



Greenhouse Gas Assessment for Global Reach Partners

Assessment Period: 2010

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Company**

Report Control

Consolidation Approach

Operational Control

Organisational Boundary

Operations of Global Reach Partners

Included

- Head Office

Operational Boundary

- Air travel
- Bicycle
- Bus and coach
- Cars
- Electricity
- Landfilled waste
- Natural gas
- On foot
- Rail (train, tram, light rail, underground)
- Refrigerant gas loss
- Taxi
- Recycled waste

Client Contact

Emma Waldron

Ecometrica Reviewer

- Charlotte Wylie - charlotte.wylie@ecometrica.co.uk

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Introduction

A greenhouse gas (GHG) emissions assessment quantifies the total greenhouse gases produced directly and indirectly from a business or organisation's activities. Also known as a carbon footprint, it is an essential tool, providing your business with a basis for understanding and managing its climate change impacts.

A GHG assessment quantifies all six Kyoto greenhouse gases where applicable and is measured in units of carbon dioxide equivalence, or CO₂e¹. The six Kyoto gases are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), sulphur hexafluoride (SF₆) and perfluorocarbons (PFCs). The global warming potential (GWP) of each gas is illustrated in the Table 1.

Table 1. GWP of Kyoto gases (IPCC 2007)

Greenhouse Gas	GWP
Carbon Dioxide (CO ₂)	1
Methane (CH ₄)	25
Nitrous Oxide (N ₂ O)	298
Hydrofluorocarbons (HFCs)	124 - 14,800
Perfluorocarbons (PFCs)	7,390 - 12,200
Sulphur hexafluoride (SF ₆)	22,800

This assessment has been carried out in accordance with the World Business Council for Sustainable Development and World Resources Institute's (WBCSD/WRI) Greenhouse Gas Protocol; a Corporate Accounting and Reporting Standard. This protocol is considered current best practice for corporate or organisational greenhouse gas emissions reporting. GHG emissions have been reported by the three WBCSD/WRI Scopes.

Scope 1 includes direct GHG emissions from sources that are owned or controlled by the company such as natural gas combustion and company owned vehicles. Scope 2 accounts for GHG emissions from the generation of purchased electricity, heat and steam generated off-site. Scope 3 includes all other indirect emissions such as waste disposal, business travel and staff commuting. Reporting of these activities is optional under the WBCSD/WRI GHG Protocol, but as they can contribute a significant portion of overall emissions Ecometrica recommends they are reported where applicable.

A GHG assessment is an essential tool in the process of monitoring and reducing an organisation's climate change impact as it allows reduction targets to be set and action plans formulated. GHG assessment results can also allow organisations to be transparent about their climate change impacts through reporting of GHG emissions to customers, shareholders, employees and other stakeholders. Regular assessments allow clients to track their progress in achieving reductions over time and provide evidence to support green claims in external marketing initiatives such as product labelling or CSR reporting. Ecometrica GHG assessments are designed to be transparent, consistent and repeatable over time.

¹ CO₂e is the universal unit of measurement to indicate the global warming potential (GWP) of each of the six greenhouse gases, expressed in terms of the GWP of one unit of carbon dioxide (WBCSD/WRI 2004)

Data Quality and Availability

In order to provide the most accurate estimate of an organisation's GHG emissions, primary (actual) data should be used where it is available, up to date and geographically relevant. Secondary data in the form of estimates, extrapolations and industry averages may be used when primary data is not available. Table 2 details the quality of data submitted for this assessment with the key assumptions used stated below.

Table 2. Data Quality and Availability

Source of emissions	Data quality
Business Travel	
Air travel	Estimated
Taxi	Estimated
Rail (train, tram, light rail, underground)	Mixed
Commuting	
Bicycle	Estimated
Bus and coach	Estimated
Cars	Estimated
On foot	Estimated
Rail (train, tram, light rail, underground)	Estimated
Premises	
Electricity	Estimated
Landfilled waste	Estimated
Natural gas	Estimated
Recycled waste	Estimated
Refrigerant gas loss	N/A

Key Assumptions

In the absence of consumption or spend data the amount of natural gas consumed has been estimated based upon the floor area of the office.

The amount of waste disposed to landfill has been estimated based upon the number of bin bags filled.

The distance travelled by train for business trips has been estimated based upon the amount spent on tickets.

The distance travelled by plane has been estimated based upon the number of plane journeys taken.

Assessment Summary for Global Reach Partners

Overall Emissions: 104 tCO₂e

Key Performance Indicators

- 2 tCO₂e per Full Time Equivalent Employee
- 52 Full Time Equivalent Employees

Summary by Activity (tCO₂e)



By Activity	tCO ₂ e/year	%
Business Travel	4.2	4
Commuting	32	30
Premises	68	66
Total	104	100

Summary by WBCSD/WRI Scope (tCO₂e)



Scope	tCO ₂ e/year	%
Scope 1	12	11
Scope 2	47	46
Scope 3	45	43
Total	104	100

Summary by Greenhouse Gas

Greenhouse Gas	GWP	tGHG/year	tCO ₂ e/year
CO ₂	1	98	98
CH ₄	25	0.2	5.1
N ₂ O	298	0.0022	0.64
Total			104

Detailed Results

Detailed Summary by WBCSD/WRI Scope

Source of Emissions	Carbon Dioxide Emissions (tCO ₂ /yr)	Methane Emissions (tCH ₄ /yr)	Nitrous Oxide Emissions (tN ₂ O/yr)	Total Emissions (tCO ₂ e/yr)	Percentage
Scope 1	12	0.00083	0.000023	12	12%
Premises	12	0.00083	0.000023	12	12%
Natural gas	12	0.00083	0.000023	12	12%
Scope 2	47	0.001	0.00095	47	45%
Premises	47	0.001	0.00095	47	45%
Electricity	47	0.001	0.00095	47	45%
Scope 3	39	0.2	0.0012	45	43%
Business Travel	4	0.00015	0.00052	4.2	4%
Air travel	1.3	0.000011	0.000041	1.3	1%
Rail (train, tram, light rail, underground)	2.6	0.00014	0.00048	2.8	3%
Taxi	0.13	0.000002	0.000003	0.14	0%
Commuting	31	0.00092	0.0006	32	31%
Bicycle	0	0	0	0	0%
Bus and coach	2	0.00011	0.00005	2	2%
Cars	4.5	0.00018	0.000066	4.5	4%
On foot	0	0	0	0	0%
Rail (train, tram, light rail, underground)	25	0.00062	0.00048	25	24%
Premises	3.8	0.2	0.000076	8.9	9%
Electricity - Electricity - transmission & distribution losses	3.8	0.000045	0.000076	3.9	4%
Landfilled waste	0	0.2	0	5.1	5%
Recycled waste	0	0	0	0	0%
Total	98	0.2	0.0022	104	100%

Annual Activity Data

Source of Emissions	Value	Unit
Business Travel		
Air travel		
Long-haul, average class	1	journey
Medium-haul, economy	3	journey
Short-haul	2	journey
Rail (train, tram, light rail, underground)		
Eurostar	1,128	pass.mile
Train, national	5,475	GBP
Taxi		
Average taxi	548	pass.mile
Commuting		
Bicycle		
Bicycle	4,512	mi
Bus and coach		
Average bus	9,325	pass.mile
Cars		
Average petrol car	13,226	mi
On foot		
On foot	6,808	mi
Rail (train, tram, light rail, underground)		
Light rail	234,438	pass.km
Underground	92,892	pass.km
Premises		
Electricity		
Electricity consumption	94,051	kWh
Landfilled waste		
Waste, landfilled, MSW	1,300	waste bag
Natural gas		
Natural gas intensity, air conditioned standard office	3,860	ft2
Recycled waste		
Waste,recycled	960	kg

Key Observations

Premises activities account for the majority of emissions, with electricity consumption contributing 51 tonnes of CO₂e, 49% of total emissions.

References

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2009 Guidelines to Defra/DECC's GHG Conversion Factors for Company Reporting.

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derived from Transport Statistics Great Britain 2008, DfT 2008, 'Ä' data relates to year 2007/08

