The Planet Mark[™] Certification Report

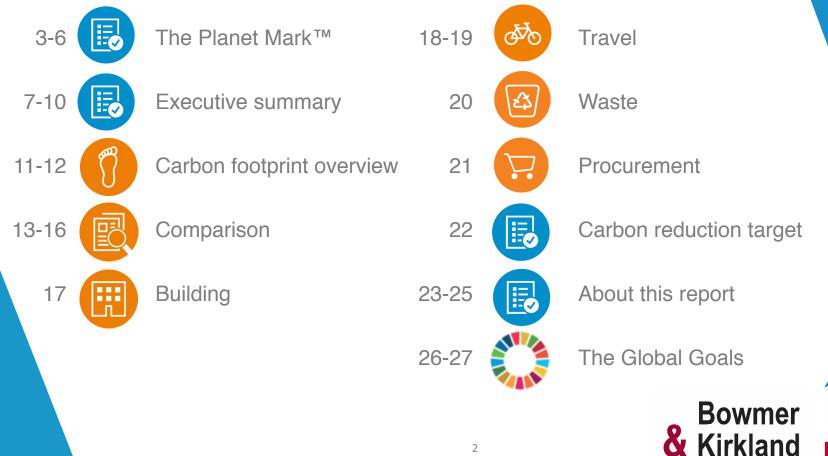
Bowmer & Kirkland

1st September 2016 - 31st August 2017





Contents



About The Planet Mark[™]

The Planet Mark[™] is a certification programme recognising commitment to continuous improvement in sustainability.

HOW IT WORKS

Our 3-step process is as simple as 1, 2, 3

1. MEASURE



We measure your carbon footprint and environmental performance 2. ENGAGE



We help you engage your employees and suppliers to drive improvements

3. COMMUNICATE



We provide marketing channels and materials to promote your achievements





The Planet Mark[™] Certificate

The Planet Mark[™] Certificate recognises your commitment to continuous improvement in sustainability and to measuring and reducing your carbon footprint on an annual basis. Display it publicly to promote your achievements.





eden projec



Supporting the Eden Project and Cool Earth

A donation has been made on your behalf to the Eden Project and Cool Earth to support education on climate change and to protect an acre of endangered rainforest.

Along with The Planet MarkTM Certificate you will receive The Planet MarkTM Acre of Rainforest Certificate and free tickets to visit the Eden Project.







COOL EARTH IS THE CHARITY THAT WORKS ALONGSIDE INDIGENOUS VILLAGES TO HALT RAINFOREST DESTRUCTION

February 2018, Certificate No: 180222-03 © Cool Earth - Registered charity no. 1117978





The Planet Mark[™] digital stickers

The Planet Mark[™] makes communicating your sustainability achievements easy. Use these digital stickers to help you.



We've achieved **The Planet Mark** Making progress. For the Planet. eden project Transforming the way we do business eden project **Bowmer** & Kirkland



Executive summary

Founded in 1923, Bowmer & Kirkland (B&K) now consists of 29 subsidiary companies or divisions, offering a wide range of specialisms from construction-related services to homeland security products. B&K now has in excess of 1400 staff operating from the Head Office in Derbyshire, regional offices in Birmingham, Manchester, Motherwell, Newark, Reading and Sunderland and from offices in the USA.

This is the 11th year that B&K has recorded its carbon footprint for its headquarters and regional offices and the 10th year it has been awarded The Planet Mark[™]. Significant improvements have been achieved over the last decade, demonstrating the benefits of a long-term carbon reduction strategy.

This year's footprint includes emissions from energy use in the building (natural gas and purchased electricity), from fuel used by the fleet, from waste disposal, business travel (air, rail, non fleet cars) and from the production of paper used in the offices.

The relative carbon footprint in year ending October 2017 was 3.8 tCO_2e per employee, a decrease of 3.3% compared to 2016. B&K's total carbon footprint was 1,232.7 tCO_2e , a decrease of 1.2% from 2016.





Executive summary

Key figures:

- Floor area increased by 5%
- Total number of employees increased by 2%
- Overall energy use has increased from 1,444,305 to 1,573,961 an increase of 9%. Part of this increase can be attributed to the 5% increase in floor area
- Overall fuel has increased from 236,475 to 254,904 litres an increase of 8%
- Paper usage has increased from 3,299,583 to 7,224,281 sheets an increase of 119%
- Air journeys have increased from 113,751 to 202,545 km an increase of 78%
- Rail journeys have decreased from 1,747,393 to 706,490 km- a reduction of 60%
- Waste outputs have reduced from 76.93 to 73.2 tonnes a reduction of 5% and recycling rate remains about the same at around 83%.

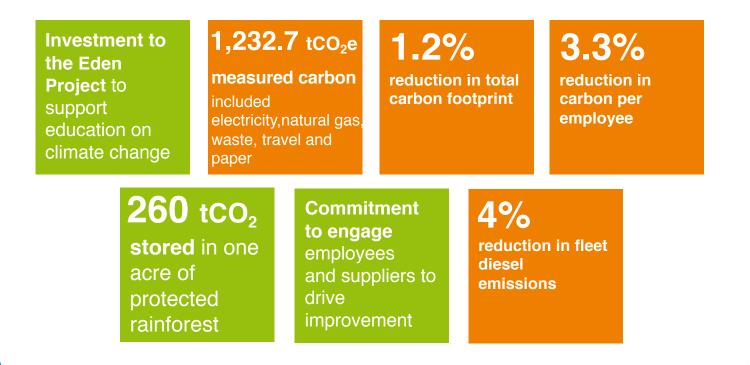
Energy, fuel and paper use and air travel km travelled have all increased from 2016. The reduction in both absolute carbon and relative carbon per employee is mostly attributed to the fact that electricity emissions – which account for 40% of total emissions – have reduced due to updated DEFRA 2017 conversion factors that reflect the greener UK grid.

Sustainability efforts should be re-focused so the carbon reductions achieved in the past decade can be sustained.



This year's highlights

Bowmer & Kirkland has achieved The Planet Mark[™] certification by showing good practice in sustainability, including:





Plans for next year

TARGETS



Recommendations

- Data collection: Start collecting actual monthly meter readings. Investigate the installation of a real time energy monitoring system
- Energy efficiency: An 'energy audit' will help identify where most energy is being used and potential wastage from equipment, lights and heat loss. Investigate the installation of LED, T5 and sensor lighting and the upgrade of heating controls.
- Fleet efficiency: Arrange safe and fuel efficient driving training for all drivers. Plan driver routes to finish at their homes
- · Travel: Promote the uptake public transport use for the purposes of client meetings
- Paper: Commit to switching to recycled paper for all office uses
- Waste: Reduce weight of waste going to landfill. Reintroduce sending waste to energy from waste schemes
- Staff engagement: Organise annual sustainability workshops. Carry out a energy awareness and 'switch off' campaign.





Total carbon footprint overview

Bowmer & Kirkland

Reporting year ending 2017 / Highlights

Carbon footprint (tCO ₂ e)	1,232.7
Per employee (tCO ₂ e)	3.8
Carbon footprint comparison	-1.2%
Comparison per employee	-3.3%
Next reduction target	5%
Data quality score	15 out of 20

Used	1,287,781	kWh of electricity
Used	286,180	kWh of natural gas
Produced	73	tonnes of waste
Procured	42	tonnes of paper
Travelled	254,904	litres of fuel
Travelled	909,035	km for business

Boundary: The report covers 6 office locations in the UK, and 9 companies in the B&K Group, i.e. Bowmer & Kirkland construction divisions of North Midlands, East Midlands, West Midlands, South Midlands, North-West Region, North East & Scotland Region, KPS, Holdings and the Southern Region. The carbon footprint excludes construction sites and project operations.



Total Carbon Footprint

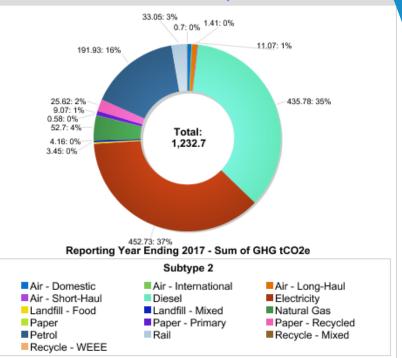


FIG 1- Total carbon footprint by emission source for reporting year ending 2017



Total carbon footprint by scope

tCO₂e	YE 2016	YE 2017	% change
Scope 1: Natural gas, fleet	582.1	570.4	-2%
Scope 2: Electricity	481.3	452.7	-6%
Scope 3: Waste, travel, paper use	183.8	209.5	14%
Total	1,247.3	1,232.7	-1.2%

Highlights

- Total carbon emissions are 1,232.7 tCO₂e
- Scope 1 (direct emissions natural gas, fleet) accounts for 46% of total emission, down 2% from 2016
- Scope 2 (imported emissions electricity) accounts for 37% of total emissions, down 6% from 2016
- Scope 3 (indirect emissions waste, travel, paper use) accounts for 17% of total emissions, up 14% from 2016.

1,232.7 carbon emissions are equivalent to 1036 return flights from London to New York

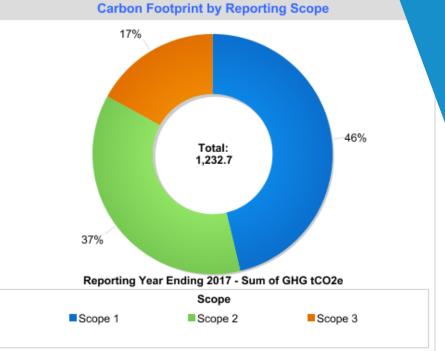
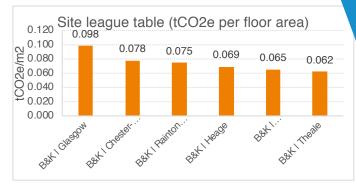


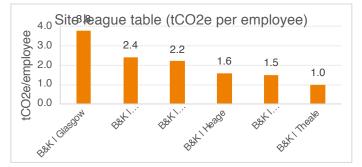
FIG 2- Total carbon footprint by scope for reporting year ending 2017





tCO₂e	B&K I Heage	B&K I Manchester	B&K I Chester- le-Street	B&K I Rainton Bridge	B&K I Glasgow	B&K I Theale	All	Total
Building-Electricity	327.64	31.83	34.77	20.17	32.11	6.22		452.7
Building-Fuel	48.3			4.4				52.7
Procurement-Paper	29.9	0.9	1.6	1.1	1.00	0.3		34.7
Travel-Business Travel							165.9	165.9
Travel-Fleet							517.7	517.7
Waste-Landfill	3.5	1.0	1.1	1.1	0.7	0.4		7.6
Waste-Recycle	1.17	0.02	0.02	0.02	0.03	0.02		1.3
Total	410.4	33.7	37.4	26.9	33.8	6.9	683.7	1,232.7
% of total	33%	3%	3%	2%	3%	1%	55%	
floor area m2	5,926	520	481	360	344	111		7,742
tCO2e/m2	0.069	0.065	0.078	0.075	0.098	0.062		0.16
employees	262	14	17	18	9	7		327
tCO2e/employee	1.6	2.4	2.2	1.5	3.8	1.0		3.8





Highlights

Glasgow is less efficient than the rest of the sites both in tCO2e per employee and tCO2e per floor area.

Theale, even though the smallest site, seems to be the most efficient one.





Total carbon footprint – year-on-year comparison

					current				
			1st Sept 2015 - 31s	t Aug 2016	1st Sept 2016 - 31st	st Sept 2016 - 31st Aug 2017		% total carbon	% Change in
Source	Scope	Unit	Amount	tCO ₂ e	Amount	tCO ₂ e	% Change in tCO2e from previous year	footprint	Amounts from previous year
Building									
Electricity	2	kWh	1,168,115.0	481.3	1,287,781.0	452.7	-6%	36.7%	10%
Natural Gas	1	kWh	276,190.0	50.8	286,180.0	52.7	4%	4.3%	4%
Waste									
Landfill	3	tonnes	12.5	6.7	12.5	7.6	14%	0.6%	0%
Recycled	3	tonnes	64.4	1.4	60.6	1.3	-5%	0.1%	-6%
Travel									
Vehicle - Fleet - Diesel	1	litres	143,324.2	374.3	137,575.4	357.7	-4%	29.0%	-4%
Vehicle - Fleet - Petrol	1	litres	71,469.2	157.0	72,793.3	160.0	2%	13.0%	2%
Vehicle - Non-Fleet - Diesel	3	litres	15,353.3	40.1	30,023.6	78.1	95%	6.3%	96%
Vehicle - Non-Fleet - Petrol	3	litres	6,327.6	13.9	14,511.7	31.9	129%	2.6%	129%
Air	3	pkm	113,751.0	15.8	202,545.0	22.9	45%	1.9%	78%
Rail	3	pkm	1,747,393.0	85.4	706,490.0	33.0	-61%	2.7%	-60%
Procurement									
Paper - Recyled Content	3	tonnes	0.7	0.5	32.2	25.6	5498%	2.1%	4705%
Paper - Primary Content	3	tonnes	18.9	17.7	9.8	9.1	-49%	0.7%	-48%
Total		tCO ₂ e		1,247.3		1,232.7	-1.2%		Į
No. employees		Number	320		327		2.2%		
Total per employee		tCO ₂ e	3.90		3.77		-3.3%		
Total floor space		m ²	7,417	7	7,742	2	4.4%		
Building emissions per m ²		tCO ₂ e	0.07		0.07		-9.0%		

Highlights

Most notable increase: non fleet petrol emissions and are up 129% from previous year, fleet petrol emissions are up 2% and natural gas emissions are up 4%.

Most notable reduction: rail emissions down 61%, electricity emissions down 6% and fleet diesel emissions down 4% from previous year.

(Note- The reduction in electricity emissions is attributed to updated 2017 Defra emission conversion factors that reflect the greening of the UK National grid for electricity. Actual electricity consumption increased by 10%. The reduction in air emissions is attributed to the majority of the flights being long haul and short haul instead of domestic. Actual air distance travelled increased by 9%. Landfill weight is the same as the previous year but landfill waste emissions went up due to update DEFRA 2017 factors.)





Total carbon footprint – year-on-year comparison

tCO ₂ e	YE 2016	YE 2017	% change
Building	532.1	505.4	-5.0%
Waste	8.0	8.9	10.5%
Travel	688.9	683.7	-0.8%
Procurement	18.2	34.7	90.9%
Total	1,247.3	1,232.7	-1.2%

Highlights

- Total carbon footprint decreased by 1.2%
- Total carbon footprint per employee decreased by 3.3%

Congratulations!

We are delighted to certify you with

The Planet Mark[™]

based on your relative carbon footprint reduction

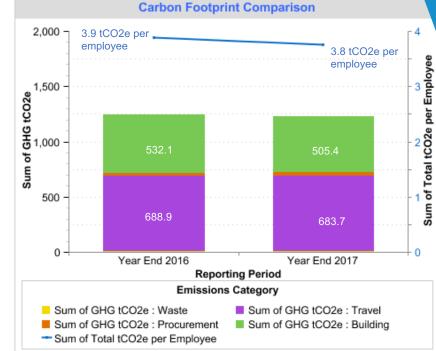
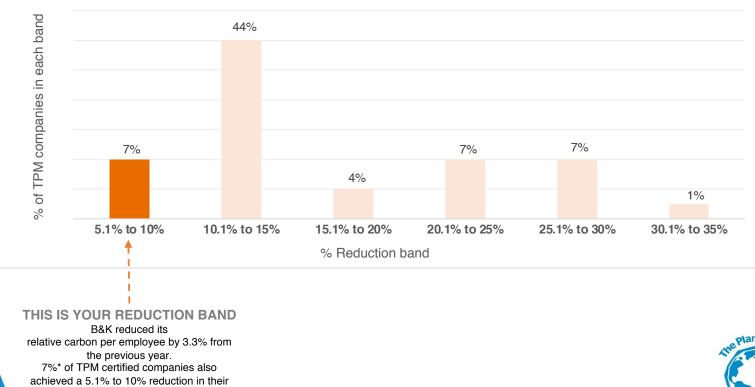


FIG 3- Total carbon footprint by emission category for the two reporting years, 2016, 2017





% Annual reduction achieved in tCO₂e/employee by YE2016 TPM companies



carbon per employee.

*latest TPM benchmark data is from reporting period YE2016



Breakdown – building

Building emissions Highlights

- 41% of total emissions
- 505.4 tCO₂e
- 0.07 tCO₂e per m²
- 5% decrease from the previous year
- Electricity accounts for 90% of the building emissions, followed by natural gas which accounts for 10%

Note: Any changes in electricity and gas emissions are attributed to updated 2017 Defra emission conversion factors.

ACTION! Measure actual consumption

Did you know? By installing energy efficient lighting you can save 20% of electricity



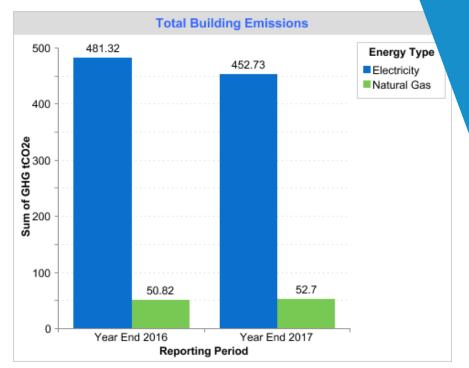


FIG 4- Breakdown of building emissions by energy type for reporting years ending 2016 and 2017





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Breakdown – business travel

Business travel emissions Highlights

- 13.5% of total emissions
- 165.9 tCO₂e
- 5% increase from the previous year
- Diesel car travel accounts for 47% of the travel emissions

ACTION! Refer to the travel toolkit for ways to manage travel emissions



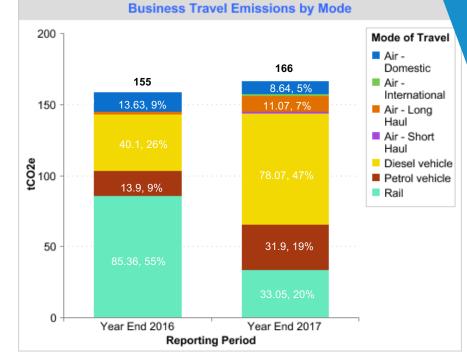


FIG 5- Breakdown of travel emissions by mode of travel for reporting years ending 2016 and 2017





Breakdown – fleet

Fleet travel emissions Highlights

- 42% of total emissions
- 517.7 tCO₂e
- 3% decrease from the previous year

Note: Fleet travel refers to company owned vehicles

ACTION! Record other types of business travel and promote public transport options for business meetings. Refer to the travel toolkit for ways to manage fleet travel emissions.

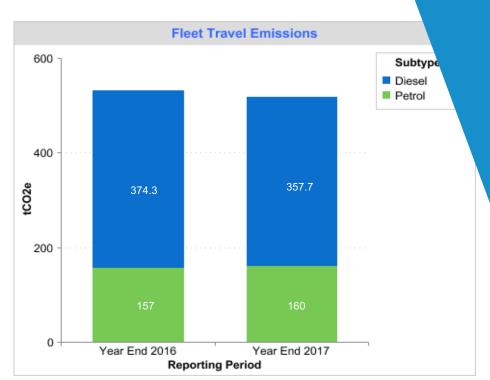


FIG 6- Breakdown of fleet emissions by fuel type for reporting years ending 2016 and 2017









Breakdown – waste

Waste emissions Highlights

- 0.7% of total emissions
- 8.9 tCO₂e
- 11% increase from the previous year
- 83% of waste was recycled this year (similar to last year)



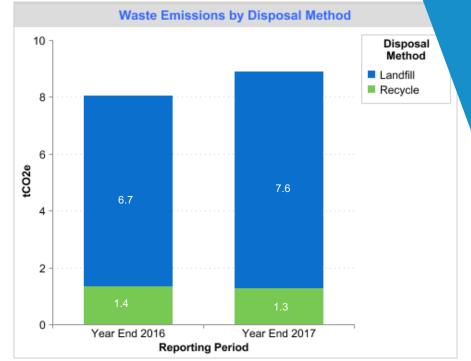


FIG 7- Breakdown of waste emissions category by disposal method, weight and emissions for the reporting years ending 2016 and 2017





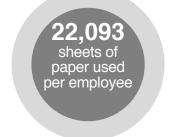
Breakdown – paper procurement

Paper use emissions **Highlights**

- 2.8% of total emissions
- 35 tCO₂e
- 91% increase from the previous year
- The majority of procured paper was from recycled sources

ACTION! Paper use can be reduced by encouraging staff to work and meet in a paperless way. Opt for digital subscriptions to magazines and newsletters, encourage staff to read on screen rather than print documents and reuse printed material wherever possible. Increase paper recycling in the office by communicating what is recyclable and how waste should be correctly disposed.

Did you know? By using recycled content paper, carbon emissions from paper use are reduced by 30%



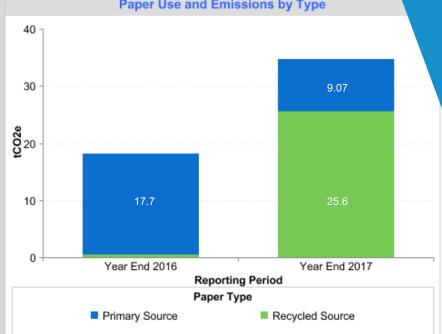


FIG 8- Breakdown of paper procurement emissions by weight and emissions for reporting years ending 2016 and 2017





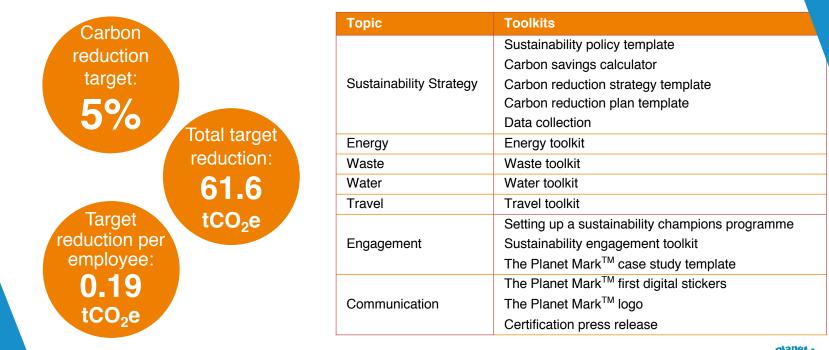
Paper Use and Emissions by Type



Carbon reduction target

The Planet MarkTM toolkits provide advice and resources to support you towards achieving your carbon reduction target. You can access all our resources through The Planet MarkTM website using your unique login. Please contact your Planet Mark Account Manager if you require a login account.

Follow link to access toolkits: http://www.theplanetmark.com/members/login/







About this report – data quality

The data quality score is based on the 'Data Quality Matrix' in The Planet Mark[™] Code of Practice and provides an indication of data assurance when using information in this report in your business.

	1st Sept 2015 - 31st Aug 2016	1st Sept 2016 - 31st Aug 2017	Definition
Relevance of boundary	3	3	Boundary accurately reflects the majority of the business carbon footprint for studied period.
Data completeness	3	3	12 months of data provided and all GHG emission sources within the boundary accounted for, no disclosure of exclusions.
Transparency	3	3	Data collection procedure clearly disclosed and full disclosure of assumptions. Some evidence provided.
Data accuracy	a accuracy 3		Efforts made to reduce uncertainties. No estimated meter readings, actual data provided where possible. Some estimations/sampling.
Consistency	3	3	Largely consistent or improved boundary and data completeness with documentation of changes made and reasons why.
TOTAL SCORE (out of 20)	15 out of 20	15 out of 20	
	75.00%	75.00%	

Target data quality improvement **2 points**





About this report – general info

Company Name	Bowmer and Kirkland
Sector	Construction
Reporting Period	1st September 2016 - 31st August 2017
Year Of Certification	10th
Reporting Boundary	Bowmer & Kirkland construction divisions of North Midlands, East Midlands, West Midlands, South Midlands, North-West Region, North East & Scotland Region, KPS, Holdings and the Southern Region. 6 offices in the UK. All offices included in reporting. Excludes sites and project operations.
Emission sources included	Electricity, natural gas, waste, fleet, business travel (non fleet, air, rail), paper
Total FTE Employees	327
Total Internal Floorspace (m ²)	7,742
Data Collection Lead	Graham Lee, Technical Manager (G.Lee@bandk.co.uk)
Significant Reporting Changes	Increase in floor space; Manchester office floor area that has more than doubled. Additional air conditioning units at the headquarters offices at Heage.
Baseline Conversion Factor	Defra 2016
Current Conversion Factor	Defra 2017
Methodology	We follow the GHG Protocol for Corporate Emission Reporting. Refer to The Planet Mark [™] Code of Practice for detailed information on the methodology and standards used in the preparation of this report
Community Project	Contributions to the Eden Project and to Cool Earth's Asháninka community rainforest project have been made as part of The Planet Mark™ Certification
Prepared by:	Nadia Karagianni, Sustainability Consultant, The Planet Mark [™]
Checked by:	Flavia Tavares, Sustainability Consultant, The Planet Mark [™]
Date:	12 February 2018





About this report – caveats

	Operational Boundary	Scope	Unit	Data Collection	Data Accuracy	Evidence Submitted	Omissions, estimates or extrapolations
1	Electricity	2	kWh	Primary source - invoices	Actual and estimated monthly readings	Internal energy report. Breakdown of charges and consumption for the Heage and Glasgow sites.	Total Solar PV generated electricity at Heage office is 20,581kWh. Estimated by B&K that 50% of this (10,290kWh) is used on-site. Assumed this is without Feed in Tarif payment, and therefore has zero emissions factor applied. Facilities at the High Edge Court site at Heage that are not part of the main construction company are excluded from the carbon footprint. The relevant meters are HEC Orig, HEC Ext1, HEC Ext 2 and HEC Ext 2 KPS. As a small part of the original offices is leased out to another company the readings for HEC Orig have been reduced by their floor area which represents 9.6% of the total floor area. The detailed breakdowns, and any other recharges, have not been reviewed for other offices.
	Natural Gas	1	kWh	Primary source - invoices	Actual and estimated monthly readings	Invoices for 12 month period for the Heage office site.	The total gas readings for High Edge Court, Heage have been reduced by 9.6% of the total floor area (B&K estimate). This assumes that the company leasing space (see electricity) uses 9.6% of the total gas consumed on site. The detailed breakdowns, and any other recharges, have not been reviewed for other offices.
I	Landfill	3	tonnes	Secondary source - internal report	Estimated	Internal report	Based on site manager assumptions on frequency and weight per site.
1	Recycled	3	tonnes	Secondary source - internal report	Estimated	Internal report	Based on site manager assumptions on frequency and weight per site.
	Vehicle - Fleet - Diesel	1	litres	Primary source - expense claims	Actual	Business mileage report	None
1	Vehicle - Fleet - Petrol	1	litres	Primary source - expense claims	Actual	Business mileage report	Includes 44 litres petrol fuel used by Hybrid vehicles
1	Vehicle - Non-Fleet - Diesel	3	litres	Primary source - expense claims	Actual	Business mileage report	None
	Vehicle - Non-Fleet - Petrol	3	litres	Primary source - expense claims	Actual	Business mileage report	None
	Vehicle - Non-Fleet - Hybrid	3	litres	Primary source - expense claims	Actual	Business mileage report	None
	Air	3	pkm	Primary source - Travel agent report	Actual	Travel agent report	Includes air travel booked via the travel agent and directly with the airline.
	Rail	3	pkm	Primary source - expense claims	Actual	Travel agent report	None
	Paper	3	tonnes	Primary source - invoices	Actual and estimated	Internal report. Schedule of invoices for paper supplies. Breakdown of paper purchases for printing department at Heage office site.	None



The Global Goals or the United Nation's Sustainable Development Goals (UN SDGs) are a collection of 17 interrelated global goals set by the United Nations. The Global Goals cover a broad range of social and economic development issues. These include poverty, hunger, health, education, climate change, gender, equality, water, sanitation, energy.

With 193 governments agreeing to deliver 17 goals tackling major world issues by 2030, change lies ahead for businesses, not only to ensure their strategies align with the goals, but also to assess and evidence their impact.

To help businesses assess their impact, The Planet Mark[™] has developed a diagnostic table to gauge contributions to the Global Goals and to illustrate the international influence of your commitment to sustainability.



of businesses say they are already planning how they will engage with the SDGs

41%

of businesses say they will embed SDGs into strategy and way they do business, within 5 years

90%

of citizens say it's *important for* business to sign up to the SDGs



The Global Goals

Congratulations! By achieving **The Planet Mark**[™] you are directly contributing to

7 Sustainable Development Goals. This is your contribution:



The Planet Mark[™]

in partnership with **The Eden Project**

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