October to 31 March 2015, the proportion dropped to 49.48%. The accounts not taking green electricity were CCL exempt either because of their charitable status or the application of the “de minimis” rule. In these cases not opting for green electricity delivers the lowest projected annual cost.
- 13.5. Wirral Council generated 152.86 MWh of electricity from a small number of on-site solar PV systems. None are backed up by REGO’s within the UK but are Feed-In-Tariff Scheme (FITS) registered. Work has started on a second phase of solar PV installations. No performance information is yet available but the design calculations suggest the new installations will raise the total annual output to 450 MWh.

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