

***Herefordshire Council's 2010/11 Carbon
Footprint Report***

August 2011



Executive Summary

Herefordshire Council is committed to a six year 30% carbon reduction target against its 2008/09 baseline. The above target has been adopted in line with its corporate objective of achieving a "Low Carbon County" status. Our carbon footprint in 2010/11 financial year was 24,218 tonnesCO₂e, which has been emitted from energy and fuel usage from our direct and indirect operations. We achieved a 7.0% and 14.2% greenhouse gas (GHG) emissions and carbon emission intensity¹ reduction respectively against our 2008/09 baseline. The above result shows that our investments in energy efficiency initiatives have started yielding carbon and financial dividend. Below is a summary of our 2010/11 GHG emission data.

Herefordshire Council's Carbon Footprint for 2010/11 Financial Year			
	Tonnes of CO ₂ e		
	Base Year (2008/09)	2009/10	2010/11
Scope 1 (Energy Direct)	2,343	1,991	1,856
Scope 2 (Electricity Indirect)	4,981	4,715	4,634
Scope 3 (Other Indirect)	18,714	18,427	17,727
Total Gross Emissions	26,038	25,133	24,218
Net Budget	£131.8 Million	£137.7 Million	£142.8 Million
Intensity Ratio (tCO ₂ e per Net Budget)	198	183	170

¹ Gross GHG emission divided by Herefordshire Council's net budget.

Report Background

This report presents an overview of Herefordshire Council's greenhouse gas (GHG) emissions for 2010/11 financial year. The Department for Environment, Food and Rural Affairs (Defra) and Department for Energy and Climate Change (DECC) GHG conversion factors² and guidance has been used in developing our 2010/11 GHG report. Our 2010/11 carbon footprint was 24,218 tonnesCO₂e, which shows that we achieved a 7.0% and 14.2% GHG emissions and carbon emission intensity³ respectively against our 2008/09 baseline. Despite the above achievement, our energy use from street lighting has increased steadily over the last three years.

Herefordshire Council's GHG emissions have been presented as gross CO₂e that encompasses emissions from the Council's direct and indirect energy and fuel usage, and indirectly from schools, major contractors⁴ and school bus services. The inclusion of Herefordshire schools and the Council's major contractors in the Council's GHG reporting is because of the Council's corporate objective of achieving a "Low Carbon County" status. Table 1 shows the business or operational areas that make up the scopes of our carbon footprint.

Table 1: Scope of Herefordshire Council's GHG Emissions

Scope 1: Direct	Scope 2: Energy Indirect	Scope 3: Other Indirect
<ul style="list-style-type: none"> • Fossil fuel Use: Council Offices; • Fossil fuel use from Council managed Youth, Day and Recreation Centres • Fossil fuel use from Libraries, Museums, Hereford Town Hall, and Shire Hall • Council's Fleet 	<ul style="list-style-type: none"> • Electricity Used by Council • Street Lighting 	<ul style="list-style-type: none"> • School Energy Use • School Bus • Business Miles • Major Contractors' Fleet • Energy Used by Major Contractors' at their Offices /Depots

² Published August 2011

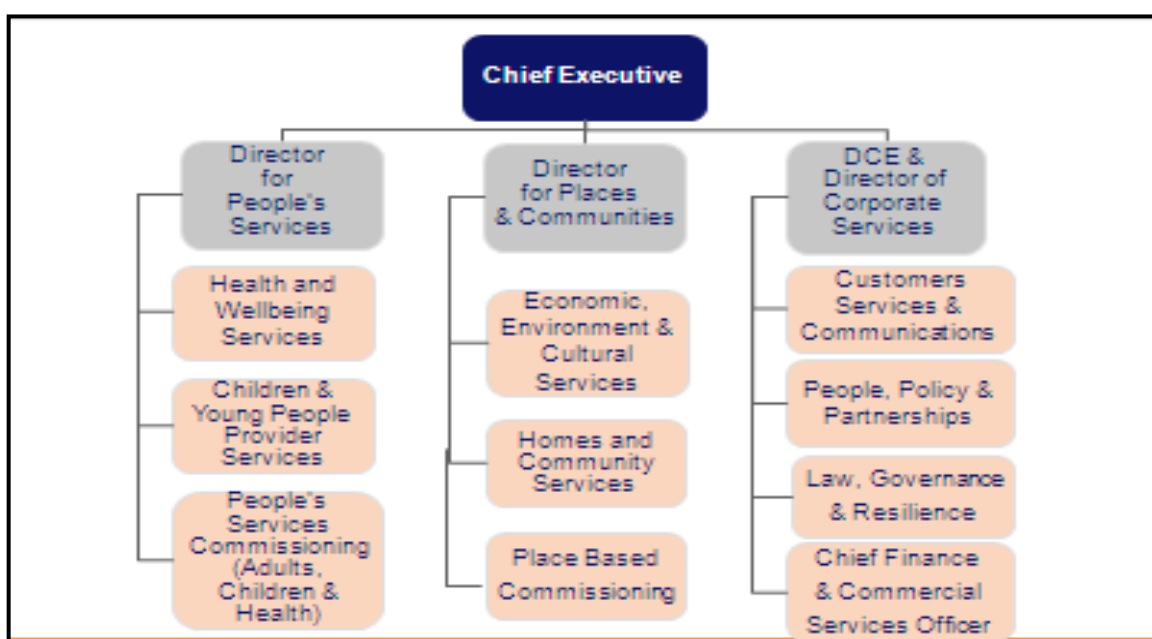
³ Gross GHG emission divided by Herefordshire Council's net budget.

⁴ Amey, FOCSA, Severn Waste and Halo

Organisational Profile and Corporate Priorities

Herefordshire Council is a Unitary Council that is committed to protecting the County's extensive area of outstanding natural beauty through active community leadership and collaboration with stakeholders across Herefordshire and neighbouring counties. One of our key strategic priorities is the protection of frontline services and deliver better outcomes for the people in Herefordshire through: enhanced efficiency and productivity; greater integration; and streamlining the way we do business as an organisation. Figure 1 shows Herefordshire Council's current organisational structure.

Figure 1 Herefordshire Council's Organisational Structure



Herefordshire Council's Carbon Footprint

Herefordshire Council's 2008/09 carbon footprint was originally calculated using the National Indicator 185 (NI 185) spreadsheet; these data have been updated using the Defra / DECC's GHG conversion factors⁵. Our updated baseline is 26,038 tonnes CO₂e. Table 1 contains a summary of Herefordshire Council's carbon footprint over the last

⁵ Published by Defra in August 2011.

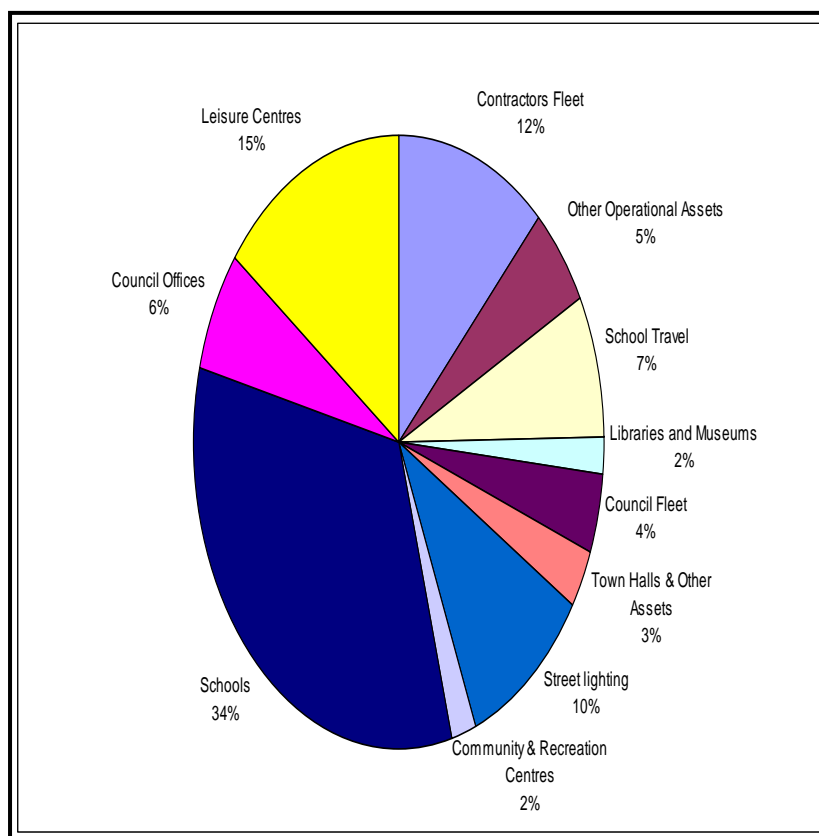
three financial years. See Appendices 1 and 2 for comprehensive distribution of the Council's GHG emissions over the last three financial years.

Table 2: Herefordshire Council's Carbon Footprint for 2010/11 Financial Year

	Tonnes of CO ₂ e		
	Base Year (2008/09)	2009/10	2010/11
Scope 1	2,343	1,991	1,856
Scope 2	4,981	4,715	4,634
Scope 3	18,714	18,427	17,727
Total Gross Emissions	26,038	25,133	24,218

Figure 2: Herefordshire Council's 2010/11 GHG Emissions

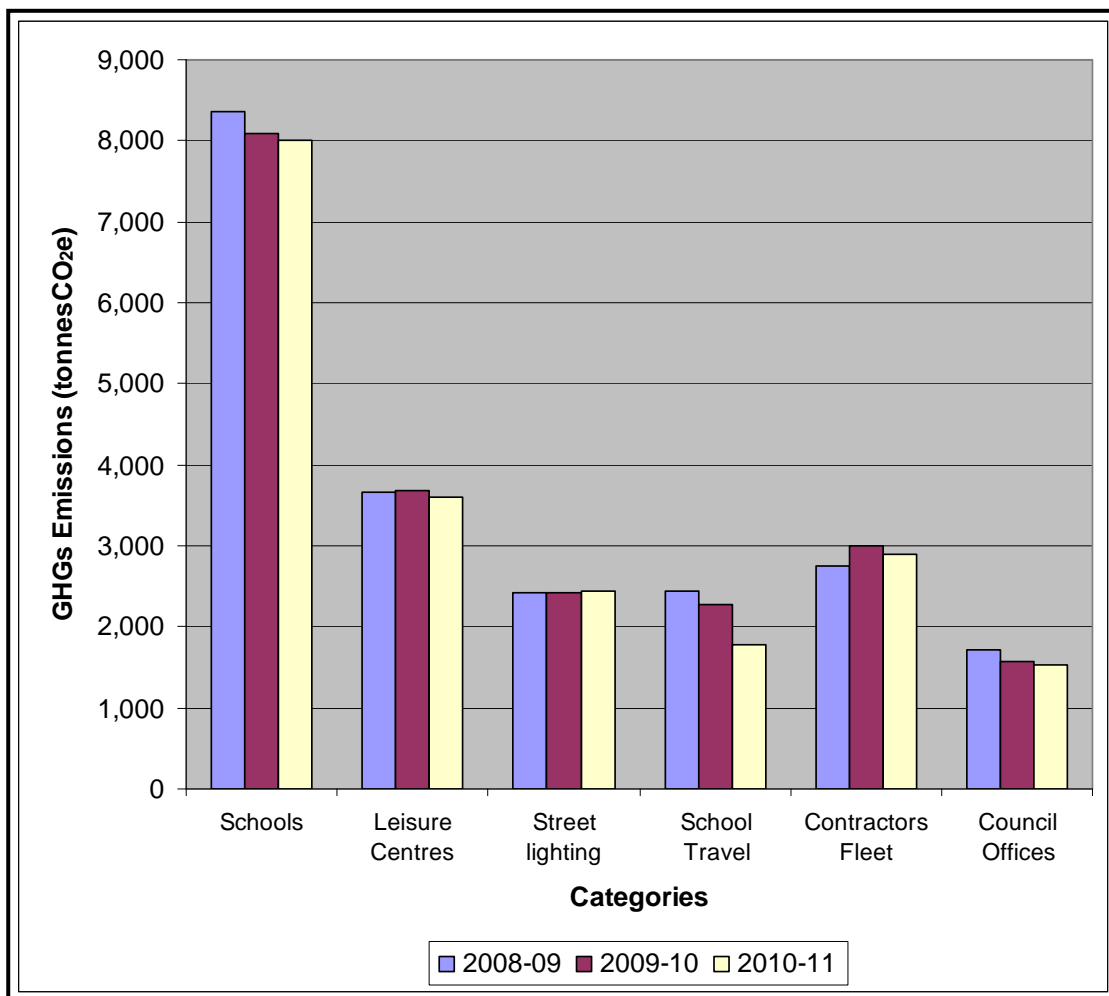
Figure 2 shows the distribution of Herefordshire Council's GHG emissions across all areas of our operations. Approximately 73% of our 2010/11 carbon footprint is Scope 3 category emissions and a significant proportion of these emissions are from the Council's major contractors and schools. The above implies that it is imperative that the Council continue to



support and collaborate with its major contractors, Herefordshire schools and third sector organisations to ensure it achieves its "Low Carbon County" corporate objective.

Further analysis of our carbon footprint shows that the top six carbon emitting categories are: Schools; Leisure Centres; Street lighting; School Travel⁶; Contractors' Fleet and Council Offices. Figure 3 shows our top six GHG emitters over the last three financial years. These six categories collectively account for approximately 84% of our carbon footprint.

Figure 3: Herefordshire Council's Top Six Carbon Emitters



Trend in Herefordshire Council's Carbon Footprint

Our carbon footprint for 2010/11 was 24,218 tonnes CO₂e, which shows that we achieved a 7.0% and 14.2% reduction in GHG emissions and CO₂ emission intensity

⁶ School Bus Services provided by the Council

respectively against our baseline. We achieved a 3.5% and 3.6% reduction in our GHG emissions between 2008/09 and 2009/10 and 2010/11 financial years respectively. The areas that have experienced progressive reduction in energy and fuel usage are School Travel, Council Offices, and Schools. Herefordshire Council used its total gross GHG emission in calculating our emissions intensity, because a significant proportion⁷ of our GHG emissions were from our major contractors. Table 3 contain our GHG emission intensity ratio, which shows a steady improvement in our intensity ratio over the last three financial years. Generally, our GHG emission reduction is attributed to our investment in energy efficiency and carbon management initiatives.

Table 3: Herefordshire Council's Carbon Intensity for 2010/11 Financial Year

	Base Year (2008/09)	2009/10	2010/11
Total Gross Emissions	26,038 tCO ₂ e	25,133 tCO ₂ e	24,218 tCO ₂ e
Net Budget	£131.8 Million	£137.7 Million	£142.8 Million
Intensity Ratio (tCO ₂ e per Net Budget)	198	183	170

Herefordshire Council in 2010 set a six year 30% CO₂ reduction target against its 2008/09 emissions and developed a Carbon Management Plan (CMP) as part of its participation in the 8th stream of the Carbon Trust's Local Authority Carbon Management Programme (LACM-8). The 30% CO₂ was adopted by the Council's Joint Management Team (JMT)⁸ as part of the Council's commitment to achieve a "Low Carbon County" status.

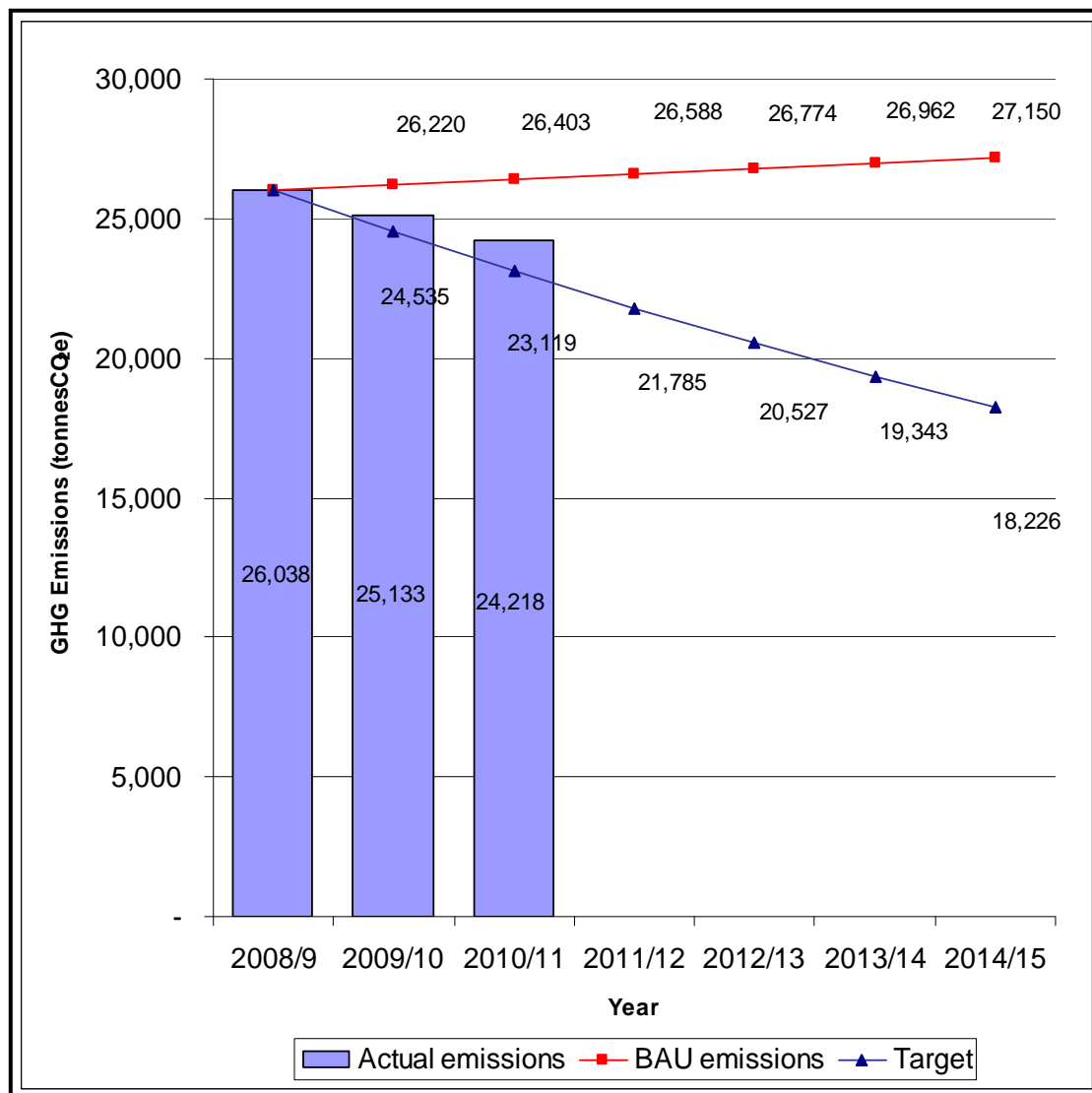
The Carbon Trust's carbon emission baseline tool has been used to calculate the value at stake (VAS) for achieving a 30% CO₂ reduction over six years. The VAS is the difference between the "do nothing" or "business as usual" (BAU) scenario and the benefits that could accrue to the Council if it achieves its 30% target. The VAS is underpinned by the assumption that energy and fuel demands will continue to rise in line

⁷ Approximately 73%

⁸ Now known as the Senior Management Team

with national trends at 0.7% annually⁹. Figure 4 shows the Council's performance against its carbon reduction target.

Figure 4: Herefordshire Council's Carbon VaS



Herefordshire Council's Carbon Management Plan

Herefordshire Council constituted a top level Carbon Board, inaugurated a Carbon Management Team (CMT), and appointed its carbon management programme Project and Deputy Project Leads from the Waste and Sustainability Unit. The purpose of

⁹ Source: Department of Trade and Industry (DTI) now Department for Business Enterprise and Regulatory Reform (DBERR).

instituting the above structure is to support the delivery of the Council's "Low Carbon County" objective. The GHG emission and intensity reduction achieved between 2010/11 and 2009/10 are attributed to the energy efficiency and carbon reduction projects that have been implemented as part of the Council's carbon management plan (CMP) and the Council's Rising to the Challenge initiative aimed at streamlining the Council's operations and improving efficiency. Some of the carbon reduction projects that have been implemented across Herefordshire Council's operations are:

- Route rationalisation for School travel;
- Asset rationalisation and establishing of multi-agency locality offices;
- Flexible working, promotion of car-sharing and tele and video-conferencing facilities;
- Waste collection route optimisation by our waste collection contractor¹⁰;
- Energy efficiency projects that are currently being implemented across Leisure Centres in Herefordshire¹¹;
- Installation of renewable energy projects across Herefordshire Councils; and
- Promotion of sustainable travel options by the Council's Integrated Transportation Team.

Herefordshire Council's Carbon Board is currently responsible for providing leadership and supports the embedding of carbon management and energy efficiency across Herefordshire Public Services (HPS) operations. The CMT is responsible for developing and managing energy efficiency initiatives, exploring the potential for local renewable energy generation and supporting carbon reduction projects across the Council's operations. The carbon management programme's Project and Deputy Project Leads are responsible for coordinating the delivery of the Council's carbon reduction target.

The data that have been used in compiling this report was collated from various service and operational areas across the Council. 11.4%, 3.6% and 14.7% of the total data used to calculate the Council's 2008/09, 2009/10 and 2010/11 GHG emissions respectively have been estimated. The reason for the estimation was to ensure that statistically valid

¹⁰ FOCSA

¹¹ By Halo supported by Herefordshire Council

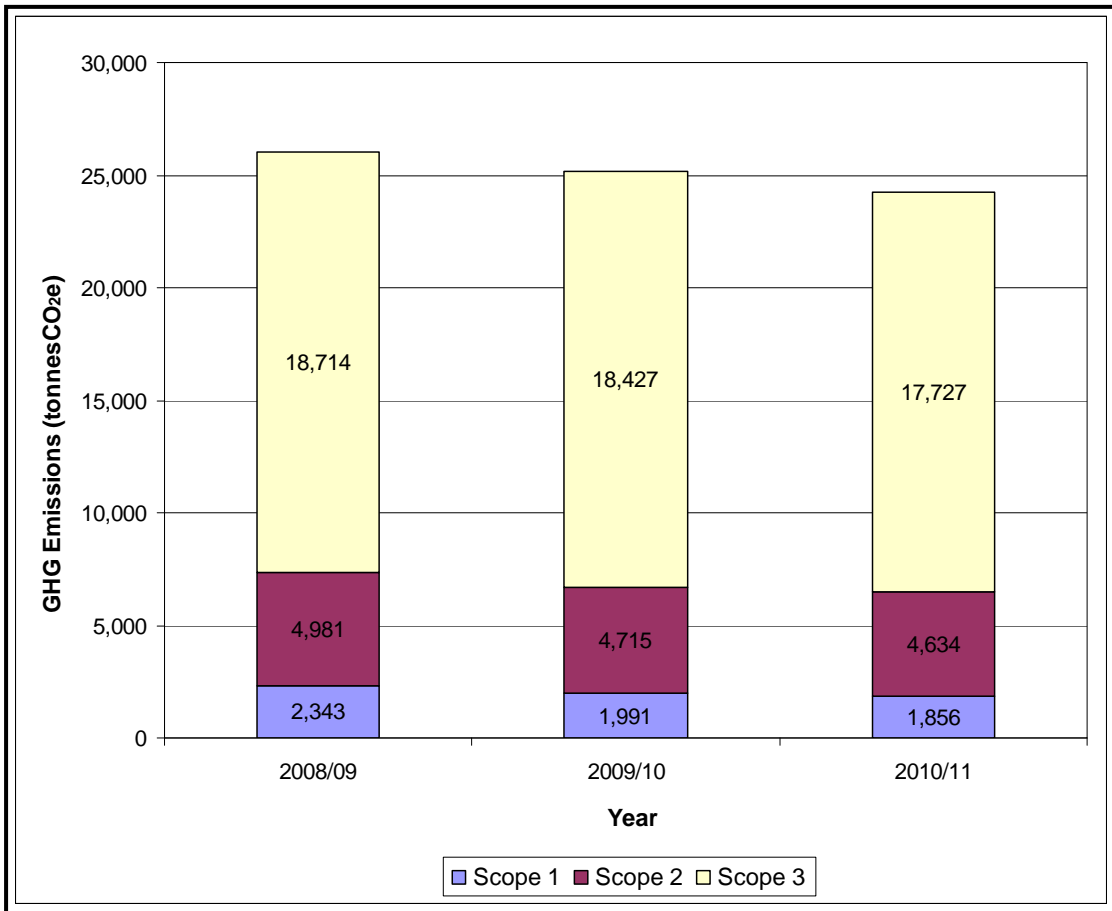
values are used in all cases of non-return of energy or fuel use data. The estimation reiterates Herefordshire's Council's commitment to transparency and accountability in the way we do business. We are optimistic that the proportion of estimated data used in calculating our carbon footprint will reduce as Automatic Meter Reading (AMRs) are rolled out across all Council's assets including Herefordshire schools.

Appendices

Appendix 1: Herefordshire Council's GHGs Emission by Category

Category		tCO ₂ e 2008/9	tCO ₂ e 2009/10	tCO ₂ e 2010/11
Buildings and Street Lighting	Schools	8,367	8,092	8,003
	Leisure Centres	3,665	3,681	3,592
	Street lighting	2,428	2,413	2,433
	Council Offices	1,715	1,566	1,533
	Town Halls and Other Assets	1,019	918	740
	Community and Recreation Centres	581	466	462
	Other Operational Assets	1,230	1,152	1,283
	Libraries and Museums	467	458	470
Transport	Council's Fleet	1,372	1,110	1,025
	School Travel	2,445	2,286	1,786
	Contractors' Fleet	2,749	2,990	2,890
Total Gross GHG Emissions		26,038	25,133	24,218

Appendix 2: Trend and Distribution of Herefordshire Council's GHG Emissions



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