



LBM DIRECT
MARKETING LTD

CARBON FOOTPRINT PROFILE

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Executive summary

A comprehensive carbon footprint report has been commissioned by LBM Direct Marketing Ltd as part of the organisations commitment to a sustainable future and greater environmental responsibility. This report identifies the levels of carbon dioxide emissions resulting from activities within the organisation from the 1st June 2008 to 31st May 2009.

Key Findings

During the period 1st June 2008 to 31st May 2009 LBM Direct Marketing Ltd were responsible for the following carbon dioxide equivalent emissions (CO₂e):

| | |
|-----------------------------------|-------------------------------------|
| <i>Natural gas:</i> | 103 tonnes CO₂e |
| <i>Company vehicles:</i> | 71 tonnes CO₂e |
| <i>Grid electricity:</i> | 1,823 tonnes CO₂e |
| <i>Waste to landfill:</i> | 9 tonnes CO₂e |
| <i>Employee commuting:</i> | 1,245 tonnes CO₂e |
| <i>Business travel:</i> | 97 tonnes CO₂e |
| Total: | 3,295 tonnes CO₂e |



**Total Carbon Footprint profile of LBM Direct Marketing Ltd
(2008-2009)**

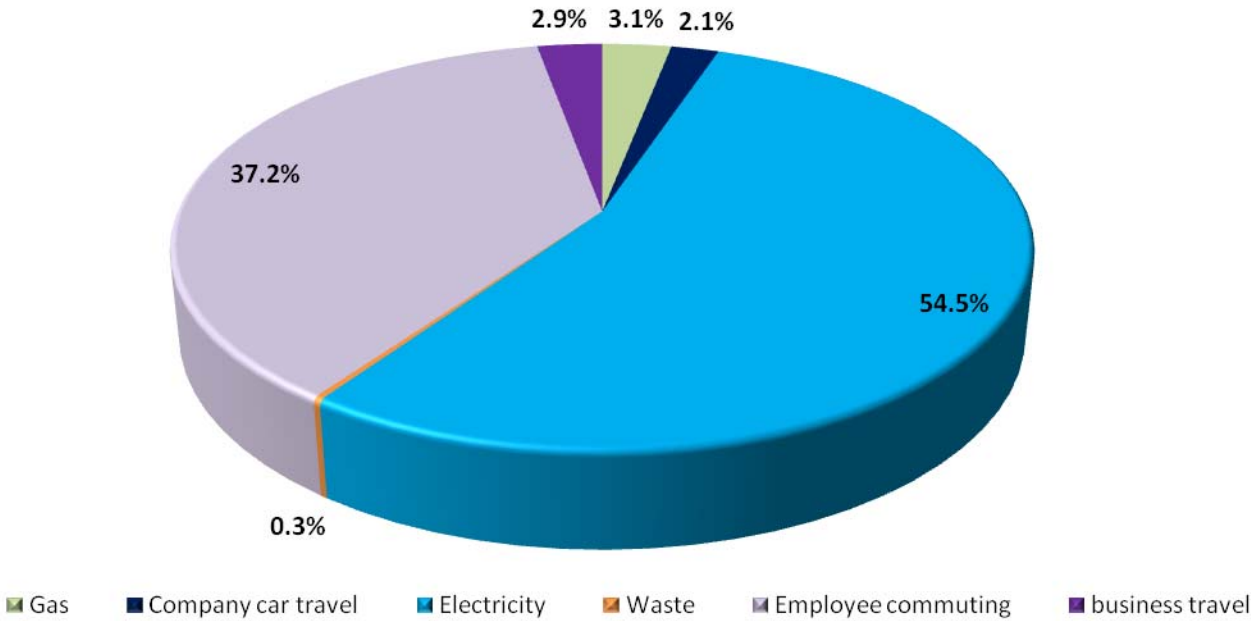


Figure 1 illustrates the carbon footprint profile to LBM Direct Marketing.

The chart above illustrates the CO₂e emission by source throughout LBM Direct marketing, the greatest contributor to the carbon footprint profile is through the consumption of grid electricity followed by employee commuting.

LBM should utilise this data to form part of their carbon reduction programme and regular assessments should be adopted to review performance against the base line. This report provides a detailed overview of emissions by source due to LBM's operation and also provides advisory energy and emissions reduction targets that LBM should adopt in order for LBM to operate as a greener organisation.

Methodology

LBM Direct Marketing Ltd currently operate at a number of sites throughout the UK, a total carbon footprint of LBM Direct Marketing has been calculated using the Greenhouse Gas Protocol and ISO 14064.

This report uses the Green House Gas Protocol & ISO 14064 methodology for calculation of a 'basic carbon footprint' for an organisation, which is currently the most widely accepted and used international accounting tool for businesses and governments in calculating greenhouse gas emissions. The methodology provides a structured approach to quantifying the key greenhouse gas emissions by source in a consistent manner.

The data presented in this document represents an estimate of the basic carbon footprint for LBM Direct Marketing, covering major greenhouse gas emissions sources for which data were made available. Emissions have been quantified based on the data provided. ¹

Green House Gas protocol

The Green House Gas protocol (GHG) is a decade long partnership between the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD). The GHG protocol provides an accounting framework for almost every greenhouse gas emission program worldwide, including the International Standards Organisation and the European Emissions Trading Scheme.

Carbon Footprint Boundary Conditions

A fundamental methodology consideration in producing a carbon footprint is to decide what the footprint should cover - i.e. which part(s) of a site, organisation or group of companies are to have their emissions quantified. This decision is commonly referred to as determining the organisational boundary. The boundary used to establish the carbon footprint was agreed with LBM Direct Marketing Ltd.

¹No guarantee is given as to the accuracy or completeness of the calculations and no verification of the source data has been undertaken.

The boundaries quantified include areas where the company can expand on existing operating policies and ensure that the organisations goal of reducing emissions is maintained.

Sites

Altrincham: call centre, training centre, & head office

Belfast

London

Middleton

Bredbury

Scope

The carbon footprint provides a profile of a set of greenhouse gas emissions caused by an organisation, expressed in an annual carbon dioxide equivalent (CO₂e) unit. The GHG protocol defines *three scopes* to distinguish between 'direct' and 'indirect' emissions to account for greenhouse gas emissions. Such scopes also enable companies to identify areas of responsibility and prevent any two companies accounting for the same emissions.

Scope 1

Covers direct greenhouse gas emissions, where fuels are consumed in equipment that is owned or leased by a company including boilers, as well as business travel and distribution of goods in company owned or leased vehicles.

Scope 2

Relates to indirect greenhouse gas emissions, which are produced by a third party to generate electricity or heat that have been purchased or consumed by the company.

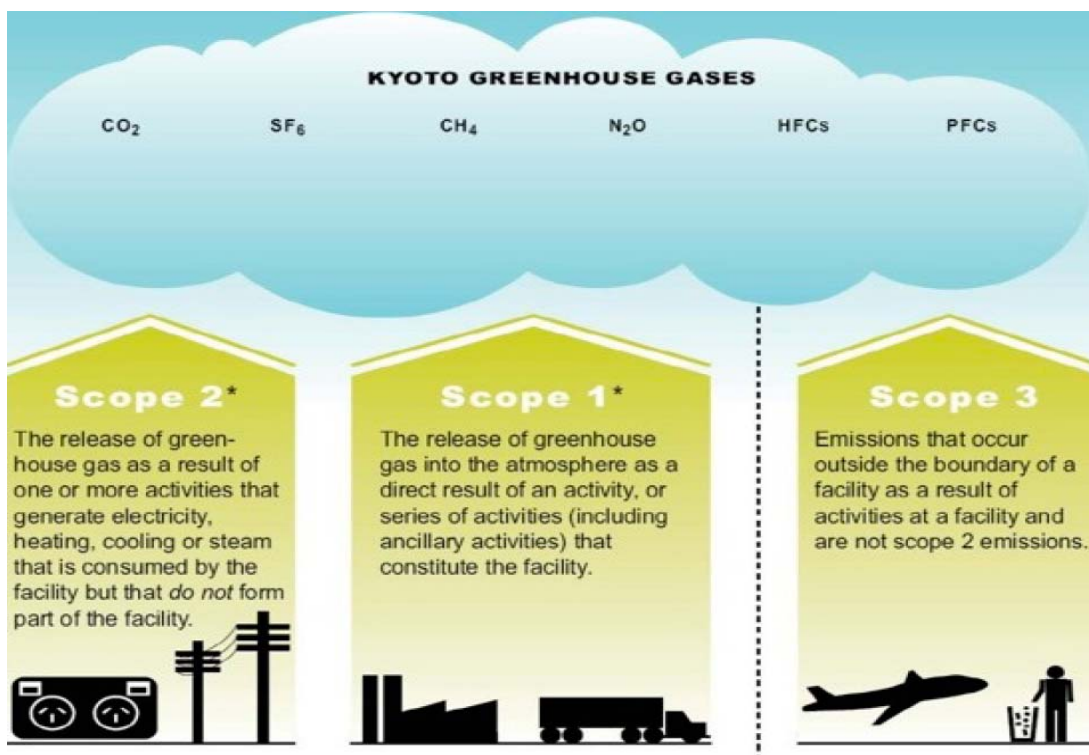
Scope 3

Covers all other indirect emissions created from sources that are not owned by or controlled by the company. Activities include the manufacture and transportation of purchased materials, waste disposal and the end of use disposal of the company's products. Scope 3 also includes employee commuting and business travel in non-

company owned vehicles, including private cars, buses, trams, trains and aeroplanes. It can also include reporting on carbon dioxide emissions across the supply chain in the manufacture of products, shipping, packaging, and printing. Finally carbon dioxide emissions in relation to water consumption also fall within this category.

A number of existing environmental reporting schemes, such as the Carbon Disclosure project consider scope 3 as an optional area of reporting.

Figure 2 illustrates scope 1, 2 & 3 emissions



Conversion factors

Conversion factors used in the calculation of carbon dioxide emissions are derived from information provided by the Department for Energy and Climate Change (DECC), The Environment Agency, and The Carbon Trust.

| Fuel consumption | Kg CO ₂ / KWh |
|----------------------|--------------------------|
| Natural Gas | 0.185 |
| Grid Electricity | 0.537 |
| 1 Kg Municipal waste | 0.548 |



The following table illustrates the levels of CO₂ produced by various forms of transport, per passenger per Km (pKm) travelled.

| Travel | Kg CO ₂ / pKm | |
|--------------------------|----------------------------|---------------------------------|
| Tram | 0.0780 | |
| Rail travel | 0.0602 | |
| Public Buses | 0.1073 | |
| ² Average car | 0.2042 | |
| Ferry | 0.1152 | |
| Air travel | KG CO ₂ per pkm | X km uplift factor ³ |
| Domestic | 0.1753 | X 109% |
| Short-haul international | 0.0983 | X 109% |
| Long-haul international | 0.1106 | X 109% |

² For employee commuting where greater detail relating to each car was provided specific emissions were applied depending upon engine size and fuel type.

³ Accounts for non-direct routes and delays / circling.

Total carbon footprint analysis of LBM Direct Marketing Ltd

Scope 1

Natural Gas

Natural gas is consumed across some of LBM's sites to provide space and hot water heating. During the period 1st June 2008 to 31st May 2009, natural gas consumption totalled 554,519⁴ kWh equating to **103 tonnes of CO₂e.**

Company owned vehicles

Company car travel considers carbon dioxide emissions produced by company cars used for business travel only.

During the reporting period a total of 216,212 miles in company cars was recorded equating to a carbon footprint of **71 tonnes of CO₂e.**

Scope 2

Electricity

During the period 1st June 2008 to 31st May 2009 LBM Direct Marketing Ltd consumed 3,94,418 kWh across all sites within the reporting boundary, equating to a carbon footprint of **1,823 tonnes of CO₂e.**



⁴ Some gas consumption data is based on estimates due to metering errors and insufficient data.

Scope 3

Waste

Active recycling across all sites and waste minimisation has resulted in limited volumes of waste sent to landfill.

During the period 1st June 2008 to 31st May 2009 LBM Direct Marketing Ltd sent 16 tonnes of municipal waste to landfill across all sites, equating to **9 tonnes CO₂e**.

The group also sent 1,229 tonnes of waste to refuse derived energy via a gasification plant. Emission relating to this source are currently not quantified due to the complexity and unavailable data specific to this process. Further research into the specific constituents of the processes and steps need to be identified by the waste contractor and LBM in order to calculate emissions.



Employee commuting

Employee commuting relates to all travel to and from the workplace by all employees at LBM Direct Marketing. Due to an absence of any formal employee travel records, a commuter survey was despatched to staff identifying the mode of transport used and the distance travelled to and from the workplace. The survey provided a total of 586 respondents detailing the frequency and mode of transport, coupled with the distance travelled each day. Data collated from this survey was extrapolated to the current number of staff employed (1,616) by the LBM across quantified sites, allowing carbon emissions relating to employee commuting at LBM to be quantified.⁵

⁵ *Figures quoted may not truly reflect commuter habits across all staff. Calculations are based on a sample of staff at LBM Group due to an absence of formal commuter records.*

Percentage of Staff Commuting to LBM by Mode of Transport

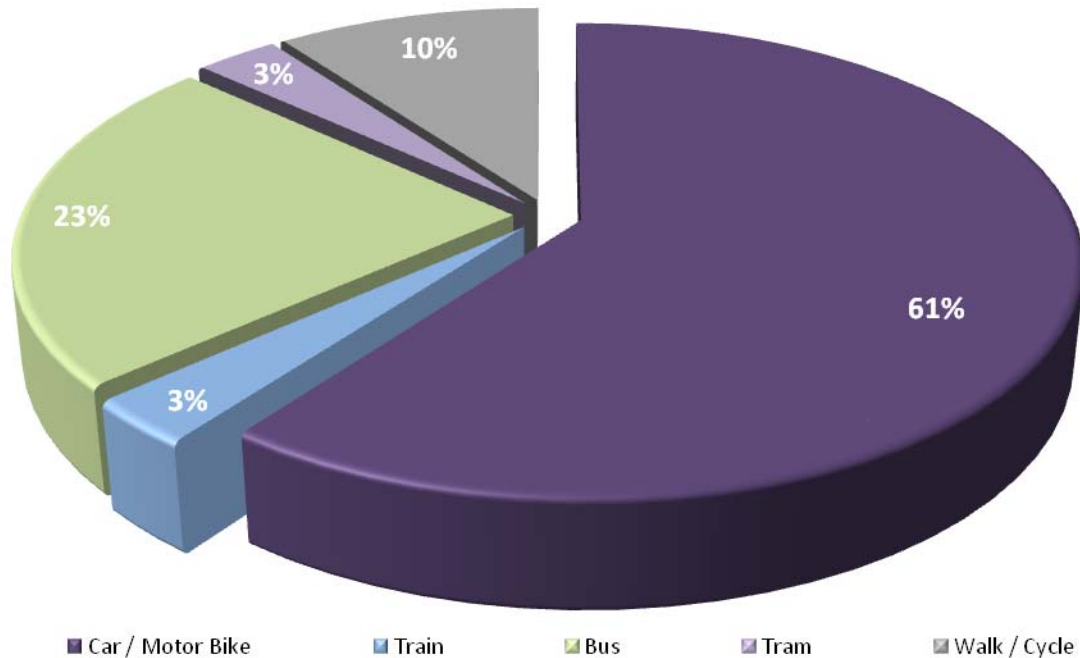


Figure 2 illustrates the percentage of staff commuting by mode of transport.

Walking or cycling

During the reporting period 1st June 2008 to 31st May 2009 10% of staff travelled to LBM Direct Marketing by bike or on foot. Travelling by bike or on foot produces zero carbon emissions, hence increasingly the popularity of **zero carbon** commuting amongst staff will significantly reduce emissions relating to employee commuting.

Train

Travelling by train produces 0.060 Kg CO₂ per passenger per kilometre making it the greenest mode of transportation.

During the period 2008/2009 3% of LBM staff utilised rail travel for commuting purposes, resulting in rail travel contributing **23 tonnes of CO₂e** to the organisations carbon footprint profile.

Tram

Travel by tram produces 0.078 Kg CO₂e per passenger per kilometre. During the period 1st June 2008 to 31st May 2009 3% of LBM staff travelled by tram. Employee commuting at LBM using the tram service resulted in **12 tonnes of CO₂e**.

Bus

Travelling by bus currently produces 0.1073 Kg CO₂e per passenger per kilometre. The employee commuting survey identified that 23% of staff travelled by bus during 1st June 2008 to 31st July 2009 at LBM, equating to **145 tonnes of CO₂e**.

Car / motorcycle

The commuter survey illustrated the car as the most popular mode of transport with 62% of staff commuting to work by this mode. The average emissions for cars commuting to LBM Direct Marketing Ltd is 0.33 Kg CO₂e per kilometre and with an average occupancy of 1.3 passengers per vehicle, car travel produces approximately 0.26 Kg CO₂e per passenger per kilometre.

The total carbon footprint for commuters travelling by car and motorcycle during the period 2008 to 2009 is **1,066 tonnes of CO₂e**; accounting for more than 31% of LBM's total carbon footprint profile.

CO₂e emissions per passenger Km / (Kg)

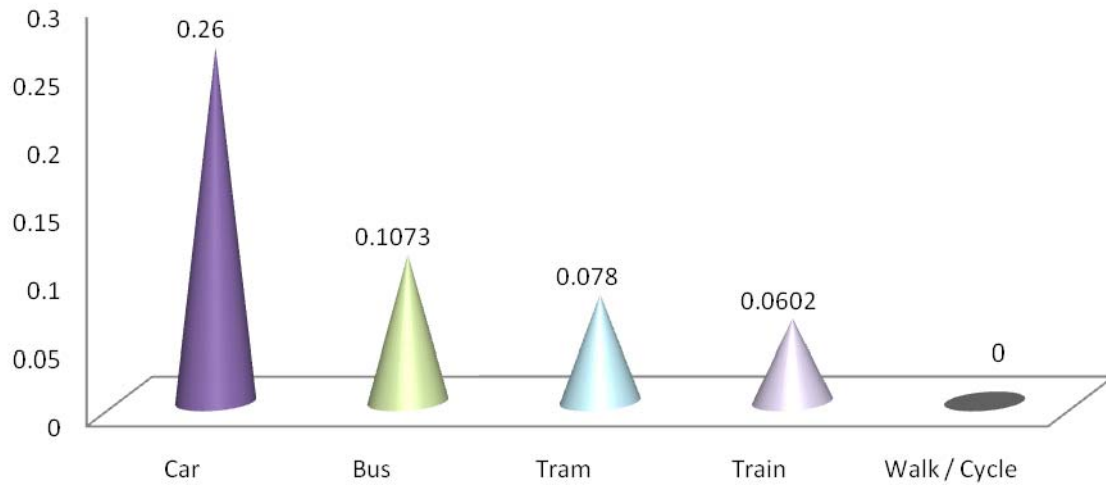


Figure 3. Above illustrates CO₂e emissions per person per Km by each mode of transport

CO₂e Emissions by Mode of Transport (tonnes / year)

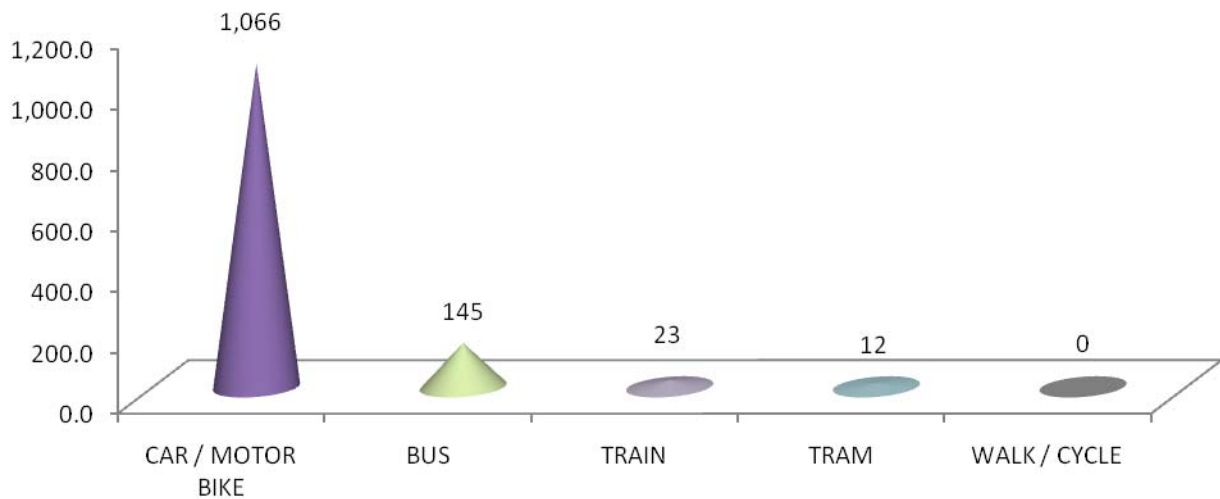


Figure 4. Above illustrates CO₂e emissions by each mode of transport

Average figures

Individual circumstances may vary significantly to the above figures. Car journeys that are made predominantly on motorways or dual carriageways, at an average of 56mpg, are likely to produce significantly lower emissions per kilometre than equivalent distances through traffic congestion.

It is important to note that due to the scope of the data capture actual figures may vary, figures quoted are based on a sample of LBM Direct Marketing staff's commuter habits at the present time. In order to establish accurate figures a site wide full data capture survey of all members of should be instigated.

*Employee commuting contributed **1,245 tonnes of CO₂e** to the organisations footprint profile for the period 2008/2009.*



*LBM should look to instigate a side wide **green commuting** campaign to reduce CO₂e emissions through the promotion of zero carbon commuting, car sharing and public transport.*

Business Travel

Business travel accounts for air, road, sea and rail travel, made during the period 1st June 2008 to 31st May 2009, based on data provided by LBM Direct Marketing Ltd.

Air Travel

During the reporting period 716 flights were taken across LBM Direct Marketing, equating to a total distance travelled of 352,408 Km. All journey were domestic flights mainly between England and Northern Ireland, however there were 26 journeys by which alternative modes of transport such as the train could have been utilised in order to reduce emissions.

Emissions relating to air travel accounted for a total of **67 tonnes of CO₂e** during 2008 to 2009.

Rail Travel

During the reporting period 2008/2009 388 train journeys were utilised for business travel purposes, equating to a total distance travelled of 115,007 Km.

Rail related business travel contributed **7 tonnes of CO₂e** to the organisations overall carbon footprint.

Road

During the reporting period a total of 68,284 miles were travelled in personal vehicles for business travel purposes, relating to **22 tonnes of CO₂e** to the organisations overall carbon footprint.

Ferry

During the reporting period 6 ferry journeys between Belfast and Stranraer were taken, equating to a total distance of 406 Km. Ferry travel contributed **0.05 tonnes of CO₂e** to the organisation carbon footprint.

Business travel through air, road and rail travel is responsible for 3% of the group's total carbon footprint profile, equating to a total of **97 tonnes of CO₂e**.

Reduction Targets

As part of LBM's commitment to the environment and the Carbon Disclosure Project response / obligations the following reduction targets have been devised.

The targets below are based on energy and emission per unit of financial turnover to account for any alternations in building stock, operations and / or growth. This relative target methodology is adopted by the Carbon Trust Standard and also the governments Carbon Reduction Commitment.



The base year for the targets is the 1st June 2008 to 31st May 2009.

Energy reduction – kWh / £ turnover

| | |
|-----------|----------------|
| 2009-2010 | 2.5% reduction |
| 2010-2011 | 5% reduction |
| 2011-2012 | 7.5% reduction |
| 2012-2013 | 10% reduction |

Emission reduction – tCO₂ / £ turnover (scope 1 & 2 only⁶)

| | |
|-----------|----------------|
| 2009-2010 | 2.5% reduction |
| 2010-2011 | 5% reduction |
| 2011-2012 | 7.5% reduction |
| 2012-2013 | 10% reduction |

⁶ Scope 1 & 2 emissions incorporate gas, electricity and company car travel.