

SHOPRITE CDP CLIMATE CHANGE RESPONSE

2023

Table of Contents

C0. Introduction	6
C0.1	6
C0.2	6
C0.3	7
C0.4	7
C0.5	7
C0.8	7
C1. Governance.....	8
C1.1	8
C1.1a.....	8
C1.1b.....	8
C1.1d.....	10
C1.2.....	10
C1.3.....	12
C1.3a.....	12
C2. Risks and opportunities.....	16
C2.1	16
C2.1a.....	16
C2.1b.....	16
C2.2.....	17
C2.2a.....	18
C2.3.....	21
C2.3a.....	21
C2.4.....	32
C2.4a.....	32
C3. Business Strategy	40
C3.1	40
C3.2.....	40
C3.2a.....	41
C3.2b.....	43
C3.3.....	44
C3.4.....	46
C3.5.....	47
C3.5a.....	47
C3.5b.....	48
C3.5c.....	51
C4. Targets and performance.....	53
C4.1	53

C4.1a.....	53
C4.1b.....	56
C4.2.....	58
C4.2a.....	59
C4.3.....	60
C4.3a.....	60
C4.3b.....	60
C4.3c.....	63
C4.5.....	63
C4.5a.....	63
C5. Emissions methodology	67
C5.1.....	67
C5.1a.....	67
C5.1b.....	67
C5.1c.....	67
C5.2.....	67
C5.3.....	74
C6. Emissions data.....	75
C6.1.....	75
C6.2.....	75
C6.3.....	75
C6.4.....	76
C6.5.....	76
C6.7.....	82
C6.10.....	82
C7. Emissions breakdowns	85
C7.1.....	85
C7.1a.....	85
C7.2.....	85
C7.3.....	85
C7.3a.....	86
C7.3c.....	86
C7.5.....	86
C7.6.....	86
C7.6a.....	86
C7.6c.....	87
C7.7.....	87
C7.9.....	87
C7.9a.....	87

C7.9b.....	90
C8. Energy	91
C8.1.....	91
C8.2.....	91
C8.2a.....	91
C8.2b.....	92
C8.2c.....	92
C8.2e.....	95
C8.2g.....	96
C9. Additional metrics.....	101
C9.1.....	101
C10. Verification	102
C10.1.....	102
C10.1a.....	102
C10.1b.....	102
C10.1c.....	103
C10.2.....	104
C10.2a.....	104
C11. Carbon pricing.....	105
C11.1.....	105
C11.1a.....	105
C11.1c.....	105
C11.1d.....	105
C11.2.....	105
C11.3.....	106
C11.3a.....	106
C12. Engagement.....	108
C12.1.....	108
C12.1a.....	108
C12.1b.....	109
C12.1d.....	110
C12.2.....	111
C12.3.....	111
C12.3a.....	111
C12.3b.....	113
C12.4.....	114
C12.5.....	115
C15. Biodiversity	116
C15.1.....	116

C15.2.....	117
C15.3.....	117
C15.4.....	118
C15.4a.....	118
C15.5.....	120
C15.6.....	120
C15.7.....	121
C16. Signoff	122
C-FI	122
C16.1	123
Appendix A: Shoprite FY2023 GHG Verification Report	124

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

Shoprite Holdings Limited is an investment holding company whose combined subsidiaries constitute the largest fast moving consumer goods (FMCG) retail operation on the African continent. Its purpose is to uplift lives every day by pioneering access to the most affordable goods and services, creating economic opportunity, and protecting our planet.

Shoprite operates more than 2 840 facilities in 11 countries across Africa, employing over 152 000 people across its operations. It's turnover in the past reporting period amounted to R214.4bn. At the heart of Shoprite's purpose is the aspiration to be Africa's most accessible, affordable, and innovative retailer, by being relentless in its efforts to keep its business efficient and sustain its price leadership. Shoprite's energy and climate strategy is based on this mindset to improve energy efficiency as much as possible and then to use renewable energy across its operations of stores, distribution centres, trucks, and trailers.

Shoprite's absolute emissions are 2 450 131 tCO₂e of which 30% account for Scope 1 emissions and 70% for Scope 2 (market-based) emissions. This is 2.1% higher than the previous reporting period.

For Shoprite, Scope 1 emissions includes stationary combustion (from standby diesel generators at stores, distribution centres and offices); fugitive refrigerant emissions (from HVAC and refrigeration systems); and mobile combustion (from its fleet of delivery vehicles). Scope 2 emissions are from the consumption of electricity at stores, distribution centres and offices.

Shoprite operates a centralised distribution network with its own fleet of trucks and trailers, some of which are refrigerated, as opposed to relying on third party transporters.

Shoprite is reporting detailed Scope 3 emissions based on its own calculations and the Quantis Scope 3 Evaluator.

Shoprite has a Position Statement on Climate Change, which was approved by the Social and Ethics Committee. The full statement is shown in section C-FI.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data and indicate whether you will be providing emissions data for past reporting years.

Reporting year

Start date

July 1, 2022

End date

June 30, 2023

Indicate if you are providing emissions data for past reporting years

No

C0.3

(C0.3) Select the countries/areas in which you operate.

Angola

Botswana

Democratic Republic of the Congo

Eswatini

Ghana

Lesotho

Malawi

Mozambique

Namibia

South Africa

Zambia

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

ZAR

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Operational control

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
No	

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual or committee	Responsibilities for climate-related issues
Chief Financial Officer (CFO)	<p>The Board delegates its oversight duties with respect to environmental and climate-related issues to the Social and Ethics Committee (Board-level committee). The Chief Financial Officer (CFO) is the highest ranked executive director on the Social and Ethics Committee.</p> <p>As the CFO, this role signs off the Board Resolutions for the investigations of the installation of solar PV systems for Shoprite. In this reporting period, 45 976 MWh worth of detailed investigations (i.e., sufficient roof structure strength, PV panel layout design, etc.) were signed off.</p>
Board-level committee	<p>The Social and Ethics Board Committee is made up of four non-executive Board members and the company CFO. Invited roles include the Company Secretary, Group Corporate Relations and Communications Manager, Group Risk and Compliance Manager and Group Sustainability Manager. This committee provides oversight on the Group's activities within communities, its environmental aspects and impacts, public health and safety, and customer complaints amongst others.</p> <p>An Environmental Sustainability Update is presented to this Committee (3 times per year), for its deliberation and feedback. This includes the company's performance against targets regarding energy use (renewable and non-renewable) and climate change related matters. Position statements for Responsible Sourcing and Biodiversity, Climate Change and Water Security were approved by this committee. These Position Statements articulate the Group's stance on these issues, including its overarching strategy, plans and commitments.</p>
Other C-Suite Officer	<p>Deputy CEO:</p> <p>The Shoprite Group Deputy CEO is responsible for a number of areas in the company, including environmental and social sustainability and engineering.</p> <p>The Deputy CEO role plays an oversight role on environmental sustainability matters, including energy efficiency and renewable energy projects. The Group's Sustainability Dashboard is presented to him monthly for his consideration and overview. This dashboard includes various climate related KPIs (e.g., electricity consumption, diesel consumption, renewable electricity consumption and refrigerant leaks).</p>

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – all meetings	<p>Reviewing and guiding annual budgets</p> <p>Overseeing major capital expenditures</p> <p>Overseeing acquisitions, mergers, and divestitures</p> <p>Reviewing innovation/R&D priorities</p> <p>Overseeing and guiding employee incentives</p> <p>Reviewing and guiding strategy</p> <p>Overseeing and guiding the development of a transition plan</p> <p>Monitoring the implementation of a transition plan</p> <p>Overseeing the setting of corporate targets</p> <p>Monitoring progress towards corporate targets</p> <p>Overseeing value chain engagement</p>	<p>The Social and Ethics Committee (SEC), tasked by the Board to perform an oversight role on its behalf, addresses climate-related issues, as a standing agenda item during its meetings. This committee meets three times per year. Any relevant and material issues are brought to the attention of the Board by means of the Social and Ethics Committee Chairman Report. The SEC is made up of four non-executive Board members and the company CFO.</p> <p>A report detailing compliance with United Nations 10 Global Compact Principles is a standing Agenda point at this meeting. The environmental principles of the Compact include supporting a precautionary approach to environmental challenges; promoting greater environmental responsibility; and the development and diffusion of environmentally friendly technologies.</p> <p>Company Position Statements for Responsible Sourcing and Biodiversity, Climate Change and Water Security were approved by the SEC. These Position Statements articulate the Group's stance on these issues, including its overarching strategy, plans and commitments.</p> <p>An Environmental Sustainability Update is presented to this Committee (3 times per year), for its deliberation and feedback. This includes the company's performance regarding energy use (renewable and non-renewable) and other climate change related matters.</p> <p>In this reporting period, a detailed overview (deep dive) of the Company's environmental sustainability strategy and implementation plans was presented to the SEC, including climate change mitigation and adaptation plans.</p>

C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues
Row 1	Yes	<p>The criteria used to assess a board members climate-related competence, is based on a review of their knowledge and experiences on climate change and climate-related issues, including:</p> <ul style="list-style-type: none"> • the science of climate change (including mitigation and adaptation) • policy and regulatory landscape • enterprise risk management • climate-related investments and financial services • climate change governance <p>The Board has continued to build on its collective approach to ESG, which is to equip all our directors with the requisite knowledge and understanding of the impact of climate change on our business, our impact on climate change in our external environment and the risks and opportunities associated with climate change. In line with this approach, all our Board members participated in a World Wildlife Fund (WWF) engagement session on environmental sustainability and climate change, encompassing global trends, benchmarking and the Group's response to environmental risks and opportunities, to improve the Board's overall competency on this important topic.</p>

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Position or committee

Other C-Suite Officer, please specify

Deputy CEO

Climate-related responsibilities of this position

Managing annual budgets for climate mitigation activities

Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)

Managing climate-related acquisitions, mergers, and divestitures

Providing climate-related employee incentives

Developing a climate transition plan

Implementing a climate transition plan

Integrating climate-related issues into the strategy

Conducting climate-related scenario analysis

Setting climate-related corporate targets

Monitoring progress against climate-related corporate targets

Managing value chain engagement on climate-related issues

Assessing climate-related risks and opportunities

Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line

More frequently than quarterly

Please explain

The Deputy CEO, who reports directly to the Chief Executive Officer (CEO), manages, and is responsible for key business functions across the entire business, including Environmental Sustainability and Engineering. The Deputy CEO is responsible for managing climate-related issues by setting and progressing business plans, plans of action, annual budgets, objectives and targets. The Deputy CEO is also responsible for identifying, assessing, and managing climate-related risks and opportunities. The Head: Group Sustainability and CSI was appointed in Feb 2019, reporting directly into the Deputy CEO and the Social and Ethics Board Committee.

This role is supported by a dedicated sustainability team, including a renewable energy, refrigeration specialist and waste management specialists. The Head: Group Sustainability and CSI provides feedback to the Deputy CEO on a monthly basis, for his assessment and monitoring of climate-related issues including climate-related KPIs (e.g. electricity consumption and renewable energy usage) through a monthly Sustainability Report and Dashboard.

Climate-related issues are monitored in monthly feedback meetings with applicable business unit managers and project managers to track progress pertaining to implementation plans, budgets and performance against climate-related target.

The growth of renewable energy use, recycling volumes and sustainable packaging use is tracked in the monthly Group Financial Meeting. These non-financial indicators are part of the executive team's annual remuneration.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

Provide incentives for the management of climate-related issues		Comment
Row 1	Yes	In this reporting period, changes were made to the short term incentive (STI) scheme for the CEO and Execs. The STI construct for financial year 2023 has been amended to be 80% weighted towards financial measures with the introduction of a 20% weighting to non-financial measures. The non-financial measures are made up of renewable energy consumption (solar photovoltaic (PV) contribution) 10%, waste recycling (plastics and cardboard recycling) 5% and sustainable packaging usage (reusable, recycled and compostable) 5%.

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive

Chief Executive Officer (CEO)

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Achievement of climate transition plan KPI

Achievement of a climate-related target

Reduction in absolute emissions

Increased share of renewable energy in total energy consumption

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

The STI construct for the CEO has been amended to be 80% weighted towards financial measures with the introduction of a 20% weighting to non-financial measures. The non-financial measures is made up of renewable energy consumption (solar photovoltaic (PV) contribution) 10%, waste recycling (plastics and cardboard recycling) 5% and sustainable packaging usage (reusable, recycled and compostable) 5% in 2023.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

The performance indicator is in line with our near-term science-based target (to reduce GHG emissions by 50% by 2030), which forms part of our climate transition plan.

Entitled to incentive

Other C-Suite Officer

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Achievement of climate transition plan KPI

Achievement of a climate-related target

Reduction in absolute emissions

Increased share of renewable energy in total energy consumption

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

The STI construct for the Deputy CEO has been amended to be 80% weighted towards financial measures with the introduction of a 20% weighting to non-financial measures. The non-financial measures is made up of renewable energy consumption (solar photovoltaic (PV) contribution) 10%, waste recycling (plastics and cardboard recycling) 5% and sustainable packaging usage (reusable, recycled and compostable) 5% in 2023.

The Deputy CEO, who reports directly to the Chief Executive Officer (CEO), manages, and is responsible for key business functions across the entire business, including environmental sustainability and Engineering. The Deputy CEO is responsible for managing climate-related issues by setting and progressing business plans, plans of action, annual budgets, goals and targets. The Deputy CEO is also responsible for identifying, assessing, and managing climate-related risks and opportunities.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

The performance indicator is in line with our near-term science-based target (to reduce GHG emissions by 50% by 2030), which forms part of our climate transition plan.

Entitled to incentive

Chief Operating Officer (COO)

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Achievement of climate transition plan KPI

Achievement of a climate-related target

Reduction in absolute emissions

Increased share of renewable energy in total energy consumption

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan.

Further details of incentive(s)

The STI construct for the Chief Operating Officers has been amended to be 80% weighted towards financial measures with the introduction of a 20% weighting to non-financial measures. The non-financial measures is made up of renewable energy consumption (solar photovoltaic (PV) contribution) 10%, waste recycling (plastics and cardboard recycling) 5% and sustainable packaging usage (reusable, recycled and compostable) 5% in 2023.

They further participate in bonus schemes based on KPIs indirectly linked to environmental criteria included in purchases (which impact sales), efficiency projects (which impact controllable expenses), energy reduction projects (which impact controllable expenses) and emissions reduction projects (which impact shrinkage). The COOs served on the Board as executive directors during the period under review.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

The performance indicator is in line with our near-term science-based target (to reduce GHG emissions by 50% by 2030), which forms part of our climate transition plan.

Entitled to incentive

Chief Financial Officer (CFO)

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Achievement of climate transition plan KPI

Achievement of a climate-related target

Reduction in absolute emissions

Increased share of renewable energy in total energy consumption

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

The STI construct for the CFO has been amended to be 80% weighted towards financial measures with the introduction of a 20% weighting to non-financial measures. The non-financial measures is made up of renewable energy consumption (solar photovoltaic (PV) contribution) 10%, waste recycling (plastics and cardboard recycling) 5% and sustainable packaging usage (reusable, recycled and compostable) 5% in 2023.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

The performance indicator is in line with our near-term science-based target (to reduce GHG emissions by 50% by 2030), which forms part of our climate transition plan.

Entitled to incentive

Environment/Sustainability manager

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Achievement of climate transition plan KPI

Achievement of a climate-related target

Reduction in absolute emissions

Increased share of renewable energy in total energy consumption

Reduction in total energy consumption

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

The STI construct for the Head: Group Sustainability and CSI has been amended to be 60% weighted towards financial measures with the introduction of a 40% weighting to non-financial measures. The non-financial measures are made up of renewable energy consumption (solar photovoltaic (PV) contribution) 10%, waste recycling (plastics and cardboard recycling) 7.5% and sustainable packaging usage (reusable, recycled and compostable) 7.5% in 2023. The remaining 10% is for communities that are impacted by climate -related disasters.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

The performance indicator is in line with our near-term science-based target (to reduce GHG emissions by 50% by 2030), which forms part of our climate transition plan.

Other non-financial measures include supporting communities that are impacted by climate -related disasters.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	3	Shoprite utilises the concept of short-, medium- and long-term time horizons as planning mechanisms to describe the fixed time period over which business risks and opportunities are determined and evaluated. Climate-related risks and opportunities are considered in these same time horizons, as specified by the company's Enterprise Risk Management Policy & Framework.
Medium-term	3	10	Shoprite utilises the concept of short-, medium- and long-term time horizons as planning mechanisms to describe the fixed time period over which business risks and opportunities are determined and evaluated. Climate-related risks and opportunities are considered in these same time horizons, as specified by the company's Enterprise Risk Management Policy & Framework.
Long-term	10	30	Shoprite utilises the concept of short-, medium- and long-term time horizons as planning mechanisms to describe the fixed time period over which business risks and opportunities are determined and evaluated. Climate-related risks and opportunities are considered in these same time horizons, as specified by the company's Enterprise Risk Management Policy & Framework.

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

Substantive financial or strategic impacts are defined according to the following criteria:

- Financial: >R250m (or 4% of profit)
- Operations: Loss of ability to sustain ongoing operations.
- Reputational: Extreme international public/media outcry. Damaging campaign. Social/legal license to operate is severely threatened.
- Environmental: Extreme environmental effect with impairment of ecosystem functions. Long-term, widespread effects on a significant area.
- Community: Extreme, widespread social impact. Irreparable damage to highly valued cultural heritage.

This is extracted from Shoprite's Enterprise Risk Management ("ERM") Policy & Framework.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered

Direct operations

Upstream

Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term

Medium-term

Long-term

Description of process

The process for identifying, assessing, and responding to all risks are detailed in the Company's ERM Policy and Framework (as approved by the Audit and Risk Committee of the Board on 08/11/2022 - version 9). The company's ERM vision is to integrate risk management across the Group to support the company's purpose and values and increase the likelihood of achieving its strategic business objectives. The Shoprite Group's ERM framework is based on the requirements prescribed by ISO 31000:2018. The Group is committed to complying with and maintaining the principles of the Code of Corporate Practices and Conduct as set out in The King Code on Corporate Governance (King IV) and the continual improvement of its risk management practices. Risk is considered for direct operations as well as up- and down-stream of the value chain.

The Group's purpose is to uplift lives every day by pioneering access to the most affordable goods and services, creating economic opportunity, and protecting our planet.

The process includes the following:

- risk identification: technical, financial, legal, social, environmental, reputational, informational, stakeholder and other such risks are identified within the context of Shoprite's external and internal environments and its strategic business objectives and goals.
- risk analysis: to gain a better understanding of the risk and where it may impact the Group.
- risk evaluation planning: to provide for focused evaluations and automation.
- risk evaluation allows for a semi-quantitative assessment of likelihood vs. impact followed by an interpretation of the perceived impact.
- risk treatment includes avoiding, optimizing, transferring, or retaining ("accepting") risk.

This applies to climate-related risks as well, taking into account short-, medium- and long-term time horizons.

Identified risks are documented in the company's Risk Register, and these are updated and re-evaluated on a quarterly basis. The status of these risks is reported at the Management Risk Forum on a monthly basis, and the Audit and Risk Board committee 3 times per year.

The risk analysis or assessment involves consideration of the causes and sources of the risks, their positive and/or negative consequences, and the likelihood that those consequences can occur. Shoprite has its own inherent risk rating scale for this assessment.

Currently the climate-related risks that are documented on the company's Risk Register are:

- CG11 Corporate Governance, Social and Environmental Sustainability impact: Shoprite may not adequately consider the potential negative impact of its operations and value chain on the environment nor its impact on its ability to generate returns and creations of long term value.
- G19 Weather / Climate Change: Increase in the severity and frequency of extreme weather events and natural catastrophes (droughts, floods, fires, heatwaves, storms etc.) and its impact on Shoprite's business and suppliers, whether linked to physical assets (stores, distribution centres or vehicles) or supply of perishable products, livestock, damage to physical assets, business continuity or sustainability.

The Group's position statement on climate change incorporates the above risk treatment approach: The Shoprite Group's response to climate change has two focused objectives:

- Reducing GHG emissions and continuously improving energy efficiency in its direct operations, and its supply chain by engaging with suppliers; and
- Strengthening the resilience and adaptive capacity of its operations and that of the communities in which it operates.

Case study 1 - Responding to Transitional risks and/or opportunities:

<https://www.shopriteholdings.co.za/articles/Newsroom/2021/shoprite-expands-solar-pv-project-commitment-climate-friendly-operations.html>

- Situation: Electricity supply in South Africa is constrained, heavily carbon intensive and tariffs are increasing beyond inflation.
- Task: This risk was assessed in terms of its likelihood and consequences, taking into account operational and financial elements.
- Action: The risk assessment process was followed, and risk control or mitigation measures were identified and developed.
- Result: To reduce the risk of higher electricity costs and to decarbonise its operations, the Shoprite Group has embarked on a programme to procure more renewable electricity. Renewable electricity is also more affordable.

Case study 2 - Responding to Physical risks and/or opportunities:

<https://www.shopriteholdings.co.za/articles/Newsroom/2021/innovative-small-supplier-helps-stock-shoprite-shelves.html>

- Situation: Unusually heavy rains caused havoc in the supply of tomatoes to Shoprite in Feb & Dec 2021.
- Task: This risk was assessed in terms of its likelihood and consequences, taking into account operational and financial elements.
- Action: The risk assessment process was followed, and risk control or mitigation measures were identified and developed.
- Result: Shoprite's risk mitigation involved the diversifying of its supply chain, and partnering with innovative suppliers, the Group was able to keep tomatoes on its supermarkets' shelves. During this period, tomatoes were sourced from a different location, away from the more traditional tomato growing regions of South Africa. The use of greenhouses and hydroponics further reduced the risk of climate change and maximises output to supply stores.
- Shoprite describes a substantive or significant climate-related consequence as an extreme environmental effect with impairment of ecosystem functions, and long-term, widespread effects on a significant area. The corresponding financial impact is >R250m.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

<div> <div>Relevance & inclusion</div> <div>Please explain</div> </div>		
Current regulation	Relevant, always included	<p>Shoprite continuously aligns itself with regulatory requirements, whilst assessing the organisation's climate-related risks, to mitigate any disruption on business due to noncompliance.</p> <p>The National Greenhouse Gas Emission Reporting Regulations, as part of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004), in South Africa, makes provision for mandatory emissions data reporting which requires systems for collecting accurate greenhouse gas (GHG) emissions data. This is relevant for all Shoprite's stationary combustion GHG emitters.</p> <p>Shoprite has registered ± 2 100 standby diesel generators, and its annual fuel consumption is now reported annually. The last report was done by Shoprite on 2023/03/31.</p> <p>Non-compliance to these Regulations can result, in case of a first conviction, to a fine not exceeding R5 million or to imprisonment for a period not exceeding five years, and in the case of a second or subsequent conviction to a fine not exceeding R10 million or imprisonment for a period not exceeding 10 years and in respect of both instances to both such fine and imprisonment.</p>
Emerging regulation	Relevant, always included	<p>The South Africa President confirmed that the South African Climate Change Bill will be signed into law soon. The objective of the Bill is to build the country's effective climate change response and the long term, just transition to a climate resilient and lower carbon economy and society in the context of an environmentally sustainable development framework.</p> <p>Government's expectation is that the climate change policy needs to be implemented in the context of an environmentally sustainable development framework that integrates environmental, economic and social development as well as employment objectives to achieve national development goals.</p> <p>Shoprite will monitor its risks and opportunities arising from the implementation of this Act. These include the setting of sectoral emission targets, a carbon budget and the preparation and submission of greenhouse gas mitigation plans.</p> <p>Non-compliance to the Act could result in a fine not exceeding R10 million or imprisonment for a period not exceeding 10 years, or to both such fine and imprisonment.</p> <p>The Carbon Tax was implemented in South Africa in 2019. The carbon tax applies only to scope 1 emitters in the first phase. The first phase is from 1 June 2019 to 31 December 2022, and the second phase is from 2023 to 2030. While the introduction of the carbon tax does not have any direct impact on the price of electricity for the first phase, it is expected to have an impact from phase 2 onwards.</p>
Technology	Relevant, always included	<p>Shoprite acknowledges that technological innovations, such as the use of renewable energy, energy efficient refrigeration equipment and increased demand for energy efficient equipment and fixtures will reduce the effect</p>

		<p>of climate change by reducing greenhouse gas emissions. To this extent, technologies that are financially feasible and will reduce Shoprite's carbon emissions are considered in climate-related risk assessments, as and when innovative technologies arise.</p> <p>In 2017, Shoprite started a project to replace 857 350 conventional fluorescent lights with energy efficient LED lamps across its Checkers, Shoprite, Usave, LiquorShop, House & Home and OK Furniture brands. This project was completed in Jun 2022.</p> <p>A new light replacement project was initiated in July 2022 to replace a further 350 000 conventional fluorescent lights with energy efficient LED lamps.</p> <p>In the financial year 2022/2023, the Group conducted detailed technical and financial feasibility studies for on-site solar PV systems totalling 45 976 MWh.</p> <p>The Group has also started a roll out of electric vehicle charging stations at selected stores that have rooftop solar PV installations.</p>
Legal	Relevant, always included	<p>Shoprite continuously aligns itself with regulatory requirements, whilst assessing the organisation's climate-related risks, to mitigate any disruption on business when the regulation is promulgated.</p> <p>This risk is included and considered even though there haven't been any climate-related litigation claims against the Company.</p>
Market	Relevant, always included	<p>Transparent disclosure of sustainability commitments, performance and progress can have a positive impact on Shoprite's reputation. Some of Shoprite's customer base are well informed on climate change, sustainability and environmental related matters and successfully addressing these customers' needs can improve the chances of retaining such customers and provide an opportunity to attract and grow this customer base.</p> <p>Due to heavy rains affecting the Limpopo province of South Africa, there was a shortage of tomatoes from these areas. Shoprite's mitigation for this was to diversify its tomato supply from other regions in the country to ensure continuous supply of fresh produce to its customers.</p> <p>https://www.shopriteholdings.co.za/articles/Newsroom/2021/innovative-small-supplier-helps-stock-shoprite-shelves.html</p>
Reputation	Relevant, always included	<p>Transparent disclosure of sustainability commitments, performance and progress can have a positive impact on Shoprite's reputation. Some of Shoprite's customer base are well informed on climate change, sustainability and environmental related matters and successfully addressing these customers' needs can improve the chances of retaining such customers and provide an opportunity to attract and grow this customer base. Hence Shoprite made its carbon and water disclosure reports and its annual sustainability report publicly available for the past two reporting periods.</p> <p>The Group has also released press statements regarding its efforts to combat climate change in mainstream media.</p> <p>https://www.shopriteholdings.co.za/newsroom/2023/led-lights-project.html</p>

		https://www.shopriteholdings.co.za/newsroom/2023/solar-rooftop-installations.html https://edition.cnn.com/2021/04/21/africa/shoprite-south-africa-solar-spc-intl/index.html
Acute physical	Relevant, always included	<p>Acute physical risks are event driven and are included in Shoprite's climate-related risk assessment. The increased severity and frequency of extreme weather events such as cyclones and floods can result in flooding and damages to stores and suppliers. Communities and customers are also severely impacted, and the Group provides immediate disaster relief.</p> <p>Due to heavy rains affecting the Limpopo province of South Africa, there was a shortage of tomatoes from these areas. Shoprite's mitigation for this was to diversify its tomato supply from other regions in the country to ensure continuous supply of fresh produce to its customers.</p> <p>https://www.shopriteholdings.co.za/articles/Newsroom/2021/innovative-small-supplier-helps-stock-shoprite-shelves.html</p> <p>https://www.shopriteholdings.co.za/newsroom/2023/western-cape-flood-relief.html</p>
Chronic physical	Relevant, always included	<p>Shoprite considers chronic physical risks (e.g., droughts, higher mean temperatures) to its operations and strategic objectives.</p> <p>Due to the drought currently affecting the Eastern Cape and North-West regions of South Africa, there was a risk of supply of fresh produce from these areas. Shoprite's mitigation for this was to diversify its supply from other regions in the country to ensure continuous supply of fresh produce to its customers.</p> <p>Sustained higher mean temperatures will directly increase the load on air-conditioning and refrigeration systems and their ability to function as designed. Where existing systems are not running at full capacity, the increased load will lead to more maintenance and the consumption of significantly more electricity, resulting in increased operating costs for Shoprite.</p>

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Current regulation

Enhanced emissions-reporting obligations

Primary potential financial impact

Increased direct costs

Company-specific description

The South African 2016 National Greenhouse Gas Emission Reporting Regulation makes it mandatory for companies to report their greenhouse gas emissions annually if the company's list of activities exceed certain thresholds for various criteria. These criteria include, for example, petroleum refining larger than 10 MW(thermal), manufacture of solid fuels larger than 10 MW(th), railway transport larger than 100 000 litres per year, commercial energy generating equipment larger than 10 MW(th), etc.

Shoprite has ±2 100 standby diesel generators with a total MW(th) installed capacity exceeding the 10 MW(th) threshold, under category 1A4a - commercial energy generating equipment; and must therefore register its stationary fuel combustion devices and report its fuel consumption annually.

To this extent, Shoprite registered their ±2 100 devices (standby diesel generators) in 2019 and has been reporting its fuel consumption annually since 2019. The last report of fuel consumption was submitted on 2023/03/31. This fuel consumption information is extracted from Shoprite's SAP ERP system.

The 2023/03/31 submitted report was reviewed by the South African Department of Forestry, Fisheries and Environment's GHG Inventory Unit and an approval notice was received on 2023/07/01.

The risk of non-compliance to this regulation is R 10 000 000. While this risk does not present a substantive financial impact to Shoprite, it can have a substantive reputational impact for non-compliance to national regulations - resulting in public/media outcry with its social license to operate is severely threatened.

Time horizon

Short-term

Likelihood

Unlikely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

10,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The increase in operating costs is estimated to be negligible, however if the penalty is charged, then it will not exceed ZAR 10 000 000 as per the National Greenhouse Gas Emission Reporting regulations.

While this risk does not present a substantive financial impact to Shoprite (as per C2.1b), it can have a substantive reputational impact for non-compliance to national regulations - resulting in public/media outcry with its social license to operate is severely threatened.

Cost of response to risk

0

Description of response and explanation of cost calculation

Situation: The South African 2016 National Greenhouse Gas Emission Reporting Regulation makes it mandatory for companies to report their greenhouse gas emissions annually if the company's list of activities exceed certain thresholds for various criteria. These criteria include, for example, petroleum refining larger than 10 MW (thermal), manufacture of solid fuels larger than 10 MW(th), railway transport larger than 100 000 litres per year, commercial energy generating equipment larger than 10 MW(th), etc. Shoprite's external tax advisors and climate-change specialists advised the company of the requirements of the National Greenhouse Gas Emission Reporting Regulations, and the need to register its stand-by stationary fuel combustion devices.

Task: Shoprite has $\pm 2\ 100$ standby diesel generators with a total MW(th) installed capacity exceeding the 10 MW(th) threshold, under category 1A4a - commercial energy generating equipment and must register its stationary fuel combustion devices and report its fuel consumption annually.

Action: To this extent, Shoprite registered their $\pm 2\ 100$ devices (standby diesel generators) in 2019 and has been reporting its fuel consumption annually since 2019. The last report of fuel consumption was submitted on 31/03/2023. This fuel consumption information is extracted from Shoprite's SAP ERP system.

Result: The 2023/03/31 submitted report was reviewed by the South African Department of Forestry, Fisheries and Environment's GHG Inventory Unit and an approval notice was received on 2023/07/01. The registration and reporting is done by the Group's Sustainability team, so no additional cost is incurred.

Comment

N/A

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Chronic physical

Changing temperature (air, freshwater, marine water)

Primary potential financial impact

Increased direct costs

Company-specific description

According to the World Meteorological Organization's (WMO) State of the Climate in Africa 2019 report, extensive areas of Africa will exceed 2°C of warming above pre-industrial levels by the last two decades of this century.

For Shoprite, the rising mean temperatures will directly increase the load on air-conditioning and refrigeration systems and their ability to function as designed and Shoprite determined the effect on OPEX and CAPEX. Where existing systems are not running at full capacity, the increased load will lead to more maintenance and the consumption of significantly more electricity, resulting in increased operating costs. Where existing air-conditioning systems are running at full capacity, the increased load will not always be met, causing a rise in in-store ambient temperature and a suboptimal shopping experience which, if not mitigated, will negatively affect sales. In addition, where both existing air-conditioning and refrigeration systems are running at full capacity, the increased load will not always be met, causing suboptimal refrigerated produce temperature which, if not mitigated, will negatively affect sales, decrease shelf life and increase food wastage, resulting in increased operating costs. Newly designed systems will require additional capacity to operate at higher mean temperatures, which will in turn be more costly to construct and operate, resulting in increased CAPEX and operating costs for Shoprite.

The Shoprite Engineering team and professional consulting engineers investigated this risk to establish the financial and technical impacts. The team considered the long (i.e., 20 years) and medium (i.e. 10 year) life expectancy of air-conditioning and refrigeration systems when specifying and designing these systems. The current specification allows for the systems to have enough capacity to meet at least a 2°C rise in mean temperature.

Time horizon

Long-term

Likelihood

Likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

112,200,000

Potential financial impact figure – maximum (currency)

136,000,000

Explanation of financial impact figure

The Shoprite Engineering team and professional consulting engineers investigated this risk to establish the financial and technical impacts. However, the financial implications associated with rising mean temperatures are inherently uncertain and complex to calculate accurately.

Based on refrigeration system sizing design calculations, a 2°C rise in the mean temperature will result in an increase of:

- 7.0% in the electricity consumption of air-conditioning systems.
- 6.6% in the electricity consumption of refrigeration systems.
- 7.0% in the capital expenditure for new air-conditioning systems; and
- 6.6% in the capital expenditure for new refrigeration systems.

- Air-conditioning systems are $\pm 10\%$ of a site's power consumption while refrigeration accounts for 40-50% of a site's power consumption. The 2°C rise will thus result in a 0.7% (7% of 10%) increase (air-conditioning) and a 2.6% to 3.3% increase (6.6% of 40-50%) (refrigeration) in a site's power consumption (3.3% to 4%). Shoprite's annual electricity cost is R3.4bn resulting in the potential financial impact of between R112.2m and R136m.
- The financial implications provided are calculated for a 12-month period only and stated in today's money.

Cost of response to risk

382,500,000

Description of response and explanation of cost calculation

Situation: According to the World Meteorological Organization's (WMO) State of the Climate in Africa 2019 report, extensive areas of Africa will exceed 2°C of warming above pre-industrial levels by the last two decades of this century.

Task: The rising mean temperatures will directly increase the load on air-conditioning and refrigeration systems and their ability to function as designed. Where existing systems are not running at full capacity, the increased load will lead to increased maintenance, electricity consumption and operating costs. Where existing air-conditioning systems are running at full capacity, the increased load will not always be met, causing a rise in in-store ambient temperature and a suboptimal shopping experience which, if not mitigated, will negatively affect sales. In addition, where both existing air-conditioning and refrigeration systems are running at full capacity, the increased load will not always be met, causing suboptimal refrigerated produce temperature which, if not mitigated, will negatively affect sales, decrease shelf life and increase food wastage, resulting in increased operating costs. Newly designed systems will require additional capacity to operate at higher mean temperatures, which will in turn be more costly to construct and operate, resulting in increased CAPEX and operating costs for Shoprite.

Action: The Shoprite Engineering team and professional consulting engineers investigated this risk to establish the financial and technical impacts, as well as the risk mitigation or control measures. For example, energy efficiency technologies were investigated to reduce electricity consumption (e.g., doors on refrigeration cabinets). This is estimated to cost $\pm\text{R}425\,000$ per site. Implementing these initiatives at Shoprite's 900 large format stores (i.e., Shoprite, Checkers, Checkers Hyper) will result in a capital expenditure of ZAR 382 500 000 to allow equipment to operate at the higher mean temperatures.

Result: Energy efficiency projects are estimated to cost $\pm\text{R}425\,000$ per store. Implementing these initiatives at Shoprite's 900 large format stores (i.e., Shoprite, Checkers, Checkers Hyper) will result in a capital expenditure of ZAR 382 500 000.

While financial impacts may not be substantial ($>\text{R}250\text{m}$), annual OPEX will increase by between R112.2m to R136m while CAPEX to respond to this risk is $\pm\text{R}382.5\text{m}$.

Comment

N/A

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical

Drought

Primary potential financial impact

Increased direct costs

Company-specific description

According to the World Meteorological Organization's (WMO) State of the Climate in Africa 2019 report, rainfall amounts during the 2018/2019 season were below normal in Southern Africa, exacerbating an existing drought situation. The Intergovernmental Panel on Climate Change (IPCC) further confirms that a reduction in precipitation is likely over North Africa and the south-western parts of South Africa by the end of the century. Shoprite's operations are primarily in this Southern African region, and rainfall variability will impact water availability and supply which will add to the cost of water. Additionally, present population growth trends in South Africa, and water availability and usage behaviours indicate that the water consumption will exceed water availability by 2030. Higher temperatures will increase evaporation from dams and rivers, and will reduce run-off on the ground, so that less of the water that falls reaches the rivers and dams.

A review of the impact and consequence of this development led to the following risk being registered on the company's Risk Register:

- CG19 Weather / Climate Change: Increase in the severity and frequency of extreme weather events and natural catastrophes (droughts, floods, fires, heatwaves, storms etc.) and its impact on Shoprite's business and suppliers, whether linked to physical assets (stores, distribution centres or vehicles) or supply of perishable products, livestock, damage to physical assets, business continuity or sustainability.

To this extent, Shoprite will have to invest CAPEX for back-up water infrastructure (water tanks and pumps) with increased operating expenses in high-risk regions in Southern Africa to ensure water supply and business continuity.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

126,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Based on the City of Cape Town's response during the 2015 - 2018 drought, it is estimated that municipalities would double water tariffs in water stressed areas to. Currently water costs amount to approximately R126,000,000 per annum.

Cost of response to risk

102,943,500

Description of response and explanation of cost calculation

Situation: According to the World Meteorological Organization's (WMO) State of the Climate in Africa 2019 report, rainfall amounts during the 2018/2019 season were below normal in Southern Africa, exacerbating an

existing drought situation. The Intergovernmental Panel on Climate Change (IPCC) further confirms that a reduction in precipitation is likely over North Africa and the south-western parts of South Africa by the end of the century. Shoprite's operations are primarily in this Southern African region, and rainfall variability will impact water availability and supply. Additionally, present population growth trends in South Africa, and water availability and usage behaviours indicate that the water consumption will exceed water availability by 2030.

Task: A review of the impact and consequence of reduced water supply led to the consideration of back-up water infrastructure - similar to that deployed in Cape Town in 2015 - 2018.

Action: Shoprite will have to invest CAPEX for back-up water infrastructure (water tanks and pumps) with increased operating expenses in high-risk regions in Southern Africa to ensure water supply and business continuity. Shoprite is using the experiences gained in the 2015-2018 drought in the Western Cape region to anticipate and mitigate the impacts of low water availability in other regions. Shoprite put measures in place to reduce water consumption (installed 3154 water saving devices in 183 sites, with total expenditure of R800 000), and augment water supply (installed water tanks and pumps at 127 sites, with total expenditure of R27 000 000) so that its operations could continue in this region.

Result: Installing water savings devices at Shoprite's remaining (900 - 183 = 717) large format stores (i.e. Shoprite, Checkers, Checkers Hyper) will result in a cost of R3 943 500 (717 x R5 500 per site) while installed water tanks and pumps at the estimated ±450 large format sites with no such infrastructure will result in a cost of R99 000 000 (450 x R220 000). The costs to manage this risk is therefore estimated to be R102 943 500.

While financial impacts may not be substantial (>R250m), and operational impacts are expected to be substantial (loss of ability to sustain ongoing operations).

Comment

N/A

Identifier

Risk 4

Where in the value chain does the risk driver occur?

Upstream

Risk type & Primary climate-related risk driver

Market

Increased cost of raw materials

Primary potential financial impact

Increased direct costs

Company-specific description

According to the World Meteorological Organization's (WMO) State of the Climate in Africa 2019 report, rainfall amounts during the 2018/2019 season were below normal in Southern Africa, exacerbating an existing drought situation and heavy precipitation events led to flooding in some areas. The Intergovernmental Panel on Climate Change (IPCC) further confirms that a reduction in precipitation is likely over North Africa and the south-western parts of South Africa by the end of the century.

A review of the impact and consequence of this development led to the following risk being registered on the company's Risk Register:

- CG19 Weather / Climate Change: Increase in the severity and frequency of extreme weather events and natural catastrophes (droughts, floods, fires, heatwaves, storms etc.) and its impact on Shoprite's business and suppliers, whether linked to physical assets (stores, distribution centres or vehicles) or supply of perishable products, livestock, damage to physical assets, business continuity or sustainability.

Shoprite's operations are primarily in this Southern African region, and a changing climate (e.g. drought, higher/unpredictable rainfall) will have a significant impact on the sourcing of fresh produce from farmers and suppliers. Shoprite has started to diversify the sourcing of products as experienced in the 2018 drought in the Western Cape region, however this can impact on the cost of goods.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)**Potential financial impact figure – minimum (currency)**

1,100,000,000

Potential financial impact figure – maximum (currency)

2,200,000,000

Explanation of financial impact figure

The cost of procurement of fresh produce is between R5.5bn to R11bn and prices are estimated to increase by $\pm 20\%$. Therefore, the estimated financial impact range is R1.1bn ($0.2 \times R5.5bn$) to R2.2bn ($0.2 \times R11bn$).

Cost of response to risk

5,500,000

Description of response and explanation of cost calculation

Situation: According to the World Meteorological Organization's (WMO) State of the Climate in Africa 2019 report, rainfall amounts during the 2018/2019 season were below normal in Southern Africa, exacerbating an existing drought situation and heavy precipitation events led to flooding in some areas. The Intergovernmental Panel on Climate Change (IPCC) further confirms that a reduction in precipitation is likely over North Africa and the south-western parts of South Africa by the end of the century.

Task: A review of the impact and consequence of this development led to the following risk being registered on the company's Risk Register:

- CG19 Weather / Climate Change: Increase in the severity and frequency of extreme weather events and natural catastrophes (droughts, floods, fires, heatwaves, storms etc.) and its impact on Shoprite's business and suppliers, whether linked to physical assets (stores, distribution centres or vehicles) or supply of perishable products, livestock, damage to physical assets, business continuity or sustainability.

Action: Shoprite's operations are primarily in this Southern African region, and a changing climate (e.g. drought, higher/unpredictable rainfall) will have a significant impact on the sourcing of fresh produce from farmers and suppliers. Shoprite has started to diversify the sourcing of products as experienced in the 2018 drought in the Western Cape region, however this can impact on the cost of goods.

Result: The Group has already made significant progress in sourcing fresh produce from different regions in South Africa. Additional route planning was done by the internal supply chain teams. However, the additional transport costs are estimated to be approximately R5 500 000.

The estimated financial impact range of R1.1bn to R2.2bn will be substantial (>R250m).

Comment

N/A

Identifier

Risk 5

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical

Flood (coastal, fluvial, pluvial, groundwater)

Primary potential financial impact

Increased direct costs

Company-specific description

According to the World Meteorological Organization's (WMO) State of the Climate in Africa 2019 report, rainfall amounts during the 2018/2019 season were below normal in Southern Africa, but heavy precipitation events led to flooding in some areas. The Intergovernmental Panel on Climate Change (IPCC) further confirms that a reduction in precipitation is likely over North Africa and the south-western parts of South Africa by the end of the century. Shoprite's operations are primarily in this Southern African region, and the increased severity and frequency of extreme weather events such as cyclones and floods can result in flooding and damages to stores and Distribution Centres. This was experienced during the cyclones in Mozambique in 2019 and severe flooding in Durban in 2021 when stores were damaged.

A review of the impact and consequence of this development led to the following risk being registered on the company's Risk Register:

- CG19 Weather / Climate Change: Increase in the severity and frequency of extreme weather events and natural catastrophes (droughts, floods, fires, heatwaves, storms etc.) and its impact on Shoprite's business and suppliers, whether linked to physical assets (stores, distribution centres or vehicles) or supply of perishable products, livestock, damage to physical assets, business continuity or sustainability.

Therefore, it is important to ensure adequate insurance coverage for climate related damages.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)**Potential financial impact figure – minimum (currency)**

44,000,000

Potential financial impact figure – maximum (currency)

132,000,000

Explanation of financial impact figure

Based on the experiences of the cyclones in Mozambique when a store was damaged in 2019, the approximate cost of damages and business interruption was approx. R44m per store. Assuming that 1 to 3 stores experience these types of events per year gives an estimated and projected total of R132m.

Cost of response to risk

5,000,000

Description of response and explanation of cost calculation

Situation: According to the World Meteorological Organization's (WMO) State of the Climate in Africa 2019 report, rainfall amounts during the 2018/2019 season were below normal in Southern Africa, but heavy precipitation events led to flooding in some areas. The Intergovernmental Panel on Climate Change (IPCC) further confirms that a reduction in precipitation is likely over North Africa and the south-western parts of South Africa by the end of the century. Shoprite's operations are primarily in this Southern African region, and the increased severity and frequency of extreme weather events such as cyclones and floods can result in flooding and damages to stores and Distribution Centres. This was experienced during the cyclones in Mozambique in 2019 and severe flooding in Durban in 2021 when stores were damaged.

Task: A review of the impact and consequence of this development led to the following risk being registered on the company's Risk Register:

- CG19 Weather / Climate Change: Increase in the severity and frequency of extreme weather events and natural catastrophes (droughts, floods, fires, heatwaves, storms etc.) and its impact on Shoprite's business and suppliers, whether linked to physical assets (stores, distribution centres or vehicles) or supply of perishable products, livestock, damage to physical assets, business continuity or sustainability.

Action: Ensure adequate insurance coverage for climate related damages. The insurance excess paid for damages to 3 stores due to a cyclone type event was R5m.

Result: While financial impacts may not be substantial (>R250m), operational impacts are expected to be substantial (loss of ability to sustain ongoing operations).

Comment

N/A

Identifier

Risk 6

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation

Carbon pricing mechanisms

Primary potential financial impact

Increased indirect (operating) costs

Company-specific description

The Carbon Tax was implemented in South Africa in 2019. The carbon tax applies only to scope 1 emitters in the first phase. The first phase is from 1 June 2019 to 31 December 2022, and the second phase is from 2023 to 2030. While the introduction of the carbon tax does not have any direct impact on the price of electricity for the first phase, it is expected to have an impact from phase 2 onwards. The first phase has a carbon tax rate of R120 per ton of carbon dioxide equivalent emissions. This rate will increase annually by inflation plus 2 per cent for the first phase (until 2022), and annually by inflation thereafter.

Considering the potential financial impact of the carbon tax, and the pending implementation of phase 2, makes this a significant risk for the Shoprite Group.

Taking into account Shoprite's projected Scope 2 CO₂ emissions (from electricity use) in South Africa in 2023, based on current Scope 2 CO₂ emissions, and the projected carbon tax in 2023, together with the assumed allowance range of 5% to 50%, the carbon tax is determined.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)**Potential financial impact figure – minimum (currency)**

147,075,000

Potential financial impact figure – maximum (currency)

279,442,500

Explanation of financial impact figure

The financial impact is calculated from the following: (projected carbon tax rate in 2023 in R/tCO₂e) x (projected Scope 2 carbon emissions in 2023 in tCO₂e) x (1 - regulated allowances in %)

The first phase has a carbon tax rate of R120 per tCO₂e emissions. This rate will increase annually by inflation plus 2% for the first phase (until 2022), and annually by inflation thereafter. In 2023, the projected carbon tax is calculated as R159/tCO₂e; while Shoprite's Scope 2 emissions in South Africa are projected to be approx. 1 850 000 tons. The regulated allowance is estimated to be between 5% and 50% (95% - 50% of R159/tCO₂e).

Cost of response to risk

0

Description of response and explanation of cost calculation

Situation: The Carbon Tax was implemented in South Africa in 2019. The carbon tax applies only to scope 1 emitters in the first phase. The first phase is from 1 June 2019 to 31 December 2022, and the second phase is from 2023 to 2030. While the introduction of the carbon tax does not have any direct impact on the price of electricity for the first phase, it is expected to have an impact from phase 2 onwards. The first phase has a carbon tax rate of R120 per ton of carbon dioxide equivalent emissions. This rate will increase annually by inflation plus 2 per cent for the first phase (until 2022), and annually by inflation thereafter.

Task: Consider the potential financial impact of the carbon tax, and the pending implementation of phase 2, makes this a significant risk for the Shoprite Group.

Action: Taking into account Shoprite's projected Scope 2 CO₂ emissions (from electricity use) in South Africa in 2023, based on current Scope 2 CO₂ emissions, and the projected carbon tax in 2023, together with the assumed allowance range of 5% to 50%, the carbon tax is determined. Shoprite's response to this risk is to increase its use of renewable electricity. Renewable electricity will carry a zero-rated carbon tax. Renewable electricity is sourced via a power purchase agreement at a lower tariff, compared to the current national grid tariff.

Result: The financial impact is expected to be substantive (>R250m) if not mitigated.

Cost of response is zero as renewable electricity is sourced via a power purchase agreement (i.e., zero investment by Shoprite).

Comment

N/A

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Opp1

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

Shift in consumer preferences

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

In April 2021, research commissioned by Mastercard revealed that "75% of South African respondents think it's now more important for businesses and brands to do more for the environment. Nearly half of respondents (45%) will give more value to brands that act in a responsible, transparent and honest way."

<https://newsroom.mastercard.com/mea/press-releases/98-of-adults-in-south-africa-willing-to-take-personal-action-on-sustainability-issues/>

This suggests that Consumer awareness of environmental and climate-related matters is increasing, and consumers also making purchasing choices based on this awareness.

As a consequence, there is an increased demand for Shoprite to acknowledge this awareness and to:

- 1) operate in an environmentally and climate friendly manner, and
- 2) offer environmentally and climate friendly products and services, so much so that customers base their choice of preferred retailer accordingly

There is an opportunity for Shoprite to grow market share, by successfully catering for this customer demand by amplifying its programmes and initiatives to operate in an environmentally responsible manner. This will result in an increase in sales.

The Group is currently:

- increasing recycling rates for cardboard and plastic,
- increasing the use of sustainable packaging
- reducing food waste
- reducing energy use and using more renewable energy.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

536,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The financial implications associated with a shift in customer preferences are inherently uncertain and complex to calculate accurately.

However, it is estimated that market share could increase, by capitalising on this opportunity, by as much as 0.25% (of R214.4bn) which will result in an increase in revenue of ZAR 536 000 000.

The financial implications provided are calculated for a 12-month period only, and stated in today's money.

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

There is an opportunity for Shoprite to grow market share, by successfully catering for customers that are becoming increasingly more environmentally conscious.

Case study:

Situation: In April 2021, research commissioned by Mastercard revealed that "75% of South African respondents think it's now more important for businesses and brands to do more for the environment. Nearly half of respondents (45%) will give more value to brands that act in a responsible, transparent and honest way."

<https://newsroom.mastercard.com/nea/press-releases/98-of-adults-in-south-africa-willing-to-take-personal-action-on-sustainability-issues/>

This suggests that Consumer awareness of environmental and climate-related matters is increasing, and consumers also making purchasing choices based on this awareness.

Task: As a consequence, there is an increased demand for Shoprite to acknowledge this awareness and to:

- 1) operate in an environmentally and climate friendly manner, and
- 2) offer environmentally and climate friendly products and services, so much so that customers base their choice of preferred retailer accordingly.

Action: There is an opportunity for Shoprite to grow market share, by successfully catering for this customer demand by amplifying its programmes and initiatives to operate in an environmentally responsible manner and offering more environmentally and climate friendly products and services. This will result in an increase in sales.

The Group is currently:

- increasing recycling rates for cardboard and plastic,
- increasing the use of sustainable packaging
- reducing food waste
- reducing energy use and using more renewable energy.

Result: The Group is already implementing environmentally and climate friendly programmes and initiatives, so it is not expecting to spend more capital to realise this opportunity. No capital- or operating expenditure, beyond costs for normal business operations, is incurred.

Comment

N/A

Identifier

Opp2

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Resource efficiency

Primary climate-related opportunity driver

Use of more efficient production and distribution processes

Primary potential financial impact

Returns on investment in low-emission technology

Company-specific description

Based on investigations into energy consumption at Shoprite stores, refrigeration represents between 40% and 50% of the store's energy consumption. This is consistent with a UNIDO study that reported that refrigeration systems in a supermarket account for between 30% and 60% of the electricity consumption, whereas lighting accounts for between 15% and 25% of the store's energy consumption.

Considering the opportunity and the probability of realising this opportunity warranted further investigation, which the Shoprite team initiated.

Adopting more energy efficient refrigeration technologies and equipment can result in reducing energy consumption by 20% and a resultant cost saving.

Time horizon

Long-term

Likelihood

Likely

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)**Potential financial impact figure – minimum (currency)**

272,000,000

Potential financial impact figure – maximum (currency)

340,000,000

Explanation of financial impact figure

Refrigeration at store level represents between 40% and 50% of the store's energy consumption. Adopting more energy efficient refrigeration technologies and equipment can result in reducing energy consumption by an estimated 20%. The financial impact figure is based on the following - Shoprite and Checkers branded stores spend approx. R3.4bn on electricity annually. Refrigeration costs are therefore between R1.36bn and R1.7bn, and 20% saving amounts to between R272m and R340m.

Cost to realize opportunity

36,000,000

Strategy to realize opportunity and explanation of cost calculation

Improving the energy efficiency of in-store refrigeration systems.

Situation: Based on investigations into energy consumption at Shoprite stores, refrigeration represents between 40% and 50% of the store's energy consumption. This is consistent with a UNIDO study that reported that refrigeration systems in a supermarket account for between 30% and 60% of the electricity consumption, whereas lighting accounts for between 15% and 25% of the store's energy consumption.

Task: Considering the opportunity and the probability of realising this opportunity warranted further investigation, which the Shoprite team initiated.

Action and cost calculations: Adopting more energy efficient refrigeration technologies and equipment can result in reducing energy consumption by 20% and a resultant cost saving.

Shoprite refurbishes its stores every 7-10 years, and the refrigeration can be upgraded as part of the refurbishment cycle which will allow all the potential savings to be realised over a period of 7-10 years. A new refrigeration system for a large format store (i.e., Shoprite, Checkers, Checkers Hyper) being refurbished or a

new store typically costs between R4m and R8m and the installation of more energy efficient refrigeration equipment will result in $\pm 15\%$ additional capital expenditure.

Shoprite refurbishes and/or opens ± 30 large format stores annually. The additional cost for energy efficient refrigeration equipment is $\pm R36m$ ($30 \times R8m \times 15\%$) annually.

Result: A substantive financial opportunity ($>R250m$) can be realised by adopting energy efficient refrigeration.

Comment

N/A

Identifier

Opp3

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Energy source

Primary climate-related opportunity driver

Use of lower-emission sources of energy

Primary potential financial impact

Reduced indirect (operating) costs

Company-specific description

Use of renewable (solar) energy

The Southern African region has sunshine all year round. The annual 24-hour global solar radiation average is about 220 W/m² for South Africa, compared with about 150 W/m² for parts of the USA, and about 100 W/m² for Europe and the United Kingdom. This makes South Africa's local resource one of the highest in the world.

Shoprite considered the technical and financial feasibility of using solar energy for multiple applications within Shoprite.

- 1) The installation of solar PV systems at Shoprite's stores, distribution centres and offices to generate renewable electricity can result in cost savings over the lifetime of these projects.
- 2) Replacing inefficient diesel-powered refrigeration systems in refrigerated trailers with solar powered cryogenic cooling systems which allows the truck engine to be turned off during loading and unloading which reduces diesel consumption.

This is aligned to the company's approved science-based targets to half emissions by 2030 and achieve net zero by 2050.

Currently the company has 73 sites that have rooftop solar PV systems installed, amounting to total installed capacity of 34MWp.

Time horizon

Medium-term

Likelihood

Very likely

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)**Potential financial impact figure – minimum (currency)**

170,000,000

Potential financial impact figure – maximum (currency)

255,000,000

Explanation of financial impact figure

The financial impact figure is based on the following - Shoprite spends approx. R3.4bn on electricity annually. If renewable electricity represents 25% of the total, and this is typically priced 20%-30% lower than grid electricity this results in an estimated saving of R170m to R255m.

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

Situation: The Southern African region has sunshine all year round. The annual 24-hour global solar radiation average is about 220 W/m² for South Africa, compared with about 150 W/m² for parts of the USA, and about 100 W/m² for Europe and the United Kingdom. This makes South Africa's local resource one of the highest in the world.

Task: Shoprite considered the technical and financial feasibility of using solar energy for multiple applications within Shoprite.

Actions:

- 1) The installation of solar PV systems at Shoprite's stores, distribution centres and offices to generate renewable electricity can result in cost savings over the lifetime of these projects
- 2) Replacing inefficient diesel-powered refrigeration systems in refrigerated trailers with solar powered cryogenic cooling systems which allows the truck engine to be turned off during loading and unloading which reduces diesel consumption.

Results: While the financial benefits may not be substantive (>R250m), the positive reputational outcomes enhance and validates Shoprite's social license to operate.

This is aligned to the company's approved science-based targets to half emissions by 2030 and achieve net zero by 2050.

Currently the company has 73 sites that have rooftop solar PV systems installed. amounting to total installed capacity of 34MWp

Shoprite is engaging with solar PV system suppliers regarding power purchase agreements, which is zero investment cost for Shoprite.

Comment

Power purchase agreements means that the company does not invest its own capital.

Identifier

Opp4

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

Shift in consumer preferences

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

A 2020 Uber Eats survey reported that South Africa ranks among the top five countries for the most ordered vegan dishes globally. It says it experienced a 71% increase in healthy orders made during the hard lockdown, a trend which has continued. Furthermore, a 2020 master's degree study into dietetics showed that the main motive for following the plant-based diet was to help prevent cruelty to animals and protect the environment and its resources.

<https://www.timeslive.co.za/sunday-times/lifestyle/food/2020-11-02-sa-a-global-leader-when-it-comes-to-vegan-grub-orders-says-uber-eats/>

Consumer awareness of environmental and climate-related matters is increasing. This has resulted in an increased demand for plant-based products.

Over the past years, the Shoprite Group has seen a 18% increase in the sales of plant-based food products, with approximately 10% increase in the number of products offered in the stores. Furthermore, global trends suggest that the vegan and flexitarian market will grow at 13% per annum.

Considering the business opportunity and the increasing availability (probability) of plant-based products makes this a viable option.

This trend is expected to continue with more consumers adopting vegan or flexitarian diets, therefore the Group will continue to source more plant-based products and ranges.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)**Potential financial impact figure – minimum (currency)**

10,400,000

Potential financial impact figure – maximum (currency)

13,000,000

Explanation of financial impact figure

The plant-based category in the Group is valued between R80m and R100m. The Group is planning to increase the number of plant-based SKUs, and sales in this category are expected to increase by 13% pa.

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

Situation: A 2020 Uber Eats survey reported that South Africa ranks among the top five countries for the most ordered vegan dishes globally. It says it experienced a 71% increase in healthy orders made during the hard lockdown, a trend which has continued. Furthermore, a 2020 master's degree study into dietetics showed that the main motive for following the plant-based diet was to help prevent cruelty to animals and protect the environment and its resources.

<https://www.timeslive.co.za/sunday-times/lifestyle/food/2020-11-02-sa-a-global-leader-when-it-comes-to-vegan-grub-orders-says-uber-eats/>

Consumer awareness of environmental and climate-related matters is increasing. This has resulted in an increased demand for plant-based products.

Over the past year, the Shoprite Group has seen a 18% increase in the sales of plant-based food products, with approximately 10% increase in the number of products offered in the stores. Furthermore, global trends suggest that the vegan and flexitarian market will grow at 13% per annum.

Task: Considering the business opportunity and the increasing availability (probability) of plant-based products makes this a viable option.

Action: This trend is expected to continue with more consumers adopting vegan or flexitarian diets, therefore the Group will continue to source more plant-based products and ranges.

Results: While the financial impact from the direct sales of plant based or vegan products may not be substantive (>R250m), the Shoprite group will continue to provide customers with options which improves reputational standing.

The Group is planning to increase the number of plant-based SKUs, and sales in this category are expected to increase by 13% per annum. The listing of additional products is not expected to realise significant costs.

Comment

N/A

C3. Business Strategy

C3.1

(C3.1) Does your organization's strategy include a climate transition plan that aligns with a 1.5°C world?

Row 1

Climate transition plan

Yes, we have a climate transition plan which aligns with a 1.5°C world

Publicly available climate transition plan

No

Mechanism by which feedback is collected from shareholders on your climate transition plan

We have a different feedback mechanism in place

Description of feedback mechanism

Our emission reduction targets are aligned with a 1.5-degree ambition and approved by the SBTi. The Group has one-on-one engagement sessions with investors regarding our climate-related targets and transition plan.

The Group's transition plan is based on two focused objectives:

- Reducing GHG emissions and continuously improving energy efficiency in its direct operations, and its supply chain by engaging with suppliers; and
- Strengthening the resilience and adaptive capacity of its operations and that of the communities in which it operates.

This is elaborated on the Position Statement on Climate Change which is available online (<https://www.shopriteholdings.co.za/content/dam/shp/docs/shp-position-statement-climate-change.pdf>)

The Group engages annually with all stakeholders regarding ESG matters via its Stakeholder Engagement and Materiality Analysis process.

Frequency of feedback collection

Annually

Attach any relevant documents which detail your climate transition plan (optional)

 shp-position-statement-climate-change.pdf

 SBTi Certificate Shoprite Holdings.pdf

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

Use of climate-related scenario analysis to inform strategy	
Row 1	Yes, qualitative, and quantitative

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Transition scenarios IEA NZE 2050	Company-wide		<p>The Carbon Tax was implemented in South Africa in 2019. The carbon tax applies only to scope 1 emitters in the first phase. The first phase is from 1 June 2019 to 31 December 2022, and the second phase is from 2023 to 2030. While the introduction of the carbon tax does not have any direct impact on the price of electricity for the first phase, it is expected to have an impact from phase 2 onwards. The first phase has a carbon tax rate of R120 per ton of carbon dioxide equivalent emissions. This rate will increase annually by inflation plus 2 per cent for the first phase (until 2022), and annually by inflation thereafter.</p> <p>See C2.3a - Risk 6</p> <p>In April 2021, research commissioned by Mastercard revealed that "75% of South African respondents think it's now more important for businesses and brands to do more for the environment. Nearly half of respondents (45%) will give more value to brands that act in a responsible, transparent, and honest way." https://newsroom.mastercard.com/nea/press-releases/98-of-adults-in-south-africa-willing-to-take-personal-action-on-sustainability-issues/ This suggests that Consumer awareness of environmental and climate-related matters is increasing, and consumers also making purchasing choices based on this awareness.</p> <p>Consequently, there is an increased demand for Shoprite to acknowledge this awareness and to:</p> <ul style="list-style-type: none"> (1) operate in an environmentally and climate friendly manner, and (2) offer environmentally and climate friendly products and services, so much so that customers base their choice of preferred retailer accordingly. <p>See C2.4a - Opp1</p> <p>The analysis using this scenario was qualitative in nature.</p> <p>The Shoprite Group has signed up to SBTs this year. The Group's decarbonisation targets have been developed to meet the goals of the Paris Agreement – to limit global warming 1.5°C. The Group's decarbonisation plans take into account the procured renewable energy until 2030, to determine an interim</p>

			<p>target. The ambition is to be net zero by 2050. Beyond the increased use of renewable energy, decarbonisation plans include improvements in energy efficiency across the Group's operations (stores and distribution centres).</p> <p>The emission reduction targets have been approved by the SBTi in Sept 2022.</p>
Physical climate scenarios Customized publicly available physical scenario	Company-wide	1.5°C	<p>According to the World Meteorological Organization's (WMO) State of the Climate in Africa 2019 report, rainfall amounts during the 2018/2019 season were below normal in Southern Africa, exacerbating an existing drought situation. The Intergovernmental Panel on Climate Change (IPCC) further confirms that a reduction in precipitation is likely over North Africa and the south-western parts of South Africa by the end of the century. Shoprite's operations are primarily in this Southern African region, and rainfall variability will impact water availability and supply which will add to the cost of water. Additionally, present population growth trends in South Africa, and water availability and usage behaviours indicate that the water consumption will exceed water availability by 2030. Higher temperatures will increase evaporation from dams and rivers, and will reduce run-off on the ground, so that less of the water that falls reaches the rivers and dams.</p> <p>See C2.3a - Risk 3</p> <p>The Group expects that climate change will severely affect water availability therefore it used the WWF Water Risk Filter to determine water security risks on a regional basis. Water supply backup plans were developed for high water consuming operations within high-risk regions.</p> <p>The analysis using this scenario was qualitative in nature.</p> <p>The Shoprite Group has signed up to SBTs this year. The Group's decarbonisation targets have been developed to meet the goals of the Paris Agreement – to limit global warming 1.5°C. The Group's decarbonisation plans take into account the procured renewable energy until 2030, to determine an interim target. The ambition is to be net zero by 2050. Beyond the increased use of renewable energy, decarbonisation plans include improvements in energy efficiency across the Group's operations (stores and distribution centres).</p> <p>The emission reduction targets have been approved by the SBTi in Sept 2022.</p>

C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis and summarize the results with respect to these questions.

Focal questions

What possible future changes to the Southern African climate are predicted, and what are the likely impacts on the Group's direct and indirect business.

What possible future developments (including regulatory changes, renewable energy availability, customer trends) need to be probed?

What variables are needed to support decision-making (for example regulatory changes, renewable energy availability, customer trends)?

What forces and developments have the greatest ability to shape future performance?"

Results of the climate-related scenario analysis with respect to the focal questions

Findings from the World Meteorological Organization's (WMO) State of the Climate in Africa 2019 report include:

- 1) rainfall amounts during the 2018/2019 season were below normal in Southern Africa, exacerbating an existing drought situation. The Intergovernmental Panel on Climate Change (IPCC) further confirms that a reduction in precipitation is likely over North Africa and the south-western parts of South Africa by the end of the century,
- 2) extensive areas of Africa will exceed 2°C of warming above pre-industrial levels by the last two decades of this century, and
- 3) rainfall amounts during the 2018/2019 season were below normal in Southern Africa, but heavy precipitation events led to flooding in some areas. The Intergovernmental Panel on Climate Change (IPCC) further confirms that increases in heavy rainfall and flooding events is also likely in Southern Africa.

Shoprite's operations are primarily in this Southern African region, and rainfall variability will impact water availability and supply which will add to the cost of water. The rising mean temperatures will directly increase the load on Shoprite's air-conditioning and refrigeration systems and their ability to function as designed. Increased severity and frequency of extreme weather events such as cyclones and floods can result in flooding and damages to Shoprite's stores and distribution centres.

In April 2021, research commissioned by Mastercard revealed that "75% of South African respondents think it's now more important for businesses and brands to do more for the environment. Nearly half of respondents (45%) will give more value to brands that act in a responsible, transparent and honest way." <https://newsroom.mastercard.com/mea/press-releases/98-of-adults-in-south-africa-willing-to-take-personal-action-on-sustainability-issues/>

This suggests that Consumer awareness of environmental and climate-related matters is increasing, and consumers also making purchasing choices based on this awareness.

The Shoprite Group has signed up to SBT this year. The Group's decarbonization targets have been developed to meet the goals of the Paris Agreement – to limit global warming to 1.5°C. The Group's decarbonisation plans consider the procured renewable energy until 2030, to determine an interim target. The ambition is to be net zero by 2050. Beyond the increased use of renewable energy, decarbonisation plans include improvements in energy efficiency across the Group's operations (stores and distribution centres). The emission reduction targets have been approved by the SBTi in Sept 2022.

The analysis using this scenario was qualitative in nature.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	<p>As seen in Section 2.4a (Opp3), consumer awareness of environmental and climate-related matters is increasing. This has resulted in an increased demand for plant-based products. Over the past years, the Shoprite Group has seen a 18% increase in the sales of plant-based food products, with approximately 10% increase in the number of products offered in the stores. This trend is expected to continue with more consumers adopting vegan or flexitarian diets - global trends suggest that the vegan and flexitarian market will grow at 13% per annum. While the financial impact from the direct sales of plant based or vegan products may not be substantive (>R250m), the Shoprite group will continue to provide customers with options which improves reputational standing.</p> <p>In April 2021, research commissioned by Mastercard revealed that "75% of South African respondents think it's now more important for businesses and brands to do more for the environment. Nearly half of respondents (45%) will give more value to brands that act in a responsible, transparent, and honest way.</p> <p>https://newsroom.mastercard.com/mea/press-releases/98-of-adults-in-south-africa-willing-to-take-personal-action-on-sustainability-issues/</p> <p>Consequently, there is an increased demand for Shoprite to acknowledge this awareness and offer environmentally and climate friendly products and services, so much so that customers base their choice of preferred retailer accordingly.</p> <p>All palm oil used in Shoprite's premium private label ranges is sustainably sourced and certified by the Roundtable on Sustainable Palm Oil, an organisation aiding in the conservation of the endangered Bornean orangutans. The cocoa powder used in most of our fresh convenience bakery products is UTZ-certified. UTZ is a foundation that sets standards for certifying cocoa and other products. Deforestation and forest degradation contribute significantly to climate change through the release of stored carbon in the Earth. Shoprite is actively transitioning to paper bags that are FSC-certified for its own brands and packaging requirements in response.</p> <p>In March 2022, we launched our first environmental campaign in Checkers stores, to drive further awareness and dialogue on</p>

		<p>environmental related issues, while inviting our customers to join us in making better decisions for our planet.</p> <p>https://www.checkers.co.za/our-sustainability-journey</p>
Supply chain and/or value chain	Yes	<p>The 2015-2018 droughts in South Africa have, to varying degrees, negatively impacted Shoprite suppliers' fresh produce production. Shoprite, with its purpose of being affordable and accessible, will be affected if fresh produce supply is scarce for certain primary lines, which may result in significant price increases of fresh produce becoming unavoidable.</p> <p>Furthermore, changes in precipitation may impact on Shoprite's procurement strategy, for example droughts, floods, and changes in average precipitation may cause harvest losses resulting in supply shortfalls. Shoprite has mitigated this risk by diversifying its sourcing of fresh produce.</p> <p>Responding to Physical risks and/or opportunities: https://www.shopriteholdings.co.za/articles/Newsroom/2021/innovative-small-supplier-helps-stock-shoprite-shelves.html</p> <p>Unusually heavy rains caused havoc in the supply of tomatoes in Feb and Dec 2021. Shoprite's risk mitigation involved the diversifying of its supply chain, and partnering with innovative suppliers, the Group was able to keep tomatoes on its supermarkets' shelves. During this period, tomatoes were sourced from a different location, away from the more traditional tomato growing regions of South Africa. The use of greenhouses and hydroponics further reduced the risk of climate change and maximises output to supply stores.</p>
Investment in R&D	Yes	<p>Two of the Shoprite's strategic drivers are:</p> <ol style="list-style-type: none"> 1) Have trusted, profitable private labels. 2) Grow market share in premium and fresh goods. <p>R&D within Shoprite (in the form of new product development) that supports these strategic drivers includes climate-related aspects. For example, new products in the premium private label ranges includes responsibly sourced palm oil and cocoa which acts against deforestation. Furthermore, new paper or board packaging is FSC-certified.</p> <p>Shoprite has also committed to using new and existing packaging that is:</p> <ul style="list-style-type: none"> • 100% reusable or recyclable or compostable by 2025, and • 30% average recycled content by 2025. <p>R&D considers the functional, commercial, and environmental feasibility of new packaging.</p>
Operations	Yes	<p>Shoprite is committed to increasing its use of renewable electricity in its operations. The Group has committed to using at least 5% of electricity from renewable sources by the end of 2023.</p> <p>Responding to Transitional risks and/or opportunities:</p>

		https://www.shopriteholdings.co.za/articles/Newsroom/2021/shoprite-expands-solar-pv-project-commitment-climate-friendly-operations.html <p>Electricity supply in South Africa is constrained, heavily carbon intensive and tariffs are increasing beyond inflation. To decarbonise its operations, the Shoprite Group has embarked on a programme to procure more renewable electricity. Renewable electricity is also more affordable.</p> <p>As a responsible retailer, Shoprite is aligned to the UN Sustainable Development Goals (SDGs), and specifically with SDG Target 12.3 that intrinsically aims to halve food waste at the retail and consumer levels and reduce food losses along the food chain by 2030. Shoprite is making good progress in diverting food waste from landfills.</p>
--	--	---

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

Financial planning elements that have been influenced		Description of influence
Row 1	Indirect costs Capital expenditures	<p>Indirect costs:</p> <p>The installation of solar PV systems at Shoprite's stores, distribution centres and offices to generate renewable electricity can result in cost savings over the lifetime of these projects. This will mean lower indirect costs for these facilities. In the past reporting period, Shoprite has increased the installed capacity of its solar PV systems by 28%. All solar PV systems installed to date generate 52,845 MWh per year. The associated cost saved increased by 29%.</p> <p>Replacing inefficient diesel-powered refrigeration systems in refrigerated trailers with solar powered cryogenic cooling systems which allows the truck engine to be turned off during loading and unloading which reduces diesel consumption.</p> <p>Case study - see C2.4a - Opp3</p> <p>Situation: The Southern African region has sunshine all year round. The annual 24-hour global solar radiation average is about 220 W/m² for South Africa, compared with about 150 W/m² for parts of the USA, and about 100 W/m² for Europe and the United Kingdom. This makes South Africa's local resource one of the highest in the world.</p> <p>Task: Shoprite considered the technical and financial feasibility of using solar energy for multiple applications within Shoprite.</p> <p>Actions:</p> <p>1) The installation of solar PV systems at Shoprite's stores, distribution centres and offices to generate renewable electricity can result in cost savings over the lifetime of these projects.</p>

		<p>2) Replacing inefficient diesel-powered refrigeration systems in refrigerated trailers with solar powered cryogenic cooling systems which allows the truck engine to be turned off during loading and unloading which reduces diesel consumption.</p> <p>Results: While the financial benefits may not be substantive (>R250m), the positive reputational outcomes enhances and validates Shoprite's social licence to operate.</p> <p>This is aligned to the company's transition plan and approved science based targets to half emissions by 2030 and achieve net zero by 2050.</p> <p>Currently the company has 73 sites that are have rooftop solar PV systems installed. amounting to total installed capacity of 34MWp.</p> <p>Shoprite is engaging with solar PV system suppliers regarding power purchase agreements. No additional costs are expected.</p> <p>Capital expenditure:</p> <p>One of Shoprite's strategic drivers is to "Refocus capital allocation". Therefore, Shoprite's approach is to use power purchase agreements, so that there is no capital expenditure by Shoprite for solar PV installations. No capital was invested by Shoprite for the 73 solar PV systems installed at its stores and distribution sites.</p>
--	--	---

C3.5

(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?

	Identification of spending/revenue that is aligned with your organization's climate transition	Indicate the level at which you identify the alignment of your spending/revenue with a sustainable finance taxonomy
Row 1	Yes, we identify alignment with both our climate transition plan and a sustainable finance taxonomy	At both the company and activity level

C3.5a

(C3.5a) Quantify the percentage share of your spending/revenue that is aligned with your organization's climate transition.

Financial Metric

CAPEX

Type of alignment being reported for this financial metric

Alignment with a sustainable finance taxonomy

Taxonomy under which information is being reported

Other, please specify

South African Revenue Services taxonomy for sustainable activities

Objective under which alignment is being reported

Climate change mitigation

Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)

100,000,000

Percentage share of selected financial metric aligned in the reporting year (%)

2

Percentage share of selected financial metric planned to align in 2025 (%)

5

Percentage share of selected financial metric planned to align in 2030 (%)

15

Describe the methodology used to identify spending/revenue that is aligned

Current CAPEX for energy efficiency projects amounts to R100m for the current year (2% of total CAPEX). We anticipate that this will increase to 5% by 2025 and 15% by 2030, as the installation of energy efficient equipment increases. This is aligned with our 2030 emission reduction targets and our transition plan.

ELECTRICITY CONSUMPTION reduced by 399.3 million kWh through our LED lamp replacement project

Before the implementation of our LED replacement project, electricity consumption through lighting represented approximately 20% of store consumption. Our LED replacement project has significantly reduced our electricity consumption through lighting and is set to be completed in South African stores and DCs by the end of the 2022 calendar year. In the year under review, we retrofitted 280 (FY 2021: 371) supermarkets, furniture outlets and DCs, investing a further R48.4 million (FY 2021: R60.8 million). The installation of LED lighting has reduced our total associated consumption in stores by 11.8% on average. In total, we have saved 399.3 million kWh, 150.4 million kWh of which was saved this year (FY 2021: 248.9 million kWh and 125.7 million kWh). The LED project has saved 412 839 tonnes of CO₂ e (FY 2021: 253 115 tonnes of CO₂ e) and R289 million in electricity cost in the year under review (FY 2021: R210 million).

We are in the process of replacing existing T8 tubes in non-RSA countries including Botswana, Eswatini, Lesotho and Namibia, and there is a rollout plan for the remaining countries.

C3.5b

(C3.5b) Quantify the percentage share of your spending/revenue that was associated with eligible and aligned activities under the sustainable finance taxonomy in the reporting year.

Economic activity

Installation, maintenance, and repair of energy efficiency equipment

Taxonomy under which information is being reported

Other, please specify

South African Revenue Services

Taxonomy Alignment

Taxonomy-aligned

Financial metric(s)

CAPEX

Taxonomy-aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned turnover from this activity that substantially contributed to climate change mitigation as a % of total turnover in the reporting year

Taxonomy-aligned turnover from this activity that substantially contributed to climate change adaptation as a % of total turnover in the reporting year

Taxonomy-eligible but not aligned turnover from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned turnover from this activity as % of total turnover in the reporting year

Taxonomy-aligned CAPEX from this activity in the reporting year (unit currency as selected in C0.4)

48,007,097

Taxonomy-aligned CAPEX from this activity as % of total CAPEX in the reporting year

0.96

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change mitigation as a % of total CAPEX in the reporting year

0.96

Taxonomy-aligned CAPEX from this activity that substantially contributed to climate change adaptation as a % of total CAPEX in the reporting year

0

Taxonomy-eligible but not aligned CAPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned CAPEX associated with this activity as % of total CAPEX in the reporting year

Taxonomy-aligned OPEX from this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-aligned OPEX from this activity as % of total OPEX in the reporting year

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change mitigation as a % of total OPEX in the reporting year

Taxonomy-aligned OPEX from this activity that substantially contributed to climate change adaptation as a % of total OPEX in the reporting year

Taxonomy-eligible but not aligned OPEX associated with this activity in the reporting year (unit currency as selected in C0.4)

Taxonomy-eligible but not aligned OPEX associated with this activity as % total OPEX in the reporting year

Type(s) of substantial contribution

Own performance

Calculation methodology and supporting information

The Group spent R48.0m on LED lamps to replace fluorescent lamps, to mitigate climate change. This represents 0.96% of the Group's CAPEX spend.

Press release - One million LED light bulbs save the Shoprite Group R346 million in electricity costs

<https://www.shopriteholdings.co.za/newsroom/2023/led-lights-project.html>

The Shoprite Group has reduced its electricity consumption by 11.8% following the installation of 1 001 932 energy-efficient light-emitting diode (LED) lightbulbs across 1 647 of its supermarkets and distribution centres nationwide.

This has eased pressure on the national electricity grid as well as generated savings of 164 million kWh and R346 million in electricity costs for the Group during its 2022/2023 financial year.

The retailer's investment in its LED replacement project, which commenced in 2017, totals R371.1 million to date, including R48.7 million over the past year.

Technical screening criteria met

Yes

Details of technical screening criteria analysis

The section 12L tax incentive allows taxpayers to claim a deduction for most forms of measured and verified energy efficiency savings that result from activities performed in the carrying on of any trade and in the production of income.

Eligibility criteria and key documents for application

SANEDI ensures that applications are submitted in line with the section 12L regulations. The regulations provide details on the requirements and restrictions of section 12L applications, including a breakdown of the process required to apply, as summarised below.

- Register the project using the SANEDI online system.
- Appoint a measurement and verification professional to compile a report containing the computation of the energy efficiency savings (two reports are submitted to SANEDI as part of this process, referred to as the baseline and performance assessment reports).
- Submit the report(s) to SANEDI.
- Obtain a certificate from SANEDI to be used when submitting tax returns, if SANEDI is satisfied that the information contained in the reports complies with the South African National Standard 50010 (SANS 50010 for Measurement and Verification of Energy Savings) and is an accurate reflection of the energy savings, and that the approach complies with the regulations.

Shoprite has appointed a consultant to manage this application process.

Do no significant harm requirements met

Yes

Details of do no significant harm analysis

Energy costs contribute to a large portion of the operational costs for businesses. This can be addressed by the implementation of energy conservation measures (ECMs), with the idea of reducing these energy costs and improving profitability. The implementation of such ECMs often requires large capital investments to be made, or the application of drastic measures to achieve operational efficiency improvements. Such costs might outweigh the benefits of the energy cost savings, causing businesses to reconsider the feasibility of these initiatives.

As an additional motivation to promote the uptake of ECMs in industry, Government has introduced the energy efficiency savings tax incentive, contained in section 12L of the Income Tax Act. Section 12L provides an opportunity for South African businesses in all sectors to apply for and benefit from a tax incentive for measured and verified energy efficiency savings. This serves as a further motivation for businesses to implement ECMs and is particularly popular among large energy consumers.

Minimum safeguards compliance requirements met

Yes

Details of minimum safeguards compliance analysis

Measured and verified energy efficiency savings.

- Register the project using the SANEDI online system.
- Appoint a measurement and verification professional to compile a report containing the computation of the energy efficiency savings (two reports are submitted to SANEDI as part of this process, referred to as the baseline and performance assessment reports).
- Submit the report(s) to SANEDI.
- Obtain a certificate from SANEDI to be used when submitting tax returns, if SANEDI is satisfied that the information contained in the reports complies with the South African National Standard 50010 (SANS 50010 for Measurement and Verification of Energy Savings) and is an accurate reflection of the energy savings, and that the approach complies with the regulations.

Shoprite has appointed a consultant to manage this application process.

C3.5c

(C3.5c) Provide any additional contextual and/or verification/assurance information relevant to your organization's taxonomy alignment.

The South African Revenue Services introduced the section 12L tax incentive that allows taxpayers to claim a deduction for most forms of measured and verified energy efficiency savings that result from activities performed in the carrying on of any trade and in the production of income.

Eligibility criteria and key documents for application

SANEDI ensures that applications are submitted in line with the section 12L regulations. The regulations provide details on the requirements and restrictions of section 12L applications, including a breakdown of the process required to apply, as summarised below.

- Register the project using the SANEDI online system.
- Appoint a measurement and verification professional to compile a report containing the computation of the energy efficiency savings (two reports are submitted to SANEDI as part of this process, referred to as the baseline and performance assessment reports).
- Submit the report(s) to SANEDI.
- Obtain a certificate from SANEDI to be used when submitting tax returns, if SANEDI is satisfied that the information contained in the reports complies with the South African National Standard 50010 (SANS 50010 for Measurement and Verification of Energy Savings) and is an accurate reflection of the energy savings, and that the approach complies with the regulations.

Shoprite has appointed a consultant to manage this application process.

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Absolute target

Intensity target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number

Abs 1

Is this a science-based target?

Yes, and this target has been approved by the Science Based Targets initiative

Target ambition

1.5°C aligned

Year target was set

2021

Target coverage

Company-wide

Scope(s)

Scope 1

Scope 2

Scope 2 accounting method

Market-based

Scope 3 category(ies)

N/A

Base year

2020

Base year Scope 1 emissions covered by target (metric tons CO2e)

583,000

Base year Scope 2 emissions covered by target (metric tons CO2e)

1,986,711

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

2,569,711

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

Target year

2030

Targeted reduction from base year (%)

42

**Total emissions in target year covered by target in all selected Scopes (metric tons CO₂e)
[auto calculated]**

1,490,432.38

Scope 1 emissions in reporting year covered by target (metric tons CO₂e)

725,405

Scope 2 emissions in reporting year covered by target (metric tons CO₂e)

1,724,725

Total emissions in reporting year covered by target in all selected scopes (metric tons CO₂e)

2,450,131

Does this target cover any land-related emissions?

Yes, it covers land-related and non-land related emissions (e.g., SBT approved before the release of FLAG target-setting guidance)

% of target achieved relative to base year [auto calculated]

11.0796227947

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

In the 2019/2020 financial year Shoprite increased its scope from Rand-based operations (i.e., South Africa, Lesotho, e-Swatini and Namibia) to company-wide operations (i.e., South Africa, Lesotho, e-Swatini, Namibia, Angola, Botswana, DRC, Ghana, Malawi, Mozambique, and Zambia). As the 2019/2020 reporting scope was Shoprite's company-wide operations, the 2019/2020 financial year (1 July 2019 - 30 June 2020) is used as the base year.

Shoprite has approved science-based targets with a target ambition of 1.5°C aligned.

Plan for achieving target, and progress made to the end of the reporting year

Shoprite has implemented various energy saving initiatives to reduce its Scope 1 and Scope 2 emissions. These initiatives include replacing of T8 and T5 lighting with LEDs, installation of rooftop solar PV systems at stores, installation of rooftop solar PV systems on trailers, renewable electricity wheeling, reverse logistics in supply chain and relooking at our refrigeration philosophy. These initiatives saved 66 986 metric tons of CO₂e (17 332 metric tons CO₂e from LEDs, 47 627 metric tons CO₂e from rooftop solar PV, 1 460 metric tons of CO₂e from rooftop solar PV on trailers and 567 metric tons of CO₂e from reverse logistics) this reporting period and are expected to save another ±972 300 metric tons of CO₂e by 2030.

Target reference number

Abs 2

Is this a science-based target?

Yes, and this target has been approved by the Science Based Targets initiative

Target ambition

Well-below 2°C aligned

Year target was set

2022

Target coverage

Company-wide

Scope(s)

Scope 3

Scope 2 accounting method

N/A

Scope 3 category(ies)

Category 11: Use of sold products

Base year

2020

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

13,274,971

Base year total Scope 3 emissions covered by target (metric tons CO2e)

13,274,971

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

13,274,971

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

100

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

100

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

Target year

2030

Targeted reduction from base year (%)

25

**Total emissions in target year covered by target in all selected Scopes (metric tons CO2e)
[auto calculated]**

9,956,228.25

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

10,853,672

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)

10,853,672

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

10,853,672

Does this target cover any land-related emissions?

Yes, it covers land-related and non-land related emissions (e.g., SBT approved before the release of FLAG target-setting guidance)

% of target achieved relative to base year [auto calculated]

72.9583213402

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

In the 2019/2020 financial year Shoprite increased its scope from Rand-based operations (i.e., South Africa, Lesotho, e-Swatini and Namibia) to company-wide operations (i.e., South Africa, Lesotho, e-Swatini, Namibia, Angola, Botswana, DRC, Ghana, Malawi, Mozambique, and Zambia). As the 2019/2020 reporting scope was Shoprite's company-wide operations, the 2019/2020 financial year (1 July 2019 - 30 June 2020) is used as the base year.

Shoprite has approved science-based targets with a target ambition of well-below 2°C aligned for Scope 3: Category 11 - Use of Sold Products.

Plan for achieving target, and progress made to the end of the reporting year

Shoprite is providing its clients with various lower electricity consumption appliances, as an alternative to the standard appliances that it sells. This will reduce the total kWh that Shoprite's clients will use when utilising the appliances.

South Africa only has a single electricity provider, which is government owned, and the South African government has made a net zero target for 2050 which will lower the national electricity emission factor resulting in lower Scope 3: Category 11 emissions.

C4.1b

(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).

Target reference number

Int 1

Is this a science-based target?

No, but we are reporting another target that is science-based

Target ambition

Year target was set

2018

Target coverage

Company-wide

Scope(s)

Scope 1

Scope 2

Scope 2 accounting method

Market-based

Scope 3 category(ies)

N/A

Intensity metric

Metric tons CO2e per square meter

Base year

2020

Intensity figure in base year for Scope 1 (metric tons CO2e per unit of activity)

0.12

Intensity figure in base year for Scope 2 (metric tons CO2e per unit of activity)

0.408

Intensity figure in base year for all selected Scopes (metric tons CO2e per unit of activity)

0.528

% of total base year emissions in Scope 1 covered by this Scope 1 intensity figure

100

% of total base year emissions in Scope 2 covered by this Scope 2 intensity figure

100

% of total base year emissions in all selected Scopes covered by this intensity figure

100

Target year

2030

Targeted reduction from base year (%)

30

**Intensity figure in target year for all selected Scopes (metric tons CO2e per unit of activity)
[auto calculated]**

0.3696

% change anticipated in absolute Scope 1+2 emissions

-20

% change anticipated in absolute Scope 3 emissions

10

Intensity figure in reporting year for Scope 1 (metric tons CO2e per unit of activity)

0.14

Intensity figure in reporting year for Scope 2 (metric tons CO2e per unit of activity)

0.333

Intensity figure in reporting year for all selected Scopes (metric tons CO2e per unit of activity)

0.473

Does this target cover any land-related emissions?

Yes, it covers land-related and non-land related emissions (e.g., SBT approved before the release of FLAG target-setting guidance)

% of target achieved relative to base year [auto calculated]

34.7222222222

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

Shoprite has a financial year-based target since its financial year runs from 01-Jul to 30-Jun. The company's target is a longer-term target.

In the 2019/2020 financial year Shoprite increased its scope from Rand-based operations (i.e., South Africa, Lesotho, e-Swatini and Namibia) to company-wide operations (i.e., South Africa, Lesotho, e-Swatini, Namibia, Angola, Botswana, DRC, Ghana, Malawi, Mozambique, and Zambia). As the 2019/2020 reporting scope was Shoprite's company-wide operations, the 2019/2020 financial year (1 July 2019 - 30 June 2020) is used as the base year.

Comparing the 2022/2023 to 2021/2022 intensity performance of the company's "Metric tons CO2e per square meter" reduced by 2.3% and the reduction since our base year (2019/2020) is 10.4%.

Plan for achieving target, and progress made to the end of the reporting year

Shoprite has implemented various energy saving initiatives to reduce its Scope 1 and Scope 2 emissions. These initiatives include replacing of T8 and T5 lighting with LEDs, installation of rooftop solar PV systems at stores, installation of rooftop solar PV systems on trailers, renewable electricity wheeling, reverse logistics in supply chain and relooking at our refrigeration philosophy. These initiatives saved 66 986 metric tons of CO2e (17 332 metric tons CO2e from LEDs, 47 627 metric tons CO2e from rooftop solar PV, 1 460 metric tons of CO2e from rooftop solar PV on trailers and 567 metric tons of CO2e from reverse logistics) this reporting period and are expected to save another ±972 300 metric tons of CO2e by 2030.

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

Target(s) to increase low-carbon energy consumption or production

C4.2a

(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.

Target reference number

Low 1

Year target was set

2018

Target coverage

Company-wide

Target type: energy carrier

Electricity

Target type: activity

Consumption

Target type: energy source

Renewable energy source(s) only

Base year

2020

Consumption or production of selected energy carrier in base year (MWh)

3,298

% share of low-carbon or renewable energy in base year

0.16

Target year

2030

% share of low-carbon or renewable energy in target year

25

% share of low-carbon or renewable energy in reporting year

5.5

% of target achieved relative to base year [auto calculated]

21.4975845411

Target status in reporting year

Underway

Is this target part of an emissions target?

Reducing Scope 2 electricity emissions only and related to Int1 and Abs1 target

Is this target part of an overarching initiative?

Science Based Targets initiative

Please explain target coverage and identify any exclusions

Shoptite aims to increase its total renewable energy consumption to account for approximately a quarter of its 2019/2020 total energy usage by the target year.

In the 2019/2020 financial year Shoprite increased its scope from Rand-based operations (i.e., South Africa, Lesotho, e-Swatini and Namibia) to company-wide operations (i.e., South Africa, Lesotho, e-Swatini, Namibia, Angola, Botswana, DRC, Ghana, Malawi, Mozambique, and Zambia). As the 2019/2020 reporting scope was Shoprite's company-wide operations, the 2019/2020 financial year (1 July 2019 - 30 June 2020) is used as the base year.

This roll-out of solar PV installations does not follow a linear trajectory as most of the solar PV installations will only come online from 2023 onwards.

Plan for achieving target, and progress made to the end of the reporting year

Shoprite has implemented various renewable energy initiatives to increase its % share of low-carbon or renewable energy. These initiatives include installation of rooftop solar PV systems at stores by either ourselves or our landlords, installation of rooftop solar PV systems on trailers and renewable electricity wheeling.

List the actions which contributed most to achieving this target

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO₂e savings.

	Number of initiatives	Total estimated annual CO ₂ e savings in metric tonnes CO ₂ e (only for rows marked *)
Under investigation	121	400,214
To be implemented*	167	552,371
Implementation commenced*	4	19,715
Implemented*	4	66,986
Not to be implemented	72	44,320

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Energy efficiency in buildings

Lighting

Estimated annual CO₂e savings (metric tonnes CO₂e)

17,332

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (location-based)

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

36,652,771

Investment required (unit currency – as specified in C0.4)

48,007,097

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

Initiative category & Initiative type

Low-carbon energy consumption

Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)

47,627

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

3,787,642

Investment required (unit currency – as specified in C0.4)

0

Payback period

<1 year

Estimated lifetime of the initiative

16-20 years

Comment

Part of Shoprite's solar PV project. Shoprite's solar PV suppliers installed solar PV systems at 13 of Shoprite's sites (3x Checkers, 6x Shoprite sites, 2x Distribution Centres and 2x Existing sites system upsizing) generating 11 983 MWh and saving 12 460 metric tons of CO₂e this financial year. Together with Shoprite's previously installed 60 installations and renewable electricity procured from our landlords, an additional 45 801 MWh of renewable electricity was consumed this reporting year, saving 47 627 metric tons of CO₂e.

Initiative category & Initiative type

Low-carbon energy generation

Solar PV

Estimated annual CO₂e savings (metric tonnes CO₂e)

1,460

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

6,975,848

Investment required (unit currency – as specified in C0.4)

21,332,850

Payback period

1-3 years

Estimated lifetime of the initiative

16-20 years

Comment

Part of Shoprite's rooftop solar PV for trailers project. Shoprite installed an additional 269 solar PV system on 269 trailers, saving 314 192 litres of diesel and saving 1 460 metric tons of CO₂e this reporting period.

Initiative category & Initiative type

Transportation

Company fleet vehicle efficiency

Estimated annual CO₂e savings (metric tonnes CO₂e)

567

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

4,661,201

Investment required (unit currency – as specified in C0.4)

0

Payback period

<1 year

Estimated lifetime of the initiative

>30 years

Comment

Part of Shoprite's Reverse Logistics Project. Shoprite reduced overall truck and trailer diesel consumption by an additional 209 940 litres, compared to the previous reporting period, saving 567 metric tons of CO₂e this reporting period.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Compliance with regulatory requirements/standards	"Operate ethically and sustainably" is a strategic enabler for Shoprite and it reflects how the company conducts its business in all geographies. Operating ethically includes compliance with local regulatory requirements and standards, and Shoprite will invest accordingly to ensure compliance.
Financial optimization calculations	The installation of solar PV systems at Shoprite's stores, distribution centres and offices to generate renewable electricity can result in cost savings over the lifetime of these projects. This will mean lower indirect costs for these facilities. In the past reporting period, Shoprite has increased the installed capacity of its solar PV systems by 28%. All solar PV systems installed to date generate 52,845 MWh per year. The associated cost saved increased by 29%.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.**Level of aggregation**

Group of products or services

Taxonomy used to classify product(s) or service(s) as low-carbon

Other, please specify

ISO 14040, life cycle assessment

Type of product(s) or service(s)

Lighting

Conventional LED

Description of product(s) or service(s)

Shoprite sells a range of energy efficient lighting products such as LED globes, in addition to the standard energy saver compact fluorescent globes.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Yes

Methodology used to calculate avoided emissions

The Avoided Emissions Framework (AEF)

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Use stage

Functional unit used

Avoided emissions of LED globes per one year period

Reference product/service or baseline scenario used

Shoprite offers an alternative to the current energy saver 14W compact fluorescent globes in the form of various lower wattage LED globes (5W to 14W).

The baseline is using the assumption that, in the case the LED globes were not an option, all the sales of these lower wattage LEDs would have been replaced by the 14W compact fluorescent globes.

Life cycle stage(s) covered for the reference product/service or baseline scenario

Use stage

Estimated avoided emissions (metric tons CO₂e per functional unit) compared to reference product/service or baseline scenario

60,071

Explain your calculation of avoided emissions, including any assumptions

It is assumed that if lower watt LED globes were not an option all the sales will be of the 14W compact fluorescent globes.

Calculation of baseline:

- $14W / 1000 = 0.014 \text{ kW}$
- Assumption = Globes will be utilised for 5 hours per day, 365 days per year
- $0.014 \text{ kW} \times 5 = 0.07 \text{ kWh per day} \times 365 = 25.55 \text{ kWh per year per unit sold}$
- All units sold in South Africa which has an emissions factor of 1.0399 kgCO₂e per kWh

Calculation of LED globe impact:

- $5W \text{ to } 14W \text{ alternative} / 1000 = 0.005 \text{ kW to } 0.014 \text{ kW}$
- Assumption = Globes will be utilised for 5 hours per day, 365 days per year
- $0.005 \text{ kWh to } 0.014 \text{ kWh} \times 5 = 0.025 \text{ kWh per day to } 0.07 \text{ kWh per day} \times 365 = 9.125 \text{ kWh to } 25.55 \text{ kWh per year per unit sold}$
- All units sold in South Africa which has an emissions factor of 1.0399 kgCO₂e per kWh

Difference between these two options, for all units sold will result in the estimate avoided emissions of 60 071 metric tons CO₂e.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

0.04

Level of aggregation

Group of products or services

Taxonomy used to classify product(s) or service(s) as low-carbon

Other, please specify

ISO 14040, life cycle assessment

Type of product(s) or service(s)

Cooking

Other, please specify

Ready-made Low Carbon Meals

Description of product(s) or service(s)

Shoprite sells a range of prepared meals as part of its Fresh Food offering. Customers have the opportunity to buy a ready-made low-carbon meal, instead of cooking a meal, thereby avoiding emissions.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

No

Methodology used to calculate avoided emissions**Life cycle stage(s) covered for the low-carbon product(s) or services(s)****Functional unit used****Reference product/service or baseline scenario used****Life cycle stage(s) covered for the reference product/service or baseline scenario****Estimated avoided emissions (metric tons CO₂e per functional unit) compared to reference product/service or baseline scenario****Explain your calculation of avoided emissions, including any assumptions****Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year**

1

Level of aggregation

Group of products or services

Taxonomy used to classify product(s) or service(s) as low-carbon

Other, please specify

ISO 14040, life cycle assessment

Type of product(s) or service(s)

Other

Other, please specify

Plant-based products

Description of product(s) or service(s)

Consumer awareness of environmental and climate-related matters is increasing. This has resulted in an increased demand for plant-based products.

Over the past years, the Shoprite Group has seen an 18% increase in the sales of plant-based food products, with a $\pm 10\%$ increase in the number of products offered in the stores. Furthermore, global trends suggest that the vegan and flexitarian market will grow at 13% per annum.

This trend is expected to continue with more consumers adopting vegan or flexitarian diets.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

No

Methodology used to calculate avoided emissions**Life cycle stage(s) covered for the low-carbon product(s) or services(s)****Functional unit used****Reference product/service or baseline scenario used****Life cycle stage(s) covered for the reference product/service or baseline scenario****Estimated avoided emissions (metric tons CO₂e per functional unit) compared to reference product/service or baseline scenario****Explain your calculation of avoided emissions, including any assumptions****Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year**

0.05

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?

No

C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Row 1

Has there been a structural change?

Yes, an acquisition

Name of organization(s) acquired, divested from, or merged with

94 stores acquired from Massmart Holdings Ltd ("Massmart")

Details of structural change(s), including completion dates

Shoprite acquired 94 stores from Massmart, which took effect on 9 January 2023.

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

Change(s) in methodology, boundary, and/or reporting year definition?	
Row 1	No

C5.1c

(C5.1c) Have your organization's base year emissions and past years' emissions been recalculated as a result of any changes or errors reported in C5.1a and/or C5.1b?

	Base year recalculation	Base year emissions recalculation policy, including significance threshold	Past years' recalculation
Row 1	No, because the impact does not meet our significance threshold	Shoprite's base year emissions recalculation policy states that emissions will only be recalculated if the change to overall emissions is greater than 5%. As the 94-store acquisition represented <5% of overall emissions the baseline was not recalculated.	No

C5.2

(C5.2) Provide your base year and base year emissions.

Scope 1

Base year start

July 1, 2019

Base year end

June 30, 2020

Base year emissions (metric tons CO₂e)

583,000

Comment

In the 2019/2020 financial year, Shoprite increased its scope from Rand-based operations (i.e., South Africa, Lesotho, e-Swatini and Namibia) to company-wide operations (i.e., South Africa, Lesotho, e-Swatini, Namibia, Angola, Botswana, DRC, Ghana, Malawi, Mozambique, and Zambia). As the 2019/2020 reporting scope was Shoprite's company-wide operations, the 2019/2020 financial year (1 July 2019 - 30 June 2020) is used as the base year to ensure future comparisons are done on a like-for-like basis.

Scope 2 (location-based)

Base year start

July 1, 2019

Base year end

June 30, 2020

Base year emissions (metric tons CO₂e)

1,986,711

Comment

In the 2019/2020 financial year, Shoprite increased its scope from Rand-based operations (i.e., South Africa, Lesotho, e-Swatini and Namibia) to company-wide operations (i.e., South Africa, Lesotho, e-Swatini, Namibia, Angola, Botswana, DRC, Ghana, Malawi, Mozambique, and Zambia). As the 2019/2020 reporting scope was Shoprite's company-wide operations, the 2019/2020 financial year (1 July 2019 - 30 June 2020) is used as the base year to ensure future comparisons are done on a like-for-like basis.

Scope 2 (market-based)

Base year start

July 1, 2019

Base year end

June 30, 2020

Base year emissions (metric tons CO₂e)

1,986,711

Comment

In the 2019/2020 financial year, Shoprite increased its scope from Rand-based operations (i.e., South Africa, Lesotho, e-Swatini and Namibia) to company-wide operations (i.e., South Africa, Lesotho, e-Swatini, Namibia, Angola, Botswana, DRC, Ghana, Malawi, Mozambique, and Zambia). As the 2019/2020 reporting scope was Shoprite's company-wide operations, the 2019/2020 financial year (1 July 2019 - 30 June 2020) is used as the base year to ensure future comparisons are done on a like-for-like basis.

Each of the Countries in which Shoprite operates, only has a single Utility supplier providing electricity to the country. These countries' emission factors are therefore the same as the local Utility suppliers' emission factors. This resulted in the Market-Based scope 2 figure equalling the Location-Based scope 2 figure during the base year.

Scope 3 category 1: Purchased goods and services

Base year start

July 1, 2019

Base year end

June 30, 2020

Base year emissions (metric tons CO₂e)

1,797,328

Comment

In the 2019/2020 financial year, Shoprite increased its scope from Rand-based operations (i.e., South Africa, Lesotho, e-Swatini and Namibia) to company-wide operations (i.e., South Africa, Lesotho, e-Swatini, Namibia, Angola, Botswana, DRC, Ghana, Malawi, Mozambique, and Zambia). As the 2019/2020 reporting scope was Shoprite's company-wide operations, the 2019/2020 financial year (1 July 2019 - 30 June 2020) is used as the base year to ensure future comparisons are done on a like-for-like basis.

Scope 3 category 2: Capital goods

Base year start

July 1, 2019

Base year end

June 30, 2020

Base year emissions (metric tons CO₂e)

43,804

Comment

In the 2019/2020 financial year, Shoprite increased its scope from Rand-based operations (i.e., South Africa, Lesotho, e-Swatini and Namibia) to company-wide operations (i.e., South Africa, Lesotho, e-Swatini, Namibia, Angola, Botswana, DRC, Ghana, Malawi, Mozambique, and Zambia). As the 2019/2020 reporting scope was Shoprite's company-wide operations, the 2019/2020 financial year (1 July 2019 - 30 June 2020) is used as the base year to ensure future comparisons are done on a like-for-like basis.

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

Base year start

July 1, 2019

Base year end

June 30, 2020

Base year emissions (metric tons CO₂e)

248,736

Comment

In the 2019/2020 financial year, Shoprite increased its scope from Rand-based operations (i.e., South Africa, Lesotho, e-Swatini and Namibia) to company-wide operations (i.e., South Africa, Lesotho, e-Swatini, Namibia, Angola, Botswana, DRC, Ghana, Malawi, Mozambique, and Zambia). As the 2019/2020 reporting scope was Shoprite's company-wide operations, the 2019/2020 financial year (1 July 2019 - 30 June 2020) is used as the base year to ensure future comparisons are done on a like-for-like basis.

Scope 3 category 4: Upstream transportation and distribution

Base year start

July 1, 2019

Base year end

June 30, 2020

Base year emissions (metric tons CO₂e)

204,066

Comment

In the 2019/2020 financial year, Shoprite increased its scope from Rand-based operations (i.e., South Africa, Lesotho, e-Swatini and Namibia) to company-wide operations (i.e., South Africa, Lesotho, e-Swatini, Namibia, Angola, Botswana, DRC, Ghana, Malawi, Mozambique and Zambia). As the 2019/2020 reporting scope was Shoprite's company-wide operations, the 2019/2020 financial year (1 July 2019 - 30 June 2020) is used as the base year to ensure future comparisons are done on a like-for-like basis.

Scope 3 category 5: Waste generated in operations

Base year start

July 1, 2019

Base year end

June 30, 2020

Base year emissions (metric tons CO₂e)

8,181

Comment

In the 2019/2020 financial year, Shoprite increased its scope from Rand-based operations (i.e., South Africa, Lesotho, e-Swatini and Namibia) to company-wide operations (i.e., South Africa, Lesotho, e-Swatini, Namibia, Angola, Botswana, DRC, Ghana, Malawi, Mozambique, and Zambia). As the 2019/2020 reporting scope was Shoprite's company-wide operations, the 2019/2020 financial year (1 July 2019 - 30 June 2020) is used as the base year to ensure future comparisons are done on a like-for-like basis.

Scope 3 category 6: Business travel

Base year start

July 1, 2019

Base year end

June 30, 2020

Base year emissions (metric tons CO₂e)

707

Comment

In the 2019/2020 financial year, Shoprite increased its scope from Rand-based operations (i.e., South Africa, Lesotho, e-Swatini and Namibia) to company-wide operations (i.e., South Africa, Lesotho, e-Swatini, Namibia, Angola, Botswana, DRC, Ghana, Malawi, Mozambique, and Zambia). As the 2019/2020 reporting scope was Shoprite's company-wide operations, the 2019/2020 financial year (1 July 2019 - 30 June 2020) is used as the base year to ensure future comparisons are done on a like-for-like basis.

Scope 3 category 7: Employee commuting

Base year start

July 1, 2019

Base year end

June 30, 2020

Base year emissions (metric tons CO₂e)

91,334

Comment

In the 2019/2020 financial year, Shoprite increased its scope from Rand-based operations (i.e., South Africa, Lesotho, e-Swatini and Namibia) to company-wide operations (i.e., South Africa, Lesotho, e-Swatini, Namibia, Angola, Botswana, DRC, Ghana, Malawi, Mozambique, and Zambia). As the 2019/2020 reporting scope was Shoprite's company-wide operations, the 2019/2020 financial year (1 July 2019 - 30 June 2020) is used as the base year to ensure future comparisons are done on a like-for-like basis.

Scope 3 category 8: Upstream leased assets

Base year start

July 1, 2019

Base year end

June 30, 2020

Base year emissions (metric tons CO₂e)

0

Comment

In the 2019/2020 financial year, Shoprite increased its scope from Rand-based operations (i.e., South Africa, Lesotho, e-Swatini and Namibia) to company-wide operations (i.e., South Africa, Lesotho, e-Swatini, Namibia, Angola, Botswana, DRC, Ghana, Malawi, Mozambique, and Zambia). As the 2019/2020 reporting scope was Shoprite's company-wide operations, the 2019/2020 financial year (1 July 2019 - 30 June 2020) is used as the base year to ensure future comparisons are done on a like-for-like basis.

Scope 3 category 9: Downstream transportation and distribution

Base year start

July 1, 2019

Base year end

June 30, 2020

Base year emissions (metric tons CO₂e)

329

Comment

In the 2019/2020 financial year, Shoprite increased its scope from Rand-based operations (i.e., South Africa, Lesotho, e-Swatini and Namibia) to company-wide operations (i.e., South Africa, Lesotho, e-Swatini, Namibia, Angola, Botswana, DRC, Ghana, Malawi, Mozambique, and Zambia). As the 2019/2020 reporting scope was Shoprite's company-wide operations, the 2019/2020 financial year (1 July 2019 - 30 June 2020) is used as the base year to ensure future comparisons are done on a like-for-like basis.

Scope 3 category 10: Processing of sold products

Base year start

July 1, 2019

Base year end

June 30, 2020

Base year emissions (metric tons CO₂e)

0

Comment

In the 2019/2020 financial year, Shoprite increased its scope from Rand-based operations (i.e., South Africa, Lesotho, e-Swatini and Namibia) to company-wide operations (i.e., South Africa, Lesotho, e-Swatini, Namibia, Angola, Botswana, DRC, Ghana, Malawi, Mozambique, and Zambia). As the 2019/2020 reporting scope was Shoprite's company-wide operations, the 2019/2020 financial year (1 July 2019 - 30 June 2020) is used as the base year to ensure future comparisons are done on a like-for-like basis.

Scope 3 category 11: Use of sold products

Base year start

July 1, 2019

Base year end

June 30, 2020

Base year emissions (metric tons CO₂e)

13,274,971

Comment

In the 2019/2020 financial year, Shoprite increased its scope from Rand-based operations (i.e., South Africa, Lesotho, e-Swatini and Namibia) to company-wide operations (i.e., South Africa, Lesotho, e-Swatini, Namibia, Angola, Botswana, DRC, Ghana, Malawi, Mozambique, and Zambia). As the 2019/2020 reporting scope was Shoprite's company-wide operations, the 2019/2020 financial year (1 July 2019 - 30 June 2020) is used as the base year to ensure future comparisons are done on a like-for-like basis.

Scope 3 category 12: End of life treatment of sold products

Base year start

July 1, 2019

Base year end

June 30, 2020

Base year emissions (metric tons CO₂e)

1,477,548

Comment

In the 2019/2020 financial year, Shoprite increased its scope from Rand-based operations (i.e., South Africa, Lesotho, e-Swatini and Namibia) to company-wide operations (i.e., South Africa, Lesotho, e-Swatini, Namibia, Angola, Botswana, DRC, Ghana, Malawi, Mozambique, and Zambia). As the 2019/2020 reporting scope was Shoprite's company-wide operations, the 2019/2020 financial year (1 July 2019 - 30 June 2020) is used as the base year to ensure future comparisons are done on a like-for-like basis.

Scope 3 category 13: Downstream leased assets

Base year start

July 1, 2019

Base year end

June 30, 2020

Base year emissions (metric tons CO₂e)

137,497

Comment

In the 2019/2020 financial year, Shoprite increased its scope from Rand-based operations (i.e., South Africa, Lesotho, e-Swatini and Namibia) to company-wide operations (i.e., South Africa, Lesotho, e-Swatini, Namibia, Angola, Botswana, DRC, Ghana, Malawi, Mozambique, and Zambia). As the 2019/2020 reporting scope was Shoprite's company-wide operations, the 2019/2020 financial year (1 July 2019 - 30 June 2020) is used as the base year to ensure future comparisons are done on a like-for-like basis.

Scope 3 category 14: Franchises

Base year start

July 1, 2019

Base year end

June 30, 2020

Base year emissions (metric tons CO₂e)

297,389

Comment

In the 2019/2020 financial year, Shoprite increased its scope from Rand-based operations (i.e., South Africa, Lesotho, e-Swatini and Namibia) to company-wide operations (i.e., South Africa, Lesotho, e-Swatini, Namibia, Angola, Botswana, DRC, Ghana, Malawi, Mozambique, and Zambia). As the 2019/2020 reporting scope was Shoprite's company-wide operations, the 2019/2020 financial year (1 July 2019 - 30 June 2020) is used as the base year to ensure future comparisons are done on a like-for-like basis.

Scope 3 category 15: Investments

Base year start

July 1, 2019

Base year end

June 30, 2020

Base year emissions (metric tons CO₂e)

0

Comment

In the 2019/2020 financial year, Shoprite increased its scope from Rand-based operations (i.e., South Africa, Lesotho, e-Swatini and Namibia) to company-wide operations (i.e., South Africa, Lesotho, e-Swatini, Namibia, Angola, Botswana, DRC, Ghana, Malawi, Mozambique, and Zambia). As the 2019/2020 reporting scope was Shoprite's company-wide operations, the 2019/2020 financial year (1 July 2019 - 30 June 2020) is used as the base year to ensure future comparisons are done on a like-for-like basis.

Scope 3: Other (upstream)

Base year start

July 1, 2019

Base year end

June 30, 2020

Base year emissions (metric tons CO₂e)

294,937

Comment

Emissions from Non-Kyoto refrigerants calculated using the DEFRA emissions factors.

In the 2019/2020 financial year, Shoprite increased its scope from Rand-based operations (i.e., South Africa, Lesotho, e-Swatini and Namibia) to company-wide operations (i.e., South Africa, Lesotho, e-Swatini, Namibia, Angola, Botswana, DRC, Ghana, Malawi, Mozambique, and Zambia). As the 2019/2020 reporting scope was Shoprite's company-wide operations, the 2019/2020 financial year (1 July 2019 - 30 June 2020) is used as the base year to ensure future comparisons are done on a like-for-like basis.

Scope 3: Other (downstream)

Base year start

July 1, 2019

Base year end

June 30, 2020

Base year emissions (metric tons CO₂e)

0

Comment

In the 2019/2020 financial year, Shoprite increased its scope from Rand-based operations (i.e., South Africa, Lesotho, e-Swatini and Namibia) to company-wide operations (i.e., South Africa, Lesotho, e-Swatini, Namibia, Angola, Botswana, DRC, Ghana, Malawi, Mozambique, and Zambia). As the 2019/2020 reporting scope was Shoprite's company-wide operations, the 2019/2020 financial year (1 July 2019 - 30 June 2020) is used as the base year to ensure future comparisons are done on a like-for-like basis.

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

IPCC Guidelines for National Greenhouse Gas Inventories, 2006

ISO 14064-1

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

Other, please specify

DEFRA Voluntary 2022 Reporting Guidelines

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO₂e?

Reporting year

Gross global Scope 1 emissions (metric tons CO₂e)

725,405

Comment

Shoprite's absolute Scope 1 emissions increased by 37.6% compared to the previous reporting year (2022/2023 reporting year compared to 2021/2022 reporting year) and has increased by 24.4% compared to Shoprite's baseline reporting year (2022/2023 reporting year compared to 2019/2020 baseline reporting year).

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

Shoprite reports on both location-based and market-based Scope 2 figures.

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO₂e?

Reporting year

Scope 2, location-based

1,832,076

Scope 2, market-based (if applicable)

1,724,725

Comment

Shoprite's absolute Scope 2 location-based emissions reduced by 5.3% compared to the previous reporting year (2022/2023 reporting year compared to 2021/2022 reporting year) and has reduced by 7.8% compared to Shoprite's baseline reporting year (2022/2023 reporting year compared to 2019/2020 baseline reporting year).

Shoprite's absolute Scope 2 market-based emissions reduced by 7.9% compared to the previous reporting year (2022/2023 reporting year compared to 2021/2022 reporting year) and has reduced by 13.2% compared to Shoprite's baseline reporting year (2022/2023 reporting year compared to 2019/2020 baseline reporting year).

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?

No

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

2,515,789

Emissions calculation methodology

Spend-based method

Other, please specify

Quantis Scope 3 Evaluator

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Scope 3 emissions from Purchased Goods and Services was calculated using the Quantis Scope 3 Evaluator which uses Shoprite's costs of purchased goods and services to estimate the emissions.

Shoprite's costs of purchased goods and services data was extracted from Shoprite's enterprise resource planning (ERP) system.

Capital goods

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

56,722

Emissions calculation methodology

Spend-based method

Other, please specify

Quantis Scope 3 Evaluator

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Scope 3 emissions from Capital Goods was calculated using the Quantis Scope 3 Evaluator which uses Shoprite's cost of capital goods to estimate the emissions.

Shoprite's cost of capital goods was extracted from Shoprite's enterprise resource planning (ERP) system.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

265,398

Emissions calculation methodology

Supplier-specific method

Fuel-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

This calculation includes transmissions and distribution losses (from the electricity supplier) relating to Scope 2 emissions and well-to-tank emissions relating to Scope 1 emissions.

Transmission and distribution losses are calculated for Shoprite's electricity consumption using the 10.9% losses provided by South Africa's electricity provider. Well-to-tank emissions are calculated using the DEFRA 2022 emissions factors.

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

196,186

Emissions calculation methodology

Spend-based method

Fuel-based method

Other, please specify

Quantis Scope 3 Evaluator

Percentage of emissions calculated using data obtained from suppliers or value chain partners

90

Please explain

Shoprite uses 3rd party distribution in its non-RSA operations and these emissions were not included in its Scope 1 emissions. To calculate 3rd party emissions, an average amount of diesel consumed by delivery trucks, per store, for non-RSA operations were estimated using our RSA operations as a baseline. The emissions are calculated by taking the total litres of fuel consumed by Shoprite's 3rd party distributors and using the relevant emission factors.

Scope 3 emissions from emissions from freight activities (i.e., Shoprite's own imports, supplier deliveries, etc.) was calculated using the Quantis Scope 3 Evaluator which uses Shoprite's cost of freight spent to estimate the emissions.

Waste generated in operations

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

13,242

Emissions calculation methodology

Spend-based method

Other, please specify

Quantis Scope 3 Evaluator

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Emissions from Waste Generated in operations were calculated using the Quantis Scope 3 Evaluator which uses Shoprite's costs of waste removal services to estimate the emissions.

Shoprite uses 3rd party waste management services at all its operations and the cost data for these suppliers were extracted from Shoprite's enterprise resource planning (ERP) system based on supplier invoices captured throughout the reporting period.

Business travel

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

2,102

Emissions calculation methodology

Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Business travel emissions are calculated using data provided by Shoprite's travel agent (which tracks all business travel activities for the company). Air travel emissions are calculated using the DEFRA 2022 emissions factors. Emissions from car travel are already included in Shoprite's Scope 1 emissions as all these cars are Shoprite owned.

Employee commuting

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

99,187

Emissions calculation methodology

Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Employee commuting emissions are estimated based on the average distance that employees stay from Shoprite's various sites and the type of transport Shoprite's employees use to get to and from work.

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

All Shoprite's leased assets are included in its Scope 1 and 2 emissions as Shoprite has operational control over all these assets.

Downstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

9,952

Emissions calculation methodology

Fuel-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Shoprite's online shopping delivery vehicles' fuel consumption is used with the DEFRA 2022 emissions factors to determine the Downstream Transportation and Distribution emissions.

Fuel usage data received from Shoprite's 3rd party distribution company which it uses for its online shopping deliveries.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Please explain

All emissions from Processing of Sold Products are included in Shoprite's Scope 1 and 2 emissions as Shoprite prepared all sold products at its sites.

Use of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

10,853,672

Emissions calculation methodology

Asset-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Emissions were calculated using the electricity consumption and lifetime of sold equipment to estimate the Use of Sold Products emissions. Shoprite tracks all sold equipment into major categories (i.e., kettles, stoves, televisions, toasters, fridges, etc.) in addition to per article sold information.

Data was extracted from Shoprite's enterprise resource planning (ERP) system.

End of life treatment of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

1,478,748

Emissions calculation methodology

Waste-type-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Emissions were calculated using the total weight of Shoprite's packaging for its products, material type of packaging (i.e., plastic, paper, metal) and the DEFRA 2021 landfill emissions to determine the End-of-Life Treatment of Sold Products emissions. Shoprite tracks the amount/weight of plastic, paper, and metal packaging material it uses with its products.

Emissions from customer food was calculated assuming 13.1% of food waste sold by Shoprite are wasted at home.

Total weight of packaging for its products and type/material of packaging and total food sold was extracted from Shoprite's enterprise resource planning (ERP) system.

Downstream leased assets

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

118,815

Emissions calculation methodology

Spend-based method

Other, please specify

Quantis Scope 3 Evaluator

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

These emissions were calculated using the Quantis Scope 3 evaluator which uses Shoprite's total rental income from tenants to estimate Downstream Leased Assets emissions. Rental income from Shoprite owned companies were excl. as these emissions were included in Scope 1 and 2.

Cost data received from Shoprite's Properties division which tracks its overall rental income from all its tenants.

Franchises

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

285,256

Emissions calculation methodology

Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Shoprite has a franchise division. To estimate its emissions, the average Scope 1 + Scope 2 emissions for Shoprite's larger format stores, per store, are calculated x 50% (estimated size of franchise division stores compared to Shoprite larger format stores) x total number of franchise division sites.

Investments

Evaluation status

Not relevant, explanation provided

Please explain

Shoprite does not have significant investments as this is not a core functionality of the company.

Other (upstream)

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

285,803

Emissions calculation methodology

Supplier-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Emissions from Non-Kyoto refrigerants are calculated using the DEFRA 2022 emissions factors.

Shoprite has a 3rd party that tracks all refrigerant leaks and provides leakage data to Shoprite on a monthly basis.

Other (downstream)

Evaluation status

Not relevant, explanation provided

Please explain

No other (downstream) Scope 3 emissions to include.

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

No

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO₂e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

0.0114

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO₂e)

2,450,131

Metric denominator

unit total revenue

Metric denominator: Unit total

214,446,545

Scope 2 figure used

Market-based

% change from previous year

13.36

Direction of change

Decreased

Reason(s) for change

Change in renewable energy consumption

Other emissions reduction activities

Acquisitions

Change in output

Change in revenue

Please explain

Scope 1 and 2 emissions increased by 2.1% (from 2 399 925 tCO₂e to 2 450 131 tCO₂e) while revenue increased by 17.8% (R182bn to R214.4bn).

The decrease of Scope 1 and 2 emissions were due to:

Scope 1

- Shoprite installed an additional 269 solar PV system on 269 trailers, saving 1 460 tCO₂e.

- Shoprite reduced overall truck and trailer diesel consumption saving 567 tCO₂e.
- Shoprite acquired 94 new facilities resulting in an increase of 3 306 tCO₂e in stationary combustion.
- Shoprite opened 221 new facilities resulting in an increase of 90 037 tCO₂e (64 150 tCO₂e increase in fugitive emissions, 5 737 tCO₂e increase in stationary combustion, 20 150 tCO₂e increase in mobile combustion).
- Fugitive emissions increased by 4 684 tCO₂e due to increased refrigerant leaks.
- South Africa experienced an increase in load shedding compared to the previous reporting year, increasing stationary combustion emissions by 102 394 tCO₂e.

Previous year gross global emissions = 2 399 925 tCO₂e.

Change = $(-1\,460 - 567 + 3\,306 + 90\,037 + 4\,684 + 102\,394) / 2\,399\,925 = +8.27\%$.

Scope 2

- Shoprite continued its rollout of energy-efficient LED lights saving 16 667 MWh of electricity and 17 332 tCO₂e.
- Shoprite solar PV suppliers installed solar PV systems at 13 of Shoprite's sites. Together with Shoprite's previously installed 60 installations and renewable electricity procured from its landlords, an additional 45 801 MWh of renewable electricity was consumed this reporting year, saving 47 627 tCO₂e.
- Shoprite acquired 94 new facilities resulting in an increase of 24 060 tCO₂e in electricity consumption.
- South Africa's national electricity supplier decreased the national emissions factor from 1.06 to 1.04 resulting in decrease of 37 319 tCO₂e (from a market-based perspective).
- South Africa experienced an increase in load shedding compared to the previous reporting year, reducing electricity consumption by 69 970 tCO₂e.

Previous year gross global emissions = 2 399 925 tCO₂e.

Change = $(-17\,332 - 47\,627 + 24\,060 - 37\,319 - 69\,970) / 2\,399\,925 = -6.17\%$.

Change = $(198\,394 - 148\,188) / 2\,399\,925 = 2.1\%$ increase

Intensity figure

0.473

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO₂e)

2,450,131

Metric denominator

square meter

Metric denominator: Unit total

5,183,449

Scope 2 figure used

Market-based

% change from previous year

2.34

Direction of change

Decreased

Reason(s) for change

Change in renewable energy consumption

Other emissions reduction activities

Acquisitions

Change in output

Please explain

Scope 1 and 2 emissions increased by 2.1% (from 2 399 925 tCO₂e to 2 450 131 tCO₂e) while total square meters increased by 4.5% (from 4 959 710 m² to 5 183 449 m²).

The decrease of Scope 1 and 2 emissions were due to:

Scope 1

- Shoprite installed an additional 269 solar PV system on 269 trailers, saving 1 460 tCO₂e.
- Shoprite reduced overall truck and trailer diesel consumption saving 567 tCO₂e.
- Shoprite acquired 94 new facilities resulting in an increase of 3 306 tCO₂e in stationary combustion.
- Shoprite opened 221 new facilities resulting in an increase of 90 037 tCO₂e (64 150 tCO₂e increase in fugitive emissions, 5 737 tCO₂e increase in stationary combustion, 20 150 tCO₂e increase in mobile combustion).
- Fugitive emissions increased by 4 684 tCO₂e due to increased refrigerant leaks.
- South Africa experienced an increase in load shedding compared to the previous reporting year, increasing stationary combustion emissions by 102 394 tCO₂e.

Previous year gross global emissions = 2 399 925 tCO₂e.

Change = $(-1\,460 - 567 + 3\,306 + 90\,037 + 4\,684 + 102\,394) / 2\,399\,925 = +8.27\%$.

Scope 2

- Shoprite continued its rollout of energy-efficient LED lights saving 16 667 MWh of electricity and 17 332 tCO₂e.
- Shoprite solar PV suppliers installed solar PV systems at 13 of Shoprite's sites. Together with Shoprite's previously installed 60 installations and renewable electricity procured from its landlords, an additional 45 801 MWh of renewable electricity was consumed this reporting year, saving 47 627 tCO₂e.
- Shoprite acquired 94 new facilities resulting in an increase of 24 060 tCO₂e in electricity consumption.
- South Africa's national electricity supplier decreased the national emissions factor from 1.06 to 1.04 resulting in decrease of 37 319 tCO₂e (from a market-based perspective).
- South Africa experienced an increase in load shedding compared to the previous reporting year, reducing electricity consumption by 69 970 tCO₂e.

Previous year gross global emissions = 2 399 925 tCO₂e.

Change = $(-17\,332 - 47\,627 + 24\,060 - 37\,319 - 69\,970) / 2\,399\,925 = -6.17\%$.

Change = $(198\,394 - 148\,188) / 2\,399\,925 = 2.1\%$ increase

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO ₂ e)	GWP Reference
CO ₂	272,793	IPCC Fourth Assessment Report (AR4 - 100 year)
CH ₄	54	IPCC Fourth Assessment Report (AR4 - 100 year)
N ₂ O	3,713	IPCC Fourth Assessment Report (AR4 - 100 year)
HFCs	448,845	IPCC Fourth Assessment Report (AR4 - 100 year)

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/area/region.

Country/area/region	Scope 1 emissions (metric tons CO ₂ e)
Angola	13,786
Botswana	7,819
Democratic Republic of the Congo	717
Ghana	1,802
Malawi	1,550
Mozambique	6,098
Namibia	8,734
Other, please specify South Africa, eSwatini & Lesotho	682,076
Zambia	2,823

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By business division

By activity

C7.3a

(C7.3a) Break down your total gross global Scope 1 emissions by business division.

Business division	Scope 1 emissions (metric ton CO ₂ e)
Distribution Centres	11,368
Distribution (Mobile)	134,458
Corporate Stores & Offices	579,579

C7.3c

(C7.3c) Break down your total gross global Scope 1 emissions by business activity.

Activity	Scope 1 emissions (metric tons CO ₂ e)
Mobile combustion	134,458
Stationary combustion	142,102
Fugitive emissions	448,845

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/area/region.

Country/area/region	Scope 2, location-based (metric tons CO ₂ e)	Scope 2, market-based (metric tons CO ₂ e)
Angola	28,197	28,197
Botswana	23,292	23,292
Democratic Republic of the Congo	1,945	1,945
Eswatini	18,229	18,229
Ghana	4,240	4,240
Lesotho	11,907	11,907
Malawi	7,271	7,271
Mozambique	1,330	1,330
Namibia	51,082	44,357
South Africa	1,677,159	1,576,533
Zambia	7,424	7,424

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By business division

By activity

C7.6a

(C7.6a) Break down your total gross global Scope 2 emissions by business division.

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Corporate Stores	1,724,944	1,623,871
Distribution	100,167	94,297
Office	6,965	6,557

C7.6c

(C7.6c) Break down your total gross global Scope 2 emissions by business activity.

Activity	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Electricity purchased	1,832,076	1,724,725

C7.7

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

No

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Increased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	47,627	Decreased	1.98	Shoprite's solar PV suppliers installed solar PV systems at 13 of Shoprite's sites (3x Checkers, 6x Shoprite sites, 2x Distribution Centres and 2x Existing sites' system upsizing) generating 11 983 MWh and saving 12 460 metric tons of CO2e this financial year. Together with Shoprite's previously installed 60 installations and renewable electricity procured from our landlords, an additional 45 801 MWh of renewable electricity was consumed this reporting year, saving 47 627 metric tons of CO2e.

				<p>This resulted in gross global emissions decreasing by 1.98%.</p> <p>Previous year gross global emissions = 2 399 925 tCO₂e</p> <p>Change = 47 627 / 2 399 925 = 1.98% reduction.</p>
Other emissions reduction activities	19,359	Decreased	0.81	<p>Shoprite continued its rollout of energy-efficient LED lights saving 16 667 MWh of electricity and 17 332 metric tons of CO₂e this reporting period. 6 576 metric tons of CO₂e was from LED lights installed during this financial year while 10 756 metric tons of CO₂e was from LED lights installed at the end of the previous reporting period. This resulted in gross global emissions decreasing by 0.72%.</p> <p>Shoprite installed an additional 269 solar PV system on 269 trailers, saving 314 192 litres of diesel and saving 1 460 metric tons of CO₂e this reporting period. This resulted in gross global emissions decreasing by 0.06%.</p> <p>Shoprite reduced overall truck and trailer diesel consumption by an additional 209 940 litres, compared to the previous reporting period, saving 567 metric tons of CO₂e this reporting period. This resulted in gross global emissions decreasing by 0.02%.</p> <p>Previous year gross global emissions = 2 399 925 tCO₂e</p> <p>Change = (17 332 + 1 460 + 567) / 2 399 925 = 0.81% reduction.</p>
Divestment	0	No change	0	No divestments took place during the current reporting period.
Acquisitions	27,366	Increased	1.14	<p>Shoprite acquired 94 stores from Massmart, which took effect on 9 January 2023, resulting in an increase of 27 366 metric tons of CO₂e (24 060 tCO₂e increase electricity consumption, 3 306 tCO₂e increased stationary combustion). This resulted in gross</p>

				<p>global emissions increasing by 1.14%.</p> <p>Previous year gross global emissions = 2 399 925 tCO₂e</p> <p>Change = (24 060 + 3 306) / 2 399 925 = 1.14% increase.</p>
Mergers	0	No change	0	No mergers took place during the current reporting period.
Change in output	90,037	Increased	3.75	<p>Shoprite opened a net of 221 new facilities resulting in an increase of 90 037 metric tons of CO₂e (64 150 tCO₂e increase in fugitive emissions, 5 737 tCO₂e increase in stationary combustion, 20 150 tCO₂e increase in mobile combustion). This resulted in gross global emissions decreasing by 3.75%.</p> <p>Previous year gross global emissions = 2 399 925 tCO₂e</p> <p>Change = (64 150 + 5 737 + 20 150) / 2 399 925 = 3.75% increase.</p>
Change in methodology	37,319	Decreased	1.55	<p>South Africa's national electricity supplier decreased the national emissions factor from 1.06 to 1.04 resulting in decrease of 37 319 metric tons of CO₂e (from a market-based perspective). This resulted in gross global emissions decreasing by 1.55%.</p> <p>Previous year gross global emissions = 2 399 925 tCO₂e</p> <p>Change = 37 319 / 2 399 925 = 1.55% reduction.</p>
Change in boundary	0	No change	0	No change in boundary took place during the current reporting period.
Change in physical operating conditions	0	No change	0	No change in physical operating conditions took place during the current reporting period.
Unidentified	0	No change	0	All reasons for changes to gross global emissions were accounted for. No unidentified reasons.
Other	37,107	Increased	1.55	Fugitive emissions increased by 4 684 metric tons of CO ₂ e due to increased refrigerant leaks. This

				<p>resulted in gross global emissions increasing by 0.20%.</p> <p>South Africa experienced an increase in load shedding compared to the previous reporting year, increasing stationary combustion emissions by 102 394 metric tons of CO₂e while reducing electricity consumption by 69 970 metric tons of CO₂e. This resulted in gross global emissions increasing by 1.35%.</p> <p>Load shedding is the interruption of the electricity supply implemented by the South African electricity supplier due to insufficient generation capacity. Shoprite uses diesel generators to generate electricity during load shedding.</p> <p>Previous year gross global emissions = 2 399 925 tCO₂e</p> <p>Change = (4 684 + 102 394 - 69 970) / 2 399 925 = 1.55% increase.</p>
--	--	--	--	---

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 0% but less than or equal to 5%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	No

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	0	1,028,796	1,028,796
Consumption of purchased or acquired electricity		103,234	1,767,495	1,870,729
Total energy consumption		103,234	2,796,291	2,899,525

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

Heating value

LHV

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

Shoprite consumed no sustainable biomass fuel.

Other biomass

Heating value

LHV

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

Shoprite consumed no other biomass fuel.

Other renewable fuels (e.g. renewable hydrogen)

Heating value

LHV

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

Shoprite consumed no other renewable fuels.

Coal

Heating value

LHV

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

Shoprite consumed no fuel generated from coal.

Oil

Heating value

LHV

Total fuel MWh consumed by the organization

1,028,796

MWh fuel consumed for self-generation of electricity

527,591

MWh fuel consumed for self-generation of heat

501,205

Comment

Shoprite consumes petrol for use in its company cars and consumes diesel for use in its supply chain fleet of trucks and for use in its stationary generators.

The total MWh from Petrol (100% mineral oil) consumption was calculated using the 9.20 kWh/litre factor provided in DEFRA Voluntary 2022 Reporting Guidelines.

The total MWh from Diesel (100% mineral oil) consumption was calculated using the 10.02 kWh/litre factor provided in DEFRA Voluntary 2022 Reporting Guidelines.

Gas

Heating value

LHV

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

Shoprite consumes a negligible amount of gas; hence this is not reported.

Other non-renewable fuels (e.g., non-renewable hydrogen)

Heating value

LHV

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

Shoprite consumed no other non-renewable fuels.

Total fuel

Heating value

LHV

Total fuel MWh consumed by the organization

1,028,796

MWh fuel consumed for self-generation of electricity

527,591

MWh fuel consumed for self-generation of heat

501,205

Comment

Shoprite currently only consumes fuel generated from oil. Petrol for use in its company cars and diesel for use in its supply chain fleet of trucks and for use in its stationary generators.

The total MWh from Petrol (100% mineral oil) consumption was calculated using the 9.20 kWh/litre factor provided in DEFRA Voluntary 2022 Reporting Guidelines.

The total MWh from Diesel (100% mineral oil) consumption was calculated using the 10.02 kWh/litre factor provided in DEFRA Voluntary 2022 Reporting Guidelines.

C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero or near-zero emission factor in the market-based Scope 2 figure reported in C6.3.

Country/area of low-carbon energy consumption

South Africa

Sourcing method

Purchase from an on-site installation owned by a third party (on-site PPA)

Energy carrier

Electricity

Low-carbon technology type

Solar

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

93,210

Tracking instrument used

Contract

Country/area of origin (generation) of the low-carbon energy or energy attribute

South Africa

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2015

Comment

Shoprite procured 93 210 MWh of renewable energy (solar) across 328 sites in South Africa in this reporting period. The commissioning of these sites took place between 2015 and 2023.

Country/area of low-carbon energy consumption

Namibia

Sourcing method

Default delivered electricity from the grid (e.g., standard product offering by an energy supplier), supported by energy attribute certificates

Energy carrier

Electricity

Low-carbon technology type

Solar

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

6,467

Tracking instrument used

Contract

Country/area of origin (generation) of the low-carbon energy or energy attribute

Namibia

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

Commissioning year of the energy generation facility (e.g., date of first commercial operation or repowering)

2016

Comment

Shoprite procured 6 467 MWh of renewable energy (solar) across 19 sites in Namibia in this reporting period. The commissioning of these sites took place between 2016 and 2023.

Country/area of low-carbon energy consumption

South Africa

Sourcing method

Financial (virtual) power purchase agreement (VPPA)

Energy carrier

Electricity

Low-carbon technology type

Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

3,557

Tracking instrument used

Contract

Country/area of origin (generation) of the low-carbon energy or energy attribute

South Africa

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

Commissioning year of the energy generation facility (e.g., date of first commercial operation or repowering)

2021

Comment

Shoprite procured 3 557 MWh of renewable energy (wind) at three of its sites (Checkers Sitari, Checkers Newton Park and Shoprite Daku Road) in South Africa in this reporting period. The procurement contract took effect in 2021.

C8.2g

(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.

Country/area

Angola

Consumption of purchased electricity (MWh)

56,327

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

56,327

Country/area

Botswana

Consumption of purchased electricity (MWh)

22,399

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

22,399

Country/area

Democratic Republic of the Congo

Consumption of purchased electricity (MWh)

1,870

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

1,870

Country/area

Eswatini

Consumption of purchased electricity (MWh)

17,530

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

17,530

Country/area

Ghana

Consumption of purchased electricity (MWh)

17,050

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

17,050

Country/area

Lesotho

Consumption of purchased electricity (MWh)

11,450

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

11,450

Country/area

Malawi

Consumption of purchased electricity (MWh)

6,993

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

6,993

Country/area

Mozambique

Consumption of purchased electricity (MWh)

19,032

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

19,032

Country/area

Namibia

Consumption of purchased electricity (MWh)

49,123

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]49,123

Country/area

South Africa

Consumption of purchased electricity (MWh)

1,612,840

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]1,612,840

Country/area

Zambia

Consumption of purchased electricity (MWh)

56,115

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

56,115

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

Description

Other, please specify

Electricity usage

Metric value

1,870,729

Metric numerator

MWh

Metric denominator (intensity metric only)

Not applicable

% change from previous year

2.13

Direction of change

Decreased

Please explain

Shoprite's total MWh consumption reduced by 2.13% compared to the previous reporting period (2022/2023 reporting period compared to the 2021/2022 reporting period).

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

Verification/assurance status	
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place

Annual process


Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

 Shoprite Holdings Limited FY2023 - Verification Statement.pdf

Page/ section reference

Page 1 to 3

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach

Scope 2 market-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

 Shoprite Holdings Limited FY2023 - Verification Statement.pdf

Page/ section reference

Page 1 to 3

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

 Shoprite Holdings Limited FY2023 - Verification Statement.pdf

Page/section reference

Page 1 to 3

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

Scope 3 category

Scope 3: Business travel

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

 Shoprite Holdings Limited FY2023 - Verification Statement.pdf

Page/section reference

Page 1 to 3

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100





C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C5. Emissions performance	Year on year change in emissions (Scope 1)	ISO 14046-3	Verified Scope 1 emissions changes compared to previous reporting period and baseline. Page 14 and 15  ₁
C5. Emissions performance	Year on year change in emissions (Scope 2)	ISO 14046-3	Verified Scope 2 emissions changes compared to previous reporting period and baseline. Page 14 and 15  ₂
C5. Emissions performance	Year on year change in emissions (Scope 1 and 2)	ISO 14046-3	Verified Scope 1 and 2 emissions changes compared to previous reporting period and baseline. Page 14 and 15  ₂
C5. Emissions performance	Year on year change in emissions (Scope 3)	ISO 14046-3	Verified Scope 3: Category 3: Fuel- and energy related activities compared to previous reporting period and baseline. Page 14 and 15  ₂

 ₁Shoprite FY2023 GHG Verification Report - Final.pdf

 ₂Shoprite Holdings Limited FY2023 - Verification Statement.pdf

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e., ETS, Cap & Trade or Carbon Tax)?

Yes

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.

South Africa carbon tax

C11.1c

(C11.1c) Complete the following table for each of the tax systems you are regulated by.

South Africa carbon tax

Period start date

July 1, 2022

Period end date

June 30, 2023

% of total Scope 1 emissions covered by tax

36.4

Total cost of tax paid

10,770,401

Comment

Currently mobile emissions, emissions from small scale generators and fugitive emissions are exempt from carbon tax in South Africa, however the fuel price includes a carbon tax component.

The current carbon tax on fuel is R0.10 per litre of Petrol and R0.11 per litre of Diesel.

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

South Africa's Carbon Tax states a tax of R159 per tonne of CO₂e, however Shoprite's direct activities will not be liable to pay direct carbon tax. The company's tax liability will be zero. The carbon tax effect on Shoprite will be indirect should liable entities pass their liability on to the consumer. To this extent, Shoprite analyses various carbon tax scenarios together with its tax consultants to understand its indirect carbon tax liability. Shoprite's energy efficiency and emission reduction efforts reduces its indirect carbon tax liability.

A case study indicating Shoprite energy efficiency reduction efforts to reduce its indirect carbon tax liability is the ongoing project started in 2017 to replace conventional fluorescent tube lamps with LED tube lamps across corporate outlets in South Africa which, upon completion, will reduce Shoprite's annual Scope 2 emissions by 125 172 tCO₂e.

C11.2

(C11.2) Has your organization cancelled any project-based carbon credits within the reporting year?

No

C11.3

(C11.3) Does your organization use an internal price on carbon?

Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Type of internal carbon price

Shadow price

How the price is determined

Alignment with the price of a carbon tax

Objective(s) for implementing this internal carbon price

Change internal behaviour

Drive energy efficiency

Navigate GHG regulations

Scope(s) covered

Scope 2

Pricing approach used – spatial variance

Uniform

Pricing approach used – temporal variance

Evolutionary

Indicate how you expect the price to change over time

The Carbon Tax was implemented in South Africa in 2019 and applied to scope 1 (stationary and mobile combustion) emitters only during the first phase (1 June 2019 to 31 December 2022). The second phase (from 2023 to 2030) will include scope 2 and while the introduction of the carbon tax does not have any direct impact on the price of electricity for the first phase, it is expected to have an impact from phase 2 onwards. The carbon price increases annual at CPI + 2%

The first phase has a carbon tax rate of R0.09 per litre of Petrol and R0.10 per litre of Diesel as is already included in Shoprite's costs as part of the national fuel levy.

Actual price(s) used – minimum (currency as specified in C0.4 per metric ton CO2e)

144

Actual price(s) used – maximum (currency as specified in C0.4 per metric ton CO2e)

159

Business decision-making processes this internal carbon price is applied to

Capital expenditure

Operations

Mandatory enforcement of this internal carbon price within these business decision-making processes

No

Explain how this internal carbon price has contributed to the implementation of your organization's climate commitments and/or climate transition plan

As the R144 to R159 per metric ton CO₂e is only applicable to scope 2 emissions, Shoprite uses this shadow price as part of its feasibility studies when looking at various energy saving initiatives such as replacing of fluorescent lighting with LEDs, installation of rooftop solar PV systems at stores, renewable electricity wheeling, refrigeration efficiencies, etc. for its South African operations. This adds R0.15 - R0.17 per kWh to the calculated electricity prices across the group.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers

Yes, our customers/clients

Yes, other partners in the value chain

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Information collection (understanding supplier behaviour)

Details of engagement

Collect targets information at least annually from suppliers

Collect climate-related risk and opportunity information at least annually from suppliers

Collect other climate related information at least annually from suppliers

% of suppliers by number

10

% total procurement spend (direct and indirect)

80

% of supplier-related Scope 3 emissions as reported in C6.5

80

Rationale for the coverage of your engagement

An annual supplier Sustainability Survey was conducted during this reporting period to gain a better understanding of the climate-related initiatives and information from suppliers. This supplier survey is conducted annually.

The survey included a number of questions, including:

- Does your company monitor its energy consumption?
- Does your company monitor its greenhouse gas emissions?
- Have you identified any climate change risks that can impact your business operations?
- Do you have targets and plans to reduce your GHG emissions?

Also:

- Does your company monitor its water consumption?
- Have you identified any water security risks (e.g., availability or quality) that can impact your business operations?

The selection of suppliers was based on the following:

- All suppliers that supply Shoprite with its own branded products were surveyed. Shoprite is accountable for its own brands and products; therefore, it wants to ensure that these products are manufactured in an environmentally responsible manner.
- Top 100 suppliers to Shoprite based on total procurements spend.

Impact of engagement, including measures of success

The annual supplier sustainability survey was the third such survey conducted by Shoprite, and it wanted to have a participation rate greater than 60%. More than 600 companies were surveyed, and 238 companies responded indicating a participation rate of 40%.

Other outcomes of the survey:

- 86% of the respondents indicated that they monitor energy consumption - increase of 9% from the previous year
- 69% of the respondents indicated that they do not monitor direct or indirect GHG emissions - no change from the previous year
- 51% of the respondents indicated that they identified climate change risks that can impact their business operations - 9% lower than the previous year

The above suggests that there may not be a high level of understanding of climate related risks by suppliers, hence there is a need for further engagement on these risks and climate change strategies. There is a need to run an engagement campaign to educate some suppliers about climate change

Comment

The Shoprite Supplier Sustainability Survey will be conducted annually going forward.

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement & Details of engagement

Education/information sharing

Run an engagement campaign to education customers about your climate change performance and strategy.

% of customers by number

40

% of customer - related Scope 3 emissions as reported in C6.5

40

Please explain the rationale for selecting this group of customers and scope of engagement

Shoprite's approved SBT includes a commitment to reduce absolute scope 3 GHG emissions from use of sold products 25%.

Customers have become more conscious of the impact of their consumption on the environment, particularly Checkers customers. As a result, they are seeking products that have a lower environmental impact. We aim to support our customers by making a variety of options available in our stores.

The environmental sustainability of private label products remains top of mind in the development of all ranges. This requires that we engage with vendors to understand what they can offer early in the product development process. We also promote suppliers who develop environmentally sustainable options to ensure conscious consumers have the widest variety of environmentally sustainable products available to them. This shift is aligned with global trends; products are not only affordable, but environmentally sustainable as well.

In March 2022, we launched our first environmental campaign in Checkers stores, to drive further awareness and dialogue on environmental related issues, while inviting our customers to join us in making better decisions for our planet. The 'Better for our planet' campaign focused on issues that are relevant to our own operations and the lives of our customers. Through the campaign, we are able to share the progress we have made on our environmental sustainability journey and encourage our customers to make better decisions as well.

Similar to the journey we are on to improve the sustainability of our products, many suppliers are launching product lines that are more environmentally sustainable. We support our suppliers in this through

environmental marketing campaigns that promote environmentally sustainable products beyond our private label offering. We provide customers with better-for-our planet product options, while giving suppliers the opportunity to showcase the environmental attributes of their products.

“Better for the planet” environmental campaign highlighted the lengths Checkers is going to mitigate their environmental impact and also try move customers towards more sustainable behaviour. We provide customers with better-for-our planet product options, while giving suppliers the opportunity to showcase the environmental attributes of their products.

<https://www.checkers.co.za/our-sustainability-journey>

Impact of engagement, including measures of success

The Checkers environmental campaign received very positive reviews from industry commentators.

- <https://www.citizen.co.za/news/opinion/opinion-columns/3101756/orchids-and-onions-checkers-recycling-campaign/>

The TV commercial for the campaign (<https://www.youtube.com/watch?v=3bjs5uvRI-A&t=2s>) was played on national television channels, and it received 375 000 views on YouTube.

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

Other partners in the value chain include Shoprite's employees. Shoprite has multiple communication channels with its 152 000 employees, including an App and quarterly newsletter.

The following climate related information was shared via the staff engagement App, SiyaRinga, to create awareness on climate related issues and Shoprite's work in this area.

- 17-Aug-22 - RF Scanner facilitating the donation of surplus food to prevent food being landfilled
- 23-Sep-22 - Bigger carrier bags for taxi commuters - using recycled and recyclable plastic
- 28-Sep-22 - Sun powers almost 80% of our trailers - using more renewable energy in logistics
- 14-Oct-22 - World Food Day - supporting hunger relief and food security
- 29-Nov-22 - Scania BEV truck - the first electric truck in South Africa
- 7-Dec-22 - Recycled Trolleys - shopping trolleys made from plastic waste
- 10-Mar-22 - Solar Appreciation Day - promoting solar energy
- 22-Mar-22 - Let's save water together!
- 8-Jun-23 - World Oceans Day - promoting awareness of the importance of our oceans
- 26-Jun-23 - Donations to Western Cape flood affected communities - providing relief to communities affected by climate-related natural disasters

The following climate related information was shared via the quarterly newsletter, to create awareness on climate related issues and Shoprite's work in this area.

- Nov-22 Sustainability Report - sharing information about the Group's environmental programmes and outcomes
 - Jul-22 - Meat Our Mobile Soup Kitchen team - providing relief to communities affected by climate-related natural disasters
 - Jul-22 - Fighting hunger through our community food gardens - community food gardens to assist communities to be more resilient and adaptive to a change
 - Feb-23 - Heavy-duty and glow-in-the-dark: Introducing our new electric truck!

- Feb-23 - Think Responsibly, Act Responsibly - the Group's environmental programmes and outcomes

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?

No, but we plan to introduce climate-related requirements within the next two years

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

Yes, we engage directly with policy makers

Yes, our membership of/engagement with trade associations could influence policy, law, or regulation that may impact the climate

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

Yes

Attach commitment or position statement(s)

<https://www.shopriteholdings.co.za/content/dam/shp/docs/shp-position-statement-climate-change.pdf>

 shp-position-statement-climate-change.pdf

Describe the process(es) your organization has in place to ensure that your external engagement activities are consistent with your climate commitments and/or climate transition plan

A Group Sustainability Manager was appointed by Shoprite in February 2019 to establish a comprehensive sustainability framework and strategy for the Group in all regions that it operates. The strategy will steer the Group's progress on and approach to activities in the company that will strengthen its ability to reduce its reliance on natural resources, while minimising its environmental footprint. The Group Sustainability Manager is the central point of contact within the company for any climate-related issues and queries. In this way, direct and indirect company activities that influence policy will be consistent with the company's overall climate change strategy and sustainability framework. A Climate Change Position Statement was developed to articulate Shoprite's position, strategy and plans related to energy and climate change.

C12.3a

(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Extended producer responsibility (EPR) regulations

Category of policy, law, or regulation that may impact the climate

Low-carbon products and services

Focus area of policy, law, or regulation that may impact the climate

Circular economy

Extended Producer Responsibility (EPR)

Policy, law, or regulation geographic coverage

National

Country/area/region the policy, law, or regulation applies to

South Africa

Your organization's position on the policy, law, or regulation

Support with minor exceptions

Description of engagement with policy makers

The Shoprite Group participated in discussions on the implementation of the EPR regulations with the government department in South Africa through the Consumer Goods Council of South Africa (CGCSA) trade association.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

The Shoprite Group supports the creation of a single EPR scheme for South Africa, as opposed to multiple schemes as indicated by the regulations.

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

Engagement on this policy and regulations is not central to the achievement of our transition plan.

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Reliability of electricity supply

Category of policy, law, or regulation that may impact the climate

Climate change mitigation

Focus area of policy, law, or regulation that may impact the climate

Low-carbon, non-renewable energy generation

Renewable energy generation

Policy, law, or regulation geographic coverage

National

Country/area/region the policy, law, or regulation applies to

South Africa

Your organization's position on the policy, law, or regulation

Support with no exceptions

Description of engagement with policy makers

The Shoprite Group participated in discussions with the new Minister of Electricity's task team regarding improving the national electricity supply. This is through the Consumer Goods Council of South Africa (CGCSA) trade association.

Shoprite supports the increase of renewable electricity available via the national grid.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

The Group's transition plan is based on its approved SBT, which is dependent on using more renewable electricity.

This engagement supports the increase of renewable electricity available via the national grid which is central to the achievement of our transition plan.

Shoprite is relying on this change to achieve your climate transition plan, since the reduction of our Scope 2 and Scope 3 emissions is dependent on the decarbonisation of the national grid.

C12.3b

(C12.3b) Provide details of the trade associations your organization is a member of, or engages with, which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association

Other, please specify

Consumer Goods Council of South Africa (CGCSA)

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

No, we did not attempt to influence their position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

The CGCSA supports the mitigation of climate change through reducing GHG emissions and using energy efficiently. It also supports providing assistance to displaced communities due to climate-related disasters. The Shoprite Group supports this position and the associated objectives.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

1,000,000

Describe the aim of your organization's funding

Membership fees that support the administrative operation of the CGCSA.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).


Publication


In mainstream reports, incorporating the TCFD recommendations

Status

Underway – previous year attached

Attach the document

 shp-ir-2022.pdf

 shp-sr-2022.pdf

 shp-position-statement-climate-change.pdf

Page/Section reference

Sustainability Report:

- Governance - page 9
- Risk management and compliance - page 13
- Section 5, page 45
- Appendix 3, page 65
- Appendix 5, page 69

Integrated Report:

- Environmental Stewardship review - page 74

Content elements

Governance

Strategy

Risks & opportunities

Emissions figures

Emission targets

Other metrics

Comment

This year's Sustainability and Integrated Reports are being prepared, so last year's reports are attached. The Group's position statement on climate change is attached.

C12.5

(C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

Environmental collaborative framework, initiative and/or commitment		Describe your organization's role within each framework, initiative and/or commitment
Row 1	Global Reporting Initiative (GRI) Community Member Other, please specify Consumer Goods Council of South Africa (CGCSA); WWF Business Network partner	The Group participates in webinars, discussions and receives the newsletters.

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity
Row 1	Yes, both board-level oversight and executive management-level responsibility	<p>The Social and Ethics Board Committee is made up of two non-executive Board members and the CFO. Invited roles include the Company Secretary, Group Corporate Relations and Communications Manager, Group Risk and Compliance Manager and Group Sustainability Manager. This committee provides oversight on the Group's activities within communities, its environmental aspects and impacts (including biodiversity), public health and safety, and customer complaints amongst others.</p> <p>An Environmental Sustainability Update is presented to this Committee (3 times per year), for its deliberation and feedback. This includes the company's performance regarding energy use (renewable and non-renewable) and climate change related matters.</p> <p>Position statements on Biodiversity and Responsible Sourcing, Climate Change and Water Security were approved by this committee. These Position Statements articulate the Group's stance on these issues, including its overarching strategy, plans and commitments.</p> <p>The Shoprite Group Deputy CEO is responsible for a number of areas in the company, including environmental and social sustainability and engineering. The Deputy CEO role plays an oversight role on environmental sustainability matters, including energy efficiency and renewable energy projects. The Group's Sustainability Dashboard is presented to him monthly for his consideration and overview. This dashboard includes various climate related KPIs (e.g., electricity consumption, diesel consumption, renewable electricity consumption and refrigerant leaks). In the past reporting period, he approved a biodiversity assessment study for the Group.</p>

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity		Biodiversity-related public commitments	Initiatives endorsed
Row 1	Yes, we have made public commitments and publicly endorsed initiatives related to biodiversity	Commitment to Net Positive Gain Commitment to No Net Loss Adoption of the mitigation hierarchy approach	CBD – Global Biodiversity Framework SDG

C15.3

(C15.3) Does your organization assess the impacts and dependencies of its value chain on biodiversity?

Impacts on biodiversity

Indicate whether your organization undertakes this type of assessment

Yes

Value chain stage(s) covered

Direct operations

Upstream

Tools and methods to assess impacts and/or dependencies on biodiversity

Biological Diversity Protocol

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)

Shoprite requested support from the Endangered Wildlife Trust to undertake an assessment of our biodiversity footprint according to the Biological Diversity Protocol to develop our understanding of the impact of our own operations or that of our products and supply chain on biodiversity. Ten sites are included in this assessment, including distribution centres, shopping centres and vacant land. While direct operations are the focus of this initial assessment, we recognise measuring the biodiversity footprint of our supply chains as the goal in the medium term. This approach demonstrates our leadership in the retail sector as we will be able to take informed action in our own operations and encourage increased biodiversity awareness and action throughout our supply chain.

As per the BD Protocol, business impacts on biodiversity includes impacts on ecosystems and material species, however, impacts on material species will be evaluated at a later stage.

Shoprite's ecosystem asset register or impact inventory holds 8 ecosystem types, the Cape Flats Dune Strandveld (endangered), Cape Flats Dune Strandveld Wetland (endangered), Cape Flats Sand Fynbos (critically endangered), Egoli Granite Grassland (critically endangered), Grassridge Bontveld (least concern), Grassridge Bontveld Wetland (least concern), KwaZulu-Natal Coastal Belt Grassland (endangered) and Swartland Shale Renosterveld Wetland (critically endangered) ecosystems. The scale of ecosystem losses in urban areas means that most of these ecosystems are listed as endangered or critically endangered in the 2018 National Biodiversity Assessment.

Next steps include four main topics: completing and improving the biodiversity asset register, disclosure opportunities, target setting and potential voluntary contributions to biodiversity conservation.

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment

Yes

Value chain stage(s) covered

Direct operations

Tools and methods to assess impacts and/or dependencies on biodiversity

Biological Diversity Protocol

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)

We support sustainable agriculture in South Africa through our Sustainable Initiative of South Africa (SIZA) membership and require all our suppliers obtain a good agricultural practice certification through localg.a.p.or GLOBALG.A.P., which supports the quality, safety and sustainability of the produce on our shelves. GLOBALG.A.P. features rigorous sustainability criteria on biodiversity, water, plastics, pest management and more.

SIZA provides agricultural stakeholders within South Africa with a platform to conduct ethical and environmentally sustainable trade, ensures there is transparency in our supply chain, and focuses on continuous improvement in practices over time. The SIZA Environmental Assurance Model is based on eight principles, including healthy soil practices, water-use efficiency, prevention of contamination to soil and water bodies, and restoration of natural ecosystems.

We play a pioneering role in the creation of localg.a.p. certifications in South Africa. This supports SMME suppliers in overcoming barriers to market access and helps SMMEs begin their sustainability journey.

C15.4

(C15.4) Does your organization have activities located in or near to biodiversity- sensitive areas in the reporting year?

Yes

C15.4a

(C15.4a) Provide details of your organization's activities in the reporting year located in or near to biodiversity -sensitive areas.

Classification of biodiversity -sensitive area

Other biodiversity sensitive area, please specify

2018 South African National Biodiversity Assessment

Country/area

South Africa

Name of the biodiversity-sensitive area

- The Cape Flats Dune Strandveld (endangered),
- Cape Flats Dune Strandveld Wetland (endangered),
- Cape Flats Sand Fynbos (critically endangered),
- Egoli Granite Grassland (critically endangered),
- KwaZulu-Natal Coastal Belt Grassland (endangered) and
- Swartland Shale Renosterveld Wetland (critically endangered)

Proximity

Adjacent

Briefly describe your organization's activities in the reporting year located in or near to the selected area

Warehousing, logistics and retail stores.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Yes, but mitigation measures have been implemented

Mitigation measures implemented within the selected area

Project design

Abatement controls

Restoration

Other, please specify

voluntary contributions to biodiversity conservation

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

Given the very limited opportunities for biodiversity footprint improvement within the land surface area of the selected sites (i.e., urban landscapes, remnant, highly fragmented ecosystems), Shoprite should explore conservation opportunities beyond the legal boundaries of its direct operations (i.e., stewardship opportunities) - potential voluntary contributions to biodiversity conservation. Taking into account, prioritise ecosystems within the asset register / impact inventory and then identify high level conservation opportunities.

Ecosystem asset prioritizing

Ecosystems can be classified according to their 1) protection level and 2) threat status. Three main databases can be used in South Africa to that end.

The NBA2018 Protection level indicates the current status and protection level of South Africa's ecosystems as determined by the National Biodiversity Assessment 2018 Process. The data forms the foundation for many land use decision processes including conservation planning (WP: Well Protected, MP: Moderately Protected, NP: Not Protected).

The NBA 2018 Red List IUCN designates the IUCN Red List of Ecosystems (RLE)¹⁶ status. The RLE assesses the global status of all the world's ecosystems to support conservation and decision making by identifying ecosystems most at risk. The RLE has eight categories: Collapsed (CO), Critically Endangered (CR), Endangered (EN), Vulnerable (VU), Near Threatened (NT), Least Concern (LC), Data Deficient (DD), and Not Evaluated (NE); ordered in decreasing risk of collapse.

Finally, the 2011 Threatened Ecosystem Status, based on The Biodiversity Act (Act 10 of 2004), is the current national ecosystem list which classified threatened or protected ecosystems in one of four categories: critically endangered (CR), endangered (EN), vulnerable (VU) or protected.

Going forward,

Shoprite's biodiversity strategy and activity should prioritize these ecosystem assets for potential voluntary conservation measures, ensuring ecological equivalency between the recorded ecosystem assets within Shoprite's biodiversity footprint and the ecosystems within the targeted stewardship sites.

Potential voluntary conservation opportunities

Biodiversity stewardship is an approach to securing land in biodiversity priority areas through entering into agreements with private landowners, CPAs, and the occupiers of communal land, led by conservation authorities and supported by conservation NGOs. The objective of biodiversity stewardship is to conserve and manage biodiversity priority areas through voluntary agreements with landowners and communities. This may involve formal protection, management, and restoration of terrestrial and aquatic ecosystems.

C15.5

(C15.5) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

Have you taken any actions in the reporting period to progress your biodiversity-related commitments?		Type of action taken to progress biodiversity- related commitments
Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Land/water protection Livelihood, economic & other incentives



C15.6


(C15.6) Does your organization use biodiversity indicators to monitor performance across its activities?

Does your organization use indicators to monitor biodiversity performance?		Indicators used to monitor biodiversity performance
Row 1	Yes, we use indicators	State and benefit indicators Pressure indicators

C15.7

(C15.7) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In voluntary sustainability report or other voluntary communications	Impacts on biodiversity	Deforestation, biodiversity loss and sustainable land management - page 59  ¹
In voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments Biodiversity strategy	A Position Statement on Biodiversity and Responsible Sourcing was approved by the Social and Ethics Board Committee.  ²

 ¹shp-sr-2022.pdf

 ²shp-position-statement-biodiversity-responsible-sourcing.pdf

C16. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

Position Statement on Climate Change

Our purpose is to uplift lives every day by pioneering access to the most affordable goods and services, creating economic opportunity, and protecting our planet.

The Shoprite Group recognises that climate change, driven by global greenhouse gas (GHG) emissions, will directly and indirectly impact its business and the communities in which it operates. Therefore, the Group supports the UNFCCC goal of limiting global temperature rise to below 1.5°C above pre-industrial levels.

The Shoprite Group's response to climate change has two focused objectives:

- Reducing GHG emissions and continuously improving energy efficiency in its direct operations, and its supply chain by engaging with suppliers; and
- Strengthening the resilience and adaptive capacity of its operations and that of the communities in which it operates.

To this end, the Shoprite Group remains committed to:

1. Embracing energy efficiency throughout its operations (in stores, distribution centres, and transportation), and using more renewable energy to reduce GHG emissions.
2. Setting science based GHG emission reduction targets for the medium and long-term, as well as renewable energy usage targets.
3. Strengthening the resilience and adaptive capacity of its operations and supply chain to ensure responsible business continuity, and that of the local communities in which it operates.
4. Collaborating and partnering with key stakeholders including regulators, suppliers, NGOs, and other organisations to address this critical global issue.
5. Sharing climate change information with employees, customers, suppliers, and investors to build knowledge and capacity.
6. Reporting and disclosing its plans, efforts and performances related to climate change mitigation and adaptation.

Approved science-based target:

The Science Based Targets initiative has validated that the corporate greenhouse gas emissions reduction target(s) submitted by Shoprite Holdings Ltd have been deemed to be in conformance with the SBTi Criteria and Recommendations (version 5). The SBTi's Target Validation Team has classified your company's scope 1 and 2 target ambition and has determined that it is in line with a 1.5°C trajectory.

The official target wording is:

Shoprite Holdings Ltd commits to reduce absolute scope 1 and 2 GHG emissions 42% by FY2030 from a FY2020 base year.

Shoprite Holdings Ltd also commits to reduce absolute scope 3 GHG emissions from use of sold products 25% within the same timeframe.

Date of issue: September 2022

Certificate Number: SHOP-SOU-001-OFF

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

Job title		Corresponding job category
Row 1	Head: Group Sustainability and CSI	Chief Sustainability Officer (CSO)

Appendix A: Shoprite FY2023 GHG Verification Report



Shoprite Holdings Limited

Verification of Carbon Footprint Inventory
1 July 2022 - 30 June 2023

Verification performed by Karen van der Wath
Carbon & Energy Management Consultant

July 2023

Final Report

Please consider the environment before printing this report!



Summary of Verification

Shoprite Holdings Limited (“Shoprite”) GHG assertion for the year 2023 contained in the GHG report entitled “Shoprite Holdings Carbon Footprint Assessment Report” has been independently verified. The preparation of the GHG report is the responsibility of Shoprite and it is the verifier’s responsibility to express an opinion on the GHG assertion based on the verification, considering the needs of the intended user.

Shoprite commissioned Karen van der Wath to perform a verification of its FY2023 GHG Inventory for the period 1 July 2022 to 30 June 2023. The verification was performed between 26 June 2023 and 4 July 2023.

Objectives

For the purposes of public disclosure through CDP (formerly the Carbon Disclosure Project), the GHG assertions verified were the following:

1. That the FY2023 GHG Inventory for Shoprite has been developed in accordance with the GHG Protocol Corporate Accounting and Reporting Standard;
2. That the calculated GHG emissions for FY2023 are:
 - Scopes 1 & 2 (location-based) - 2 557 482 tonnes of CO₂e
 - Scopes 1 & 2 (market-based) - 2 450 131 tonnes of CO₂e
 - Scope 3
 - Category 3: Fuel and Energy Related Activities - 265 398 tonnes of CO₂e
 - Category 6: Business travel - commercial airlines - 2 102 tonnes of CO₂e
 - Outside of Scopes - 285 803 tonnes of CO₂e.

The verification performed applied the ISO14064-3 International Standard for GHG verifications to form an opinion at a limited level of assurance about the above GHG assertions, regarding:

1. Conformance with the general requirements of the GHG Protocol Corporate Accounting Standard;
2. Completeness and accuracy of the calculated emissions for the 2023 financial year.

Verifier Opinion

Based on the process and procedures conducted, there is no evidence that

- the GHG assertion has not been prepared in accordance with the requirements of the GHG Protocol Corporate Accounting and Reporting Standard, and
- the GHG assertion is not materially correct and is not a fair representation of the GHG data and information, with the qualification that all stipulated corrective action requests were addressed.

Karen van der Wath
Lead verifier
Carbon & Energy Management Consultant
4 July 2023