Carbon Footprint Assessment

2021

CORONATION

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Contents

1. Introduction

Coronation Fund Managers (Coronation or the Company) is a leading South African investment manager, with billions of rand in assets under management on behalf of our clients. Headquartered in Cape Town, we have offices in major South African metros, as well as the Republic of Ireland and the United Kingdom (UK). One of our key strategic focus areas is being an active corporate citizen and therefore we are committed to building an equitable and inclusive society and reducing our operational impact on the natural environment. Understanding and addressing our contribution to climate change is a key part of this commitment. For insight into how we integrate environmental, social and governance factors into our investment process, please refer to our Stewardship Report, which is available on our website. Environmental issues, including climate change, water scarcity and plastic pollution, are among the most significant challenges of our time, with knock-on effects on society and the global economy. As a company which focuses on the long term, we understand the materiality of climate-related risks and the need for transparent reporting. With this in mind, during March 2020, Coronation became a signatory to the Task Force on Climate-related Financial Disclosures (TCFD). As a TCFD supporter, the Board of Directors (Board) has undertaken to provide more oversight over climate-related risks and opportunities.

The 2021 financial year saw the introduction of climate-related risks and opportunities as discussion topics at the Board and at the Audit and Risk Committees. In support of this, management has been mandated to identify and report on climate-related risks and Board members have undergone training on climate-related matters, to ensure that they are equipped to assess climate-related issues.

As a first step in climate change risk reporting, the Board mandated management to conduct a company-level carbon footprint. This was first undertaken for the 2020 financial year and the Board further resolved that the Company should use the findings to reduce its operational carbon footprint and, potentially, invest in projects to offset its current emissions. These steps were the first towards formally reporting in terms of the TCFD, as included in this year's reporting. It is important to note that our standard operating activities were interrupted by Covid-19 for the entire 2021 reporting period. Impacted operations include the number of employees working in our offices and the associated commuting, on-site electricity, water and waste quantities, as well as business travel (flights, accommodation, car rental). Overall, this means that resource consumption and travel emissions are significantly lower than would be expected in a standard operating year. It is therefore expected that our carbon footprint metrics will differ once normal operations recommence.

Notwithstanding the material impact of lockdown restrictions on business-as-usual activities, we are confident in our abilities to track our carbon footprint impact. We will continue to deepen our approach to monitoring and improving our operational sustainability.

1.1 GLOBAL CONTEXT

Scientists have reached consensus that rising atmospheric concentrations of greenhouse gases (GHGs), particularly carbon dioxide (CO_2), threaten to have severe impacts on natural ecosystems, food production and human health. Industrialised and rapidly industrialising countries are the main sources of GHGs. However, the greatest impacts will be experienced by people and ecosystems in developing countries, particularly those in low-lying coastal regions and those dependent on marginal agricultural areas for livelihoods.

Global consensus on a plan of action was best articulated in the 2016 Paris Agreement, which aims to limit global temperature increases to well below 2°C and strives to achieve limiting temperature increases to 1.5°C above pre-industrial levels. As signatories to the Paris Agreement, and in acknowledgement of the significant risks to humanity, national governments are taking a variety of steps to reduce GHG emissions, including the introduction of national targets, regulations and standards on GHG emissions, renewable energy and energy efficiency; carbon and fossil fuel taxes; emissions trading schemes; and mandatory emissions reporting programmes. A variety of voluntary disclosure frameworks and emissions offset programmes have also emerged around the world.

South Africa is a signatory to the Paris Agreement and has submitted its updated Nationally Determined Contribution (NDC) to the United Nations Framework Convention on Climate Change (UNFCCC). The NDC includes proposed actions for both adapting to the impacts of climate change and making its contribution to global efforts on mitigating emissions, as well as the finance and investment requirements for both. South Africa's NDC is underpinned by the environmental rights set out in section 24 of the Constitution, and the National Development Plan (NDP), which provides a 2030 vision to guide the country's sustainable development trajectory.

1.2 THE ROLE OF A CARBON FOOTPRINT

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, published by the World Business Council for Sustainable Development and the World Resources Institute (WBCSD/WRI Protocol), has become the global standard for voluntary disclosure reporting. The Protocol highlights the need for companies to understand and manage their GHG risks in order to maintain their licence to operate; to ensure long-term success in a competitive business environment; and to comply with national or regional policies aimed at reducing corporate GHG emissions. Understanding a carbon footprint is the first step in identifying exposure to transition risks. These are the risks associated with exposure to national and global actions taken to address climate change (such as carbon taxes and penalties) and changing markets.

This GHG emissions assessment has thus been undertaken to provide an estimate of the overall magnitude of and key contributors to our corporate carbon footprint. It provides the basis for further initiatives, such as public reporting, target setting and implementation of mitigation activities.

2. Assessment methodology

2.1 GENERAL PROCEDURE

The assessment methodology follows the reporting principles and guidelines provided by the WBCSD/WRI's Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition), which provides requirements and guidance for companies and other organisations preparing a GHG emissions inventory.

In line with the GHG Protocol, the following procedure was employed to perform the GHG emissions assessment for Coronation:

1. Establishment of the assessment boundaries (including the selection of GHGs and operational boundaries);
2. Data collection;
3. Evaluation of data quality and sources;
4. Calculation of emissions using appropriate conversion factors; and
5. Making of recommendations for future action.

2.2 ASSESSMENT BOUNDARIES

GREENHOUSE GASES

A GHG emissions assessment can include all seven GHGs covered by the Kyoto Protocol, namely: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), sulphur hexafluoride (SF_6), nitrogen trifluoride (NF_3), perfluorocarbons (PFCs) and hydrofluorocarbons (HFCs). However, the emissions factors used in compiling the inventory presented in this report only include the first three gases. Emissions of refrigerants used in refrigerators are also included.

These gases are typically converted to a consistent unit, namely carbon dioxide equivalents, using the applicable global warming potential (GWP). The GWP of a gas is its relative potential contribution to climate change over a 100-year period, in comparison with carbon dioxide (see glossary for a full definition). In this report, GWPs are based on the Intergovernmental Panel on Climate Change's fourth assessment report (AR4).

REPORTING BOUNDARIES

The GHG Protocol defines GHG emissions according to three scopes:

- **Scope 1:** Direct GHG emissions from sources owned or controlled by the company;
- **Scope 2:** Indirect emissions from generation of purchased electricity, steam or cooling consumed by the company, but not generated in house (emissions occur at the power station and/or heating/cooling source); and
- **Scope 3:** Other indirect GHG emissions that occur as "a consequence of activities of the company, but occur from sources not owned or controlled by the company" (upstream/downstream of the business). These include production of purchased materials, transport of materials, emissions from business travel and employee commuting and investment activities, among others.

The GHG Protocol mandates that scopes 1 and 2 emissions are reported as a minimum. Scope 3 emissions reporting is optional, but is particularly significant for the asset management industry.

When deciding on where to allocate GHG emissions from companies, operations and facilities that are not wholly owned, it is important to draw clear organisational boundaries. Provision is made in the Protocol for either equity share or control approaches to be used (see glossary).

For this assessment, the organisational boundary comprises the operational activities of our offices in South Africa, the UK and the Republic of Ireland. The emissions of our Namibian strategic partner were excluded from this assessment. Scope 1 and 2 emissions, along with a selection of scope 3 emission categories are included in the assessment.

Coronation does not own any of the real estate in which we have our offices. Certain equipment (including air conditioners) falls under the ownership, financial responsibility and operational control of our landlord/s. Electricity, fuels or refrigerant gases consumed by this equipment thus falls outside of our organisational boundary and is therefore not included in our scope 1 emissions.

As indicated above, the GHG Protocol defines emissions associated with investments as scope 3 emissions. For an organisation such as Coronation, this will be a significant emissions category, likely to exceed any of the other emissions categories by orders of magnitude. This category is excluded from the current carbon footprint. Refer to our Stewardship Report for details on our portfolio carbon intensity.

2.3 DATA COLLECTION, SOURCES, QUALITY AND CALCULATION APPROACH

The GHG emissions presented in this report are not based on direct measurement of emissions, but rather on detailed records of material, energy and activity data from which emissions can be calculated. These calculations utilise emission factors (e.g. amount of carbon dioxide produced per litre of fuel consumed). This approach is considered the most pragmatic since the volume of GHGs produced in most activities is well understood.

The validity of all estimates depends on the accuracy, relevance and completeness of the input data and emission factors utilised. Within this report all assumptions and emission factors utilised are clearly laid out to ensure reporting transparency and that the reported emissions are based on best practice.

The emissions calculations utilise standardised emission factors used for assessments such as this one. The majority of the emission factors are sourced from the UK Department for Environment, Food and Rural Affairs (DEFRA)'s GHG reporting: conversion factors 2021. South Africa and the UK's grid electricity emission factors are based on Carbon Footprint's *2020 Country Specific Electricity Factors* report.

3. Data: source, quality and assumptions

Data utilised for the calculation of emissions was collated by Coronation for its offices in Cape Town, Johannesburg, Durban, Pretoria, London and Dublin, for the financial year ended 30 September 2021. A complete list of data for the emissions categories included in this report, as well as the assumptions/extrapolations used to fill data gaps, is as follows.

Fuels consumed in stationary equipment

Coronation owns a back-up generator that is in place for instances where grid electricity is unavailable and the landlord's generator is non-operational. In the period under review, this only occurred for one month, with diesel consumption known from procurement records.

Refrigerant gas

Fugitive refrigerant emissions accounted for in this carbon footprint arise from office refrigerators. The current refrigerator systems utilise both R 134a and R 22 refrigerants, with consumption of refrigerants used for recharging being known from procurement records.

Electricity

Electricity consumption within the South African offices for the period under review was known from utilities bills. Electricity consumption within the London office was known for 10 months from utilities bills, with the remaining two months extrapolated based on monthly consumption. Electricity consumption within the Dublin office was unknown and assumed to be negligible, as the office serves four people (approximately 1% of Coronation's employees).

Materials: paper

Paper consumption data was known for all offices based on procurement records.

Business travel

Business travel includes flights, vehicle hire, non-commuting personal vehicle use and accommodation. Flight data, including flight numbers, distances and class, and accommodation data are known from travel records. Vehicle use data is known from a combination of car hire records, Uber payment records and travel kilometre claims.

It is assumed that all vehicles have similar emissions to UK vehicles and the DEFRA 2021 emission factors are applicable.

Employee commuting

Employee commuting statistics were based on a combination of survey data and assumptions. Commuting distances were calculated based on home address postcodes, while the general transport type (i.e. car, train, etc.) utilised for commuting was based on employee surveys. It was assumed that, unless otherwise known, all privately owned vehicles were medium-sized petrol cars. The number of days on which commuting occurred for each employee was based on office scan-in records.

Municipal water

Water consumption was known for the Cape Town, Johannesburg and Pretoria offices from utilities bills. Water consumption for the Durban, London and Dublin offices was unknown and assumed to be negligible based on the offices serving less than 4% of Coronation employees.

Waste

Landfilled or otherwise treated waste quantities were not known for any office; however, the financial service nature of Coronation's business means that total waste and the associated emissions are likely negligible.

Recycled waste quantities were known for the Cape Town office. Recycled quantities for the other offices were unknown and assumed to be negligible based on the offices serving 6% of Coronation's employees.

4. Results

The GHG emissions from Coronation's operations for the year ended September 2021 are represented in Figure 1.

Figure 1

2021 GHG EMISSIONS

Scope	GHG emissions (tonnes CO_2e)	Description
Scope 1	102	Stationary combustion and refrigerants
Scope 2	766	Grid electricity
Scope 3	131[1]	Paper consumption, business travel, staff commute, water and waste
Total	**999**	

[1] *Scope 3 corporate emissions have significantly reduced from 2020 due to a reduction in travel (both business travel and commuting) due to Covid-19 restrictions.*

Analysing the 999 tonnes of GHG emissions using the US Environmental Protection Agency's equivalencies calculator, this equates to:

- Amount of carbon sequestered by 16 519 saplings growing for 10 years;
- 37 863 incandescent lamps switched over to LEDs;
- 340 tonnes of waste recycled instead of landfilled; or
- 122 million smartphones charged.

It is worth noting that, due to the impact of Covid-19 and the resultant work-from-home and mobility restrictions on our business operations, going forward year-on-year comparisons of this data will be coming off an abnormal base.

To allow for year-on-year and intercompany comparisons, a set of emissions intensity indicators is also presented in Figure 2.

Figure 2

GHG EMISSIONS INTENSITY FACTORS

Total GHG emissions (tonnes)	Emissions per employee (tonnes CO_2e/ employee)	Emissions per employee (tonnes CO_2e/ employee/day[1])	Emissions per office (tonnes CO_2e/ m^2 floor space)	Emissions by revenue (tonnes CO_2e/ R'm revenue)
999	2.64	0.04	0.15	0.23

[1] *Excludes estimated days where employees worked from home due to Covid-19.*

The contribution to emissions by emissions category is shown in Figures 3 and 4.

Figure 3

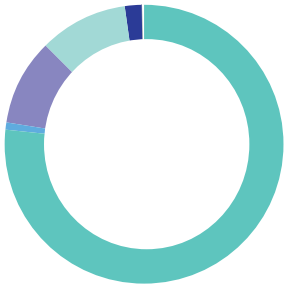
GHG EMISSIONS CONTRIBUTORS

Emission source	GHG emissions (kg CO_2e)	% contribution
Electricity	765 760	76.7%
South African electricity	755 980	75.7%
London electricity	9 780	1.0%
Dublin electricity	–	–
Refrigerant fugitive emissions	101 808	10.2%
Employee commuting	101 030	10.1%
Business travel – flights	22 254	2.2%
Business travel – vehicles	3 504	0.4%
Material use – paper	1 862	0.2%
Business travel – accommodation	1 281	0.1%
Material use – municipal water	918	0.1%
Stationary combustion	433	0.0%
Waste – recycled waste	103	0.0%
Total	**998 953**	**100%**

Note: Figures may not add up to totals due to rounding.

Figure 4

GHG EMISSIONS SOURCES



South African electricity	76%	Material use – paper	0%
London electricity	1%	Business travel – accommodation	0%
Refrigerant fugitive emissions	0%	Material use – municipal water	0%
Staff commuting	10%	Stationary combustion	0%
Business travel – flights	10%	Waste – recycled waste	0%
Business travel – vehicles	2%		

Note: Numbers may not add up to 100% due to rounding.

4.1 SCOPE 1

Scope 1 emissions categories included in the calculations includes emissions from fuel consumption for the Cape Town office's on-site generator and fugitive refrigerant emissions from office refrigerators. Figure 5 shows that together these categories contribute 102 tonnes CO_2e of GHG emissions to Coronation's carbon footprint.

Figure 5

FUEL AND REFRIGERANT CONSUMPTION

Category	Emissions (kg CO_2e)
Stationary fuel – diesel	433
Fugitive emissions – R 22 refrigerant	10 860
Fugitive emissions – R 134a refrigerant	90 948
Total	**102 241**

4.2 SCOPE 2

Scope 2 data included emissions from grid-purchased electricity in South Africa and the UK. As indicated previously, emissions from the small Dublin office were excluded from the analysis.

A total of 861 megawatt hours (MWh) of electricity was consumed across the Group, equating to an average of 39 kWh per employee per day in the office (i.e. adjusted for out-of-office days). This consumption produced 766 tonnes CO_2e of GHG emissions, equivalent to 2 tonnes CO_2e per employee. In line with employee numbers, the South African offices have the highest electricity consumption and resultant scope 2 emissions.

Figure 6

ELECTRICITY EMISSIONS ANALYSIS

Location	Electricity (kWh)	GHG emissions (tonnes CO_2e)	Consumption per employee (kWh/employee/day in office)	Emissions per employee (tonnes CO_2e/employee)	Emissions per office area (kWh/m^2 office space)
SA electricity	814 633	755 980	38	2.06	130
UK electricity	46 060	9 780	112	1.4	242
Rep. of Ireland electricity	–	–	–	–	–
Total	**860 693**	**765 760**			
Average			39	**2.03**	**131**

4.3 SCOPE 3

Scope 3 emissions categories included in the assessment were materials consumption, business travel, employee commuting, municipal water consumption and waste recycling. In total these scope 3 sectors contributed 131 tonnes CO_2e of GHG emissions to Coronation's carbon footprint.

Materials consumption

Materials consumption emissions are only considered for office paper. In total, consumption amounted to 804 reams of paper across all offices, equivalent to 2 026 kg of paper.

Figure 7

MATERIALS CONSUMPTION

Categories	GHG emissions (kg CO_2e)
Material use – office paper	1 862

Travel

Business travel emissions are associated with flights, vehicle use and accommodation, while employee commuting emissions arise from employees travelling to and from the office.

The bulk of travel emissions (79%) is due to employee commuting, which is an artefact of business travel being curtailed by the Covid-19 pandemic. In terms of business travel, flights account for 82% of emissions, while vehicle use and accommodation account for 13% and 5% of business travel emissions respectively.

Employees in South Africa make the largest contribution to overall commuting emissions, given that the majority of our employees are located there. Furthermore, the majority of employees in South Africa utilise personal vehicles for travel. London- and Dublin-based employees utilise public transport, which has lower GHG intensity.

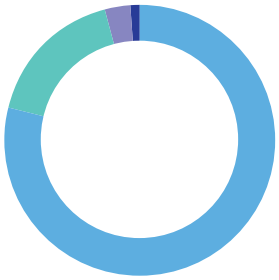
Figure 8

BUSINESS TRAVEL AND EMPLOYEE COMMUTING

Categories	GHG emissions (kg CO_2e)
Business travel – flights	22 254
Business travel – vehicles	3 504
Business travel – accommodation	1 281
Total business travel	**27 039**
Employee commuting	101 030
Total travel	**128 068**

Figure 9

BUSINESS TRAVEL EMISSIONS SOURCES



Water and waste

Emissions linked to the production of municipal water used in our offices and waste recycled at the Cape Town office are reported here.

Municipal water consumption amounted to 6 161 kilolitres, which is associated with just under 1 tonne CO_2e of GHG emissions. Waste recycling emissions amounted to 0.1 tonnes CO_2e of GHG emissions.

Although relatively insignificant when compared with other emissions categories, it is good practice to track and record water consumption and waste production. This is especially relevant in South Africa, where water is in short supply and many landfill sites are nearing the end of their lifespan. In response to this, water awareness campaigns have been implemented to encourage employees to save water, while recycling stations have been set up in the Cape Town offices to encourage good disposal practices.

Figure 10

WATER CONSUMPTION AND WASTE RECYCLING

Categories	GHG emissions (kg CO_2e)
Material use – municipal water	918
Waste – recycled waste	103
Total	**1 021**

5. Future focus

Forward-looking recommendations arising from this carbon footprint report are linked to: 1) future GHG emissions assessments, 2) reducing our GHG emissions and 3) carbon offsetting.

5.1 FUTURE GREENHOUSE GAS FOOTPRINT ASSESSMENTS

Coronation is considering the following actions to improve future GHG footprint exercises:

- **The implementation of an internal system for recording and submitting the data required for our GHG emissions assessment.** This would improve the ease and efficiency of data collection and ensure the accuracy of future emissions assessments. Ideally, data should be collected and tracked monthly.
- **The collection of all relevant data to ensure reporting accuracy.** This includes the full set of electricity data for all sites, as well as improved data on the size of employee cars.
- **Improvement of scope 3 emissions reporting to include other categories that are most relevant to Coronation.** Quantis has developed a scope 3 emissions evaluation tool that allows for the determination of scope 3 categories most relevant to an organisation[1]. Use of the tool to highlight the priority scope 3 emissions categories for inclusion in future years' reporting will be explored.

5.2 GREENHOUSE GAS EMISSIONS REDUCTION

A number of measures are being considered for implementation by Coronation to contribute to reducing its carbon footprint:

- **Electricity**
  - Where office premises are leased, engage landlord on the installation of solar photovoltaic systems;
  - Consider a wheeling contract for green energy;
  - Procure electrical equipment for offices with high energy efficiency ratings of A+ upwards. Develop a procurement policy to guide this process;
  - Encourage and seek out open-air office environments, rather than airconditioned spaces that use refrigerant gases and energy to operate; and
  - Build awareness among employees as to the efficient use of electricity, e.g. turning off lights and equipment.

- **Employee business travel (flights, accommodation, vehicles)**
  - Use video conferencing technology whenever possible and appropriate to reduce number of flights taken, even post the pandemic;
  - Develop an employee travel policy that governs the class of flight depending on the distance and requirements of the destination, as business and first class travel are more emissions intensive than economy class travel;
  - Build employee awareness around the environmental impact of flying;
  - Encourage employees to bear sustainability in mind and take the most direct routes where possible;
  - Encourage employees to stay in hotels or accommodation with strong sustainability practices; and
  - Encourage employees to use public transport in those cities where it is available and safe to do so.

[1] *https://quantis-suite.com/Scope-3-Evaluator/*

- **Employee commuting**
  - Investigate flexible working hours and work-from-home policies to allow employees to plan around traffic and reduce time and resultant emissions from commuting, even post the pandemic; and
  - Encourage and facilitate carpooling among employees to reduce emissions from commuting.
- **Paper**
  - Workshop high paper use processes to find alternatives, e.g. electronic processing;
  - Build awareness among employees about reducing paper usage;
  - Only procure Forest Stewardship Council (FSC) certified paper with recycled content; and
  - If marketing collateral is printed, this should be on FSC-certified paper.
- **Waste**
  - Continue to ensure all offices have the facilities and processes in place to maximise recycling
- **Water**
  - Continue to build awareness of responsible water use in all offices
  - Install water saving fittings in all bathrooms and kitchens
- **General**
  - Develop sustainability awareness and culture;
  - Set up an Employee Sustainability Committee to meet quarterly to discuss Coronation's operational sustainability objectives and how to address them;
  - Develop or adopt a sustainability framework and develop a corporate identity for the programme; and
  - Consistently track carbon-emitting data to assess improvements or problem areas.

6. Carbon offsetting

Coronation has implemented projects and programmes to reduce our carbon footprint and will continue to promote mitigation going forward. However, our current and planned activities will not completely eliminate all of our GHG emissions.

Carbon offsetting provides a means for organisations to purchase emissions reductions from other parties to the equivalent of their residual GHG emissions and thereby achieve carbon neutrality. However, when purchasing carbon credits, it is important that projects supported are carefully chosen to ensure that the credits are legitimate (i.e. third-party verified and validated), are additional to what would have happened under a business-as-usual scenario and are transparently reported in the public domain. Furthermore, it is desirable that the projects result in additional benefits that align with the organisation's broader social and environmental commitments, and projects may therefore include aspects of community upliftment, education schemes and/or the promotion of biodiversity and ecosystem quality.

Within this context, Coronation partnered with Credible Carbon[1], a South African carbon credit registry that works with South African projects that result in a discernible impact on poverty in addition to emissions reductions. Credible Carbon matched Coronation with Walker's Recycling, a family-owned recycling business that collects material from homes and businesses around Cape Town. Through recycling, Walker's reduces emissions associated with the primary materials value chain. The business provides employment for 15 people and diverts large volumes of material from Cape Town's overstretched landfill sites, providing a range of further environmental benefits. All carbon credits generated by Walker's Recycling have been verified by a third party. The verification report, which provides additional details on Walker's operations, is available online[2].

To offset our emissions, Coronation purchased and retired 1 967 Walker's Recycling credits from Credible Carbon in September 2021. This purchase fully offsets the 999 tonnes associated with our 2021 carbon footprint, with the remainder contributing to a partial offset of our 2020 emissions.

[1] *https://www.crediblecarbon.com/*
[2] *https://www.crediblecarbon.com/offset-projects/walkers-recycling/*

7. Conclusion

Coronation's management and Board will continue to focus on ensuring that the Company continues to implement actions to reduce its carbon footprint and improve its disclosure. While this is our second year of formal reporting, we have implemented various initiatives over the past few years that already contribute to these aims.

In order to ensure we play our role as an active corporate citizen, we will review the findings of this assessment and implement the necessary steps to align our operational activities with industry best practice.

As previously noted, climate change and the related risks and opportunities have been elevated to a key focus area by the Board. This carbon footprint assessment is a continuation of the journey to mitigate our operational impact on the environment through improved efficiencies and participating in offsetting our carbon emissions through partnerships with accredited providers.

A further demonstration of our commitment is that Coronation became an official supporter of the recommendations of the TCFD in 2020 and commenced reporting against the TCFD framework in the 2021 Integrated Annual Report.

8. Verification

The 2021 Coronation carbon footprint was independently verified by The Green House (www.tgh.co.za), an independent sustainability consultancy that specialises in GHG emissions accounting. All emissions calculations were checked for accuracy and a spot check of activity data was conducted and data interrogated where appropriate. Along with verifying the carbon footprint, The Green House also provided content input to this report.

The report is compiled in accordance with the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition). The GHG Protocol is consistent with the International Organization for Standardization's (ISO) GHG emissions reporting standard (ISO 14064-:1 *Greenhouse gases – Part 1: Specification with guidance at the organizational level for quantification and reporting of greenhouse gas emissions and removals).*

9. Glossary

Carbon dioxide equivalent (CO_2e)	Standardised unit of measure to reflect the global warming potential (GWP) of the seven Kyoto Protocol GHGs.
Climate change	Change in climate patterns, particularly from the 20th century onwards, that is attributed to increased atmospheric GHG emissions, primarily from human activities such as fossil fuel combustion.
Control	Ability of an organisation to direct the operating policies of a facility or organisation. Usually, if the organisation owns more than 50% of the voting interests, this implies control. The holder of the operating licence often exerts control. However, holding the operating licence is not a sufficient criterion for being able to direct the operating policies of a facility or organisation. In practice, the actual exercise of dominant influence itself is enough to satisfy the definition of control without requiring any formal power or ability through which it arises.
Direct emissions	Emissions released from organisation-owned equipment and premises. These include carbon dioxide, methane and nitrous oxide emissions from fuel combusted in organisation-owned generators and vehicles, as well as methane emissions from organisation-owned landfill sites.
Emissions factor	Coefficient for the conversion of activity data into emissions data. These factors are average values that take into account activity-level information (technology type, etc.).
Equity share	Percentage of economic interest in/benefit derived from an organisation.
Global warming	Continuous gradual rise of the earth's average surface temperature, which is attributed to increased atmospheric GHG levels. The phenomena is linked to changes in global climate and weather patterns (see also, "Climate change").
Global Warming Potential (GWP)	Index to measure how much energy the emissions of a gas will absorb over a given time period, in relation to carbon dioxide (CO_2) emissions. The index has units of carbon dioxide equivalents (CO_2e) (see also, "Carbon dioxide equivalents") and is utilised to calculate the overall effects of all seven Kyoto Protocol gases. Fourth assessment report (AR4) GWPs, with a 100-year time horizon, are used within this report. Methane therefore has a GWP of 25 kg CO_2e/kg, while nitrous oxide has a GWP of 298 kg CO_2e/kg.
Greenhouse gases (GHGs)	Seven major GHGs are identified by the Kyoto Protocol. These are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), nitrogen trifluoride (NF_3), sulphur hexafluoride (SF_6), hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs).
Intergovernmental Panel on Climate Change (IPCC)	Special intergovernmental body established by the United Nations Environment Programme and the World Meteorological Organisation to provide assessments of the results of climate change research to policy makers.
Indirect emissions	Emissions that are a consequence of an organisation's operations but that are not released from organisation-owned equipment or premises. As such, indirect emissions are direct emissions for another organisation. Indirect emissions include those associated with purchased electricity, heat and cooling (scope 2 emissions), where emissions are released at the generation source. Scope 3 indirect emissions include all emissions released due to an organisation's value chain, including emissions from the production of purchased goods, outsourced waste management, investments and transport in non-organisation-owned vehicles.
Kyoto Protocol	A global agreement whereby industrialised countries agreed to reduce their greenhouse gas emissions. Originated at the third Conference of the Parties to the United Nations Convention on Climate Change held in Kyoto, Japan in December 1997.
Scope 1	Direct GHG emissions from sources owned or controlled by the reporting organisation.
Scope 2	Indirect GHG emissions from the generation of purchased electricity, steam, heating and cooling consumed by the reporting organisation.
Scope 3	Indirect GHG emissions that occur in an organisation's value chain. These include emissions from the production of purchased goods, outsourced waste management, investments and transport in non-organisation-owned vehicles.

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