

Carbon Calculated Report: Qualified Greenhouse Gas Inventory



Client: Bidvest Group Ltd
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Overview of Bidvest's Carbon Dioxide Equivalent (CO₂e) Emissions

Reporting period:

Financial year 2012: 01 July 2011 – 30 June 2012

Carbon footprint calculation conducted on:

Bidvest Group Limited (all divisions)

Methodology:

Greenhouse Gas Protocol – Corporate Accounting and Reporting Standard

Total Bidvest employees covered by report:	105 103
Percentage Bidvest employees covered by report:	100%
Revenue (Million Rand)	137 235.02

Scope 1 Direct Emissions	Metric tonnes of CO₂e
Equipment owned or controlled consuming petrol	53 170.12
Equipment owned or controlled consuming diesel	288 058.93
Equipment owned or controlled consuming biodiesel	10 292.61
Equipment owned or controlled consuming LPG	1 227.78
Equipment owned or controlled consuming LNG	4 360.47
Equipment owned or controlled consuming coal	38 550.21
Equipment owned or controlled consuming gas	2 014.18
TOTAL SCOPE 1 EMISSIONS	397 674.30
Scope 2 Indirect Emissions	
Purchased electricity	309 030.96
TOTAL SCOPE 1 & 2 EMISSIONS	706 705.26
Scope 3 Indirect Emissions	
Business travel in commercial airlines	10 245.37
Business travel in rental cars	474.13
Business travel in hotel accommodation	437.36
Consumption of office paper	7 966.38
TOTAL SCOPE 3 EMISSIONS	19 123.25
TOTAL BIDVEST GROUP LTD 2012 EMISSIONS CO₂e (TONNES)	725 828.51
Emissions per full-time employee (t/FTE)	6.91
Emissions per million Rand Revenue (t/Rm)	5.29

NOTE: Overview of individual business divisions are provided in Appendix A



Bidvest Group Ltd carbon emissions in tonnes of CO₂e and intensity figures by division and sub division in 2012:

Bidvest Division	Bidvest Subdivision	Total emissions (t CO ₂ e)	Total full-time employees	Emissions per full-time employee	Revenue in million Rand	Emissions per Million Rand Revenue
Bidvest Corporate		12 515.20	644	19.43	799.69	15.65
Bidvest Foodservice group		269 718.77	19 221	14.03	70 756.63	3.81
	Asia-Pacific	77 528.26	4 486	17.28	23 493.35	3.30
	South Africa	60 401.11	3 749	16.11	6 148.50	9.82
	Europe	131 789.40	10 986	12.00	41 114.79	3.21
Bidvest Namibia		108 646.09	3 110	34.93	2 971.32	36.56
	Commercial Holdings	5 098.63	1 323	3.85	1 522.81	3.35
	Fisheries Holdings	103 547.46	1 787	57.94	1 494.01	69.31
Bidvest South Africa		334 948.46	82 128	4.08	62 707.38	5.34
	Bidvest Automotive	58 863.43	5 870	10.03	19 130.90	3.08
	Bidvest Electrical	13 281.60	2 066	6.43	4 286.09	3.10
	Bidvest Financial Services	16 104.78	1 285	12.53	1 715.66	9.39
	Bidvest Freight	75 879.68	4 800	15.81	20 868.63	3.64
	Bidvest Industrial	11 218.52	1 190	9.43	1 473.92	7.61
	Bidvest Office	27 628.36	4 169	6.63	4 183.98	6.60
	Bidvest Paper Plus	39 294.94	4 323	9.09	3 858.15	10.18
	Bidvest Rental and Products	59 788.78	5 970	10.01	2 057.28	29.06
	Bidvest Services	18 879.49	47 260	0.40	3 086.48	6.12
	Bidvest Travel and Aviation	14 008.87	5 195	2.70	2 046.30	6.85
Bidvest Group Total		725 828.51	105 103	6.91	137 235.02	5.29



Bidvest Group Ltd carbon emissions in tonnes CO₂e by scope per division and sub division in 2012:

Bidvest Division	Bidvest Subdivision	Scope 1	Scope 2	Scope 1&2	Scope 3	Total
Bidvest Corporate		11 275.48	846.08	12 121.57	393.63	12 515.20
Bidvest Foodservice group		146 774.24	118 855.96	265 630.19	4 088.58	269 718.77
	Asia-Pacific	24 115.49	51 240.96	75 356.45	2 171.81	77 528.26
	South Africa	22 064.00	37 477.43	59 541.43	859.68	60 401.11
	Europe	100 594.75	30 137.57	130 732.32	1 057.08	131 789.40
Bidvest Namibia		100 888.68	1 713.37	102 602.05	6 044.04	108 646.09
	Commercial Holdings	3 377.60	1 065.97	4 443.58	655.05	5 098.63
	Fisheries Holdings	97 511.07	647.40	98 158.48	5 388.99	103 547.46
Bidvest South Africa		138 735.91	187 615.55	326 351.45	8 597.00	334 948.46
	Bidvest Automotive	21 344.70	36 403.69	57 748.40	1 115.03	58 863.43
	Bidvest Electrical	8 028.99	4 979.49	13 008.48	273.12	13 281.60
	Bidvest Financial Services	804.26	13 842.88	14 647.14	1 457.64	16 104.78
	Bidvest Freight	23 045.94	51 751.77	74 797.71	1 081.97	75 879.68
	Bidvest Industrial	3 343.85	6 652.23	9 996.08	1 222.43	11 218.52
	Bidvest Office	11 771.81	14 871.36	26 643.17	985.19	27 628.36
	Bidvest Paper Plus	3 770.13	34 835.88	38 606.01	688.94	39 294.94
	Bidvest Rental and Products	47 715.44	11 538.13	59 253.57	535.22	59 788.78
	Bidvest Services	14 476.98	3 851.08	18 328.06	551.43	18 879.49
	Bidvest Travel and Aviation	4 433.80	8 889.03	13 322.83	686.04	14 008.87
Bidvest Group Total		397 674.30	309 030.96	706 705.26	19 123.25	725 828.51



Abbreviations and Glossary of Terms

A/C	Air conditioning
Baseline year	An historical year used to compare preceding year's emissions.
CO₂	Carbon dioxide
CO₂e	Carbon dioxide equivalent – standardisation of all greenhouse gases to reflect the global warming potential relative to carbon dioxide.
CDP	Carbon Disclosure Project
Defra	United Kingdom Department of Environment, Food and Rural Affairs.
Direct emissions	Greenhouse gas emissions from facilities/sources owned or controlled by a reporting company, e.g. generators, blowers, vehicle fleets.
Emission factors	Specific value used to convert activity data into greenhouse gas emission values. Presented in specific units, e.g. kgCO ₂ /km travelled.
FTEs	Full-time employees
GHG	Greenhouse gases
GHG Protocol	Greenhouse Gas Protocol – uniform methodology used to calculate the carbon footprint of an organisation.
GWP	Global Warming Potential – an indication of the global warming effect of a greenhouse gas in comparison to the same weight of carbon dioxide.
HCFC	Hydrochlorofluorocarbon
IPCC	International Panel on Climate Change
Indirect emissions	Greenhouse gas emissions from facilities/sources that are not owned or controlled by the reporting company, but for which the activities of the reporting company are responsible, e.g. purchasing of electricity.
Operational boundary	Determination of which facilities or sources of emissions will be included in a carbon footprint calculation.
Organisational boundary	Determination of which business units of an organisation will be included in a carbon footprint calculation.
Optional information	Information relating to emissions that are recommended but not compulsory under the GHG Protocol, e.g. emissions from air travel.
Relevant emissions	Emissions generated as a result of the business activities of the reporting company.
Required information	Information relating to emissions that are compulsory under the GHG Protocol, namely direct emissions and indirect emissions from purchased electricity.
Scope 1 emissions	Emissions resulting from equipment owned or controlled by a reporting company.
Scope 2 emissions	Emissions resulting from consumption of electricity purchased by a reporting company.
Scope 3 emissions	Emissions resulting from other activities of a reporting company, such as commuting travel, business air travel, paper consumption.
UNEP	United Nations Environment Programme
WBCSD	World Business Council for Sustainable Development
WRI	World Resources Institute



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Section A: Introduction

This report constitutes the fifth carbon footprint commissioned by Bidvest Group Ltd. (Bidvest) and should be compared against the baseline carbon footprint calculations for 2008. All reports have been prepared using the **Greenhouse Gas (GHG) Protocol Corporate Accounting and Reporting Standard** methodology; the most widely used international carbon calculation methodology, compatible with other GHG standards such as the ISO14064. The report allows for direct integration with national or international greenhouse gas registries. In accordance with the GHG Protocol, clear organisational and operational boundaries have been defined and agreed to by Bidvest and the relevant activity data has been supplied by Bidvest for calculation purposes

Bidvest has collated relevant greenhouse gas emissions data from their different business divisions and activities as part of their 2012 Sustainability Report. All Bidvest business units have been included in the inventory. One hundred per cent of Bidvest full-time employees (FTE's) are covered by this report.

The GHG-emitting activities covered by the report include **direct** emissions resulting from fuel used by Bidvest-owned or controlled equipment and vehicles, including: diesel, biodiesel, petrol, LPG, LNG, propane gas and coal; **indirect** emissions from purchased electricity (referred to as Scope 1 and 2 emissions respectively); and selected indirect emissions resulting from Bidvest's business travel activities by aircraft, rental cars (new) and overnight accommodation (new) and the consumption of office paper (referred to as Scope 3 emissions). It is important to highlight that under the GHG Protocol, the reporting of both direct emissions and indirect emissions resulting from purchased electricity are compulsory. All other indirect emissions are reported on a voluntary basis.

Although conducted in accordance with the Greenhouse Gas (GHG) Protocol, this report is lacking certain compulsory and voluntary information as required by the GHG Protocol. This includes activities accounting for air conditioning and refrigeration gas refills (Scope 1), employee commuting, travel claims/allowances, and other third party production of consumed materials, outsourced activities and end-use of products sold by Bidvest (all Scope 3).

Emissions within the Bidvest car rental operations resulting from client usage of Bidvest-owned cars are not included in this report, as directed by Bidvest. These would normally be reported under Scope 1 direct emissions.

GHG Protocol calculation methodologies have been adopted where appropriate. Exceptions include emissions relating to paper consumption, where a customised methodology has been used that incorporates environmental data from the manufacturer of the paper.

Carbon Calculated has gone to all reasonable lengths to ensure that the primary information provided by Bidvest is correct but Carbon Calculated takes no responsibility for any inaccuracies that this information might contain. This report, in its entirety, is both material and complete and is intended for Bidvest's internal use only. Information may, however, be extracted for reporting purposes, such as for submission into international and/or national Greenhouse Gas registries and sustainability reporting. It can also be presented for third-party verification purposes.

The GHG Protocol

The GHG Protocol is a multiple-stakeholder partnership of business, NGOs and governments led by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD). It is the best source of information about corporate GHG accounting and reporting, and draws on the expertise and contributions of individuals and organisations from around the world. The GHG Protocol is the most widely-used standard for mandatory and voluntary GHG Programmes and is compatible with other international GHG standards such as ISO 14064. It is also analogous to the generally-accepted financial accounting standards for the consistent accounting reporting purposes of companies.



Section B: Required Information

1. *Company Description*

Bidvest is an international service, trading, and distributions company. It is a geographically dispersed and multi-faceted businesses conglomeration with group headquarters based in Johannesburg, South Africa (refer to Appendix A for a breakdown of these operations).

Bidvest has a proud history of measurement and reporting of its sustainability indicators, including its environmental impact across its group and geographical reach. It is a founding member of the Johannesburg Stock Exchange's Socially Responsible Investment Index (JSE SRI) and is a South African company listed on the Dow Jones Sustainability World Index. This report has been completed as part of Bidvest's corporate sustainability reporting activities for 2012.

2. *Inventory Boundaries*

2.1 Organisational Boundary

Definition: Organisational Boundaries

Organisational boundaries determine which business units (core, subsidiaries, franchises, etc.), facilities, or physical places of operation, owned or controlled by the reporting company, are included in the carbon footprint. The more complex the company structure, the more important are the boundaries of an organisations for the clear definition and scope of the report.

Bidvest restructured their business in 2011. The following GHG Inventory reflects the consolidation in 2011 into four Bidvest business divisions from ten divisions in place in the previous year. All of Bidvest's reporting years contain the same organisational boundaries, creating a platform for comparison of the total emissions between the five years, despite the business restructuring. The emissions resulting from the activities of all of Bidvest's 105 103 full-time employees as of the end of 2011 are captured in this report.

All South African and international business activities fall under the following four Bidvest Group divisions¹:

- Bidvest Corporate
- Bidvest South Africa
- Bidvest Foodservice group
- Bidvest Namibia

Bidvest has business operations in the following countries, all of which are included in this report: South Africa, United Arab Emirates, United Kingdom, Isle of Man, Botswana, Democratic Republic of Congo, Malawi, Zambia, Uganda, Mozambique, Zimbabwe, Namibia, Lesotho, Swaziland, Kenya, Seychelles, Tanzania, Mauritius, China, Singapore, Australia, New Zealand, Belgium, Poland, Czech Republic, Slovakia, and the Netherlands.

¹ For details of the subdivisions per division, view Appendix A



2.2 Operational Boundary

Definition: Operational Boundaries

Operational boundaries determine the business activities of the reporting company that generate emissions, which of these activities should be included in the calculation, and how these activities should be classified (i.e. direct or indirect emissions).

Greenhouse Gas (GHG) emissions resulting from the following activities have been calculated:

- Equipment and vehicles owned or controlled by Bidvest that consume petrol
- Equipment and vehicles owned or controlled by Bidvest that consume diesel
- Equipment and vehicles owned or controlled by Bidvest that consume biodiesel
- Equipment owned or controlled by Bidvest that consume LPG
- Equipment owned or controlled by Bidvest that consume LNG
- Equipment owned or controlled by Bidvest that consume coal
- Equipment owned or controlled by Bidvest that consume 'other' gas²
- Consumption of purchased electricity
- Business travel in commercial airlines
- Business travel in rental cars (New in 2012)
- Business travel in overnight accommodation (New in 2012)
- Consumption of office paper

2.2.1 Recommended Improvements

It is recommended that Bidvest consider incorporating the following activities in their future data collection:

- Air conditioning and refrigeration gas refills be recorded
- Fuel used in owned equipment to be recorded separately from fuel used in fleet vehicles
- 'Other' gases should be recorded as individual gases by type of gas such as propane and butane. Currently these are lumped together as one category – 'other gases'.
- Emissions from car rental businesses
- Employee commuting
- Travel claims and/or travel allowances

2.3 Reporting Period

The reporting period of this report is for the Bidvest 2012 financial year (1 July 2011 – 30 June 2012).

3. Information on Bidvest's Emissions

3.1 Total Scope 1 & 2 Emissions

The GHG Protocol requires carbon footprint calculations to include all direct emissions under Scope 1, and indirect emissions from purchased electricity under Scope 2, as compulsory reporting. Other activities under indirect emissions, Scope 3, are voluntarily reported. Refer to Appendix B for a diagram to illustrate direct and indirect emissions and the different scopes of reporting.

² It was not clear what gas was consumed by Bidvest. It was assumed to be Propane.



Definition: Scope 1 Emissions

Emissions from sources owned or controlled by the reporting company, e.g. generators, refrigeration, air-conditioning units.

Definition: Scope 2 Emissions

Emissions associated with the consumption of purchased electricity, heat or steam from a source that is not owned or controlled by the reporting company, e.g. an electricity utility such as Eskom.

Definition: Direct and Indirect Emissions

Under the GHG Protocol, emissions are categorised as 'direct' when they are generated from activities or sources within the reporting company's organisational boundary and which the company owns or controls. 'Indirect' sources are those emissions related to the company's activities that are emitted from sources owned or controlled by another company, e.g. purchased electricity, rental cars, commercial airlines or paper.

Emission Factors:

Emission factors convert activity data (e.g. amount of fuel used, kilometres driven, and kilowatt hours of purchased electricity) into a value indicating carbon dioxide equivalent (CO₂e) emissions generated by that particular activity.

Default values are used by the GHG Protocol to assist businesses that are unable to develop accurate customised values. These default values are representative averages based on the most extensive data sets available and are largely identical to those used by the Intergovernmental Panel on Climate Change (IPCC), the premier authority on greenhouse gas accounting practices at the global level.

The GHG Protocol recommends, however, that businesses should use customised values whenever possible, as industrial processes or the composition of fuels used by businesses may differ with time and by region. This report largely uses the latest emission factors provided by the UK government's Department of Environment, Food and Rural Activities (Defra), May 2012. These have been adopted by the GHG Protocol as *de facto* emission factors and are updated on a regular basis.

In reporting emissions generated by the consumption of electricity purchased in South Africa from Eskom, the emissions factor provided by the utility's annual report (2012) has been used to provide local context accuracy.

3.2 Emissions of each GHG

All emissions are calculated as carbon dioxide equivalent gases (CO₂e), as required by the GHG Protocol.



DIRECT SCOPE 1 EMISSIONS FROM BIDVEST 2012

Scope	Description	Emissions Factors kg CO ₂ e/unit ³	Business Division	Total Consumption	Metric tonnes of CO ₂ e emissions
1.	Equipment owned or controlled by Bidvest that consumes petrol (litres of petrol)	2.3144 kg CO ₂ e/litre	Bidvest Corporate	35 091	81.21
			Bidvest Foodservice group	3 841 998	8 891.92
			Bidvest Namibia	490 025	1 134.11
			Bidvest South Africa	18 606 493	43 062.87
			TOTAL	22 973 607	53 170.12
	Equipment owned or controlled by Bidvest that consumes diesel (litres of diesel)	2.6769 kg CO ₂ e/litre	Bidvest Corporate	4 181 804	11 194.27
			Bidvest Foodservice group	46 712 377	125 044.36
			Bidvest Namibia	36 738 533	98 345.38
			Bidvest South Africa	19 976 436	53 474.92
			TOTAL	107 609 149	288 058.93
	Equipment owned or controlled by Bidvest that consumes HTVO biodiesel (litres of biodiesel)	2.9652 ⁴ kg CO ₂ e/litre	Bidvest Corporate	0	-
			Bidvest Foodservice group	8 488	25.17
			Bidvest Namibia	0	-
			Bidvest South Africa	0	-
			TOTAL	8 488	25.17
	Equipment owned or controlled by Bidvest that consumes ME biodiesel (litres of biodiesel)	2.8605 ⁵ kg CO ₂ e/litre	Bidvest Corporate	0	-
			Bidvest Foodservice group	2 634 523	7 536.05
			Bidvest Namibia	0	-
			Bidvest South Africa	954 865	2 731.39
			TOTAL	3 589 388	10 267.44
	Equipment owned or controlled by Bidvest that consumes LPG (kilograms of LPG)	2.9340 ⁶ kg CO ₂ e/kg	Bidvest Corporate	0	-
			Bidvest Foodservice group	101 630	298.18
			Bidvest Namibia	10 489	30.77
			Bidvest South Africa	306 347	898.83
			TOTAL	418 466	1 227.78
	Equipment owned or controlled by Bidvest that consumes LNG (kilograms of LNG)	2.7244 kg CO ₂ e/kg	Bidvest Corporate	0	-
			Bidvest Foodservice group	1 594 027	4 342.81
			Bidvest Namibia	0	-
Bidvest South Africa			6 484	17.67	
TOTAL			1 600 511	4 360.47	
Equipment owned or controlled by Bidvest that consumes coal (kilograms of industrial coal)	2 183.8 kg CO ₂ e/kg	Bidvest Corporate	0	-	
		Bidvest Foodservice group	0	-	
		Bidvest Namibia	0	-	
		Bidvest South Africa	17 652 810	38 550.21	
		TOTAL	17 652 810	38 550.21	
Equipment owned or controlled by	GWP: 3.3 ⁷	Bidvest Corporate	0	-	
		Bidvest Foodservice group	192 650	635.75	

³ Unless otherwise stated, all emission factors are provided by UK Government Department of Environment, Food and Rural Affairs (Defra), [Guideline to Defra's GHG Conversion Factors for Company Reporting; Updated May 2012](http://www.defra.gov.uk/environment/business/reporting/conversion-factors.htm). Available from: <http://www.defra.gov.uk/environment/business/reporting/conversion-factors.htm>

⁴ Biodiesel was divided into two categories HTVO (Hydro-treated Vegetable Oil) and ME (Methyl Ester). Emission factors were extracted from Defra September 2009 provided by UK Government Department of Environment, Food and Rural Affairs (Defra), [Guideline to Defra's GHG Conversion Factors for Company Reporting; Updated September 2009](http://www.defra.gov.uk/environment/business/reporting/conversion-factors.htm).

⁵ Biodiesel was divided into two categories HTVO (Hydro-treated Vegetable Oil) and ME (Methyl Ester). Emission factors were extracted from Defra September 2009 provided by UK Government Department of Environment, Food and Rural Affairs (Defra), [Guideline to Defra's GHG Conversion Factors for Company Reporting; Updated September 2009](http://www.defra.gov.uk/environment/business/reporting/conversion-factors.htm).

⁶ The emission factor for LPG is 1.5326 kg CO₂e/litre and the conversion between kilograms and m³ is 522.4.

⁷ The type of gas consumed was not provided. It was assumed Propane was combusted.



that consumes 'other' gas (kilograms of gas)	Bidvest Namibia	417 701	1 378.41
	Bidvest South Africa	8	0.03
	TOTAL	610 359	2 014.18

INDIRECT SCOPE 2 EMISSIONS FROM PURCHASED ELECTRICITY FOR BIDVEST 2012

Scope	Description	Emissions Factors	Business Division	Total Consumption (kWh)	Metric tonnes of CO ₂ e emissions
2	Purchased electricity	Various emission factors used, based on location of sub division	Bidvest Corporate	1 464 405	846.08
			Bidvest Foodservice group	180 419 109	118 855.96
			Bidvest Namibia	7 229 416	1 713.37
			Bidvest South Africa	190 722 461	187 615.55
			TOTAL	379 835 391	309 030.96
	Purchased electricity from renewable resources	0 kg CO ₂ e/kWh	Bidvest Foodservice group	57 994 258	0
			Bidvest South Africa	75 000	0
			TOTAL	58 069 258	0

ELECTRICITY EMISSION FACTORS FOR DIFFERENT COUNTRIES/REGIONS

Country/Region	Emissions Factors (kg CO ₂ e/kWh) ⁸
South Africa	0.990 ⁹
Botswana	2.063
United Kingdom	0.457 ¹⁰
Mozambique	0.001
Zambia	0.003
Zimbabwe	0.619
Namibia	0.237 ¹¹
New Zealand	0.167
Singapore	0.519
Peoples Republic of China	0.743
Australia	0.853
Netherlands	0.374
Belgium	0.218
United Arab Emirates	0.631
Poland	0.640
Czech Republic	0.514
Slovakia	0.222
Democratic Republic of Congo	0.003
Tanzania	0.281
Kenya	0.395
OECD Europe: Isle of Man	0.326
Rest of Africa: Lesotho, Malawi, Mauritius, Seychelles, Swaziland and Uganda	0.494

⁸ All emission factors extracted from the International Energy Agency, *CO₂ Emissions from Fuel Combustion: Highlights*, OECD/IEA, Paris, 2011, p109, unless indicated otherwise. Emission factors are for 2009 and exclude losses during transmission and distribution.

⁹ The emission factor for South Africa was extracted from Eskom, Annual Report 2012, Eskom, Johannesburg, 2012

¹⁰ Emission factor for the United Kingdom was sourced from Defra, May 2012 and represents the emission factor for 2010.



Carbon Dioxide Equivalent (CO₂e)

Due to the varying ability of greenhouse gases to trap heat in the atmosphere, some are more harmful to the climate than others. Each greenhouse gas has a 'global warming potential' (GWP), which refers to its heat trapping potential relative to that of CO₂. Therefore, to provide a comparable final figure, all emissions are reported as a relative figure to CO₂, i.e. as CO₂e values.

The six main greenhouse gases covered by the GHG Protocol and reported as CO₂e are:

- Carbon dioxide (CO₂)
- Methane (CH₄)
- Nitrous Oxide (N₂O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulphur hexafluoride (SF₆)

3.3 Methodologies Used

This calculation was conducted in alignment with the GHG Protocol, using the following calculation tools.

- CO₂ emissions from business travel (GHG Protocol)
- CO₂ emissions from fuel-use combustion (GHG Protocol)
- CO₂ emissions from transport or mobile services (GHG Protocol)
- Individual CO₂ emissions from purchased electricity (GHG Protocol)
- CO₂ emissions resulting from the purchasing of office paper (customised by Carbon Calculated using paper manufacturers' environmental profiles and GHG Protocol's individual CO₂ emissions from purchased electricity, heat and steam)

3.4 Specific Exclusions

The following exclusions of emission sources (and their explanations) are described below:

Scope 1: Direct emissions:

- Business travel in corporate jets – no aircraft owned by Bidvest.
- Air conditioning and refrigeration gas refills– information not currently available.
- Employee commuting in company-owned or controlled vehicles – information not available or insufficiently differentiated to properly ascribe fuel combustion to specific activities.
- Car rental businesses (fuel use as Scope 1) – under discussion as to whether to include.

Scope 3: Indirect emissions:

- Employee commuting in cars, trains or buses – information not available.
- Travel claims by employees using private vehicles for business purposes – information not available.
- Outsourced activities such as shipping, courier services and printing services – partial information not sufficient for this report.
- End use of products sold by the reporting company – information not available.
- Emissions resulting from the generation and disposal of waste – insufficient information and not deemed accurate enough for reporting purposes.

¹¹ The emission factor for Namibian electricity was recorded as 0.1 kgCO₂e/kWh in the Bidvest 2010 Carbon Footprint Report, extracted from the IEA 2009 Highlights Report for electricity and heat generation in 2007. The IEA 2010 Highlights Report indicates the emission factor of 0.424 kg CO₂e/kWh for Namibian electricity and heat generation in 2008 and the IEA 2011 Highlights Report indicates the emission factor of 0.237 kg CO₂e//kWh for Namibian electricity and heat generation in 2009. This results in a material difference between years in emissions from electricity in Namibia.



Section C: Optional Information under the GHG Protocol

4. *Relevant Scope 3 Emissions*

The following table outlines Scope 3 emissions generated during Bidvest's 2012 financial year. Please refer to the footnotes below the table for further details.

Definition: Scope 3 Emissions

Scope 3 emissions are indirect emissions, other than purchased electricity, which can be described as relevant to the activities of the reporting company. Under the GHG Protocol it is not compulsory to report them. Certain GHG reporting registries, however, require that some Scope 3 emissions be reported under different circumstances.

Air Travel and the Multiplier Effect

The GHG Protocol uses emissions factors for air travel based on size of aircraft, occupancy levels and fuel consumption proposed by the UK government's Defra paper. It should be highlighted that these assumptions do not cater for the increased global warming effects of aviation that are higher than the impact of CO₂ emissions alone - "due to water vapour, sulphate or soot particles, indirect effects of nitrogen oxide emissions on the concentration of ozone and methane, or through the induced formation of clouds".

As a result of excessive emissions during take-off and landing, different factors are used in calculating emissions of short-, medium- and long-haul flights, in accordance with the GHG Protocol. Many organisations then multiply these emissions by a multiplier factor to provide a more realistic quantification of the global warming effect of aviation emissions. To date there is no universally-accepted multiplier factor, although it is believed that between 2 and 5 would be accurate. WWF, the global conservation organisation, for example, uses a multiplier effect of 2.7. This report does not include a multiplier effect for air aviation emissions.

The IPCC Aviation and the global Atmosphere 8.2.2.3 states that 9-10% should be included to take into account non-direct routes (i.e. not along the straight line distances between destinations) and delays/circling. Airline industry representatives have indicated that the percentage uplift for short-haul flights should be higher and for long-haul flights will be lower; however specific data is not currently available to provide separate factors. A 9% uplift factor has been used for all flights in this report.



INDIRECT SCOPE 3 EMISSIONS FROM BIDVEST 2012

Scope	Description	Emissions Factors kg CO ₂ e/unit ¹²	Business Division	Flight Kilometres	Metric tonnes of CO ₂ e emissions	
3	Business travel in commercial airlines ¹³	Local flights: 0.16685 kgCO ₂ e/ passenger km	Bidvest Corporate	0	0	
			Bidvest Foodservice group	28 961	5.27	
			Bidvest Namibia	0	0	
			Bidvest South Africa	11 305	2.06	
			TOTAL	36 480 527	7.32	
	Business travel in commercial airlines	Regional flights: 0.09522 kgCO ₂ e/ passenger km	Bidvest Corporate	2 505 814	260.08	
			Bidvest Foodservice group	8 702 014	903.18	
			Bidvest Namibia	1 621 528	168.30	
			Bidvest South Africa	29 281 281	3 039.10	
			TOTAL	42 110 637	4 370.65	
	Business travel in commercial airlines	International flights: 0.10896 kgCO ₂ e/ passenger km	Bidvest Corporate	362 787	43.09	
			Bidvest Foodservice group	20 263 065	2 406.57	
			Bidvest Namibia	10 394 616	1 234.53	
			Bidvest South Africa	18 382 318	2 183.20	
			TOTAL	49 402 786	5 867.39	
	TOTAL Flights				91 553 689	10 245.37
		Description	Emissions Factors kg CO₂e/unit¹⁴	Business Division	Consumption	Metric tonnes of CO₂e
		Business travel in rental cars (litres of petrol)	2.3144 kg CO ₂ e/litre	Bidvest Corporate	20 697	47.90
				Bidvest Foodservice group	3 219	7.45
Bidvest Namibia				3 480	8.05	
Bidvest South Africa				74 102	171.50	
TOTAL				101 498	234.91	
	Business travel in rental cars (litres of diesel)	2.6769 kg CO ₂ e/litre	Bidvest Corporate	0	-	
			Bidvest Foodservice group	2 703	7.24	
			Bidvest Namibia	0	-	
			Bidvest South Africa	86 665	231.99	
			TOTAL	89 368	239.23	
	Business travel in overnight accommodation (bed nights)	19 kg CO ₂ e/bed night	Bidvest Corporate	2 010	38.19	
			Bidvest Foodservice group	5 125	97.38	
			Bidvest Namibia	1 879	35.70	
			Bidvest South Africa	14 005	266.10	
			TOTAL	23 019	437.36	
	Consumption of office paper in kilograms ¹⁵	Direct emissions 992 kg CO ₂ e/t Indirect emissions (incl. third party electricity) 631.62 kg CO ₂ e/t	Bidvest Corporate	2 693	4.37	
			Bidvest Foodservice group	407 423	661.50	
			Bidvest Namibia	2 831 608	4 597.45	
			Bidvest South Africa	1 664 833	2 703.06	
			TOTAL	4 906 557	7 966.38	

¹² Unless otherwise stated, all emission factors provided by UK Government Department of Environment, Food and Rural Affairs (Defra), Guideline to Defra's GHG Conversion Factors for Company Reporting: Updated May 2012. Available from: <http://www.defra.gov.uk/environment/business/reporting/conversion-factors.htm>

¹³ Emission factors are based on the distance per flight per country. The total number of flights for local, regional and international flights was provided. Flight distances were then estimated per country using the table in Appendix F. Emission factors were determined as follows: For flights less than 463km - 0.16685 tCO₂e/km, for flights between 463- 3 700km - 0.09522 tCO₂e/km and for flights greater than 3 700km - 0.10896 tCO₂e/km. It is recommended that Bidvest collect the flight routings per division as estimates only provide an indication of carbon. All flights include a 9% uplift factor.

¹⁴ Unless otherwise stated, all emission factors provided by UK Government Department of Environment, Food and Rural Affairs (Defra), Guideline to Defra's GHG Conversion Factors for Company Reporting: Updated May 2012. Available from: <http://www.defra.gov.uk/environment/business/reporting/conversion-factors.htm>

¹⁵ Emission factors for office paper are linked to Mondi Rotatrim as the majority of office paper consumed by Bidvest is Mondi Rotatrim (via personal communication).



5. Emissions from GHGs not covered by the Kyoto Protocol

While the GHG Protocol's Scope 1, 2 and 3 emissions are strictly for GHGs that fall under the international Kyoto Protocol on the control of climate change, provision is made for separate reporting on GHGs that might be under consideration by other international treaties such as the Montreal Protocol.

Bidvest did not record the usage of any non Kyoto Protocol GHGs during the 2012 financial year.

6. 'Base-Year' Information

Base-year Calculations

A base year is the historical year against which a reporting company's emissions are tracked and compared over time. It is typically the earliest relevant point in time for which a company has reliable data. The base year should be recalculated as additional or new and relevant data becomes available that would affect the baseline year figure and its comparability with future emission activities.

The first GHG inventory, compiled in 2008, should be considered the 'baseline' as this is the earliest relevant point in time for which the company has reliable data. The table below compares the past three years only due to changes in business structure, making year-on-year comparisons by division difficult.

COMPARITIVE TABLE EMISSIONS IN TONNES CO ₂ E BY SCOPE PER YEAR			
	2010	2011	2012
FTE	105 752	105 057	105 103
Revenue (million Rand)	Not available	121 516	137 235
Scope 1	372 664	375 234	397 674
Scope 2	295 126	303 711	309 031
Scope 3	10 753	13 686	19 123
Total	678 542	692 631	725 829
Intensity per FTE	6.42	6.59	6.91
Intensity per million Rand	Not available	5.70	5.29

Please review Appendix E for a comparison of 2010, 2011 and 2012 greenhouse gases, both by emitting activity and by business division.

7. Information on Offsets

Bidvest has not offset any of its 2012 GHG emissions through either the purchasing of renewable energy or any other appropriate offsetting mechanism.

8. Verification of GHG Inventory

At the time of writing the report, an independent verification party has not verified this report. It is recommended that this carbon footprint report be verified.

9. Facilities covered by GHG Inventory

Four Bidvest divisions are covered in this report:

- Bidvest Corporate
- Bidvest Foodservice group
- Bidvest Namibia
- Bidvest South Africa

A breakdown of the business units per division is found in Appendix A.



10. Contact Persons

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Appendix A: Overview for individual business divisions of 2012

Bidvest

Bidvest Corporate

- BID Corporate Services
- BID Sports- MSCSports
- Bidvest International (Isle of Man)
- Bidvest properties
- Bidvest Wits Football Club
- Business Solutions and Group Procurement
- Ontime automotive

Bidvest Foodservice group

Asia-Pacific

- Angliss Hong Kong & China
- Angliss Singapore
- Bidvest Australia
- Bidvest New Zealand

Bidvest Food South Africa

- Bidvest Foodservice (Caterplus)
 - Bidvest Foodservice (Caterplus HO)
 - Bidvest Foodservice Gaborone

Crown Foods Group

- Bidfood Exports
- Bidfood Technologies
- Chipkins Bakery Supplies
- Crown National
- NCP Yeast

Speciality

- Patleys

Europe

- 3663 First for foodservice
- Deli XL Belgium
- Deli XL Netherlands
- Farutex
- Horeca trade
- Nowaco -Czech Republic
- Nowaco Slovakia
- Seafood holdings

Bidvest Namibia

Bidvest Namibia Commercial Holdings

- Bidvest management service Namibia
- Bidvest Namibia IT
- Budget rent a car Namibia
- Caterplus, Namibia
- CN Business Furniture, Namibia
- Globe Electrical, Windhoek
- HRG Rennies travel Namibia
- Kolok, Namibia
- Manica, Namibia
- Minolco Namibia
- Steiner Namibia
- Taeuber & Corssen
- Waltons, Namibia



- Bidvest Namibia Fisheries Holdings
 - Namibian Fishing
 - Bidvest Fisheries holdings (PTY) LTD
- Bidvest South Africa
 - Bidvest Automotive
 - McCarthy
 - Bidvest Electrical
 - Atlas
 - Bidvest Electrical HO
 - Cabstrut
 - Sanlic
 - Versalec Cables
 - Voltex
 - Eastern Cape Region
 - Free State Region
 - Gauteng East
 - Gauteng West
 - Natal Region
 - North East region
 - North West TVL
 - Southern Cape Region
 - Western Cape Region
 - Voltex Industrial Systems
 - Voltex Lighting
 - Voltex Retail
 - Waco
 - Bidvest Financial Services
 - Bidvest Bank
 - Bidvest Bank Gaborone Botswana
 - Bidvest Financial Services
 - Master Currency
 - MCY Management Services
 - Namibia Bureau De Change
 - Bidvest Freight
 - Bidfreight HO
 - Bidfreight management services
 - BidFreight Port Operations
 - Bidfreight Port Operations
 - Bidfreight Port Operations, Ensimbini Terminals
 - South African Container Stevedores
 - Bidvest Panalpina Logistics
 - Bidvest Panalpina Logistics HO
 - Rennies Distribution Services OLD
 - Safcor Panalpina OLD
 - BULK CONNECTIONS
 - Bulk Connections HO
 - DCTC
 - Island View Storage
 - Island View Storage, Cape Town Bulk Storage (Pty) Ltd 50%
 - Island View Storage, Head Office
 - Island View Storage, Richards Bay
 - Manica
 - Manica Africa, South Africa
 - Manica Botswana



- Manica DRC
- Manica Mozambique
- Manica, Malawi
- Manica, Zambia
- Manica, Zimbabwe
- MARINE INSURANCE
 - P & I Associates
 - Rennie Murray
- MARINE SERVICES
 - Rennies Ships Agency (RSA)
- Naval
- SACD Freight
 - Bidfreight Intermodal
 - Cape Container Terminal Leasing
 - SACD Freight Depot, Cape Town
 - SACD Freight, Durban
 - SACD Freight, HO Cape Town
 - SACD Freight, JHB
 - SACD Freight, Port Elizabeth
- South African Bulk Terminals
 - RBT SHELL
 - South African Bulk Terminals (SABT), Island View
- Bidvest Industrial
 - Afcom GE Hudson
 - Bloemfontein
 - Cape Town
 - Durban
 - East London
 - Johannesburg
 - Markwell & Germiston
 - Nelspruit
 - Port Elizabeth
 - Pretoria
 - Tzaneen
 - Berzacks Head Office
 - Bidvest Industrial HO
 - Bidvest Material handling
 - Buffalo Executape
 - Ramset
 - Vulcan Catering Equipment (Pty) Ltd
 - Yamaha
- Bidvest Office
 - Furniture
 - Bidoffice Furniture manufacturing
 - CN Business Furniture
 - Dauphin Office Seating
 - Ditulo Office (Pty) Limited
 - Global payment Technologies
 - Office Automation
 - Konica Minolta South Africa - Head office
 - Oc` SA
 - Stationery
 - Contract Office Products
 - Hortors Stationery



- SA Diaries
- Waltons
 - Waltons Free State
 - Waltons, Gauteng
 - Waltons, Kwa-Zulu Natal
 - Waltons, National Head Office
 - Waltons, Port Elizabeth
 - Waltons, Western Cape Regional Office
- Bidvest Paper Plus
 - Bidpaper Plus
 - Kolok Unlimited
- Bidvest Rental & Products
 - Execuflora
 - G Fox & Company
 - Hotel Amenities Suppliers
 - Laundries
 - First Garment Rental Head office
 - First Garment Zambia
 - Giant Swaziland
 - Nomtsalane Laundry
 - Umoja Laundry
 - Pureau Fresh Water Company
 - Silk by design
 - Steiner
 - Rochester Midlands Industries
 - Steiner Hygiene
 - Steiner Hygiene, Botswana
 - Steiner Hygiene, Swaziland
- Bidvest Services
 - Bidvest Services Head Office
 - Dinatla
 - Dinatla Setsebi
 - Taemane
 - Umoja Cleaning
 - Magnum
 - African Consultancy for Transport Security PTY
 - Bandit Security
 - Langa Lethu Risk Management
 - Magnum Shield Security
 - Provicom Risk Solutions
 - Prestige
 - Dinatla Langa Status
 - Prestige Cleaning Services
 - QMS
 - TMS Group
 - TMS Group, Head Office
 - TopTurf
 - Top Turf Botswana
 - Top Turf Seychelles
 - Top Turf Swaziland
 - TopTurf Group, Mauritius
 - TopTurf Lesotho
 - TopTurf, Head Office
- Bidvest Travel & Aviation



BidAir

BidAir Cargo

Bidair cargo Kenya

Bidair Cargo SA

Bidair Cargo Tanzania

Bidair Cargo Uganda

Bidair Cargo Zambia

Bidair Cargo Zimbabwe

Bidair Hospitality

Bidair Services Group

Bidair Services

Commuter Handling Services

BidTravel

BCD Travel

Bidtravel Head office

Carlson Wagonlit Travel

Harvey World Travel

HRG Rennies Travel

Macardo lodge t/a Travelwise

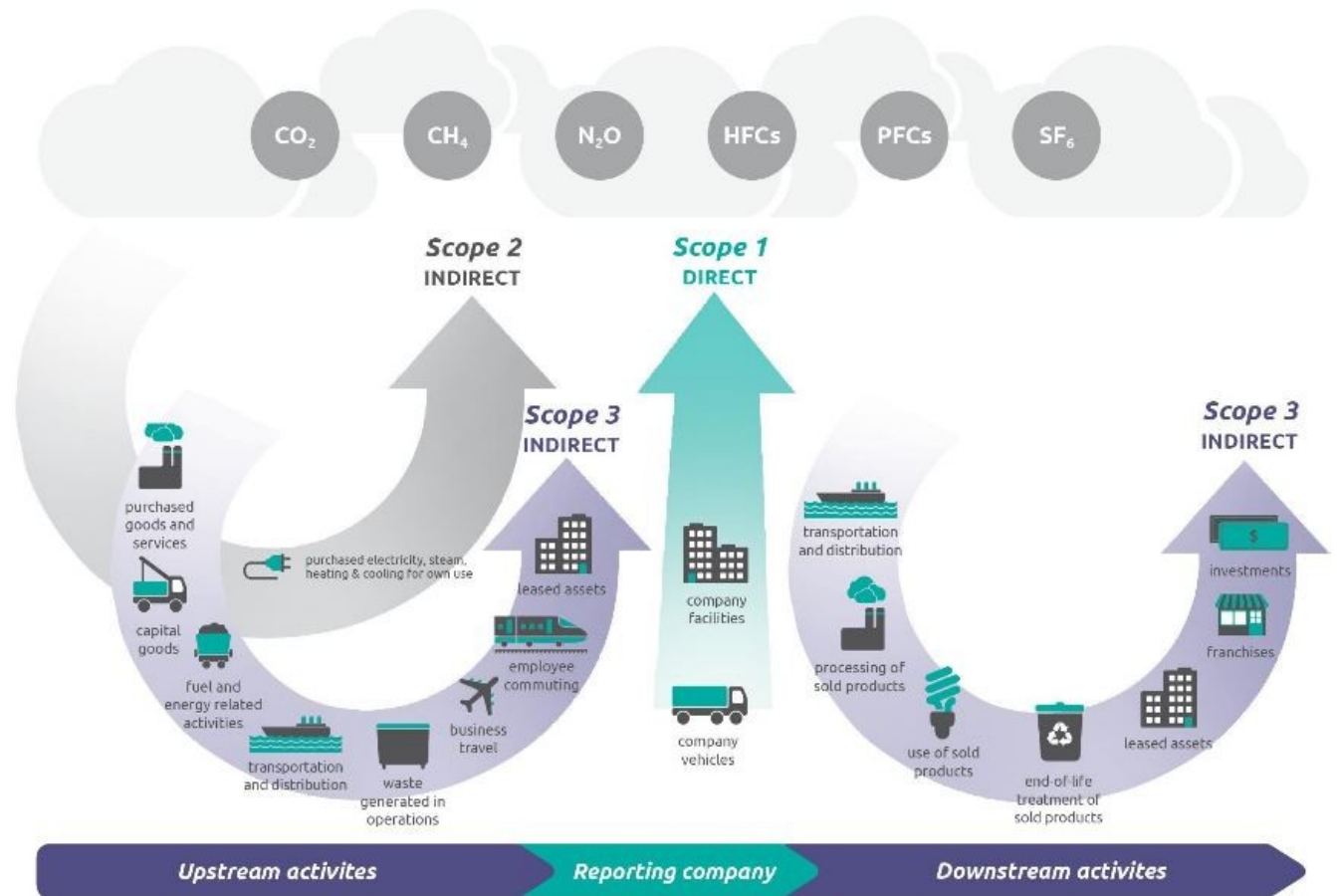
mymarket.com

Travel Connections

Budget rent-a-car



Appendix B: Diagram illustrating Direct vs. Indirect Emissions¹⁶



¹⁶ Source of diagram: GHG Protocol : <http://www.ghgprotocol.org/files/ghgp/public/overview-of-scopes.jpg>



Appendix C: Results of 2010-2012 comparative emissions

During 2011, Bidvest restructured their business. The figures in the table below compare the emissions from 2010, 2011 and 2012 per division and sub division according to the new structure.

COMPARISON OF TOTAL EMISSIONS AND INTENISTY PER FTE							
Division	Sub Division	2010 (tCO ₂ e)	2010 (tCO ₂ e/FT E)	2011 (tCO ₂ e)	2011 (tCO ₂ e/FTE)	2012 (tCO ₂ e)	2012 (tCO ₂ e/FTE)
Bidvest Corporate		14 237¹⁷	24.34	14 338	24.85	12 515	19.43
Bidvest Foodservice group		247 922	13.98	261 300	14.61	269 719	14.03
	Asia- Pacific	70 440	16.98	76 641	18.90	77 528	17.28
	Europe	121 031 ¹⁸	11.97	125 072	12.16	60 401	16.11
	South Africa	56 452 ¹⁹	15.95	59 587 ²⁰	16.84	131 789	12.00
Bidvest Namibia		97 006	37.69	100 353	37.17	108 646	34.93
	Commercial Holdings	2 623	2.87	4 102	4.46	5 099	3.85
	Fisheries Holdings	94 383	56.82	96 251	54.04	103 547	57.94
Bidvest South Africa		319 377	3.82	316 640	3.77	334 948	4.08
	Bidvest Automotive	62 997 ²¹	10.64	68 278 ²²	11.63	58 863	10.03
	Bidvest Electrical	14 418	6.61	14 890	6.82	13 281	6.43
	Bidvest Financial Services	5 569 ²³	4.44	14 800	12.05	16 105	12.53
	Bidvest Freight	66 938 ²⁴	13.77	65 636	13.79	75 880	15.81
	Bidvest Industrial	9 994	8.09	10 595	7.71	11 219	9.43
	Bidvest Office	27 959	6.59	24 067	5.65	27 628	6.63
	Bidvest Paper Plus	36 879	7.80	32 330	7.32	39 295	9.09
	Bidvest Rental and Products	58 683	10.84	52 204	8.73	59 789	10.01
	Bidvest Services	22 109	0.44	20 612	0.42	18 879	0.40
	Bidvest Travel and Aviation	13 831	2.77	13 227	2.54	14 009	2.70
Grand Total		678 542	6.47	692 631	6.59	725 829	6.91

¹⁷ In 2011 Bidvest Corporate, Bidvest Properties restated their 2010 petrol usage from zero to 4 000 litres.

¹⁸ In 2011 Foodservice group, Europe, 3663 First for Foodservice restated their 2010 electricity usage from 60 932 176 kWh to 4 723 486 kWh and Nowaco- Czech Republic restated electricity usage from 1 684 643 kWh to 30 813 654 kWh.

¹⁹ In 2012 Bidvest Foodservice group, South Africa restated 2010 Scope 3 emissions to exclude 3 344kg NO_x (1 037 tCO₂e).

²⁰ In 2012 Bidvest Foodservice group, South Africa restated 2011 Scope 3 emissions to exclude 3 648 kg NO_x (1 131 tCO₂e).

²¹ In 2011 Bidvest SA, Bidvest Automotive, McCarthy restated their 2010 diesel usage from 449 788 litres to 2 949 788 litres.

²² In 2012 Bidvest Automotive restated their 2011 electricity from 43 487 399 kWh (43 053 tCO₂e) to 43 912 218 kWh (43 473 tCO₂e).

²³ In 2011 Bidvest SA, Bidvest Financial services restated their 2010 petrol usage from 644 125 litres to 186 417 and diesel usage from 66 838 litres to 50 531 litres in 2011.

²⁴ In 2012 Bidvest SA, Bidvest Freight restated their 2010 Scope 3 emissions to exclude 15 523 kg NO_x (4 812 tonnes of CO₂e) and 323 kg Methane (7 tCO₂e).



COMPARISON OF EMISSIONS IN TONNES OF CO₂e BY SCOPE AND YEAR

Division	Sub Division	2010			2011			2012		
		Scope 1	Scope 2	Scope 3	Scope 1	Scope 2	Scope 3	Scope 1	Scope 2	Scope 3
Bidvest Corporate		12 194 ²⁵	1 278	765	11 012	1 161	2 165	11 275	846	394
Bidvest Foodservice group		131 247	114 278	2 398	138 425	119 191	3 685	146 774	118 856	4 089
	Asia- Pacific	21 283	48 434	723	24 643	50 919	1 079	24 115	51 241	2 172
	Europe	21 435	34 032 ²⁶	985	20 912	37 259	1 416	22 064	37 477	860
	South Africa	88 529	31 812	690 ²⁷	92 869	31 013	1 190 ²⁸	100 595	30 138	1 057
Bidvest Namibia		96 179	473	354	97 472	2 493	388	100 889	1 713	6 044
	Commercial Holdings	2 234	210	179	2 755	1 150	197	3 378	1 066	655
	Fisheries Holdings	93 945	263	175	94 716	1 343	191	97 511	647	5 389
Bidvest South Africa		133 045	179 097	7 236	128 325	180 867	7 448	138 736	187 616	8 597
	Bidvest Automotive	22 496 ²⁹	39 670	831	23 322	43 473 ³⁰	1 483	21 345	36 404	1 115
	Bidvest Electrical	7 953	6 095	370	8 545	5 988	357	8 029	4 979	273
	Bidvest Financial Services	816 ³¹	4 593	160	859	13 459	482	804	13 843	1 458
	Bidvest Freight	17 847	48 087	1 004 ³²	19 841	44 632	1 163	23 046	51 752	1 082
	Bidvest Industrial	2 995	6 185	814	3 339	6 946	310	3 344	6 652	1 222
	Bidvest Office	8 424	18 475	1 061	7 587	15 522	958	11 772	14 871	985
	Bidvest Paper Plus	2 576	33 661	643	2 360	29 318	653	3 770	34 836	689
	Bidvest Rental and Products	47 084	11 263	336	41 921	9 830	454	47 715	11 538	535
	Bidvest Services	17 692	3 415	1 002	15 828	4 147	636	14 477	3 851	551
	Bidvest Travel and Aviation	5 163	7 652	1 016	4 723	7 551	952	4 434	8 889	686
Grand Total		372 664	295 126	10 753	375 234	303 711	13 686	397 674	309 031	19 123

²⁵ In 2011 Bidvest Corporate, Bidvest Properties restated their 2010 petrol usage from zero to 4 000 litres.

²⁶ In 2011 Foodservice group, Europe, 3663 First for Foodservice restated their 2010 electricity usage from 60 932 176 kWh to 4 723 486 kWh and Nowaco- Czech Republic restated electricity usage from 1 684 643 kWh to 30 813 654 kWh.

²⁷ In 2012 Bidvest Foodservice group, South Africa restated 2010 Scope 3 emissions to exclude 3 344 kg NO_x (1 037 tCO₂e).

²⁸ In 2012 Bidvest Foodservice group, South Africa restated 2011 Scope 3 to exclude 3 648kg NO_x (1 131 tCO₂e).

²⁹ In 2011 Bidvest SA, Bidvest Automotive, McCarthy restated their 2010 diesel usage from 449 788 litres to 2 949 788 litres.

³⁰ In 2012 Bidvest Automotive restated their 2011 electricity from 43 487 399 kWh (43 053 tCO₂e) to 43 912 218 kWh (43 473 tCO₂e).

³¹ In 2011 Bidvest SA, Bidvest Financial services restated their 2010 Scope 1 petrol usage from 644 125 litres to 186 417 and diesel usage from 66 838 litres to 50 531 litres in 2011.

³² In 2012 Bidvest SA, Bidvest Freight restated their 2010 Scope 3 emissions to exclude 15 523 kg NO_x (4 812 tonnes of CO₂e) and 323 kg Methane (7 tCO₂e).



DIRECT SCOPE 1 EMISSIONS FROM BIDVEST 2012

Scope	Description	Emissions Factors ³³	Business Division	Total Consumption	Tonnes of CO ₂ e
1	Equipment owned or controlled by Bidvest that consumes petrol e.g. vehicles and generators (litres of petrol)	2.3144 kg CO ₂ e/litre	Bidvest Corporate	35 091	81.21
			Bidvest Foodservice group	3 841 998	8 891.92
			Asia-Pacific	1 026 539	2 375.82
			South Africa	1 874 335	4 337.96
			Europe	941 123	2 178.14
			Bidvest Namibia	490 025	1 134.11
			Commercial Holdings	457 068	1 057.84
			Fisheries Holdings	32 957	76.28
			Bidvest South Africa	18 606 493	43 062.87
			Bidvest Automotive	5 918 049	13 696.73
			Bidvest Electrical	1 650 223	3 819.28
			Bidvest Financial Services	289 019	668.90
			Bidvest Freight	689 345	1595.42
			Bidvest Industrial	859 011	1,988.10
			Bidvest Office	3 254 972	7 533.31
			Bidvest Paper Plus	826 038	1 911.78
			Bidvest Rental & Products	1 527 831	3 536.01
			Bidvest Services	3 279 928	7 591.06
			Bidvest Travel & Aviation	312 078	722.27
					TOTAL
	Equipment owned or controlled by Bidvest that consumes diesel e.g. vehicles and generators (litres of diesel)	2.6769 kg CO ₂ e/litre	Bidvest Corporate	4 181 804	11 194.27
			Bidvest Foodservice group	46 712 377	125 044.36
			Asia-Pacific	8 017 550	21 462.18
			South Africa	6 191 753	16 574.70
			Europe	32 503 074	87 007.48
			Bidvest Namibia	36 738 533	98 345.38
			Commercial Holdings	861 471	2 306.07
			Fisheries Holdings	35 877 062	96 039.31
			Bidvest South Africa	19 976 436	53 474.92
			Bidvest Automotive	2 857 024	7 647.97
			Bidvest Electrical	1 568 580	4 198.93
			Bidvest Financial Services	50 564	135.35
			Bidvest Freight	7 759 888	20 772.44
			Bidvest Industrial	461 167	1 234.50
			Bidvest Office	1 528 432	4 091.46
			Bidvest Paper Plus	663 711	1 776.69
			Bidvest Rental & Products	1 128 415	3 020.65
			Bidvest Services	2 572 348	6 885.92
			Bidvest Travel & Aviation	1 386 306	3 711.00
					TOTAL
	Equipment owned or controlled by Bidvest that consumes Biodiesel e.g.	2.9652 (HTVO) and 2.8605 (ME) kg	Bidvest Foodservice group	2 643 011	7 561.22
			Asia-Pacific	5 824	16.66
			South Africa	8 488	25.17
			Europe	2 638 699	7 159.39
			Bidvest South Africa	954 865	2 731.39

³³ Unless otherwise stated, all emission factors provided by UK Government Department of Environment, Food and Rural Affairs (Defra), [Guideline to Defra's GHG Conversion Factors for Company Reporting](http://www.defra.gov.uk/environment/business/reporting/conversion-factors.htm); Updated May 2012. Available from: <http://www.defra.gov.uk/environment/business/reporting/conversion-factors.htm>



vehicles and generators (litres of biodiesel)	CO ₂ e/litre	Bidvest Freight	8 387	23.99
		Bidvest Industrial	34 150	97.69
		Bidvest Office	692	1.98
		Bidvest Rental & Products	911 636	2 607.73
		TOTAL	3 597 876	10 292.61
Equipment owned or controlled by Bidvest that consumes LPG e.g. vehicles and generators (kilograms of LPG)	2.9359 kg CO ₂ e/kg	Bidvest Foodservice group	101 630	298.18
		Asia-Pacific	83 977	246.39
		South Africa	17 653	51.79
		Bidvest Namibia	10 489	30.77
		Commercial Holdings	4 668	13.70
		Fisheries Holdings	5 821	17.08
		Bidvest South Africa	306 347	898.83
		Bidvest Electrical	3 540	10.39
		Bidvest Freight	217 423	637.92
		Bidvest Industrial	7 646	22.43
		Bidvest Office	49 442	145.06
		Bidvest Paper Plus	27 832	81.66
		Bidvest Rental and Products	284	0.83
		Bidvest Travel and Aviation	180	0.53
		TOTAL	418 466	1 227.78
Equipment owned or controlled by Bidvest that consumes LNG e.g. vehicles and generators (kilograms of LNG)	2.7244 kg CO ₂ e/kg	Bidvest Foodservice group	1 594 027	4 342.81
		Asia-Pacific	5 300	14.44
		South Africa	394 349	1 074.37
		Europe	1 194 378	3 253.99
		Bidvest South Africa	6 484	17.67
		Bidvest Electrical	144	0.39
		Bidvest Freight	5 922	16.14
		Bidvest Industrial	418	1.14
		TOTAL	1 600 511	4 360.47
Equipment owned or controlled that consumes coal (kilograms of coal)	2.1838 kg CO ₂ e/kg	Bidvest South Africa	17 652 810	38 550.21
		Bidvest Rental & Products	17 652 810	38 550.21
		TOTAL	17 652 810	38 550.21
Equipment owned or controlled by Bidvest that consumes gas (kilograms of gas ³⁴)	GWP: 3.3	Bidvest Foodservice group	192 650	635.75
		Europe	192 650	635.75
		Bidvest Namibia	417 701	1 378.41
		Fisheries Holdings	417 701	1 378.41
		Bidvest South Africa	8	0.03
		Bidvest Freight	7	0.02
		Bidvest Paper Plus	1	0.00
		TOTAL	610 359	6 042.55

³⁴ It was not clear what gas was consumed. It was assumed to be propane.



INDIRECT SCOPE 2 EMISSIONS FROM PURCHASED ELECTRICITY FOR BIDVEST 2012

Scope	Description	Emissions Factors	Business Division	Total Consumption (kWh)	Metric tonnes of CO ₂ e emissions
2	Purchased electricity	Various emission factors used, based on location of division	Bidvest Corporate	1 464 405	846.08
			Bidvest Foodservice group	180 419 109	118 855.96
			Asia-Pacific	74 457 310	51 240.96
			South Africa	37 254 994	37 477.43
			Europe	68 706 805	30 137.57
			Bidvest Namibia	7 229 416	1 713.37
			Commercial Holdings	4 497 767	1 065.97
			Fisheries Holdings	2 731 649	647.40
			Bidvest South Africa	190 722 461	187 615.55
			Bidvest Automotive	36 771 409	36 403.69
			Bidvest Electrical	5 029 790	4 979.49
			Bidvest Financial Services	13 982 709	13 842.88
			Bidvest Freight	53 174 906	51 751.77
			Bidvest Industrial	6 719 426	6 652.23
			Bidvest Office	15 021 580	14 871.36
			Bidvest Paper Plus	35 187 753	34 835.88
			Bidvest Rental & Products	11 965 647	11 538.13
			Bidvest Services	3 890 425	3 851.08
			Bidvest Travel & Aviation	8 978 817	8 889.03
		TOTAL		379 835 391	309 030.96
	Purchased electricity from renewable sources (kWh)	0 kg CO ₂ e/kWh	Bidvest Foodservice group	57 994 258	0
			Asia-Pacific	502 817	0
			Europe	57 491 441	0
			Bidvest South Africa	75 000	0
			Bidvest Paper Plus	75 000	0
			TOTAL		58 069 258



INDIRECT SCOPE 3 EMISSIONS FROM BIDVEST 2012						
Scope	Description	Emissions Factors kg CO ₂ e/unit ³⁵	Business Division	Flights Kilometres	Metric tonnes of CO ₂ e emissions	
3	Business travel in commercial airlines: ³⁶	Local flights: 0.16685 kgCO ₂ e/ passenger km	Bidvest Corporate	0	0	
			Bidvest South Africa	28 961	5.27	
			Bidvest Foodservice group	0	0	
			Bidvest Namibia	11 305	2.06	
			TOTAL	36 480 527	7.32	
	Business travel in commercial airlines:	Regional flights: 0.09522 kgCO ₂ e/ passenger km	Bidvest Corporate	2 505 814	260.08	
			Bidvest South Africa	8 702 014	903.18	
			Bidvest Foodservice group	1 621 528	168.30	
			Bidvest Namibia	29 281 281	3 039.10	
			TOTAL	42 110 637	4 370.65	
	Business travel in commercial airlines:	International flights: 0.10896 kgCO ₂ e/ passenger km	Bidvest Corporate	362 787	43.09	
			Bidvest South Africa	20 263 065	2 406.57	
			Bidvest Foodservice group	10 394 616	1 234.53	
			Bidvest Namibia	18 382 318	2 183.20	
			TOTAL	49 402 786	5 867.39	
				TOTAL Flights	91 553 689	10 245.37

³⁵ Unless otherwise stated, all emission factors provided by UK Government Department of Environment, Food and Rural Affairs (Defra), [Guideline to Defra's GHG Conversion Factors for Company Reporting: Updated May 2012](http://www.defra.gov.uk/environment/business/reporting/conversion-factors.htm). Available from: <http://www.defra.gov.uk/environment/business/reporting/conversion-factors.htm>

³⁶ Emission factors are based on the distance per flight per country. The total number of flights for local, regional and international flights was provided. Flight distances were then estimated per country using the table in Appendix F. Emission factors were determined as follows: For flights less than 463km - 0.16685 tCO₂e/km; for flights between 463- 3 700km - 0.09522 tCO₂e/km and for flights greater than 3 700km - 0.10896 tCO₂e/km. It is recommended that Bidvest collect the flight routings per division as estimates only provide an indication of carbon. All flights include a 9% uplift factor.



INDIRECT SCOPE 3 EMISSIONS FROM BIDVEST 2012					
Scope	Description	Emissions Factors kg CO ₂ e/unit ³⁷	Business Division	Consumption	Metric tonnes of CO ₂ e emissions
3.	Business travel in overnight bed nights	0.19 kgCO ₂ e/bed night	Bidvest Corporate	2 010	38.19
			Bidvest Foodservice group	5 125	97.38
			Asia-Pacific	2 439	46.34
			South Africa	1 984	37.70
			Europe	702	13.34
			Bidvest Namibia	1 879	35.70
			Commercial Holdings	1 879	35.70
			Bidvest South Africa	14 005	266.10
			Bidvest Automotive	739	14.04
			Bidvest Financial Services	377	7.16
			Bidvest Freight	1 730	32.87
			Bidvest Industrial	1 068	20.29
			Bidvest Office	3 088	58.67
			Bidvest Paper Plus	1 040	19.76
			Bidvest Rental & products	667	12.67
	Bidvest Services	3 381	64.24		
	Bidvest Travel & Aviation	1 915	36.39		
	TOTAL	23 019	437.36		
	Business travel in rental cars	2.6769 kg CO ₂ e/ litre petrol	Bidvest Corporate	20 697	47.90
			Bidvest Foodservice group	5 922	14.69
			South Africa	5 232	12.91
			Europe	690	1.78
			Bidvest Namibia	3 480	8.05
			Commercial Holdings	3 480	8.05
			Bidvest South Africa	160 766	403.49
			Bidvest Automotive	2 370	5.50
			Bidvest Freight	48 183	111.51
		2.3144 kg CO ₂ e/ litre diesel	Bidvest Industrial	7 764	18.94
			Bidvest Office	49 538	132.19
			Bidvest Paper Plus	19 230	103.68
			Bidvest Rental & products	5 161	11.94
			Bidvest Services	6 633	15.35
			Bidvest Travel & Aviation	1 888	4.37
TOTAL			95 433	474.13	
Bidvest Rental & products			55 221	90.25	
Bidvest Services			51 120	83.59	
Bidvest Travel & Aviation	4 101	6.66			
TOTAL	190 865	474.13			
Consumption of office paper in kilograms ³⁸	Direct emissions during manufacture: 992 kg CO ₂ e /tonne paper	Bidvest Corporate	2 693	4.37	
		Bidvest Foodservice group	407 423	661.50	
		Asia-Pacific	23 702	38.48	
		South Africa	23 814	38.67	
		Europe	359 907	584.35	
	Indirect emissions at manufacturing	Bidvest Namibia	2 831 608	4 597.46	
		Commercial Holdings	34 776	56.46	
		Fisheries Holdings	2 796 832	4 540.99	
		Bidvest South Africa	1 664 833	2 703.06	
		Bidvest Automotive	210 660	342.03	

³⁷ Unless otherwise stated, all emission factors provided by UK Government Department of Environment, Food and Rural Affairs (Defra), Guideline to Defra's GHG Conversion Factors for Company Reporting; Updated May 2012. Available from: <http://www.defra.gov.uk/environment/business/reporting/conversion-factors.htm>

³⁸ Emission factors for office paper are linked to Mondi Rotatrim as the majority of office paper consumed by Bidvest is Mondi Rotatrim as at April 2011. Emission factors provided via personal communication.



	linked to third party electricity consumption: 631.62 kg CO ₂ e/tonne paper	Bidvest Electrical	57 902	94.01
		Bidvest Financial Services	65 940	107.06
		Bidvest Freight	255 172	414.30
		Bidvest Industrial	503 104	816.85
		Bidvest Office	150 821	244.8
		Bidvest Paper Plus	178 992	290.62
		Bidvest Rental & products	91 206	148.08
		Bidvest Services	56 263	91.35
		Bidvest Travel & Aviation	94 773	153.88
		TOTAL	4 906 557	7 966.38



Appendix D: GHG emissions per Bidvest business division

Overview of Bidvest Corporate carbon dioxide equivalent (CO₂e) emissions

Reporting period: Financial year 2012: 01 July 2011 – 30 June 2012

Carbon footprint calculation conducted on: Bidvest Corporate

Methodology: Greenhouse Gas Protocol – Corporate Accounting and Reporting Standard

Bidvest Corporate employees covered by report:	644
Bidvest Corporate Revenue in Million Rand:	799.69
Percentage of staff covered by this report:	100%

Scope 1: Direct Emissions	Tonnes of CO₂e
Vehicles and equipment owned or controlled consuming petrol	81.21
Vehicles and equipment owned or controlled consuming diesel	11 194.27
Vehicles and equipment owned or controlled consuming biodiesel	0.00
Vehicles and equipment owned or controlled consuming LPG	0.00
Vehicles and equipment owned or controlled consuming LNG	0.00
Equipment owned or controlled consuming coal	0.00
Equipment owned or controlled consuming gas	0.00
TOTAL SCOPE 1	11 275.48
Scope 2: Indirect Emissions	
Purchased electricity	846.08
TOTAL SCOPE 1 & 2 EMISSIONS	12 121.57
Scope 3 Indirect Emissions	
Business travel in commercial airlines	303.16
Business travel in rental cars	47.90
Business travel in overnight accommodation	38.19
Consumption of office paper	4.37
TOTAL SCOPE 3 EMISSIONS	393.63
TOTAL BIDVEST CORPORATE 2012 EMISSIONS (tCO₂e)	12 515.20
Emissions per employee (t/full-time employee)	19.43
Emissions per million Rand revenue (t/revenue)	15.65



Overview of Bidvest Foodservice group's carbon dioxide equivalent (CO₂e) emissions

Reporting period: Financial year 2012: July 2011 – June 2012

Carbon footprint calculation conducted on: Bidvest Foodservice group

Methodology: Greenhouse Gas Protocol – Corporate Accounting and Reporting Standard

Bidvest Foodservice group employees covered by report:	19 221
Bidvest Corporate Revenue in Million Rand:	70 756.63
Percentage of staff covered by this report:	100%

Scope 1: Direct Emissions	Tonnes of CO₂e
Vehicles and equipment owned or controlled consuming petrol	8 891.92
Vehicles and equipment owned or controlled consuming diesel	125 044.36
Vehicles and equipment owned or controlled consuming biodiesel	7 561.22
Vehicles and equipment owned or controlled consuming LPG	298.18
Vehicles and equipment owned or controlled consuming LNG	4 342.81
Equipment owned or controlled consuming coal	0.00
Equipment owned or controlled consuming gas	635.75
TOTAL SCOPE 1	146 774.24
Scope 2: Indirect Emissions	
Purchased electricity	118 855.96
TOTAL SCOPE 1 & 2 EMISSIONS	265 630.19
Scope 3 Indirect Emissions	
Business travel in commercial airlines	3 315.02
Business travel in rental cars	14.69
Business travel in overnight accommodation	97.38
Consumption of office paper	661.50
TOTAL SCOPE 3 EMISSIONS	4 088.58
TOTAL BIDVEST FOODSERVICE GROUP 2012 EMISSIONS (tCO₂e)	269 718.77
Emissions per employee (t/full-time employee)	14.03
Emissions per million Rand revenue (t/revenue)	3.81



Overview of Bidvest Namibia's carbon dioxide equivalent (CO₂e) emissions

Reporting period: Financial year 2012: July 2011 – June 2012

Carbon footprint calculation conducted on: Bidvest Namibia

Methodology: Greenhouse Gas Protocol – Corporate Accounting and Reporting Standard

Bidvest Namibia employees covered by report:	3 110
Bidvest Corporate Revenue in Million Rand:	2 971.32
Percentage of staff covered by this report:	100%

Scope 1: Direct Emissions Tonnes of CO₂e

Vehicles and equipment owned or controlled consuming petrol	1 134.11
Vehicles and equipment owned or controlled consuming diesel	98 345.38
Vehicles and equipment owned or controlled consuming biodiesel	0.00
Vehicles and equipment owned or controlled consuming LPG	30.77
Vehicles and equipment owned or controlled consuming LNG	0.00
Equipment owned or controlled consuming coal	0.00
Equipment owned or controlled consuming gas	1 378.41

TOTAL SCOPE 1 **100 888.68**

Scope 2: Indirect Emissions

Purchased electricity	1 713.37
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TOTAL SCOPE 1 & 2 EMISSIONS **102 602.05**

Scope 3 Indirect Emissions

Business travel in commercial airlines	1 402.83
Business travel in rental cars	8.05
Business travel in overnight accommodation	35.70
Consumption of office paper	4 597.45

TOTAL SCOPE 3 EMISSIONS **6 044.04**

TOTAL BIDVEST NAMIBIA 2012 EMISSIONS CO₂e (tCO₂e) **108 646.09**

Emissions per employee (t/full-time employee)	34.93
Emissions per million Rand revenue (t/revenue)	36.56



Overview of Bidvest South Africa's carbon dioxide equivalent (CO₂e) emissions

Reporting period: Financial year 2012: July 2011 – June 2012

Carbon footprint calculation conducted on: Bidvest South Africa

Methodology: Greenhouse Gas Protocol – Corporate Accounting and Reporting Standard

Bidvest South Africa employees covered by report:	82 128
Bidvest Corporate Revenue in Million Rand:	62 707.38
Percentage of staff covered by this report:	100%

Scope 1: Direct Emissions Tonnes of CO₂e

Vehicles and equipment owned or controlled consuming petrol	43 062.87
Vehicles and equipment owned or controlled consuming diesel	53 474.92
Vehicles and equipment owned or controlled consuming biodiesel	2 731.39
Vehicles and equipment owned or controlled consuming LPG	898.83
Vehicles and equipment owned or controlled consuming LNG	17.67
Equipment owned or controlled consuming coal	38 550.21
Equipment owned or controlled consuming gas	0.03

TOTAL SCOPE 1 **138 735.91**

Scope 2: Indirect Emissions

Purchased electricity	187 615.55
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TOTAL SCOPE 1 & 2 EMISSIONS **326 351.45**

Scope 3 Indirect Emissions

Business travel in commercial airlines	5 224.36
Business travel in rental cars	403.49
Business travel in overnight accommodation	266.10
Consumption of office paper	2 703.06

TOTAL SCOPE 3 EMISSIONS **8 597.00**

TOTAL BIDVEST SOUTH AFRICA 2012 EMISSIONS (tCO₂e) **334 948.46**

Emissions per employee (t/full-time employee)	4.08
Emissions per million Rand revenue (t/revenue)	5.34



Appendix E: Comparison of emissions in tonnes of CO₂e for 2010, 2011 and 2012 per Bidvest business sub division

Bidvest Corporate				
Scope	Activity	2010 (t CO ₂ e)	2011 (t CO ₂ e)	2012 (t CO ₂ e)
	Full-time employees	585	577	644
	Revenue (million Rand)	N/A	691.35	799.69
Direct emissions: Scope 1	Consumption of petrol	54	63	81
	Consumption of diesel	12 140	10 949	11 194
	Consumption of biodiesel	0	0	0
	Consumption of LPG	0	0	0
	Consumption of LNG	0	0	0
	Consumption of coal	0	0	0
	Consumption of gas	0	0	0
Indirect emissions: Scope 2	Purchased electricity	1 278	1 161	846
Scope 3	Travel in commercial planes	760	2 160	303
	Travel by rental car	0	0	48
	Overnight accommodation	0	0	38
	Consumption of office paper	5	4	4.37
	Total	14 236.78	14 337.64	12 515
	Intensity per FTE	24.34	24.85	19.43
	Intensity per million Rand	N/A	20.74	15.65

Bidvest Foodservice group: Asia-Pacific				
Scope	Activity	2010 (t CO ₂ e)	2011 (t CO ₂ e)	2012 (t CO ₂ e)
	Full-time employees	4 149	4 056	4 486
	Revenue (million Rand)	N/A	19 563.07	23 493.35
Direct emissions: Scope 1	Consumption of petrol	2 619	2 747	2 376
	Consumption of diesel	18 581	21 776	21 462
	Consumption of biodiesel	0	15	17
	Consumption of LPG	84	99	246
	Consumption of LNG	0	6	14
	Consumption of coal	0	0	0
	Consumption of gas	0	0	0
Indirect emissions: Scope 2	Purchased electricity	48 434	50 919	51 241
Scope 3	Travel in commercial planes	693	1 042	2 087
	Travel by rental car	0	0	0
	Overnight accommodation	0	0	46
	Consumption of office paper	29	36	38
	Total	70 439	76 641	77 528
	Intensity per FTE	16.98	18.90	17.28
	Intensity per million Rand	N/A	3.92	3.30



Bidvest Foodservice group: Europe				
Scope	Activity	2010 (t CO ₂ e)	2011 (t CO ₂ e)	2012 (t CO ₂ e)
	Full-time employees	10 115	10 285	10 986
	Revenue (million Rand)	N/A	34 664.91	41 114.79
Direct emissions: Scope 1	Consumption of petrol	1 199	1 525	2 178
	Consumption of diesel	76 847	79 576	87 007
	Consumption of biodiesel	7 130	8 055	7 519
	Consumption of LPG	18	6	0
	Consumption of LNG	3 334	3 026	3 254
	Consumption of coal	0	0	0
	Consumption of gas	0	681	636
Indirect emissions: Scope 2	Purchased electricity	31 812	31 013	30 138
Scope 3	Travel in commercial planes	371	753	458
	Travel by rental car	0	0	1.78
	Overnight accommodation	0	0	13
	Consumption of office paper	320	437	584
	Total	121 031	125 072	131 789
	Intensity per FTE	11.97	12.16	12.00
	Intensity per million Rand	N/A	3.61	3.21

Bidvest Foodservice group: South Africa				
Scope	Activity	2010 (t CO ₂ e)	2011 (t CO ₂ e)	2012 (t CO ₂ e)
	Full-time employees	3 540	3 539	3 749
	Revenue (million Rand)	N/A	5 417.58	6 148.50
Direct emissions: Scope 1	Consumption of petrol	4 812	4 271	4 338
	Consumption of diesel	15 842	15 688	16 575
	Consumption of biodiesel	0	95	25
	Consumption of LPG	17	41	52
	Consumption of LNG	764	817	1 074
	Consumption of coal	0	0	0
	Consumption of gas	0	0	0
Indirect emissions: Scope 2	Purchased electricity	34 032	37 259	37 477
Scope 3 ³⁹	Travel in commercial planes	686	1 203	770
	Travel by rental car	0	0	13
	Overnight accommodation	0	0	38
	Consumption of office paper	299	213	584
	Total	56 451	59 587	60 401
	Intensity per FTE	15.95	16.84	16.11
	Intensity per million Rand	N.A	11.00	9.82

³⁹ In 2012 Bidvest Foodservice group, South Africa restated 2010 Scope 3 emissions to exclude 3 344kg NO_x (1 037 tCO₂e) and restated 2011 Scope 3 emissions to exclude 3 648 kg NO_x (1 131 tCO₂e).



Bidvest Namibia: Commercial Holdings				
Scope	Activity	2010 (t CO ₂ e)	2011 (t CO ₂ e)	2012 (t CO ₂ e)
	Full-time employees	913	919	1 323
	Revenue (million Rand)	993.34	920.73	1 522.81
Direct emissions: Scope 1	Consumption of petrol	1 066	915	1 058
	Consumption of diesel	1 162	1 841	2 306
	Consumption of biodiesel	0	0	0
	Consumption of LPG	6	0	14
	Consumption of LNG	0	0	0
	Consumption of coal	0	0	0
	Consumption of gas	0	0	0
Indirect emissions: Scope 2	Purchased electricity ⁴⁰	210	1 150	1 066
Scope 3	Travel in commercial planes	136	113	555
	Travel by rental car	0	0	8
	Overnight accommodation	0	0	36
	Consumption of office paper	43	84	56
	Total	2 623	4 102	5 099
	Intensity per FTE	2.87	4.46	3.85
	Intensity per million Rand	2.64	4.45	3.35

Bidvest Namibia: Fisheries Holdings				
Scope	Activity	2010 (t CO ₂ e)	2011 (t CO ₂ e)	2012 (t CO ₂ e)
	Full-time employees	1 661	1 781	1 787
	Revenue (million Rand)	984.68	1 245.74	1 494.01
Direct emissions: Scope 1	Consumption of petrol	49	53	76
	Consumption of diesel	93 877	93 344	96 039
	Consumption of biodiesel	0	0	0
	Consumption of LPG	0	12	17
	Consumption of LNG	18	0	0
	Consumption of coal	0	0	0
	Consumption of gas	0	1 307	1 378
Indirect emissions: Scope 2	Purchased electricity ⁴¹	263	1 343	647
Scope 3	Travel in commercial planes	169	185	848
	Travel by rental car	0	0	0
	Overnight accommodation	0	0	0
	Consumption of office paper	7	7	4 541
	Total	94 383	96 251	103 547
	Intensity per FTE	56.82	54.04	57.94
	Intensity per million Rand	95.85	77.26	69.31

⁴⁰ The emission factor for Namibian electricity was recorded as 0.1 kgCO₂e/kWh in 2010 and 0.424 kgCO₂e/kWh in 2011 extracted from the International Energy Agency, CO₂ Emissions from Fuel Combustion: Highlights OECD/IEA, Paris. The 2010 emission factors were from the 2009 IEA report and the 2011 emission factor is from the 2010 IEA report. This explains the large difference in emissions from electricity between years for Namibia. Electricity consumption for Commercial Holdings was recorded as 2 053 046 kWh in 2010 and 2 694 302 kWh in 2011.

⁴¹ The emission factor for Namibian electricity was recorded as 0.1 kgCO₂e/kWh in 2010 and 0.424 kgCO₂e/kWh in 2011 extracted from the International Energy Agency, CO₂ Emissions from Fuel Combustion: Highlights OECD/IEA, Paris. The 2010 reports were from the 2009 IEA report and the 2011 emission factor is from the 2010 IEA Report. This explains the large difference in emissions from electricity between years for Namibia. Electricity consumption by Fisheries Holdings in 2010 was recorded as 2 629 351 kWh and in 2011 consumption was recorded as 3 168 220 kWh.



Bidvest South Africa: Bidvest Automotive				
Scope	Activity	2010 (t CO ₂ e)	2011 (t CO ₂ e)	2012 (t CO ₂ e)
	Full-time employees	5 922	5 869	5 870
	Revenue (million Rand)	N/A	18 608.26	19 130.90
Direct emissions: Scope 1	Consumption of petrol	14 622	14 399	13 697
	Consumption of diesel	7 874	8 923	7 648
	Consumption of biodiesel	0	0	0
	Consumption of LPG	0	0	0
	Consumption of LNG	0	0	0
	Consumption of coal	0	0	0
	Consumption of gas	0	0	0
Indirect emissions: Scope 2	Purchased electricity	39 670	43 473 ⁴²	36 404
Scope 3	Travel in commercial planes	177	1 121	759
	Travel by rental car	0	0	0
	Overnight accommodation	0	0	14
	Consumption of office paper	654	362	342
	Total	62 997	68 278	58 863
	Intensity per FTE	10.64	11.63	10.03
	Intensity per million Rand	N/A	3.67	3.08

Bidvest South Africa: Bidvest Electrical				
Scope	Activity	2010 (t CO ₂ e)	2011 (t CO ₂ e)	2012 (t CO ₂ e)
	Full-time employees	2 181	2 184	2 066
	Revenue (million Rand)	N/A	4 100.37	4 286.09
Direct emissions: Scope 1	Consumption of petrol	3 614	3 894	3 819
	Consumption of diesel	4 312	4 638	4 199
	Consumption of biodiesel	0	0	0
	Consumption of LPG	27	13	10.39
	Consumption of LNG	0	0	0.39
	Consumption of coal	0	0	0
	Consumption of gas	0	0	0
Indirect emissions: Scope 2	Purchased electricity	6 095	5 988	4 979
Scope 3	Travel in commercial planes	266	259	179
	Travel by rental car	0	0	0
	Overnight accommodation	0	0	0
	Consumption of office paper	104	98	94
	Total	14 418	14 890	13 282
	Intensity per FTE	6.61	6.82	6.43
	Intensity per million Rand	N/A	3.63	3.10

⁴² In 2012 Bidvest Automotive restated their 2011 electricity from 43 487 399 kWh (43 053 tCO₂e) to 43 912 218 kWh (43 473 tCO₂e).



Bidvest South Africa: Bidvest Financial				
Scope	Activity	2010 (t CO ₂ e)	2011 (t CO ₂ e)	2012 (t CO ₂ e)
	Full-time employees	1 253	1 228	1 285
	Revenue (million Rand)	N/A	1 676.70	1 715.66
Direct emissions: Scope 1	Consumption of petrol	668	703	669
	Consumption of diesel	147	156	135
	Consumption of biodiesel	0	0	0
	Consumption of LPG	0	0	0
	Consumption of LNG	0	0	0
	Consumption of coal	0	0	0
	Consumption of gas	0	0	0
Indirect emissions: Scope 2	Purchased electricity	4 593	13 459 ⁴³	13 843
Scope 3	Travel in commercial planes	121	234	1 338
	Travel by rental car	0	0	5.50
	Overnight accommodation	0	0	7.16
	Consumption of office paper	39	248	107
	Total	5 569	14 800	16 105
	Intensity per FTE	4.44	12.05	12.53
	Intensity per million Rand	N/A	8.83	9.39

Bidvest South Africa: Bidvest Freight				
Scope	Activity	2010 (t CO ₂ e)	2011 (t CO ₂ e)	2012 (t CO ₂ e)
	Full-time employees	4 860	4 761	4 800
	Revenue (million Rand)	N/A	19 253.27	20 868.63
Direct emissions: Scope 1	Consumption of petrol	1 265	1 322	1 595
	Consumption of diesel	16 234	18 137	20 772
	Consumption of biodiesel	0	27	24
	Consumption of LPG	337	340	638
	Consumption of LNG	12	15	16
	Consumption of coal	0	0	0
	Consumption of gas	0	0	0.02
Indirect emissions: Scope 2	Purchased electricity	48 087	44 632	51 752
Scope 3	Travel in commercial planes	761	849	523
	Travel by rental car	0	0	112
	Overnight accommodation	0	0	33
	Consumption of office paper	243	314	414
	Total	66 939⁴⁴	65 636	80 328
	Intensity per FTE	13.77	13.79	16.74
	Intensity per million Rand	N/A	3.41	3.85

⁴³ The increase in electricity consumption is attributed to Bidvest Bank, South Africa, which recorded emissions from electricity in tonnes in 2010 as 3 973 t CO₂e compared to 13 106 t CO₂e in 2011.

⁴⁴ In 2012 Bidvest SA, Bidvest Freight restated their 2010 Scope 3 emissions to exclude 15 523 kg NO_x (4 812 tonnes of CO₂e) and 323 kg Methane (7 tCO₂e)..



Bidvest South Africa: Bidvest Industrial				
Scope	Activity	2010 (t CO ₂ e)	2011 (t CO ₂ e)	2012 (t CO ₂ e)
	Full-time employees	1 236	1 375	1 190
	Revenue (million Rand)	N/A	1 486.37	1 473.92
Direct emissions: Scope 1	Consumption of petrol	1 924	1 824	1 988
	Consumption of diesel	1 067	1 486	1 235
	Consumption of biodiesel	0	0	98
	Consumption of LPG	4	8	22
	Consumption of LNG	0	21	1.14
	Consumption of coal	0	0	0
	Consumption of gas	0	0	0
Indirect emissions: Scope 2	Purchased electricity	6 185	6 946	6 652
Scope 3	Travel in commercial planes	471	260	366
	Travel by rental car	0	0	19
	Overnight accommodation	0	0	20
	Consumption of office paper	343	50	817
	Total	9 994	10 595	11 219
	Intensity per FTE	8.09	7.71	9.43
	Intensity per million Rand	N/A	7.13	7.61

Bidvest South Africa: Bidvest Office				
Scope	Activity	2010 (t CO ₂ e)	2011 (t CO ₂ e)	2012 (t CO ₂ e)
	Full-time employees	4 241	4 256	4 169
	Revenue (million Rand)	N/A	3 684.60	4 183.98
Direct emissions: Scope 1	Consumption of petrol	4 758	4 094	7 533
	Consumption of diesel	3 444	3 380	4 091
	Consumption of biodiesel	0	1	1.98
	Consumption of LPG	222	112	145
	Consumption of LNG	0	0	0
	Consumption of coal	0	0	0
	Consumption of gas	0	0	0
Indirect emissions: Scope 2	Purchased electricity	18 475	15 522	14 871
Scope 3	Travel in commercial planes	741	822	549
	Travel by rental car	0	0	132
	Overnight accommodation	0	0	59
	Consumption of office paper	320	136	245
	Total	27 959	24 067	27 628
	Intensity per FTE	6.59	5.65	6.63
	Intensity per million Rand	N/A	6.53	6.60



Bidvest South Africa: Bidvest Paper Plus				
Scope	Activity	2010 (t CO ₂ e)	2011 (t CO ₂ e)	2012 (t CO ₂ e)
	Full-time employees	4 730	4 418	4 323
	Revenue (million Rand)	N/A	3 705.37	3 858.15
Direct emissions: Scope 1	Consumption of petrol	1 524	1 392	1 912
	Consumption of diesel	998	907	1 777
	Consumption of biodiesel	0	2	0
	Consumption of LPG	54	50	82
	Consumption of LNG	0	6	0
	Consumption of coal	0	0	0
	Consumption of gas	0	3	0
Indirect emissions: Scope 2	Purchased electricity	33 661	29 318	34 836
Scope 3	Travel in commercial planes	636	554	275
	Travel by rental car	0	0	104
	Overnight accommodation	0	0	
	Consumption of office paper	7	100	291
	Total	36 879	32 330	39 285
	Intensity per FTE	7.80	7.32	9.09
	Intensity per million Rand	N/A	8.73	10.18

Bidvest South Africa: Bidvest Rental and Products				
Scope	Activity	2010 (t CO ₂ e)	2011 (t CO ₂ e)	2012 (t CO ₂ e)
	Full-time employees	5 414	5 981	5 970
	Revenue (million Rand)	N/A	1 703.08	2 057.28
Direct emissions: Scope 1	Consumption of petrol	2 629	3 048	3 536
	Consumption of diesel	4 749	5 590	3 021
	Consumption of biodiesel	0	153	2 608
	Consumption of LPG	1	1	1
	Consumption of LNG	0	0	0
	Consumption of coal	39 706	33 130	38 550
	Consumption of gas	0	0	0
Indirect emissions: Scope 2	Purchased electricity	11 263	9 830	11 538
Scope 3	Travel in commercial planes	239	357	363
	Travel by rental car	0	0	12
	Overnight accommodation	0	0	13
	Consumption of office paper	97	97	148
	Total	58 683	52 204	59 789
	Intensity per FTE	10.84	8.73	10.01
	Intensity per million Rand	N/A	30.65	29.06



Bidvest South Africa: Bidvest Services				
Scope	Activity	2010 (t CO ₂ e)	2011 (t CO ₂ e)	2012 (t CO ₂ e)
	Full-time employees	49 952	48 620	47 260
	Revenue (million Rand)	N/A	2 928.37	3 086.48
Direct emissions: Scope 1	Consumption of petrol	9 836	9 226	7 591
	Consumption of diesel	7 856	6 547	6 886
	Consumption of biodiesel	0	55	0
	Consumption of LPG	0	0	0
	Consumption of LNG	0	0	0
	Consumption of coal	0	0	0
	Consumption of gas	0	0	0
Indirect emissions: Scope 2	Purchased electricity	3 415	4 147	3 851
Scope 3	Travel in commercial planes	916	535	380
	Travel by rental car	0	0	15
	Overnight accommodation	0	0	64
	Consumption of office paper	86	101	91
	Total	22 109	20 612	18 879
	Intensity per FTE	0.44	0.42	0.40
	Intensity per million Rand	N/A	7.04	6.12

Bidvest South Africa: Bidvest Travel and Aviation				
Scope	Activity	2010 (t CO ₂ e)	2011 (t CO ₂ e)	2012 (t CO ₂ e)
	Full-time employees	5 000	5 208	5 195
	Revenue (million Rand)	N/A	1 866.31	2 046.30
Direct emissions: Scope 1	Consumption of petrol	1 079	979	722
	Consumption of diesel	4 082	3 735	3 711
	Consumption of biodiesel	0	0	0
	Consumption of LPG	2	2	1
	Consumption of LNG	0	0	0
	Consumption of coal	0	2	0
	Consumption of gas	0	5	0
Indirect emissions: Scope 2	Purchased electricity	7 652	7 551	8 889
Scope 3	Travel in commercial planes	846	760	491
	Travel by rental car	0	0	4
	Overnight accommodation	0	0	36
	Consumption of office paper	170	193	154
	Total	13 831	13 226	14 009
	Intensity per FTE	2.77	2.54	2.70
	Intensity per million Rand	N/A	7.09	6.85



Appendix F: Table indicating air flight distances used to estimate flights by Bidvest⁴⁵

Country	Assumed flight			Assumed distance ⁴⁶		
	Local	regional	Long-haul	Local	Regional	Long-haul
Australia	Sydney-Melbourne	Sydney-Auckland	Sydney-Jhb	713	2 160	11 058
Belgium	Brussels-London	Brussels-London	Brussels-Jhb	320	320	8 847
Czech Rep.	Prague-London	Prague-London	Prague - Jhb	1 062	1 047	8 712
Hong Kong, China	Hong Kong-Shanghai	Hong Kong-Shanghai	Hong Kong-Jhb	1 208	1 208	10 710
Namibia	Windhoek-Luderitz	Windhoek-Johannesburg	Windhoek-London	492	1 186	8 376
Netherlands	Amsterdam-London	Amsterdam-London	Amsterdam-Jhb	359	359	8 989
New Zealand	Auckland-Christchurch	Auckland-Sydney	Auckland-Jhb	762	2 160	12 205
Poland	Warsaw-Krakow	Warsaw-London	Warsaw-Jhb	246	1 475	8 552
Rest of Africa	Maputo- Beira	Lusaka-Jhb	Lusaka-London	716	1 194	7 909
Singapore	Singapore-Kuala Lumpur	Singapore-Honk Kong	Singapore-Jhb	307	2 569	8 659
Slovakia	Bratislava-London	Bratislava-London	Bratislava-Jhb	1 452	1 452	8 552
South Africa	Cape Town- Jhb	Jhb-Windhoek	Jhb-London	1 270	1186	9 070
UK & Isle of Man	London-Edinburgh	London-Prague	London-Jhb	535	1 047	9 070
United Arab Emirates	Abu Dhabi-Dubai	Abu Dhabi-London	Abu Dhabi-Jhb	116	5 523	6 275
Botswana	Gaborone-Francistown	Gaborone-Jhb	Gaborone-London	409	293	8 809
Mozambique	Maputo-Beira	Maputo -Jhb	Maputo-London	719	433	9 163
Zambia	Lusaka-Livingstone	Lusaka- Jhb	Lusaka - London	393	1 197	7 915
Zimbabwe	Harare-Bulawayo	Harare-Jhb	Harare-London	348	955	8 280
Malawi	Lilongwe-Blantyre	Lilongwe-Jhb	Lilongwe-London	245	1 484	7 953
Democratic Republic of Congo	Kinshasa-Kisangani	Kinshasa-Jhb	Kinshasa-London	1 209	2 767	6 373
Swaziland	Manzini-Lavumisa	Manzini-Jhb	Manzini-London	80	308	9 184
Seychelles	Mahe-Victoria	Mahe-Jhb	Mahe-London	225	3 752	8 165
Uganda	Kampala-Jinja	Kampala-Jhb	Kampala-London	100	2 932	6 484
Mauritius	Mauritius-Rodrigues	Mauritius-Jhb	Mauritius-London	598	3 070	9 765
Lesotho	Maseru-Mokhotlong	Maseru-Jhb	Maseru-London	180	375	9 377
Tanzania	Dar es Salaam-Zanzibar	Dar es Salaam - Nairobi	Dar es Salaam - London	72	665	7 492

NOTE: Jhb refers to Johannesburg International Airport.

⁴⁵ Bidvest provided the number of local, regional and international flights flown per business sector. Flight distances were then estimated per country using the above table. Emission factors are based on the distance per flight leg. Emission factors were determined as follows: for flights less than 463km - 0.16685 tCO₂e/km; for flights between 463- 3 700km - 0.09522 tCO₂e/km and for flights greater than 3 700km - 0.10896 tCO₂e/km. Additional passenger flight kilometres were also provided by Bidvest where the information was available. These kilometres were added to the local, regional and international flight kilometres.

⁴⁶ Sources of distances: <http://www.travelmath.com/> and <http://www.airrouting.com>

