



Report to Cabinet

Subject: Carbon Footprint

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Background

In November 2006, Gedling Borough Council adopted a resolution to 'seek ways to reduce the carbon emissions (carbon footprint) of Gedling Borough Council by 50% over the next five years'. The first step towards this has been the calculation of the Borough Councils own carbon footprint.

This year has also seen several other local authority climate change developments, including 'Getting on Target; the sustainable energy toolkit', and the inclusion in the Single Set of National Indicators, published by Communities and Local Government, of NI 186 'Per Capita CO² emissions in the LA area'. Background information on this has been published and the baseline for all LA areas has been set at 2005 levels.

Carbon Footprint

Whilst there is an increasingly overwhelming consensus that human activity is having a significant impact on the climate of the planet, there has yet to be agreement over the best way to measure it. As a result, there have been a number of different carbon footprint models proposed in recent years. In June 2007, CLG, DEFRA and IDeA produced a sustainable energy toolkit and benchmark, created with several beacon authorities, which was designed specifically for local authorities to address climate change and achieve targeted improvements in dealing with energy.

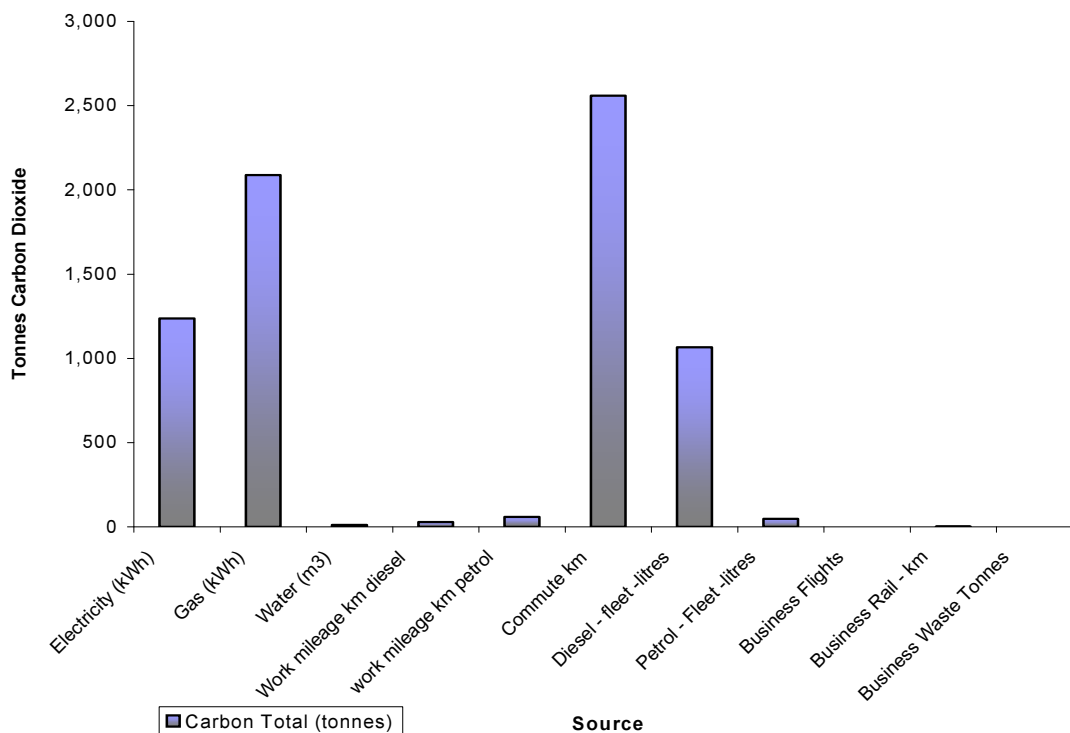
With the support of the East Midlands Local Authority Energy Partnership, Gedling Borough Council has used a desktop toolkit to calculate the carbon footprint of its own activities. The toolkit uses information relating to energy usage, travel and waste produced. It is acknowledged however that the results are only as good as the information put in, and some of the information has been difficult to gather, such as that relating to journeys to work by employees, and use of resources. In this respect our experience reflects that of other authorities who, in some instances, have been unable to complete all the relevant sections.

The resulting table is shown below;

Gedling Borough Council
Carbon Footprint 2006

Source	Volume	Carbon Conversion Value (tonnes)	Carbon Total (tonnes)
Electricity (kWh)	2877566	0.00043	1237
Gas (kWh)	10986721	0.00019	2087
Water (m ³)	23741	0.00043	10
Work mileage km diesel	153543	0.000175	27
Work mileage km petrol	307065	0.00	58
Commute (km)	1481422	(variable; 66% petrol, 33% diesel)	2559
Diesel – fleet -litres	425687	0.0025	1064
Petrol – fleet – litre	20004	0.00231	46
Business flights	0	0	0
Business rail – km	27900	0.00004	1
Business Waste Tonnes		0.447	0
Total			7,091

GBC Carbon Footprint



For comparison, a number of other authorities have undertaken the same exercise;

Local Authority	Carbon Total
Gedling	7091
Rushcliffe	3865
County	105902
City	29123
South Derbyshire	1246
North East Derbyshire	4237

It should be noted however that, as stated above, a number of these are incomplete, particularly with regards to the contribution commuting makes.

With regards to Gedling's footprint, there are some points to note;

1. The largest single contributing source of CO² results from officers commuting to work. The Borough Council adopted a travel plan in December 2006, so the impacts of this have yet to be seen. Initiatives to reduce commuting could however have a significant and quick impact.
2. With regards to work-related travel, there are already some positive messages. Where lengthy journeys are taking place, the most carbon effective mode of transport, by train, is being used instead of air travel.

Whilst this exercise has been useful in establishing the councils carbon footprint, it has only been a desktop exercise. The Carbon Trust has recently started offering free Carbon Surveys to organisations with energy spends over £50 000, so it is recommended that the Council apply for a survey, which will also come with an action plan for improvements.

NI 186 Per Capita CO² Emissions

This new measure has established centrally produced statistics to measure end user CO² emissions from businesses, the public sector, domestic housing and road transport (excluding motorways). It represents the opportunity for local authorities to provide vision and leadership by raising awareness and influencing behaviours. The following table shows the published 2005 levels, which will provide the baseline against which progress will be monitored.

Local and Regional Estimates Carbon Emissions by End User, Summary 2005

CO₂ emissions (kt CO₂) 2005 by
End User

Local Authority and Government Office Region	Industry and Commercial	Domestic	Road Transport	Land use, land use change and forestry	Total	Population Thousands ⁽¹⁾	Per capita Total CO2 (tonnes)	Domestic per capita CO2 (tonnes)
Ashfield	324	276	250	-1	849	111	7.6	2.5
Bassetlaw	558	266	398	29	1250	108	11.6	2.5
Broxtowe	208	268	380	1	856	108	8.0	2.5
Gedling	170	284	117	2	572	112	5.1	2.5
Mansfield	225	245	124	0	594	98	6.1	2.5
Newark and Sherwood	472	278	427	13	1190	106	11.2	2.6
Nottingham	959	630	344	1	1934	267	7.2	2.4
Rushcliffe	244	282	304	14	845	106	8.0	2.7
Total	3159	2530	2344	59	8092	1015	64.8	20.1

Sustainable Energy Toolkit

As well as reviewing carbon usage, the toolkit looks at the overall performance of an authority in relation to sustainability in its role as

- an estate manager
- a service provider, and
- a community leader

Each of these are considered against a benchmark of how well the authority is operating (its processes) and how it sets out what it intends to achieve (its policies and programmes)

Officers have undertaken an initial assessment of this;

	Processes	Policies and Programmes	Total
Estate Manager	10	8	18
Service Provider	9	18	27
Community Leader	6	5	11
Total			56

Whilst an authority which has established sustainability related priorities would expect to score over 100, Gedling's score demonstrates that it is just setting out to address these wider issues. The toolkit then sets out advice on how to improve these functions and in this respect aligns well with the advice given in the toolkit supporting the Nottingham Declaration, of which this authority is a signatory.

Conclusions

Gedling Borough Council has now begun to consider how it can develop its operations, to be a more sustainable user of resources, and its policies, and to

encourage others to do the same. Whilst understanding its current carbon footprint is an important first step towards this, it inevitably also highlights what needs to be achieved to improve on this.

Recommendation

- 1) That members note the report
- 2) That the Borough Council apply for a Carbon Trust Carbon survey