



Carbon Footprint Report for The Courier Company

Assessment Period: 1st July 2011 - 30th June 2012

Executive Summary

Carbon Footprint Ltd has calculated The Courier Company’s annual carbon dioxide emissions based on a dataset provided by the company.

The Courier Company’s carbon footprint was calculated at 449.67 tCO₂e per annum.

Period of calculation	Total footprint (tCO ₂ e)	Tonnes of CO ₂ e per employee	Tonnes of CO ₂ e per £M turnover
1 st July 2011 to 30 th June 2012	449.67	27.25	132.87

The chart below demonstrates the contribution of each element in the makeup of the total carbon footprint of the company’s operations.

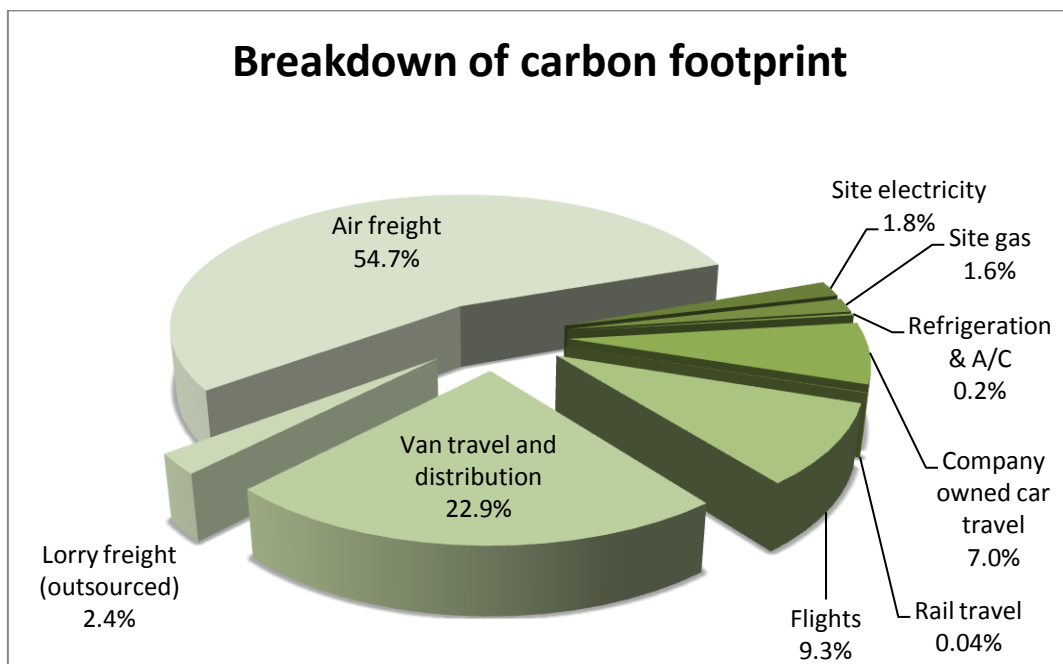


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Quality Control

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1 Introduction

1.1 Scope of this work

Carbon Footprint Ltd has assessed the carbon emissions from 1st July 2011 to 30th June 2012 resulting from The Courier Company's business activities.

1.2 What is a carbon footprint?

A carbon footprint is a measure of the impact our activities have on the environment in terms of the amount of green house gases produced, measured in units of carbon dioxide equivalents (CO₂e).

A carbon footprint is made up of two parts, the primary footprint and secondary footprint.

1. The **primary footprint**:

There are two primary causes of emissions, the energy use in buildings and travel emissions. This encompasses electricity use, burning oil or gas for heating, and fuel consumption as a result of business travel or distribution. The primary footprint corresponds to elements within scopes 1, 2 and 3 of the World Resources Institute GHG Protocol, as indicated in the table below:

Table 1 showing primary footprint

Footprint	Activity	Scope
Primary	Electricity, heat or steam generated onsite	1
	Natural gas, gas oil, LPG or Coal use attributable to company owned facilities	1
	Company owned vehicle travel	1
	Production of any of the 6 GHG's	1
	Purchased electricity, heat or steam	2
	Employee business travel (using transport not owned by the company)	3

2. The **secondary footprint**:

Is a measure of the indirect emissions from a company's upstream and downstream activities, typically from outsourced/contract manufacturing, and products and services offered by an organisation. The secondary footprint corresponds to scope 3 of the World Resources Institute GHG Protocol excluding employee business travel as indicated in the table below:

Table 2 secondary footprint

Footprint	Activity	Scope
Secondary	Employee commuting	3
	Transportation of an organisation's products, materials or waste by another organisation	3
	Outsourced activities, contract manufacturing and franchises	3
	GHG emissions from waste generated by the organisation but managed by another organisation	3
	GHG emissions from the use and end of life phases of the organisation's products and services	3
	GHG emissions arising from the production and distribution of energy products, other than electricity, steam and heat, consumed by the organisation	3
	GHG emissions from the production of purchased raw or primary materials	3

For businesses, the assessment focuses on the primary footprint, as this lies under the control of the organisation.

We ask companies to recognise that there is a secondary footprint and select suppliers based on their environmental credentials, as well as price and performance.

1.3 How is the carbon footprint calculated?

The carbon footprint appraisal is derived from a combination of client data collection and data computation by Carbon Footprint Ltd's analysts.

Carbon Footprint Ltd analysts have calculated The Courier Company's footprint based on the current metrics (published April 2012) developed by the UK Department for Environment, Food and Rural Affairs (Defra) and the Department of Energy and Climate Change (DECC) and have prepared a summary for The Courier Company included in this report. These metrics use GHG activity data multiplied by GHG emission factors. Carbon Footprint Ltd has selected this preferred method of calculation as a government recognised approach and uses data which is realistically available from the client, particularly when direct monitoring is either unavailable or prohibitively expensive.

Carbon Footprint Ltd confirms that the methodology used to quantify the carbon footprint meets the following principles:

- a) The subject and its boundaries have been clearly identified and documented.
- b) The carbon footprint has been based on primary activity data unless the entity could not demonstrate that it was not practicable to do so, in which case an authoritative source of secondary data relevant to the subject was used.

- c) The methodology employed minimised uncertainty and yielded accurate, consistent and reproducible results.
- d) Emission factors used are germane to the activity concerned and current at the time of quantification.
- e) Conversion of non-CO₂ greenhouse gases to CO₂e has been based upon the 100 year Global Warming Potential figures published by the IPCC or national (Government) publication.
- f) Carbon footprint calculations have been made exclusive of any purchases of carbon offsets.
- g) All carbon footprints have been expressed as an absolute amount in tCO₂e.

1.4 Why is it important?

Over the past two decades the effect of climate change has become more marked. Considerable evidence exists that most global warming has been caused by human activities. Changes in our post industrial lifestyles have altered the chemical composition of the atmosphere, generating a build up of greenhouse gases – primarily carbon dioxide, methane, and nitrous oxide levels.

The consequences of inaction will be disasterous. Rising global temperatures will cause sea levels to rise and local climate conditions to be altered, affecting forests, crop yields, and water supplies. It will also affect human health, accelerate species extinction, and disrupt many types of ecosystem. Deserts may expand and some of our countryside may be permanently altered.

For this reason it is vital that all individuals, businesses, organisations and governments work towards the common goal of reduced carbon emissions. The carbon footprint assessment will enable your business to:

- Report on greenhouse gas (GHG) emissions
- Set targets to reduce emissions
- Base supply chain selection on environmental factors
- Achieve cost savings through managing resources, energy saving and implementing good environmental practice
- Generate great PR through communicating your environmental successes
- Improve reputation with potential and existing customers
- Broaden market opportunities by differentiating your products and brands
- Raise staff morale and attract high-calibre employees
- Attract ethical investors
- Be prepared for future legislative changes

1.5 Abbreviations

CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalent
ECA	Enhanced Capital Allowance
EU	European Union
GHG	Greenhouse Gas

ISO	International Standards Organisation
km	Kilometres
kWh	Kilowatt Hours
PR	Public Relations
ROI	Return On Investment
SMB	Small & Medium size Businesses
SME	Small & Medium size Enterprises
UN	United Nations

2 Appraisal Boundaries and Summary of Data Supplied

A summary of the information submitted by The Courier Company and the boundaries set for the calculation are detailed below.

2.1 Organisational boundaries

The organisation has consolidated its facility-level GHG emissions or removals by the following approach:

Control: The organisation has accounted for all quantified GHG emissions and/or removals from facilities over which it has financial control.

2.2 Operational boundaries

GHG Emissions and removals associated with The Courier Company’s operations:

Figure 1 showing assessment boundary

Scope 1 Direct Emissions	Scope 2 Energy Indirect	Scope 3 Other Indirect
<u>Fuel combustion</u> Natural Gas	<u>Consumption of purchased electricity, heat steam and cooling</u> Electricity	<u>Purchased materials and fuels</u> None
<u>Owned Transport</u> Company cars and vans		<u>Transport related activities</u> Rail, flights, air freight, van and lorry travel
<u>Process emissions</u> None		<u>Waste disposal</u> None
<u>Fugitive Emissions</u> Fridges and A/C		<u>Leased assets, outsourcing and franchising</u> None
		<u>Sold goods and services</u> None

Key:

Within the assessment boundary	Outside of assessment boundary
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The indirect GHG sources that are outside the assessment boundary have been excluded from quantification because quantification of its contribution to the GHG emissions is not technically feasible or cost effective.

2.3 Biomass

There are no CO₂ emissions from the combustion of biomass to be considered within this report.

2.4 Accuracy of the carbon footprint calculation

The result of a carbon footprint calculation varies in accuracy depending on the data set provided. The more accurate the data supplied, the more accurate the final result which will subsequently allow for better targeting of areas where improvements can be made.

An overview of the accuracy provided per element for this assessment is shown in the table below:

Table 3 showing assessment accuracy

Dataset	Accuracy
Site electricity	Average
Site gas	Excellent
Refrigeration & A/C	Excellent
Company owned car travel	Excellent
Rail travel	Excellent
Flights	Excellent
Van travel and distribution	Excellent
Lorry freight (outsourced)	Average
Air freight	Good

The data provided is derived from energy bills, expenses claims and data collected by employees.

As only country destination (but not the town) for all air freight travel was known, all calculations were carried out using the capital cities for destinations. For more accurate calculations please record flights departure and destination. Again, capitals of countries have been used for lorry freight.

As the total UK domestic freight transportation is divided up between lorry and van travel. The total UK domestic lorry freight has been apportioned to a 30%, since 70% is estimated to be carried out by The Courier Company vans (emissions already included in this appraisal).

An average distance of 90km per haul has been used, as distribution distances around the UK are unknown.

It was estimated that 40kWh were consumed in the Chesterfield office, as this is an employee working part time from home and the electricity consumption attributable to the company's activities is unknown.

2.5 Greenhouse gas removals

Within the calculation of The Courier Company's carbon footprint, there are no business processes resulting in the reduction of greenhouse gases from the atmosphere to be deducted from the calculation.

3 Carbon Footprint Results

3.1 Summary of results

The total carbon footprint for The Courier Company for the period ending 30th June 2012 was 449.67 tCO₂e.

The following table provides a summary of results for The Courier Company's carbon footprint calculation by scope.

Table 4 showing the results of The Courier Company's carbon footprint assessment by scope

Scope	Activity	Tonnes CO ₂ e
Scope 1	Site gas consumption	7.29
	Company owned car travel	31.57
	Van travel and distribution	103.10
	Refrigeration & A/C	1.04
Scope 1 Sub Total		143.00
Scope 2	Site electricity	8.12
Scope 2 Sub total		8.12
Scope 3	Business Rail travel	0.16
	Business Flights	41.60
	Air freight	246.03
	Lorry freight (outsourced)	10.76
Scope 3 Sub Total		298.56
Overall Total		449.67

The following table provides a summary by business unit and source activity.

Table 5 summary of carbon footprint results per activity

Element of Footprint	Tonnes of CO ₂ e
Site electricity	8.12
Site gas	7.29
Refrigeration & A/C	1.04
Company owned car travel	31.57
Rail travel	0.16
Flights	41.60
Van travel and distribution	103.10
Lorry freight (outsourced)	10.76
Air freight	246.03
Total	449.67
Tonnes of CO₂e per employee	27.25
Tonnes of CO₂e per £M turnover	132.87

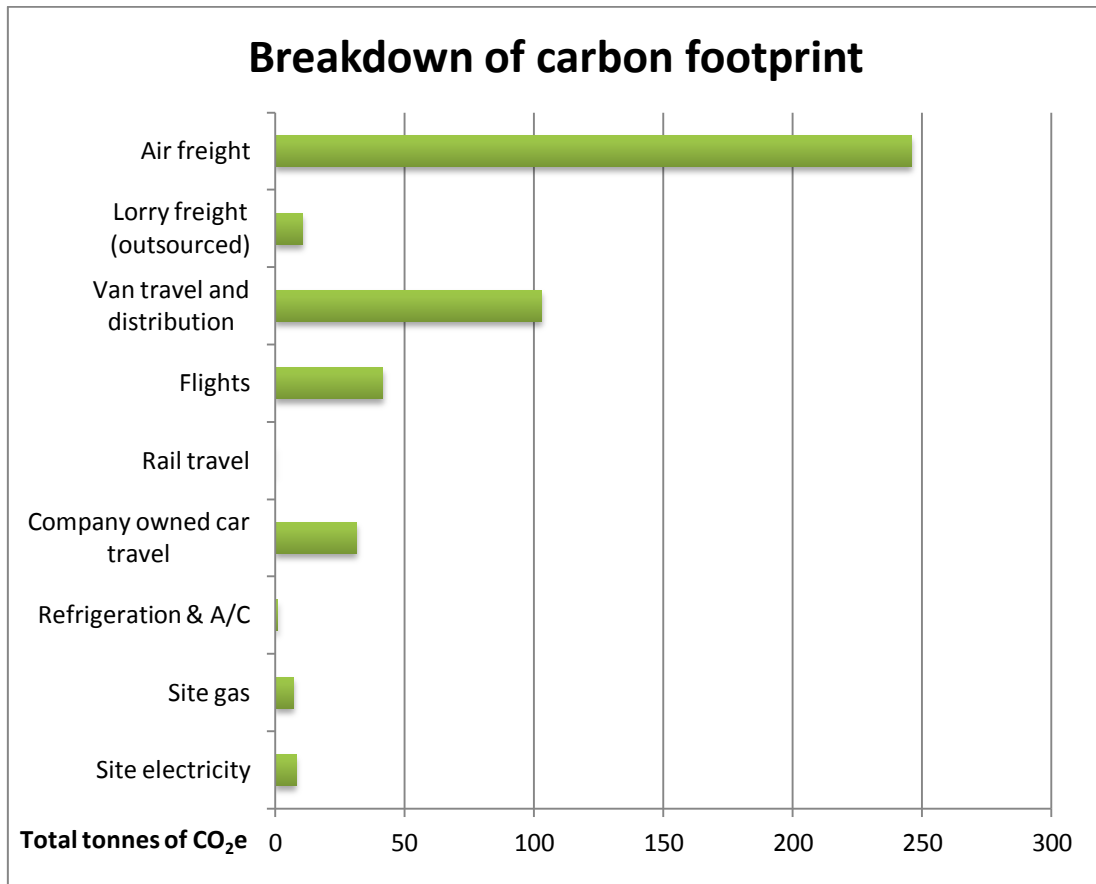


Figure 2 showing the contribution in tonnes of CO₂e of each element

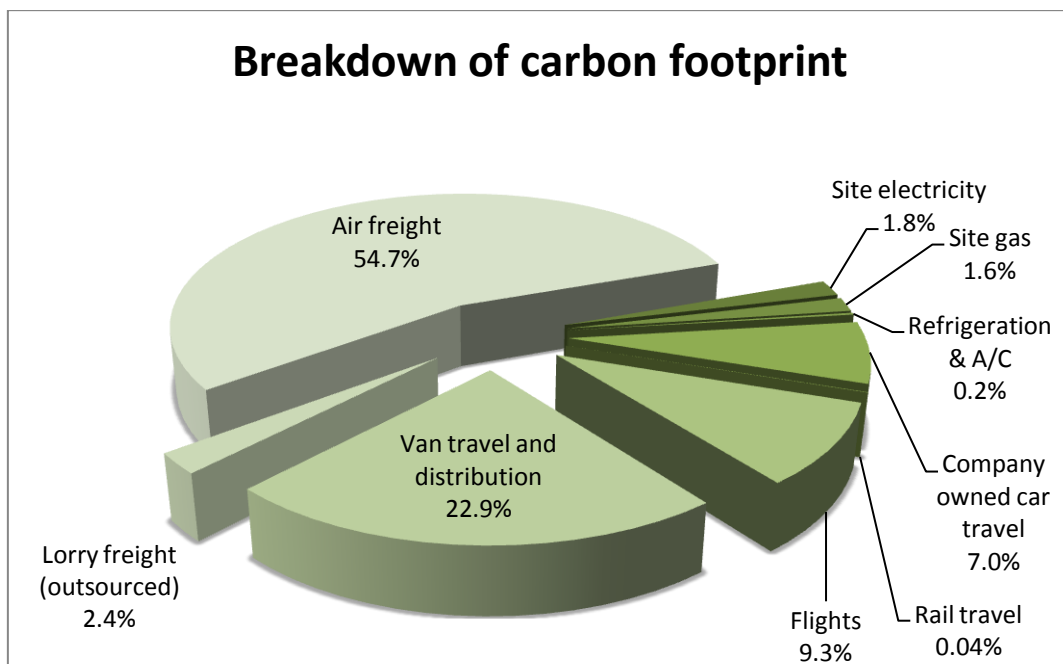


Figure 3 showing the percentage contribution of each element contributing The Courier Company's carbon footprint

4 Comparison & Bench Marking

4.1 Comparison to base year emissions

This report is the second annual appraisal completed by The Courier Company. The first report was completed in 2011 but only covered six months of business operations. Therefore, as this year's business appraisal is for a full year, it will serve as a base year for future carbon footprint assessments.

4.2 External benchmarking

The following table is a summary of results of research published on "Low Carbon Life" web site (ref 3). The data is derived from company carbon footprint submissions on the Carbon Disclosure Project (CDP).

Table 6 showing building emissions per employee for a range of sectors

Sector	Energy use per employee (kWh)	CO ₂ output per employee (tonnes)
For comparison, the domestic average home	9,600	2.21
Office-based service companies	6,360	2.26
Offices, combined with some retail		
Financial	8,180	2.88
Mobile phone	6,120	2.35
Non-grocery retailing	14,060	5.54
Grocery retailers	12,350	4.72
Entertainment and media companies	15,130	5.37

Your organisation might not fall into one of the above categories; this is due to the limited information that is readily available from organisations like the CDP.

Carbon Footprint Ltd recommends that organisations use the base-year GHG inventory as a benchmark to measure yourself against. When using the base-year GHG inventory as a benchmark, organisations can set realistic reduction targets and measure their progress year on year. This can also provide excellent marketing opportunities, where real figures can demonstrate your commitment towards helping fight climate change.

5 Carbon Footprint Standard

5.1 Brand endorsement

The Courier Company in conjunction with Carbon Footprint Ltd, has assessed its carbon footprint. By achieving this The Courier Company has qualified to use the Carbon Footprint Standard branding. This can be used on all marketing materials, including web site and customer tender documents, to demonstrate your carbon management achievements.



The Carbon Footprint Standard is recognition of your organisation's commitment to carbon management. The text to the right hand side of the logo demonstrates what level you have achieved in line with international best practice.

5.2 Carbon Neutrality

Many leading organisations include carbon offsetting as part of their carbon management programme to help them achieve the goal of carbon neutrality.

Promoting a business as carbon neutral has many advantages, including:

- Differentiation from competitors
- Demonstrating real commitment to the environment beyond purely costs saving measures
- Increased staff engagement in the environmental / carbon management programme
- Increased understanding of the cost of carbon
- Helping to develop emissions reductions around the world that otherwise would not happen

Used as part of a well thought out carbon management programme, these factors can help businesses retrain and win new sales.

Carbon Footprint Ltd provides a full range of offset programmes to help you become carbon neutral; these range from local projects to government approved international clean energy offsets meeting Kyoto and UN requirements.

Further details and quotations for these projects are available on request.

6 Recommendations

Carbon Footprint Ltd advises organizations like yours to work towards the reduction of their emissions. In so doing this will maximize business benefits through reduced energy and travel costs, and new marketing opportunities.

Below are top level recommendations to ensure your organization leverages the most out of being a carbon footprint approved business.

1. Set targets to reduce emissions year on year
2. Communicate targets and actions to employees, customers and other stakeholders
3. Monitor your usage of electricity, fuels and travel during the year, to ensure you stay on track towards meeting your targets
4. Investigate ways of reducing emissions (in your buildings and in travel), and implement the most cost effective solutions
5. Consider offsetting your remaining emissions to become a carbon neutral business and achieve a higher level of "Carbon Footprint Approval"
6. Market your company as "Carbon Footprint Approved" by using the branding on all your marketing and sales materials, including web site, leaflets, business cards, e-mails, letter headed paper etc.

Contact Carbon Footprint Ltd if you would like to discuss these or any other carbon management activities.

7 References

1. 2012 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting
2. Guidelines to Defra's Greenhouse Gas (GHG) Conversion Factors for Company Reporting – annexes
3. The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, Revised Edition