GREENHOUSE GAS INVENTORY

FY2022

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TFG FY2022 SUMMARY CARBON FOOTPRINT REPORT

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1. REPORT OVERVIEW – EXECUTIVE SUMMARY

Figure 1 is a summary of the emissions and company metrics reported by TFG in FY2022.

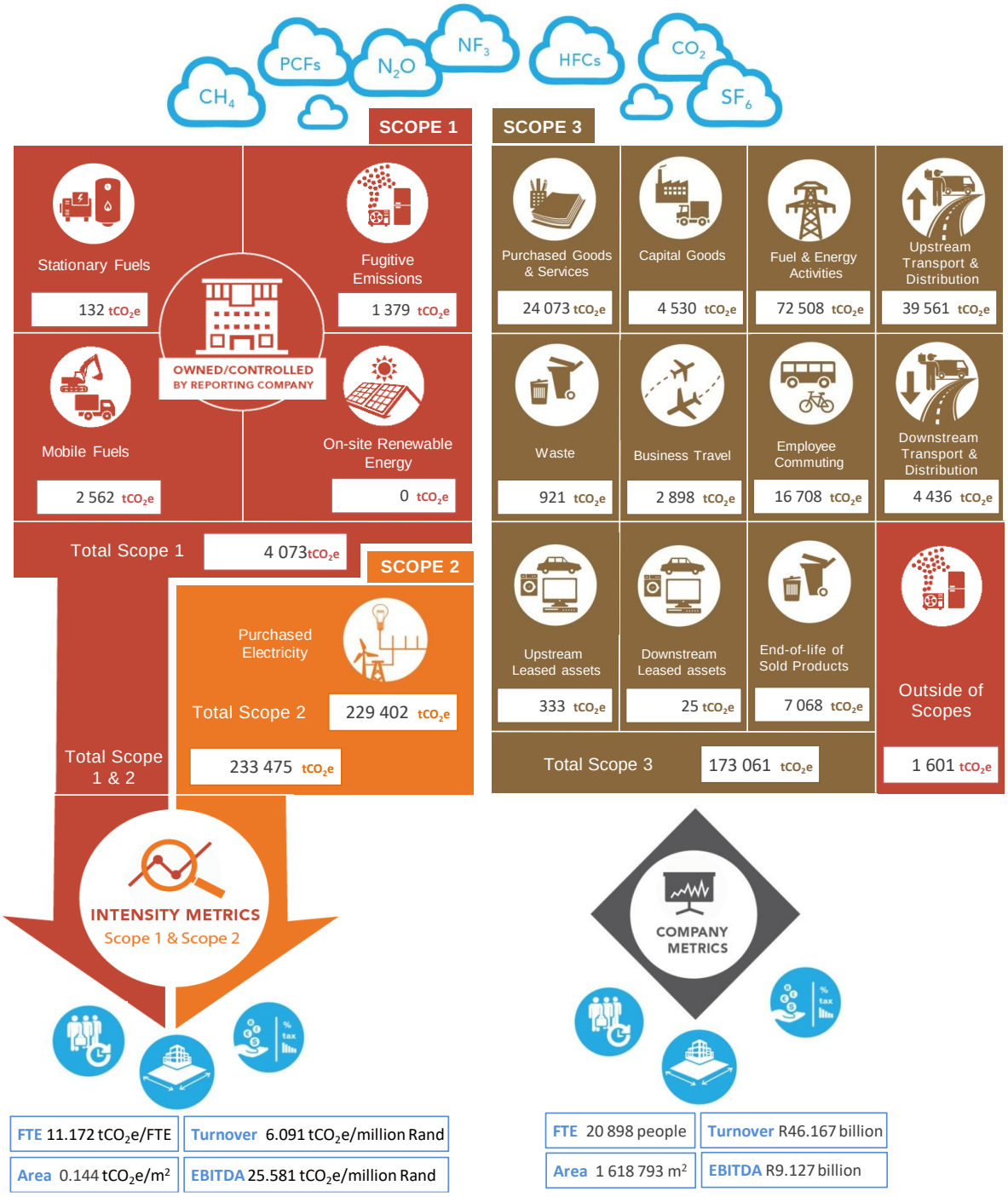

Figure 1: Summary of TFG's FY2022 emissions and company metrics.

Table 1: REPORT OVERVIEW – TFG GROUP EMISSIONS, METRICS, AND INTENSITY

TFG	Metric tonnes of CO_2e				% Change
	FY2019	FY2020	FY2021	FY2022	FY21 vs. FY22
Total Scope 1	4 672	5 215	3 750	4 073	9%
Total Scope 2	153 097	166 655	175 863	229 402	30%
Total Scope 1 & 2	157 768	171 870	179 613	233 475	30%
Total Scope 3	66 650	75 193	61 216	173 061	183%
Outside of Scopes	2 542	2 743	1 362	1 601	18%

TFG	Metrics				% Change
	FY2019	FY2020	FY2021	FY2022	FY21 vs. FY22
Full-time employees (FTE)	16 555	17 433	18 708	20 898	12%
Total employees	29 121	29 776	34 891	38 329	10%
Group EBITDA (R million)	8 531.80	8 513.30	6 541.80	9 126.90	40%
Group Revenue (R million)	37 128	38 477	35 586	46 167	30%

TFG	Intensity				% Change
	FY2019	FY2020	FY2021	FY2022	FY21 vs. FY22
Scope 1&2 tCO_2e/FTE	9.530	9.859	9.601	11.172	16%
Scope 1&2 tCO_2e/Total employees	5.418	5.772	5.148	6.091	17%
Scope 1&2 tCO_2e/EBITDA (R million)	30.505	20.188	27.570	25.581	(7%)
Scope 1&2 tCO_2e/Retail revenue (R million)	4.249	4.467	5.047	5.057	0%

Table 2: EMISSIONS BREAKDOWN FOR TFG GROUP, AFRICA, LONDON, AND AUSTRALIA

TFG	Metric tonnes of CO_2e				% Change
	FY2019	FY2020	FY2021	FY2022	FY21 vs. FY22
Total Scope 1	4 672	5 215	3 750	4 073	9%
Total Scope 2	153 097	166 655	175 863[1]	229 402	30%
Total Scope 1 & 2	157 768	171 870	179 613	233 475	30%
Total Scope 3	66 650	75 193	61 216	173 061	183%
Outside of Scopes	2 542	2 743	1 362	1 601	18%
TFG Africa					
Total Scope 1	4 484	5 016	3 664	4 050	11%
Total Scope 2	150 959	164 816	166 663	223 169	34%
Total Scope 1 & 2	155 443	169 832	170 327	227 219	33%
Total Scope 3	62 844	72 935	56 069	134 362	140%
Outside of Scopes	2 542	2 743	1 362	1 601	18%
TFG London					
Total Scope 1	188	199	86	22	(74%)
Total Scope 2	2 137	1 839	534	506	(5%)
Total Scope 1 & 2	2 325	2 038	621	528	(15%)
Total Scope 3	3 806	2 258	589	18 699	3 075%
Outside of Scopes	0	N/R	0	0	N/A
TFG Australia					
Total Scope 1	N/R	N/R	0	0	N/A
Total Scope 2	N/R	N/R	8 666	5 727	(34%)
Total Scope 1 & 2	N/R	N/R	8 666	5 727	(34%)
Total Scope 3	N/R	N/R	4 558	20 000	339%
Outside of Scopes	N/R	N/R	0	N/A	N/A

N/R = Not reported N/A = Not applicable

1 Total electricity consumption has increased relative to FY2020 despite widespread reductions related to COVID-19, this is due to the inclusion of electricity by TFG Australia for the first time as well as TFG Africa's acquisition of Jet during FY2021.

2. INTRODUCTION

This FY2022 CFR constitutes the fifteenth CFR commissioned by TFG and should be compared against previous carbon footprint calculations to review changes in annual consumption, boundaries, and areas of improvement. All reports have been prepared using the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard (GHG Protocol) methodology.

The CFR covers 20 898 permanent full-time employees (FTEs), 1 618 793 square metres (m^2) of stores and facility area, R9.127 billion EBITDA.

As a result, the GHG-emitting activities covered by the CFR include:

- Direct emissions (referred to as Scope 1), resulting from fuel used by TFG -owned or TFG -controlled equipment (stationary fuels); fleet vehicles (mobile fuels); air-conditioning, refrigeration, and fire-suppressing gas refills (fugitive emissions). Although renewable energy generated onsite produces few to zero emissions, consumption is reported within Scope 1 so that the total kilowatt hours consumed by a company is measured year-on-year.
- Indirect emissions from purchased electricity (referred to as Scope 2) both renewable and grid electricity.
- Selected indirect emissions in the supply chain (referred to as Scope 3), resulting from TFG 's business travel activities, its employee commuting, upstream and downstream distribution, the consumption of products and services, capital goods, electricity transmission and distribution (T&D) losses, upstream and downstream leased assets, end-of-life treatment of sold products and waste disposal. Well-to-Tank (WtT) and Tank-to-Wheel (TtW) combined as Well-to-Wheel (WtW)[2] has also been included as best practice.

Carbon Calculated has gone to all reasonable lengths to ensure that the primary information provided by TFG is correct. Carbon Calculated is not liable for any inaccuracies that this information might contain. Information may, however, be extracted for reporting purposes, such as for submission into international and national GHG registries and for purposes of sustainability reporting. It may also be presented for third-party verification purposes.

2 Well-to-Wheel (WtW) emissions are the combination of Well-to-Tank (WtT) and Tank-to-Wheel (TtW) emissions. WtT emissions are Upstream third-party emissions related to the production and distribution of fuel and electricity generation. TtW emissions are direct use emissions from fuel combustion in equipment and vehicles.

3. COMPANY DESCRIPTION

TFG is one of South Africa's foremost independent chain-store groups and has a diverse portfolio of 30 leading fashion and lifestyle retail brands. As at the end of the 2022 financial year, the Group was trading in 4 351 stores across 24 countries on 5 continents and reported a Group turnover of R43.4 billion (FY2021: R32.95 billion). The company was established in 1924 and was listed on the Johannesburg Stock Exchange (JSE) in 1941. Their retail brands offer clothing, jewellery, cell phones, accessories, cosmetics, sporting apparel and equipment, and homeware and furniture.

We deliver products and services in select merchandise categories under our well-established brands.

Figure 2: TFG retail brands for FY2022

The majority of the Group's turnover is in the form of cash sales to customers, with the balance being from TFG's own in-house credit offering. Credit is offered to customers in South Africa, Namibia, Botswana, Lesotho and eSwatini. The Group also generates revenue from interest received on customers' store cards and through value-added services available to TFG Africa customers.

The Group's focus is speciality retail where they invest in brands and build brand equity. The brands cater for market segments from value to upper income while providing convenient shopping experiences in-store and online. The Group's unique portfolio of brands, geographic spread and customer retention initiatives differentiates it from other retailers locally and abroad.

TFG consists of three business segments, each with their own local management teams, which report into the Group's head office in Cape Town. Retail brands within these business segments are supported by centralised support services structures. The percentage contribution of the three business segments to Group turnover for FY2022 was: TFG Africa 70%, TFG London 14% and TFG Australia 16%. The reporting period of this CFR is TFG's 2022 financial year (01 April 2021 – 31 March 2022).

TFG Africa operations that are included in the reporting boundary totalled 3 087 outlets. Most of those outlets were in South Africa (2 873), with the remaining 214 outlets in: Botswana (46), Lesotho (21), Namibia (100), Eswatini (18) and Zambia (29), all of which reported electricity consumption. The TFG London operations totalled 688 outlets (198 stores and 490 concessions) of which 174 outlets in the UK were included in the boundary, and TFG Australia operations totalled 576 outlets (538 stores and 38 concessions) of which 536 outlets were included in the boundary.

4. REPORT OVERVIEW – GROUP EMISSIONS EXECUTIVE SUMMARY

Table 3: OVERVIEW OF TFG'S FY2022 GHG EMISSIONS

REPORTING PERIOD: TFG's financial year (1 April 2021 – 31 March 2022)

CARBON FOOTPRINT CALCULATION CONDUCTED ON: TFG Africa, TFG Australia and TFG London

METHODOLOGY: GHG Protocol – Corporate Accounting and Reporting Standard

GHG CONSOLIDATION APPROACH: Operational Control

Company Metrics	
Total TFG employees	38 329
Total permanent full-time TFG employees (FTE) covered by CFR	20 898
Total square metreage of area reported	1 618 793
Square metres excluding stores	267 083
Total TFG EBITDA (R billion)	9.1
Total TFG Retail revenue (R billion)	46.2

Scope 1 Direct Emissions	Metric tonnes of CO_2e
Stationary fuel	132.15
Fugitive gas	1 379.19
Mobile fuel	2 561.57
Onsite renewable energy (emissions)	0.00
TOTAL SCOPE 1 EMISSIONS	**4 072.91**

Scope 2 Indirect Emissions	Location-based	Market-based
Purchased electricity – facilities	21 490.55[3]	21 341.92
Purchased electricity – stores	209 003.65	208 060.03
TOTAL SCOPE 2 EMISSIONS	**230 494.21**	**229 401.95**
TOTAL SCOPE 1 & 2 EMISSIONS (MARKET-BASED)		**233 474.85**

Intensity Metrics	
Scope 1 & 2 emissions per full-time employee (tCO_2e/FTE)	11.172
Scope 1 & 2 emissions per total employee (tCO_2e/employee)	6.091
Scope 1 & 2 emissions per square metre including stores (tCO_2e/m^2)	0.144
Scope 1 & 2 emissions per million Rand Retail revenue (tCO_2e/R million)	0.874
Scope 1 & 2 emissions per million Rand EBITDA (tCO_2e/R million)	25.581
Scope 1 & 2 emissions per million Rand Retail revenue (tCO_2e/R million)	5.057

3 TFG's market-based electricity differs to location-based electricity because TFG London purchased renewables with supplier-provided contractual instruments for the first time in FY2022.

Table 4: OVERVIEW OF TFG'S FY2022 SCOPE 3 GHG EMISSIONS – CORPORATE VALUE CHAIN

Metric tonnes of CO_2e

Scope 3 Indirect Emissions			
1. Purchased goods and services	Paper – products	992.56	
	Paper – marketing	1 639.00	
	Packaging	10 091.41	
	Water	802.26	
	Other	10 548.18	
			24 073.41
2. Capital goods			4 529.52
3. Fuel- and energy-related activities	Electricity T&D losses	27 134.62	
	Well-to-Tank emissions	45 372.97	
			72 507.59
4. Upstream transportation and distribution	Distribution and freight	32 443.46	
	Well-to-Tank emissions	7 117.66	
			39 561.12
5. Waste generated in operations	Waste to landfill	881.59	
	Recycling and compost	39.44	
	Wastewater	0.32	
			921.36
6. Business travel	Car hire	47.28	
	Air travel	1 722.99	
	Accommodation	326.29	
	Travel claims	477.95	
	Well-to-Tank emissions	323.63	
			2 898.15
7. Employee commuting			16 707.72
8. Upstream leased assets	Purchased electricity	318.90	
	Gas – LNG	14.38	
			333.28
9. Downstream transportation and distribution	Distribution	3 751.63	
	Well-to-Tank emissions	684.14	
			4 435.77
10. Processing of sold products			Not relevant
11. Use of sold products			Not evaluated
12. End-of-life treatment of sold products			7 068.42
13. Downstream leased assets	Tenant electricity		24.53
14. Franchises			Not applicable
15. Investments			Not evaluated
TOTAL SCOPE 3 EMISSIONS			173 060.87
Outside of Scopes:			
Non-Kyoto Protocol GHG emissions			1 600.95

5. NOTABLE YEAR-ON-YEAR CHANGES

TFG 's reporting and consumption has changed notably between years in the following ways:

1) Well-to-Tank (WtT) emissions have been added to Scope 3 in addition to the previously reported Tank-to-Wheel (TtW) emissions within Scope 1. Combined, this accounts for the full lifecycle of all fuels combusted by the company, including mobile fuel and stationary fuel, as is best practice.
2) Capital goods, additional purchased goods, and services as well as end-of-life treatment of sold products included for the first time for TFG London and TFG Australia.
3) TFG London purchased renewable electricity, reducing Scope 2 emissions.
4) TFG London and Australia reported on transport and distribution for the first time.
5) Additional manufacturing facilities added to the TFG Africa boundary. This reduces the need to import products as a preference for local manufacturing of products.
6) Jet stores reported for a full year.
7) Emissions from the consumption of water included for the first time.
8) TFG Africa stores reported water for the first time.
9) TFG Africa included fugitive emissions for head offices and manufacturing which were not included in FY2021.
10) TFG Australia experienced further lockdown measures in FY2022 reducing consumption. TFG London and TFG Africa, had lockdown measures lifted, increasing consumption and effective emissions.
11) Business travel for TFG Africa and TFG London increased following the lifting of travel restrictions.
12) TFG London courier waste was excluded as the proxy data was sourced from FY2019 and it is unclear whether it was still relevant to the reporting boundary.

SECTION B

6. REQUIRED INFORMATION

6.1. GHG INVENTORY – ORGANISATIONAL BOUNDARY

Organisational boundaries are established on either the control approach or the equity share approach.

TFG reports on all emissions using the **operational control approach.**

Table 5 indicates the number of facilities per geography that have been included in the FY2022 TFG CFR:

Table 5: TFG FACILITIES INCLUDED IN CFR FOR FY2022

Facility type	TFG Africa	TFG London	TFG Australia
Head offices	8[4]	3	3
Regional offices	3[5]	0	0
Distribution Centres/warehouses	9[6]	3	7[7]
Owned manufacturing facilities	6[8]	0	0
Stores (excluding concessions)[9]	3 087	175[10]	538[11]
Total facilities	3 113	181	548

6.2. GHG INVENTORY – OPERATIONAL BOUNDARY

GHG emissions for the categories outlined In Table 6 below have been included and calculated as part of TFG's inventories in FY2022:

Table 6: CATEGORIES INCLUDED IN THE TFG FY2022 CFR

Scope	Category	Type/Source
Scope 1	Stationary fuel	♦ Generators
	Mobile fuel – on -road	♦ Fleet vehicles
	Fugitive gas	♦ Air-conditioning gas ♦ Fire suppressants ♦ Refrigerants
	Onsite renewable energy	♦ Photovoltaic solar
Scope 2	Purchased electricity	♦ Grid electricity ♦ Renewable electricity
Scope 3	Purchased goods and services and Capital goods	♦ Paper products – reams of office paper, envelopes, till rolls ♦ Marketing – magazines, mailers & flyers ♦ Packaging – paper bags, plastic bags, cartons, hangers, other packaging ♦ Water usage ♦ Capital goods

4 Data for 7 and 17 Huguenot Street incorporated in other facilities.
5 Includes one new and two decommissioned offices.
6 Facilities include: Assegaai, Durban (new), Epping 1, Epping 2 (Nourse (new)), Epping 3: (Packer Ave (new)), Midrand, Ndabeni (Jewellery and Sport), Tygerberg and Lefic.
7 Includes Rockwear warehouse and 6 additional warehouses (including one in the USA), which are not under TFG Australia's operational control. The three Connor warehouses are excluded as they closed in July 2021.
8 Includes six new manufacturing facilities, namely: Epping Prestige, Johannesburg Prestige, Durban Prestige, Caledon II, Maitland II and Cotton Traders. No data was available for Cotton Traders or Johannesburg Prestige, which were excluded.
9 Sourced from the TFG FY2022 year-end Results: https://tfglimited.co.za/investor-information/financial-reports-and-presentations/
10 Emissions from 210 stores were included in the footprint (including 36 closed stores). Data excludes 490 concessions and stores outside the UK.
11 A total of 536 stores were included in the footprint and 38 concessions were excluded.

	Fuel- and energy-related activities	♦ Electricity T&D losses ♦ WtT emissions
	Upstream and downstream transportation and distribution	♦ Logistical services (expressed on a WtW basis) ♦ Courier services (expressed on a WtW basis) ♦ Air and sea freight
	Waste	♦ Landfill ♦ Recycling ♦ Compost ♦ Wastewater
	Business travel	♦ Car hire ♦ Air travel ♦ Accommodation ♦ Travel claims
	Employee commuting	♦ Private commuting
	Upstream leased assets (TFG Australia)	♦ Purchased electricity and gas at leased warehouses
	Downstream leased assets (TFG Africa)	♦ Tenant electricity at owned but not occupied facility
Outside of Scopes	Fugitive gases	♦ Air-conditioning (R22)

6.3. REPORTING PERIOD

The reporting period of this CFR is TFG's 2022 financial year (01 April 2021 to 31 March 2022).

6.4. BASELINE YEAR

Baseline-year Calculations
A baseline 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. A baseline year can be a calendar year or a fiscal year.

TFG Africa has set 2008 as the baseline year for carbon footprint calculations because this was the year that best represented the reporting boundaries with reliable and transparent data. There has been a significant change to the organisation's boundary during the reporting period with the reporting of Jet Stores for a full year, however it is difficult to assess the true impact this has had on materiality based on comparative emissions since these have been dramatically affected by the COVID-19 pandemic. A more detailed assessment of the relevance of the current baseline year may be required going forward.

Emissions for TFG in 2008 were as follows:

- Scope 1: 3 620 tCO_2e
- Scope 2: 88 774 tCO_2e
- Scope 1 and 2: 92 394 tCO_2e
- Scope 3: 36 136 tCO_2e
- Outside of Scopes: 1 047 tCO_2e.

For a historical record of TFG emissions from FY2019, see Table 15.

A baseline year for TFG, including TFG London and TFG Australia, has not been set. Consideration should be given to setting a new baseline for the Group given the changes in the boundary.

7. METHODOLOGY, EXCLUSIONS AND ASSUMPTIONS

This CFR has been completed using the GHG Protocol. The following exclusions and/or assumptions are noted in relation to the reporting boundary as well as the Scope 1, Scope 2 and Scope 3 emissions covered by the CFR:

7.1. ORGANISATIONAL BOUNDARY EXCLUSIONS

Emissions generated by the following facilities and/or entities are excluded from the reporting boundary:

- Fedisa Training Academy – TFG does not have operational control over the facility.
- Durban Regional office at 9 Fairways (651m^2) – data not available.
- Johannesburg Prestige Clothing (326m^2)– data not available.
- Cotton Traders – part of the Granny Goose acquisition[12] – data not available.
- TFG London stores in Hong Kong (15), Macau (2) and Switzerland (6)[13] – outside the reporting boundary.
- All concessions are excluded.

7.2. OPERATIONAL BOUNDARY EXCLUSIONS AND ASSUMPTIONS

Scope 1 – Direct Emissions

- Diesel in bowsers for TFG Africa is excluded as this is stored fuel and not combusted.

Scope 2 – Indirect Emissions

- Electricity consumption for TFG Australia stores was estimated based on the kWh per square metre of actual consumption of a select few stores, which was then applied to all stores and emissions calculated based on each store's territory or region.
- Where electricity consumption was unknown for TFG London, it was estimated based on kWh/m^2 of available data. Data was provided for 11 months, from which an average was used for the twelfth month.

12 Granny Goose and therefore Cotton Traders was acquired effective 1 October 2021.
13 Sourced from the TFG FY2022 year-end Results: https://tfglimited.co.za/investor-information/financial-reports-and-presentations/

Scope 3 – Indirect Emissions

- Refer to Table 7 for any category or activity exclusions within the reporting year.

Table 7: SPECIFIC SCOPE 3 EMISSION CATEGORIES AND EXCLUSIONS ACCORDING TO THE CORPORATE VALUE CHAIN FOR TFG IN FY2022

Category	Scope 3 category	Evaluation status	Reason for exclusions
1	Purchased goods and services	Relevant, partially reported: ♦ Paper products ♦ Marketing material – paper ♦ Packaging – various ♦ Water supply ♦ Other (based on GBP spend for TFG London)	TFG purchases a wide variety of consumables from various sources for which data is currently unavailable or has not been evaluated.
2	Capital goods	Relevant, reported	Data on dollar spend was used in the Quantis tool for TFG Australia and TFG London.
3	Fuel- and energy-related activities (not included in Scope 1 or Scope 2)	Relevant, reported: ♦ Electricity T&D losses ♦ WtT emissions	Not relevant
4	Upstream transportation and distribution	Relevant, reported distributors: ♦ Third party logistics ♦ Courier services ♦ Freight – sea & air	TFG distributes a wide variety of products from various sources. Currently, not all relevant information is available or has been evaluated.
5	Waste generated in operations	Relevant, reported: ♦ Landfill waste ♦ Recycling and compost ♦ Wastewater	TFG London – Whistles HO and Phase Eight HO did not report waste. No waste data for stores reported as they are usually within malls where waste is difficult to separate and measure. Only TFG Australia reported wastewater for head office.
6	Business travel	Relevant, reported: ♦ Car hire ♦ Air travel ♦ Accommodation ♦ Travel claims	Travel reported by TFG Africa and TFG Australia. TFG London travel data was estimated under purchased goods and services as raw data was not available, only costs.
7	Employee commuting[14]	Relevant, reported	Excludes homeworker emissions (optional reporting) Calculated for full-time employees only
8	Upstream leased assets	Relevant, reported (TFG Australia only): ♦ Purchased electricity ♦ Purchased gas	Not applicable
9	Downstream transportation and distribution	Relevant, reported (TFG Australia and TFG London only): ♦ Courier data	It is assumed that TFG Africa pay for all courier services for clients online packaging, therefore captured as upstream.
10	Processing of sold products	Not relevant, explanation provided	TFG sells products that do not require further processing.
11	Use of sold products	Relevant, not yet calculated	TFG retail brands offer a variety of lifestyle products, and the company has no control over consumer use, hence this has been excluded. Where emissions are applicable, these are indirect and most likely to be immaterial, e.g., electricity used to wash clothing, charging of mobile phones

14 Under the GHG Protocol, this category can optionally include homeworker emissions linked to the business-related energy requirements in employee's homes. This calculation can be included based on a methodology developed by a UK-based initiative for companies with a high level of homeworker employees, to fully account for the company's environmental impact.

12	End-of-life treatment of sold products	Relevant, reported (TFG London and TFG Australia only)	TFG Africa excluded as data not available. Emissions based on tonnes of materials sold and is estimated based on average weight per item sold assuming 95% to landfill and 5% compost.
13	Downstream leased assets	Relevant, reported: Tenant electricity	Not applicable
14	Franchises	Not relevant, explanation provided	TFG does not operate any franchises.
15	Investments	Not relevant, explanation provided	Information not evaluated

7.3. COMPLETENESS OF A CORPORATE GHG INVENTORY AS BEST PRACTICE

It is best practice according to the completeness principle of the GHG Protocol to not exclude any facilities, activities, geographies, or business units wherever possible in order to have a robust GHG inventory. Furthermore, as the business changes, that specific activity or facility may become a hotspot for emissions, so it is important to include all emission sources within a GHG inventory.

However, companies often define a threshold that sets out that an emissions source below a predefined level can be excluded from the GHG inventory. In accordance with the GHG Protocol, defining the de minimis threshold is at a company's discretion and this threshold should be disclosed. To be will aligned with setting targets in line with the requirements of the SBTi, it is recommended to set a 5% de minimis threshold for GHG inventory compilation and target setting.

7.4. DATA QUALITY

Of equal importance to data completeness is the quality of data submitted. The data from which the emission calculations are based should be as accurate and robust as possible. In the early stages of GHG inventory compilation, or for complex scope 3 categories, estimations of emissions may be used, although, it is preferential to use emissions data based on actual data for Scopes 1 and 2.

Table 8 provides an indication of the type and quality of the data provided per category, based on the subjective assessment of the data carried out by Carbon Calculated.

Table 8: TYPE AND QUALITY OF TFG 's FY2022 DATA

Scope	Category	Type/Source	Actual, proxy, estimated, excluded	Data quality score (1=high, 5=low)
Scope 1	Stationary fuel	♦ Generators, boilers	♦ Actual	2
	Mobile fuel – on -road	♦ Fleet vehicles	♦ Actual	2
	Fugitive gas	♦ Air-conditioning gas ♦ Fire suppressants ♦ Refrigerants	♦ Actual	1
	Onsite renewable energy	♦ Photovoltaic	♦ Actual	1
Scope 2	Purchased electricity	♦ Grid electricity ♦ Renewable electricity	♦ Actual & estimate	3 – London few stores reported, awaiting certificates of purchased renewables. Australia estimated based on kWh/m^2 where data was unavailable.
Scope 3	Purchased goods and services	♦ Office paper ♦ Packaging ♦ Water	♦ Actual	2 – multiple data sources. 4 – Quantis for "other"
	Capital goods	♦ Other	♦ Actual	4 – Quantis used based on available spend data
	Fuel- and energy-related activities	♦ Electricity T&D losses ♦ Well-To-Tank emissions	♦ Actual	2
	Upstream & downstream transportation and distribution	♦ Logistical services ♦ Courier services	♦ Actual	3 – carbon calculations were completed by supplier in some instances. Not all suppliers provided data.
	Waste	♦ Landfill ♦ Recycling ♦ Compost ♦ Wastewater	♦ Actual	3 – data sources not reviewed, only summaries
	Business travel	♦ Car hire ♦ Air travel ♦ Accommodation ♦ Travel claims	♦ Actual	1 – data provided from suppliers
	Employee commuting	♦ Employee commuting survey	♦ Actual/ estimated	4 – Africa and London as only 4% and 6% of employees covered by survey. 2 – Australia 45% of employees included in the survey. Survey results extrapolated to account for FTEs.
	Upstream leased assets	♦ Leased warehouses	♦ Actual	2 – consumption based on percentage occupancy and months of occupation per facility
	End-of-life of sold products	♦ Weight of sold products	♦ Actual	4 – Australia and London provided data for textiles only. Data incomplete as weight purchased does not equal weight of product sold. Quantis tool used to estimate emissions

SECTION C

8. INFORMATION ON TFG 'S EMISSIONS

8.1. TOTAL SCOPE 1 & 2 EMISSIONS

The GHG Protocol requires carbon footprint calculations to include, as compulsory reporting, all direct emissions under Scope 1 and indirect emissions under Scope 2.

All emissions are calculated using emission factors and reported as tonnes of carbon dioxide equivalent (tCO_2e) gases as required by the GHG Protocol. Unless otherwise stated, emission factors are sourced from United Kingdom Department for Environment, Food and Rural Affairs (Defra)[15].

Emission Factors
Emission factors convert operational activity data (e.g., kilometres driven, kilowatt hours of purchased electricity) into a value indicating the GHG emissions generated by that activity – reported as carbon dioxide equivalent (CO_2e). Emission factor values can be sourced from a variety of different providers.

Carbon Dioxide Equivalent (CO_2e)
A standard unit for measuring emissions from various GHGs based on their global warming potential (GWP) in relation to that of carbon dioxide.

The GHGs covered by this calculation are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF_6) and nitrogen trifluoride (NF_3). As described above, all these gases are amalgamated and reported in terms of their carbon dioxide equivalency (CO_2e).

8.2. COMPANY INTENSITY METRICS

Intensity metrics are indicators that provide a comparison of the amount of CO_2e relevant to an operational indicator. Typically, the indicator is a factor that is comparable across years and sectors. Examples include: FTEs, area in square metres (m^2), and/or a monetary factor such as EBITDA, revenue or turnover.

15 United Kingdom Department for Environment, Food and Rural Affairs (Defra). 2021. *Greenhouse gas reporting: conversion factors 2021*.

8.3. SCOPE 1 EMISSIONS

Scope 1 emissions are from sources owned or controlled by the reporting company, e.g., generators, refrigeration, air-conditioning units.

Table 9 provides a breakdown of TFG 's direct Scope 1 consumption and carbon emissions for FY2022. Please note that throughout the CFR, all consumption, and emissions in tonnes of CO_2e are rounded to two decimal places[16] and intensity metrics are rounded to three decimal places.

Table 9: TFG'S DIRECT SCOPE 1 EMISSIONS IN FY2022

Category	Units/Type	Total consumption	Metric tonnes of CO_2e[17]
Stationary fuel	Litres – diesel in equipment Africa	48 645.00[18]	131.61
	Litres – diesel in equipment London	200.00	0.54
	Total	48 845.00	132.15
Fugitive gas[19]	Kilograms – R407c Africa	104.00	184.50
	Kilograms – R410a Africa and London	560.50	1 170.32
	Kilograms – R134a Africa	17.00	24.31
	Kilograms – Aflush Africa	58.00	0.06[20]
	Total	739.50	1 379.19
Mobile fuel – TtW	Litres – diesel Africa[21]	306 188.77	828.40
	Litres – petrol Africa	734 984.95	1 719.64
	Litres – diesel London[22]	2 440.37	6.60
	Litres – petrol London	2 960.00	6.93
	Total	1 046 574.09	2 561.57
Renewable energy generated onsite	kWh – Solar renewable energy Africa	126 318.00	0.00

16 Should the figures in the breakdown tables of this CFR be summed manually, there may be variances of 0.01 (up or down) from the totals stated herein due to rounding of data to two decimal places.
17 Unless otherwise stated, all emission factors are provided by: United Kingdom Department for Environment, Food and Rural Affairs (Defra). 2021. Greenhouse gas reporting: conversion factors 2021.
18 Diesel in generators includes diesel in stores 11 465 litres and a mobile generator 444 litres but excludes diesel in bowsers as these are only stored.
19 The GWP for air-conditioning, fire suppressant and refrigeration gas refills are sourced from: Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. 2007. Fourth Assessment Report of the Intergovernmental Panel on Climate Change. United Kingdom: Cambridge University Press.
20 A-flush is used to flush out a system before maintenance. The emission factor was sourced directly from the supplier via private correspondence.
21 TFG Africa increased mobile fuel as Jet vehicles were incorporated for a full year of travel.
22 TFG London has split data between diesel and petrol, improving reporting year-on-year.

8.4. SCOPE 2 EMISSIONS – MARKET-BASED AND LOCATION-BASED EMISSIONS

Location-based electricity
The location-based method reflects the average emissions intensity of electricity grids on which energy consumption occurs, taking into account all electricity generation (renewable and non-renewable), thus using the grid average emission factor. An example is the national annual electricity emission factor provided by Eskom to South African electricity consumers.

Market-based electricity
The market-based method reflects the emissions from electricity-generating sources that companies have purposefully chosen – for example, energy from a specific wind farm – which may be different from the electricity that is generated for the local grid. Different electricity suppliers and contracts emit more or less GHGs depending on the energy source or technology, resulting in a supplier-specific emission factor.

Scope 2 emissions are 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. Scope 2 emissions are reported according to either the location-based or market-based approach.

Where relevant, this means reporting the specific emissions associated with the procurement of energy from a contracted supplier. Contracts with low-carbon electricity suppliers and renewable energy certificates (RECs) are examples of instruments that provide companies with an opportunity to account for emissions under the market-based approach. Regardless of whether supplier-specific emission factors are employed or not, dual reporting of location and market-based electricity is recommended as best practice.

Table 10 provides a breakdown of TFG 's indirect Scope 2 consumption and carbon emissions for FY2022.

Table 10: TFG'S INDIRECT SCOPE 2 EMISSIONS FROM PURCHASED ELECTRICITY IN FY2022

Category	Units/Region	Total consumption	Metric tonnes of CO_2e	
			Location-based	Market-based
Purchased non-renewable electricity	kWh – Africa	217 824 770.59	223 168.77	223 168.77[23]
	kWh – London	2 382 288.33	505.83	505.83[24]
	kWh – Australia	7 807 346.03	5 727.35	5 727.35[25]
Total purchased electricity		228 014 404.95	229 401.95	229 401.95
Purchased renewable electricity	kWh – London	5 144 163.72	1 092.26	0.00
Total purchased electricity[26]		233 158 568.67	230 494.21	229 401.95

23 South African emission factor for purchased electricity sourced from: Eskom. 2021. Eskom Integrated Report 2021. Johannesburg, Eskom.
24 The TFG London emission factors for electricity is provided by: United Kingdom Department for Environment, Food and Rural Affairs (Defra). 2021. Greenhouse gas reporting: conversion factors 2021.
25 Emission factor for Australia electricity is sourced from Australian National Greenhouse Accounts factors. 2021.
26 In dual reporting (market-based and location-based methodologies), the Scope 2 total is for the selected methodology and not the combined totals of both methodologies.

SECTION D

9. ADDITIONAL INFORMATION UNDER THE GHG PROTOCOL

9.1. SCOPE 3 EMISSION CATEGORIES

Scope 3 emissions
Scope 3 emissions are indirect emissions (other than purchased electricity, heat or steam) that can be described as relevant to the activities of the reporting company, e.g., business travel, and which are emitted by sources in the reporting company's supply chain. Scope 3 emissions are reported at the discretion of the reporting company.

It is widely accepted that reporting on a variety of Scope 3 categories (refer to Appendix A) allows companies to gain more meaningful and comprehensive information that provides input into their wider business strategy. Furthermore, reporting of Scope 3 categories is increasingly becoming a focus in management of corporate carbon emissions. Certain reporting platforms, such as CDP and the Science Based Targets initiative (SBTi), are steadily requiring greater and more detailed understanding of the entire supply chain of an organisation, making Scope 3 reporting increasingly important for companies.

9.2. RELEVANT SCOPE 3 EMISSIONS

Table 11 outlines Scope 3 emissions generated during TFG 's reporting year from data that was available and deemed accurate. This Table indicates the consumption together with the calculated emissions. Please refer to relevant footnotes for further details.

Table 11: TFG'S INDIRECT SCOPE 3 EMISSIONS FROM FY2022

Category	Units/Description	Total consumption	Metric tonnes of CO_2e[27]
Purchased goods & services – paper products	Tonnes – cardboard	4 064.77	3 338.13
	Tonnes – cardboard recycled	1 066.35	766.21
	Tonnes – paper	558.74	513.70
	Tonnes – Mondi Rotatrim[28]	8.30	15.55
	Tonnes – Sappi Typek[29]	294.77	851.50
	Tonnes – mixed paper and board	163.34	143.94
	Tonnes – LDPE plastic[30]	1 367.05	3 555.19
	Tonnes – LDPE plastic recycled	95.04	170.80

27 Unless otherwise stated, all emission factors are provided by Defra, Guideline to Defra's GHG Conversion Factors for Company Reporting; Annexes. Updated in August 2020.
28 Emission factor for Mondi Rotatrim paper: Mondi. December 2021. Mondi Office Paper Environmental Parameters. (Unpublished).
29 Emission factor for Sappi Typek paper: Sappi. May 2021. Sappi Paper Profile – Stanger Mill. (Unpublished). Office paper was assumed to be 78% single sided and store paper 75% single sided printing.
30 Unless stated otherwise, plastic bags were assumed to be LDPE.

	Tonnes – PP plastic	379.56	1 178.44
	Tonnes – PS plastic	63.37	239.41
	Tonnes – scrap metal	0.90	3.30
	Tonnes – wood	2.37	0.74
	Tonnes – fabric	13.76	307.06
	Total	8 078.32	11 083.97
Purchased goods & services – marketing	Tonnes – magazine paper	1 474.51	1 355.66
	Tonnes – mailers and flyers	308.18	283.34
	Total	1 782.69	1 639.00
Purchased goods & services – water	Kilolitres – municipal Africa	790 036.74	736.04
	Kilolitres – municipal London	435 861.21	64.94
	Kilolitres – municipal Australia	8 594.60	1.28
	Total	1 234 492.55	802.26
Purchased goods & services – other	GBP spend – London (incl. travel)[31]	11 791 740.95	10 548.18[32]
Capital goods	GBP spend – London	1 453 012.52	315.69
	AUD spend – Australia	26 546 000.00	4 213.83[33]
	Total		4 529.52
Fuel- & energy-related activities – T&D losses from purchased grid electricity	Kilowatt hours – Africa	217 824 770.59	26 454.44[34]
	Kilowatt hours – London	2 382 288.33	44.76
	Kilowatt hours – Australia	7 807 346.03	635.42[35]
	Total	228 014 404.95	27 134.62
Fuel- & energy-related activities – WtT emissions – Scope 1, 2 and T&D losses	Fuel and energy WtT – Africa	Various	43 763.06[36]
	Fuel and energy WtT – London	Various	146.81[37]
	Fuel and energy WtT – Australia	Various	1 463.09[38]
	Total		45 372.97
Upstream transportation & distribution – TtW	Litres – diesel Africa	8 582 577.44	23 220.42
	Litres – petrol Africa	1 820 000.00	4 258.24
	Tonne.km – sea freight	45 530 552.96	602.46
	Tonne.km – air freight	3 217 887.49	3 882.17
	Tonne.km – average rigid truck London	1 267 331.70	263.40
	No. packages (Startrack)[39] Australia	72 632.00	216.82
	Total	Various	32 443.46

31 It was not clear if travel claims were included in the data. In future, travel claims, and other business travel should be reported separately to improve accuracy and completeness of reporting. WtT for business travel excluded as detailed data was not available.
32 Carbon is calculated using Quantis tool based on available spend data. Conversion of 1.24USD to 1GBP was used. Categories reported separately such as paper and electricity were excluded to avoid double counting.
33 Carbon is calculated using Quantis tool based on available spend data. Conversion of 0.71USD to 1AUD was used. Shop fittings, office furniture and equipment and computer equipment were incorporated as retail trade spend category.
34 Emission factor for T&D losses for electricity purchased in South Africa is sourced from: Eskom. 2021. Eskom Integrated Report 2021. Johannesburg, Eskom.
35 Emission factor for Australia electricity T&D losses is sourced from Australian National Greenhouse Accounts factors. 2021.
36 WtT emissions in tCO_2e include stationary 31, mobile 636, Scope 2 - 38 802 and T&D losses 4 295.
37 WtT emissions in tCO_2e include stationary 0.13, mobile 3.32, electricity 132, T&D losses from purchased electricity 12.
38 WtT emissions in tCO_2e - electricity 1 371 and T&D losses 86, leased assets LPG 2, leased assets electricity 5.
39 A breakdown of tonne.km was not available and it was assumed the calculations were correct from the supplier. WtT excluded as data was not available.

Upstream transportation & distribution – WtT	WtT freight and courier – Africa	Various	6 720.62
	WtT freight and courier – London	20 047 816.91	310.18
	WtT freight and courier – Australia	354 035.52	86.87
	Total	Various	7 117.66
Waste	Tonnes – landfill[40]	776.19	881.59
	Tonnes – recycling	1 850.53	39.40
	Tonnes – compost	4.44	0.04
	Kilolitres – wastewater	1 187.00	0.32
	Total	Various	921.36
Business travel – car hire TtW	Km – Africa	268 466.00	46.57
	Km – Australia	4 174.00	0.72
	Total	272 640.00	47.28
Business travel – air travel TtW[41]	Km – Africa	7 324 127.19	1 286.57
	Km – Australia	2 789 008.20	436.42
	Total	10 113 135.39	1 722.99
Business travel – accommodation TtW[42]	Bed nights – Africa	5 166.00	307.48
	Bed nights – Australia	479.00	18.81
	Total	5 645.00	326.29
Business travel – travel Claims TtW	Litres – diesel Australia	26 583.42	71.92
	Litres – petrol Australia	141 925.36	332.06
	Km – Africa	413 689.86	70.94
	Km – Australia	17 640.00	3.02
	Total	Various	477.95
Business travel – WtT	WtT business travel – Africa	8 006 283.05	172.60
	WtT business travel – Australia	Various	151.04
	Total	Various	323.63
Employee commuting	Permanent FTE – Africa	19 267.00	15 692.87[43]
	Permanent FTE – London	587.00	146.50[44]
	Permanent FTE – Australia	1 044.00	868.35[45]
	Total	20 898.00	16 707.72
Upstream leased assets	kWh – purchased electricity (Australia)	403 667.58[46]	318.90
	kWh – purchased LPG (Australia)	241 353.00	14.38
	Total		333.28
	Tonne.km – WtW incl. DHL London	3 433 414.18	3 775.79[47]

40 Emission factor for South Africa waste to landfill was sourced from Friedrich 2013.
41 An 8% uplift factor is included to consider non-direct routes and delays/circling. The impact of radiative forcing is also included.
42 A country-specific emission factor is used, which has seen significant variances year-on-year since its introduction.
43 Commuting for Africa was calculated using 713 surveys resulting in 581 tCO_2e, 0.81 tCO_2e/employee.
44 Emissions from commuting based on 36 surveys totalling 8.98 tCO_2e, 0.25 tCO_2e/employee.
45 Commuting for Australia was calculated using 455 surveys resulting in 378 tCO_2e, 0.83 tCO_2e/employee.
46 Johnny Bigg warehouse in America is excluded as electricity and water data not available. Only 1% of the warehouse was occupied and only for a short time. Connor warehouses 1-3 were closed from July due to relocation to the new warehouse. Three months of data was included in reporting.
47 Emissions are sourced directly from the supplier, DHL and included upstream and downstream transportation and distribution as it was not possible to split out. Data was available for March 2021-February 2022, a twelve-month period although not exactly to the reporting year.

Downstream transportation and distribution – courier	No. packages – Aus post[48]	504 527.00	659.98
	Total	Various	4 435.77
End-of-life treatment of sold products	Tonnes sold products – London	1 523.35	676.58[49]
	Tonnes sold products – Australia	5 171.12[50]	6 391.84
	Total	Various	7 068.42
Downstream leased assets	kWh – tenant electricity (Africa)	23 144.02	24.53

9.3. OUTSIDE OF SCOPES: EMISSIONS FROM GHG EMISSIONS NOT COVERED BY THE KYOTO PROTOCOL

The GHG Protocol methodology was developed to report on all GHGs that were identified under the Kyoto Protocol. Outside of Scopes emissions include, among others, GHGs that are not incorporated under this agreement, as they are presumed to have been phased out under the Montreal Protocol. In South Africa, certain GHGs which are not part of the Kyoto Protocol, such as HCFC22 (Freon or R22), and are therefore considered Outside of Scopes, continue to be used as gas refills in air-conditioning and refrigeration equipment.

TFG recorded usage of 885 kg (totalling 1 601 tCO_2e) of R22 Freon gas refills during the reporting year as indicated in Table 12.

Table 12: TFG 'S DIRECT EMISSIONS FROM OUTSIDE OF SCOPE GHGS IN FY2022

Category	Units/Type	Total consumption	Metric tonnes of CO_2e
Fugitive gas (non-Kyoto)[51]	Kilograms – HCFC22 (Freon) (Africa)	884.50	1 600.95
	Total	884.50	1 600.95

48 A breakdown of tonne.km was not available and it was assumed the calculations were correct from the supplier. WtT excluded as data was not available.
49 Emissions calculated using the Quantis tool based on weight per product material group for available data.
50 Weight of units sold was included in the calculations assuming 95% would go to landfill at end of life and 5% composted. It is likely this is underrepresented. Unsold stock (128t), donations (31t) and upparel recycling (1t) not included.
51 The GWP for air-conditioning, fire suppressant and refrigeration gas refills are sourced from: Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. 2007. *Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. United Kingdom: Cambridge University Press.

9.4. WATER CONSUMPTION

The incorporation of water consumption is recommended as an awareness-raising tool. Total water consumed by TFG in FY2022 was 1 234 493 kilolitres. TFG Africa reported water for stores in FY2022 for the first time. Table 13 provides a comparison of TFG 's water consumption over the last four years of reporting (FY2019–FY2022)[52] as compared to the baseline year.

Table 13: TFG'S WATER CONSUMPTION IN KILOLITRES OVER 4 YEARS (FY2019–FY2022)

Description	Division	FY2019	FY2020	FY2021	FY2022	% Change
TFG Africa – municipal	South Africa DCs	4 835.72	6 395.48	9 868.21	16 085.73	62%
	Head offices	35 308.25	19 403.47	16 389.51	16 678.00	2%
	Regional offices	1 544.00	1 168.98	1 285.36	3 287.00	156%
	Manufacturing	12 684.71	17 048.93	12 518.59	40 129.01	39%
	Stores	N/R	N/R	N/R	713 857.00	N/A
	Total	54 372.68	44 016.86	40 061.67	790 036.74	1 815%
TFG London – municipal	Facilities	4 276.00	N/R	2 172.10	435 861.21	%
	Stores	N/R	N/R	612.00	N/R	N/A
	Total	4 276.00	N/R	2 784.10	435 861.21	15 555%
TFG Australia – municipal	Warehouses	N/R	N/R	8 349.24	6 842.60	(18%)
	Head offices	N/R	N/R	1 978.00	1 752.00	(11%)
	Total	N/R	N/R	10 327.24	8 594.60	(17%)
Total municipal water		58 648.68	44 016.86	53 173.01	1 234 492.55	2 631%
TFG Africa – borehole	South Africa DCs	N/A	4 576.00	4 167.85	3 383.05	(19%)
	Head offices	N/A	15 341.00	6 849.43	8 993.88	31%
	Total borehole	N/A	19 917.00	11 017.28	12 376.93	12%

10. ILLUSTRATED SUMMARY

Table 14: SUMMARY OF TFG'S EMISSIONS BY SCOPE IN FY2022 IN TONNES OF CO_2e

Category	TFG Africa	TFG London	TFG Australia	TOTAL
Scope 1	4 050	22	0	4 073
Scope 2	223 169	506	5 727	229 402
Scope 3	134 362	18 699	20 000	173 061
Outside of Scopes	1 601	0	N/A	1 601

N/A = Not applicable

52 Water data for earlier years can be viewed in previous carbon footprint reports.

10.1. ILLUSTRATED OVERVIEW OF RESULTS OF EMISSIONS BY SCOPE FOR TFG IN FY2022

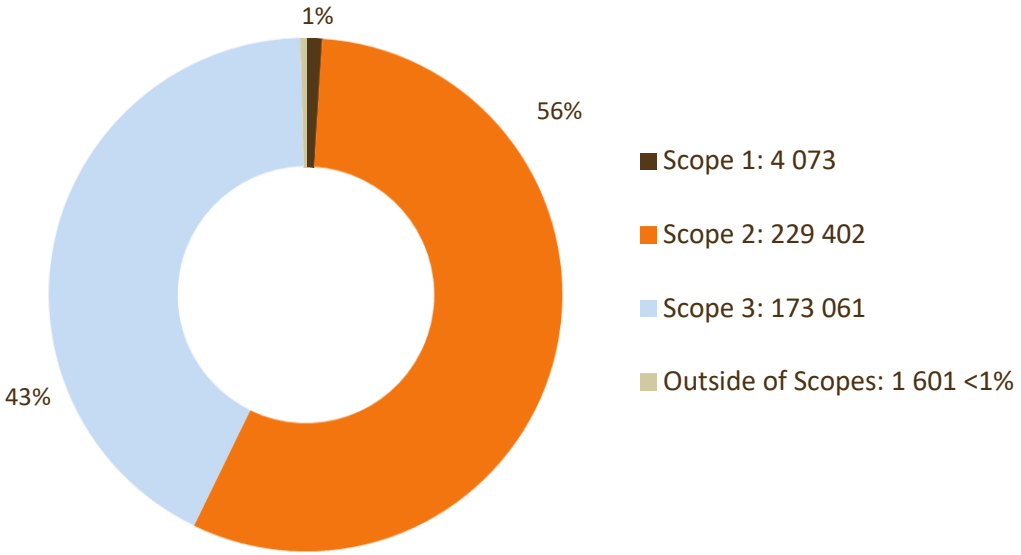

Figure 3: TFG 's emissions in tonnes of CO_2e by Scope in FY2022

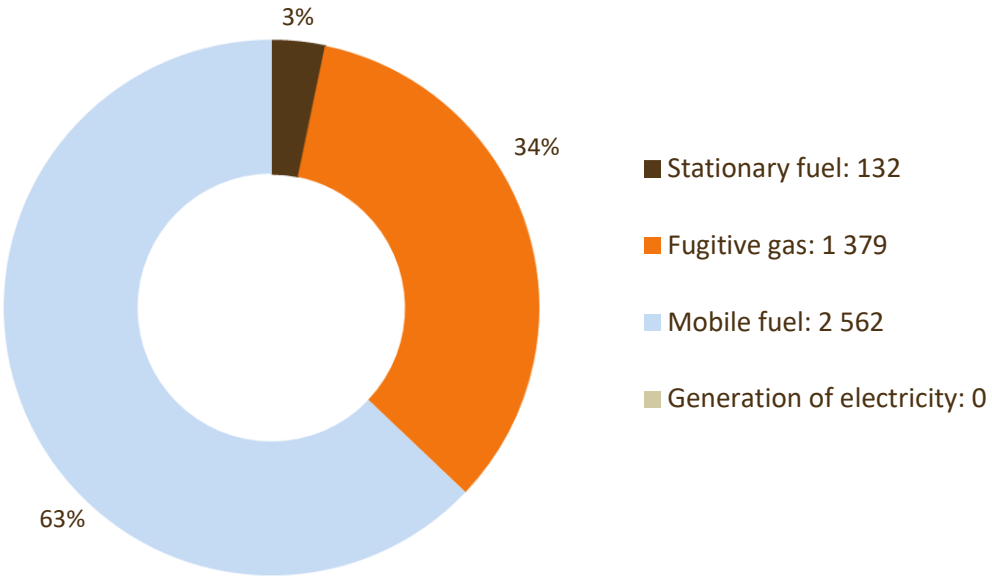

Figure 4: TFG 's Scope 1 emissions in tonnes of CO_2e in FY2022

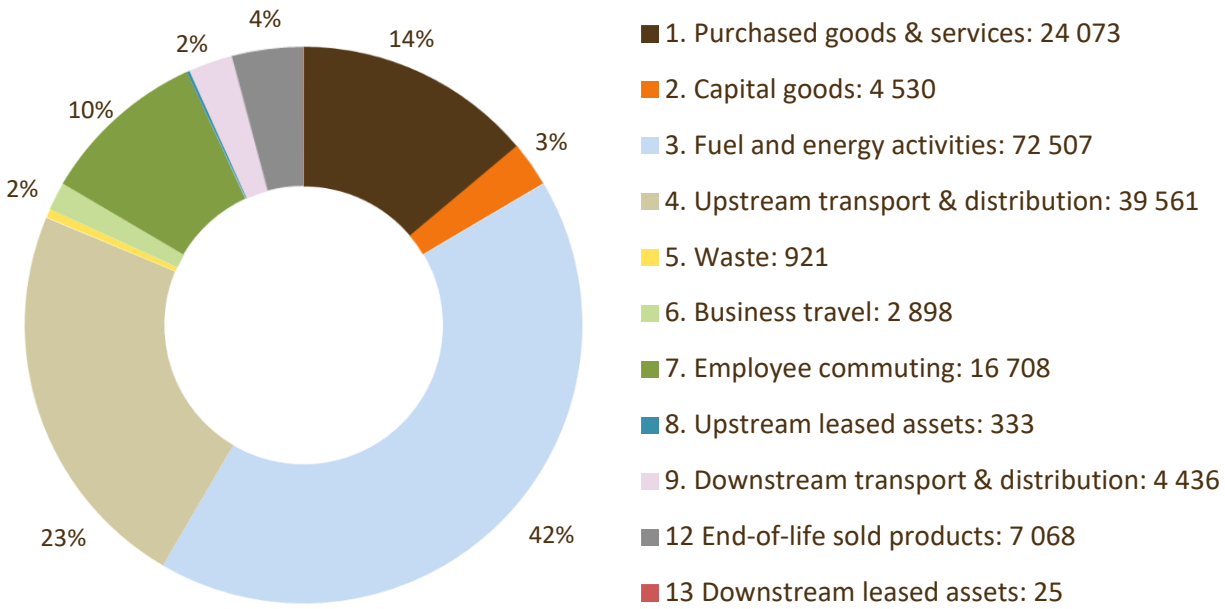

Figure 5: TFG 's Scope 3 emissions by category in tonnes of CO_2e in FY2022

11. COMPARISON OF EMISSIONS AND INTENSITY

Inclusive of this CFR, Carbon Calculated has worked with TFG for fifteen reporting years. The aim has been to collect the most detailed and accurate data possible and to further extend the operational and organisational boundary. Table 15 provides a comparison of TFG 's carbon footprint over the last four years of reporting (FY2019–FY2022)[53]. As a result of the COVID-19 pandemic, it is expected that consumption and emissions have been subjected to increased variability in FY2020 and beyond.

High-level notable changes include a 9% increase in Scope 1, due to stationary fuel from increased loadshedding and mobile fuel increase as a result of the Jet acquisition being reported for a full year. Scope 2 increased by 30% as new facilities were added to the TFG Africa reporting boundary and due to the return to work following lockdown. Scope 3 increases are linked to new Scope 3 categories being added to the reporting boundary such as capital goods, end-of-life treatment of products, as well as water and WtT. Further increases are linked to returning to work following the COVID-19 lockdown, such as commuting and business travel.

53 Carbon data for earlier years can be viewed in previous carbon footprint reports.

Table 15: COMPARISON OF TFG'S EMISSIONS OVER 4 YEARS (FY2019–FY2022)

Category	Metric tonnes of CO_2e				% Change
	FY2019	FY2020	FY2021	FY2022	FY21/FY22
Stationary fuel	136[54]	256	69	132	91%
Fugitive gas	1 415	2 123	1 696	1 379	-19%
Mobile fuel	3 049	2 836	1 985	2 562	29%
Onsite renewable	0	0	0	0	0
Total Scope 1	4 599	5 215	3 750	4 073	9%
Total Scope 2	153 096	166 655	175 863	229 402	30%
Total Scope 1 & 2	157 695	171 870	179 613	233 475	30%
Paper products	1 554	937	855	993	16%
Marketing	6 695	3 437	1 846	1 639	-11%
Packaging	4 315	4 358	7 105	10 091[55]	42%
Water	N/R	N/R	N/R	803	N/A
Other purchased goods and services	N/R	N/R	N/R	10 548	N/A
Capital goods	N/R	N/R	N/R	4 530	N/A
T&D losses	13 963	16 260	17 676	27 135	54%
Fuel and energy – WtT	N/R	N/R	N/R	45 373	N/A
Upstream distribution	18 220	22 908	24 871	32 443	30%
Upstream distribution – WtT	N/R	N/R	N/R	7 118	N/A
Waste	757	758	771	921	19%
Business travel – hire cars	39	63	15	47	213%
Business travel – air travel	5 228	4 743	401	1 723	330%[56]
Business travel – accommodation	438	235	78	326	318%
Business travel – travel claims	100	50	303	478	58%
Business travel – WtT emissions	N/R	N/R	N/R	324	N/A
Employee commuting	15 318[57]	21 422	6 797	16 708	146%
Upstream leased assets	N/R	N/R	481	333	(31%)
Downstream distribution incl. WtT	N/R	N/R	N/R	4 436	N/A
End-of-life of sold products	N/R	N/R	N/R	7 068	N/A
Downstream leased assets – tenant	14	24	18	25	39%
Total Scope 3	66 643	75 193	61 216	173 061	183%
Outside of Scopes – R22 Freon	2 542	2 743	1 362	1 601	18%

N/A= Not applicable N/R=Not reported

54 FY2019 stationary fuel was restated in FY2020, as the diesel stored in bowsers was included as generator fuel; however, it was only stored and not consumed. The emissions reduced from 208 to 136 tCO_2e.

55 The increase in packaging is COVID-19 related and the increase in packaging is also due to an increase of winter wear, boots and additional (Cosmetics and Jewellery) commodities shipped in FY2022 when compared to FY2021.

56 Increase in travel data is linked to the lifting of travel restrictions following the pandemic.

57 FTE numbers for FY2019 were restated in FY2020 resulting in a restatement of commuting emissions. Emissions changed from 15 325 to 15 318 tCO_2e.

11.1. EMISSIONS INTENSITY

It is useful to compare year-on-year emissions in terms of emission intensities, e.g., total emissions per FTE, m^2, EBITDA and revenue. For the purposes of benchmarking with other companies in the relevant sector intensity figures are generally based on Scope 1 and Scope 2 emissions only. This is because these scopes are compulsory for reporting, while Scope 3 categories are reported at the discretion of the reporting company. However, it is important to note that emission intensity values are highly sensitive to changes in the intensity indicators over time and may not sufficiently demonstrate emission reduction efforts by TFG.

During FY2022 TFG emitted 11.172 tCO_2e per full time employee and 0.143 tCO_2e per square metre of floor space including stores and facilities. Table 16 provides a comparison of TFG 's metrics and intensity over the last four years of reporting (FY2019–FY2022).

Table 16: COMPARISON OF TFG'S METRICS AND INTENSITY OVER 4 YEARS (FY2019–FY2022)

TFG	Metrics				% Change
	FY2019	FY2020	FY2021	FY2022	FY21 vs. FY22
Total Scope 1 & 2	157 695	171 870	179 613	233 475	30%
Full-time employees (FTE)	15 744	16 200	18 708	20 898	12%
Total employees	26 600	26 854	34 891	38 329	10%
Square meterage (including stores)	1 062 075	1 011 451[58]	1 563 860	1 618 793	4%
Group EBITDA (R million)	8 531.8	8 513.3	6 541.80	9 126.90	40%
Group Revenue (R million)	37 128	38 477	35 586	46 167.40	30%
Scope 1&2 tCO_2e/FTE	10.021	10.609	9.601	11.172	16%
Scope 1&2 tCO_2e/Total employees	5.913	5.152	5.148	6.091	18%
Scope 1&2 tCO_2e/m^2 including stores	0.148	0.170	0.115	0.144	25%
Scope 1&2 tCO_2e/EBITDA (R million)	18.483	20.188	27.570	25.581	(7%)
Scope 1&2 tCO_2e/Retail revenue (R million)	4.249	4.467	5.047	5.057	0%

58 Area excludes all facilities within TFG London as data was not available for FY2021.

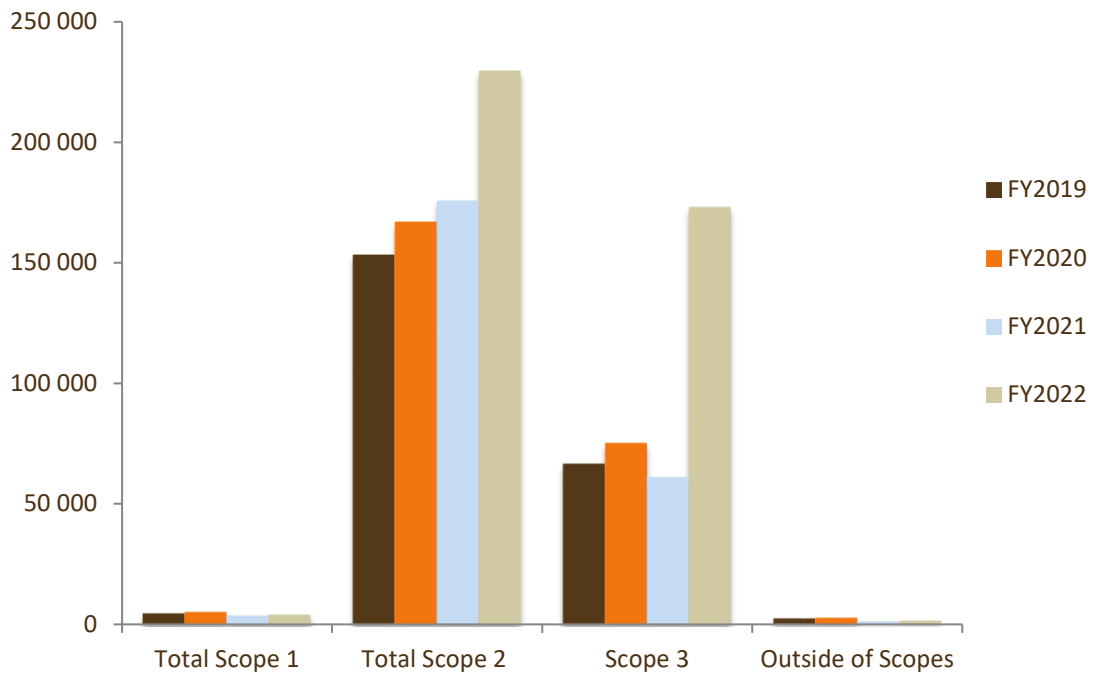

Figure 6: TFG 's comparative emissions between years (FY2019-FY2022) by Scope

12. TFG INTEGRATED INFORMATION

12.1. INFORMATION ON OFFSETS AND RENEWABLE ENERGY

TFG has not offset any of its GHG emissions by appropriate offsetting mechanism.

TFG generated of 126 318 kWh of onsite renewable energy at its Caledon manufacturing facility during the reporting year, effectively saving 134 tCO_2e. In FY2021, Caledon generated 112 086 kWh and 108 000 kWh in FY2020.

TFG London purchased REGOs to the value of 5 144 164 kWh. The certificates of which will only be available in August 2022.

12.2. VERIFICATION OF GHG INVENTORY

An independent verification party has not verified this report. It is recommended that the CFR be verified by an external third party.

12.3. REPORTING IMPROVEMENTS

TFG has improved its reporting from FY2021 to FY2022 by implementing the following measures:

- Water reported for TFG Africa stores for the first time. Limited data was available, thus estimated water consumption is based on kl/m^2 of actual data in selected stores and extrapolated to all stores.
- Electricity data for Australia stores is based on 108 stores, where they could be linked to square metres. An average kWh/m^2 was calculated and used for the stores where electricity data was not available. This is an improvement in accuracy compared to only 44 stores in FY2021.
- TFG London fleet data was split between petrol and diesel whereas previously all was reported as diesel.
- Capital goods, additional purchased goods, and services as well as end-of-life treatment of sold products were included for the first time for TFG London and TFG Australia.
- Well-to-Tank (WtT) emissions have been added to Scope 3.
- TFG London purchased renewable electricity, reducing Scope 2 emissions.

12.4. REPORTING RECOMMENDATIONS

It is recommended that the following actions are taken to improve the relevance, completeness, consistency, transparency and accuracy (i.e. the five principles of the GHG Protocol) of TFG 's emissions:

- TFG Africa to capture weight of sold products for additional Scope 3 categories
- TFG Africa to collect data on Rand spent of all purchased goods and services as well as capital goods.
- Consideration should be given to measuring waste at Caledon warehouse and Durban Regional office for improved completeness in reporting.
- Material use for advertising provided by Pointgroup included paper, vinyl, plastic, and fabric. Weight per category is required. Currently only paper data was used as weight was available.
- TFG Australia to provide kilowatt hours consumed per region in Australia. Consumption was not available for all stores; thus estimations were made based on a rate of kWh/m^2. However, the area for stores did not sum correctly, so a further estimation was made based on available data as a percentage of area. There was <4% difference in totals thus not material but accuracy can be improved.
- TFG Australia transport and distribution: Data to be requested for NZ Post, IPEC and Toll Global Forwarding.
- DHL report for courier was assumed to all be downstream. It would be ideal to separate who pays for the deliveries for more accurate reporting of upstream and downstream distribution.
- Plastic bag data should also indicate the type of plastic e.g. LDPE, HDPE.
- TFG London weight for cartons to be provided and Hobbs to provide hanger and carton data in future.

- TFG London to request certificates of all purchased renewable electricity and to ensure they align with best practice and international certification requirements.
- TFG London should collect and report on all travel data including travel claims.
- Consideration could be to report employees as full time equivalent, where part time employees are classified as 0.5 of a full-time position. Emissions from commuting would effectively increase but intensity metrics would be adjusted and reduced as there would be an increase in the number of employees and this may be more representative of the emissions per employee.

12.5. STRATEGIC RECOMMENDATIONS

It is recommended that the following actions are taken to move towards a global goal of Net Zero 2050:

- Given than 56% of emissions are from Scope 2 purchased electricity, onsite generation of electricity such as Caledon Manufacturing in South Africa must be considered as a vital way to reduce emissions.
- Transition to fugitive gases with lower GWP. Currently TFG Africa utilises a large amount of R22 Freon, which is being phased out hence it is reported as outside of scopes. When considering replacement of refrigeration and air conditioning systems, the GWPs of refills must be considered during the procurement process.
- Climate targets should be science-based to align with the Paris Agreement achieving Net Zero by 2050.
- Consideration must be given to rebaslineing particularly if a science-based target is to be set given that financial years impacted by COVID-19 do not present representative baselines years and the SBTi recommends setting a baseline upon the most recent complete inventory year.

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APPENDIX A: KEY TERMS AND ABBREVIATIONS

Abatement	Measures companies take to avoid, reduce, or eliminate sources of GHG emissions within their value chain. Examples include reducing energy use, switching to renewables, and retiring high-emitting assets
Baseline year	A past year used as a baseline to compare year-on-year emissions
CDP	A non-profit organisation that supports companies and cities in the disclosure of their environmental impact to the international investor community (see www.cdp.net)
Climate positive / Carbon negative	The activity that goes beyond achieving net-zero carbon emissions to create an environmental benefit by removing additional carbon dioxide from the atmosphere
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent – conversion of all greenhouse gases to reflect their global warming potential relative to CO_2
Decarbonisation	The process by which CO_2 emissions are reduced or eliminated. Under the Net-Zero Standard, most companies are required to reduce emissions by at least 90% to reach net-zero
Defra	United Kingdom Department for Environment, Food and Rural Affairs
Direct emissions	Greenhouse gas emissions from facilities/sources – e.g., generators, fugitive emissions, vehicle fleets, etc. – owned or controlled by a reporting company
Downstream emissions	Greenhouse gas emissions related to manufactured and/or sold goods and services, e.g., end-of-life treatment of sold products, transportation and distribution of sold products and franchises
Emission factors	Specific value used to convert activity data into greenhouse gas emission values, presented in specific units, e.g., $kgCO_2e$/km travelled
FTE	Full-time employee
Fugitive emissions	Emissions from gases or vapours from pressurised equipment due to leaks and other unintended or irregular releases of gases e.g., air-conditioning gas leaks, refrigeration and fire-suppressant gas refills, or methane emissions from coal mining
FY	Financial year
GHG Protocol	Greenhouse Gas Protocol – International methodology used to calculate the carbon footprint of an organisation, developed by the World Business Council for Sustainable Development (WBCSD) and the World Resources Institute (WRI)
Global Warming Potential (GWP)	An indication of the global warming effect of a greenhouse gas in comparison to the same weight of CO_2
Indirect emissions	GHG 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, business travel, etc.
Intensity	A metric to compare CO_2e emissions, expressed in terms of another metric of activity, e.g., CO_2e per FTE, area, income, or tonnes of product
Kyoto Protocol	An international agreement linked to the United Nations Framework Convention on Climate Change, which commits its Parties by setting internationally-binding emission reduction targets. The Protocol was adopted in Kyoto, Japan, in December 1997 and entered into force in February 2005

Market-based electricity	The emissions from electricity-generating sources that companies have purposefully chosen – for example, energy from a specific wind farm – which may be different from the electricity that is generated for the local grid, thus using a supplier-specific emission factor
Neutralisation	The removal and permanent storage of carbon from the atmosphere to counterbalance the impact of emissions that remain unabated from either inside or outside of a company's value chain. This can take the form of technological removals (i.e. Direct Air Capture (DAC) with geological storage) and nature-based solutions (e.g. reforestation)
Off-road mobile fuel	Fuel emissions from vehicles used onsite, e.g., forklifts, tractors, but not used on public roads
On-road mobile fuel	Fuel emissions from vehicles used offsite, on public roads, e.g., passenger vehicles, delivery vehicles
Outside of Scopes	Emissions accounted for by the direct CO_2 impact of burning biomass and biofuels where the Scope 1 impact of these fuels has been determined to be a net zero. This also includes fugitive emissions outside of the GHG Protocol
R million	Million South African Rand
Science Based Target initiative (SBTi)	A partnership between CDP, United Nations Global Compact (UNGC), World Resources Institute (WRI) and World Wildlife Fund (WWF). The initiative enables leading companies to set targets that will hold global warming below 1.5°C or well below the 2°C threshold – as directed by science and promoted through the Paris Agreement
Scope 1 emissions	Emissions resulting from equipment owned or controlled by a reporting company (direct emissions)
Scope 2 emissions	Emissions resulting from consumption of electricity, steam or heat purchased by a reporting company (indirect emissions)
Scope 3 emissions	Emissions resulting from indirect activities, excluding Scope 2, of a reporting company, e.g., commuting travel, business travel, paper consumption (indirect emissions)
Transmission and Distribution (T&D) Losses	The energy losses that occur in the transfer of electricity from the power plant to the end user. Reporting the T&D emissions associated with purchased power helps represent the full impact of an organisation's activities and operations and is regarded as best practice. This does not apply for renewable energy generated onsite
Tank-to-wheel (TtW) emissions	Direct use emissions from fuel combustion in vehicles, generally reported as mobile fuel emissions.
tCO_2e	Tonnes of Carbon Dioxide equivalent emissions
Upstream emissions	Indirect GHG emissions that occur in the development of a material/product, up to the point of sale by the producer, sometimes referred to as cradle-to-gate emissions, e.g., manufacture and delivery of goods or raw materials, business travel, employee commuting and waste generated in operations
Verification/Assurance	The act of reviewing, inspecting or testing by an independent third-party, in order to establish and document that a product, service or system meets regulatory or technical standards
Well-to-Tank (WtT) emissions	Upstream third-party emissions related to the production and distribution of fuel for stationary and mobile equipment and for electricity generation. Generally reported under Scope 3, category 3.
Well-to-Wheel (WtW) emissions	The combination of Well-to-Tank and Tank-to-Wheel emissions.

APPENDIX B: GHG PROTOCOL'S SCOPE 3 CATEGORIES

Table 17 outlines the GHG Protocol's Scope 3 categories in further detail. Reporting on these categories applies to only those activities carried out by the reporting company during the reporting year.

Table 17: EMISSIONS-GENERATING ACTIVITIES OF THE SCOPE 3 CATEGORIES

Category	Scope 3 category	Description
1	Purchased goods and services	Emissions from the production of goods (consumables) and services, purchased or acquired by the reporting company.
2	Capital goods	Emissions from the production of capital goods (assets) purchased or acquired by the reporting company.
3	Fuel- and energy-related activities	Emissions from the indirect consumption of fuels and energy not already accounted for in Scope 1 or Scope 2, specifically fuel or energy consumed by third parties as a result of the operations of the reporting company. Examples include emissions released during the transmission and distribution of electricity from utility to consumer.
4	Upstream transportation and distribution	Emissions from the transportation and distribution of products or services commissioned and paid for by the reporting company in vehicles not owned or controlled by the reporting company. This includes logistics, courier services and shipping.
5	Waste generated in operations	Emissions from the disposal and treatment by a third party of waste generated by the reporting company's operations and employees.
6	Business travel	Emissions from the transportation of employees for business-related activities in vehicles or aircraft not owned or operated by the reporting company. Also included is travel accommodation incurred during employee travel.
7	Employee commuting	Emissions from the commuting between residence and place of work by employees for business-related activities in vehicles not owned or operated by the reporting company.
8	Upstream leased assets	Emissions from the operation of assets leased by the reporting company and not accounted for in Scope 1 and Scope 2. This category is applicable only to companies that operate leased assets.
9	Downstream transportation and distribution	Emissions from the transportation and distribution of products or services sold by the reporting company but where the transportation is commissioned and paid for by the end-user and operated in vehicles not owned or controlled by the reporting company. This includes logistics, retail deliveries and courier services.
10	Processing of sold products	Emissions from the processing of products sold by the reporting company but used in the manufacture of downstream products, pertaining to the Scope 1 and Scope 2 emissions of downstream companies (e.g., manufacturers).
11	Use of sold products	Emissions from the end-use of goods and services sold by the reporting company, pertaining to fuels, feedstocks and products that directly consume energy (fuels or electricity) during use and for the expected lifetime.
12	End-of-life treatment of sold products	Emissions from the end-of-life waste disposal and treatment of products sold by the reporting company.
13	Downstream leased assets	Emissions from the operation of assets owned by the reporting company and leased to other entities, not included in Scope 1 and Scope 2.

14	Franchises	Emissions from the operations of franchises not accounted for in Scope 1 and Scope 2 of the reporting company. This category is only applicable to franchisors accounting for the Scope 1 and Scope 2 emissions of franchisees.
15	Investments	Emissions from the operation of investments (including equity, debt investments and project finance) not accounted for in Scope 1 or Scope 2. This category is applicable to investors (i.e., investing for profit) and companies that provide financial services.