

SPAR



THE SPAR GROUP LTD

2022

CLIMATE CHANGE REPORT

Supplement to the integrated annual report
for the year ended 30 September 2022

ABOUT SPAR

SPAR is a warehousing and wholesale distribution business, supplying goods and services to independently owned retailers, trading predominantly under the SPAR retail brand. Part of a global organisation, The SPAR Group Ltd is the registered licensee of the SPAR brand in parts of Southern Africa including South Africa, as well as Switzerland, Ireland, South West England and Poland. The nature of the relationship between the company and independently owned stores is one of joint co-operation for the benefit of the members of this association. SPAR's primary revenue stream is derived from the provision of goods and services to its member stores. The financial performance of independent retailers does not form part of the company's financial results. SPAR operates under a 'voluntary trading model' whereby retailers may also source goods from local traders, thereby supporting their local communities.

OUR SUSTAINABILITY FRAMEWORK

Our sustainability policy supports the SPAR strategy and focuses on five key areas that are fundamental to the role that we play as a food retailer:



Health



Community



Climate



Sourcing



Environment

OUR SUSTAINABILITY PLEDGE

Our sustainability pledge is to create authentic shared value for stakeholders by working towards these outcomes:

- Contribution to societal change
- Contribution to responsible living
- Opportunity creation
- Resource stewardship

OUR CLIMATE CHANGE TARGETS

SPAR has committed to achieving net zero emissions across its direct South African operations by 2050. To achieve this commitment, we set the following science-based targets in 2017. These targets are currently being updated in line with a 1.5°C pathway, and we have plans to get these verified by the Science-Based Targets Initiative (SBTi) (see page 27 – metrics and targets).

- Reduce absolute carbon emissions from our South African transport operations 33% by 2030 and 100% by 2050, from 2017 levels
- Reduce absolute carbon emissions from our South African warehousing operations 51% by 2030, and 100% by 2050, from 2017 levels

OUR INTEGRATED REPORTING APPROACH

We recognise the rapidly evolving interest and engagement of investors and other stakeholders on SPAR's approach to long-term value creation, including our consideration and management of environmental, social and governance (ESG) issues relating to the business. We strive to provide accurate and meaningful information to these stakeholders in accordance with the latest public guidance, and in a manner that reflects integrated business thinking. We aim to continually improve and evolve our disclosure in accordance with the available guidance and scientific, regulatory and other contextual developments relating to business and sustainability.

OUR REPORTING SUITE

The 2022 reporting suite consists of the following elements aimed at stakeholders, and is available on our website:

- Integrated annual report, with governance reports and summarised consolidated financial statements
- Full audited annual financial statements
- Year end results announcement and presentation
- King IV Report on Corporate Governance™ for South Africa, 2016 (King IV)¹ disclosure and reference index
- Environmental, socio-economic and governance supplementary report 2022
- Climate change report 2022

REPORTING FRAMEWORKS

Our integrated reporting process is guided by the principles and requirements contained in IFRS (including the recent ISSB Exposure Drafts), the International Integrated Reporting Framework, the GRI Sustainability Reporting Standards, the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), the King IV™ Report on Corporate Governance for South Africa 2016 (King IV), the Companies Act No 71 of 2008 (Companies Act), and the JSE Listings Requirements and Climate Disclosure Guidance.

FORWARD-LOOKING STATEMENTS

Our reports, including this one, contain forward-looking statements that are based on assumptions and expectations regarding SPAR's present and future strategies and operating environment. Forward-looking statements involve known and unknown risks, uncertainties, and other factors that could cause the actual results, performance or achievements of the group to be materially different from the anticipated future results, performance or achievements expressed or implied by such statements. The forward-looking statements contained in this report have not been reviewed or reported on by the external auditor. SPAR undertakes no obligation to update or revise these statements after this report has been published.

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OUR CLIMATE CHANGE REPORT

This is SPAR's first stand-alone climate change report. The contents and structure of the report have been informed by the TCFD recommendations, JSE Climate Disclosure Guidance and IFRS Climate Exposure Draft. The purpose of the report is to provide comprehensive and transparent disclosure on SPAR's approach to and consideration of climate change, and the management of the climate-related impacts, risks and opportunities most material to the business.

SCOPE AND BOUNDARY

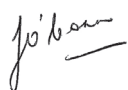
The scope of this first climate change report includes the general governance and risk management approach of the group, the climate-related risks and opportunities of all SPAR direct operations in Southern Africa, and the climate-related risks and opportunities of our South African supply and value chains. The report reflects the 'financial materiality' perspective emphasised by the TCFD recommendations and focuses primarily on SPAR's climate-related risks and opportunities. More information on SPAR's mitigation and adaptation activities is provided in our Environmental, Socio-Economic and Governance Supplementary Report 2022, which reflects the 'impact materiality' perspective of the GRI Sustainability Reporting Standards. We aim to expand the boundary of this report in future to encompass more of our global supply and value chains.

VERIFICATION

We use a combined approach that includes input from management, and internal and external assurance providers. An accredited external service provider has verified 100% of the scope 1 and 2 emissions figures disclosed in this report.

BOARD APPROVAL

The SPAR board, supported by the Social, Ethics and Sustainability Committee (Sesco), has overall accountability for this report (see page 7 – governance). The Audit Committee reviewed the integrity of this report and recommended it to the board for approval. The board is satisfied that this report provides a fair account of the climate-related risks and opportunities facing the South African operations, our response to managing these risks and opportunities, and our performance in mitigating our climate change impacts.



GO O'Connor

Chairman

15 December 2022



BW Botten

Group Chief Executive Officer (CEO)

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INTRODUCTION

AN INTRODUCTION FROM THE CHIEF ESG OFFICER AND COMPANY SECRETARY

It is my pleasure to introduce this first SPAR Climate Change Report 2022, drafted in accordance with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), and focusing on our South African direct operations and value chain. The report has been prepared by the Risk and Sustainability team under my guidance, and approved by the SPAR board. In this report, we explore the implications of climate change for the business and outline the development of SPAR's strategic response. Our understanding of the implications of climate change for our business is evolving, supported by a climate scenario analysis process initiated in 2021. We are just starting out on this process, and intend to remain transparent and accountable to our stakeholders and society as we build stronger actions and commitments.

CONTEXT

Recent years have brought numerous significant disruptions to business, economies and society, both locally in South Africa and across the globe. Unanticipated social shocks have included Covid-19, civil unrest in South Africa, and the war in Ukraine. Recent extreme weather events and climate-related natural disasters, including severe storms, landslides, floods, heatwaves and wildfires, have caused untold damage globally and specifically in KwaZulu-Natal in South Africa.

This decade has been identified by the Intergovernmental Panel on Climate Change (IPCC) as a critical turning-point for collective action to succeed in limiting global warming to 1.5°C above pre-industrial levels. The recent establishment of the International Sustainability Standards Board (ISSB) has ushered in a new era in global sustainability reporting. These developments have been accompanied by shifts in consumer ethics and preferences, increased stakeholder pressure on business to decarbonise, growing investor interest in ESG performance, the rise of investor ESG ratings, and a strengthening bond between decarbonisation and the cost of capital.

SPAR has not escaped the impact of these events, but I am proud to say that we continue to perform well. Our unique business model, coupled with the strong position we hold in our markets, supports our capacity to adapt to challenges, while we build the capabilities necessary to integrate sustainability more fully across the business. These attributes hold us in good stead as we take key steps forward in building a more climate-resilient business.

SCENARIOS

We are committed to achieving a just transition to net zero emissions across our value chain by 2050 (see page 11 – strategy and 27 – metrics and targets). To help us achieve net zero, and to support the integration of climate change more fully across the business, we have embarked on an exploratory climate change scenario planning process. Through this process, we have begun to explore the climate-related risks and opportunities impacting our direct operations and value chain in South Africa, and develop a strategic response (see page 11 – strategy). This initiative expands upon our existing resource stewardship work, as outlined in our sustainability pledge (see page 1 – About SPAR) and reported on in our Environmental, Socio-Economic and Governance Supplementary Report 2022.

The scenario process comprised a series of participatory workshops and discussions attended by executive management, key SPAR technical personnel, and select external stakeholders and suppliers. The workshops created space to explore issues not previously contemplated, and to engage key stakeholders across the South African value chain and supply chain.

Looking at our business through a climate change lens expanded our field of view, and prompted us to see our business model in the context of the wider food system. This reminded us that we are centrally a food business, not just warehousing and logistics. The process has deepened our understanding of the impact of climate change on the business, surfaced key contradictions and trade-offs that require deeper engagement, and inspired a sense of urgency to deliver on concrete climate commitments in line with the goals of the Paris Agreement. It has brought to light the need for meaningful collaboration and inspired us to reflect more deeply on our role, both as a leader and as a participant in collective action.

During these deeper reflections, we discussed how climate change is compounding existing vulnerabilities and inequalities, and acknowledged a need to address this issue directly in the scenario process. We have since applied a social lens to the process, in the interest of addressing gaps in the representation of the voice, perspectives and interests of marginalised stakeholders. We aim to ensure that the final outputs and outcomes of the process are consistent with our commitment to inclusion, diversity and black economic empowerment, and the principles and content of a Just Transition (see page 11 – strategy).

OUTLOOK

We are aware that embarking on this climate scenario process means that we have started down a road, not arrived at a destination. We have built consensus on the need for this work, but we still need to build coherence around the fundamental principles and pathways for this work to have impact. A long road lies ahead of us to effectively integrate sustainability across our business, from the boardroom to the shopfloor.

Looking ahead, we need to define a strategic roadmap for the group, set concrete climate commitments, and strive to make climate action more real and visible across our value chain. We need to access green financing mechanisms and allocate capital towards implementation. We need to innovate and collaborate, expand our network, partner with our suppliers and retailers, and pilot initiatives at our corporate stores. We need to drive accountability, strengthen our disclosure, and better tell the story of what we are doing. Ultimately, we will need to reorient learning and development, reorganise resources and workflows, redefine roles and responsibilities, and quite possibly restructure aspects of the business.

Moving forward, we have completed Phase 1 of the scenario process and published this first Climate Change Report 2022. We are updating our science-based emissions reduction targets, and we have plans to get these verified by the Science-Based Targets Initiative (SBTi). We have run an ESG training session with the board on the back of the scenario process and are making good progress on finalising a climate change strategic roadmap (see page 25). And for the first time in our history, we presented on sustainability and climate at the annual SPAR retailer Convention.

CLOSING

Exploring our climate change impacts, risks and opportunities this year has brought us closer to our purpose: to inspire people to do and be more; and without a doubt, we can all achieve more working together. This is the ethos of our adage, 'My SPAR, Our tomorrow', and it is this inclusive ethic that will be leading us in our actions towards achieving net zero.

Addressing climate change is complex. We are part of the problem, and so need to be a part of the solution. SPAR is well positioned to take on this challenge, but we are not the experts, and we cannot do it alone. We need more information, stronger relationships, new partnerships, and more meaningful collaboration if we are to succeed. We welcome guidance in this endeavour, and feedback from our stakeholders on this report.



Kevin O'Brien

Chief ESG Officer and Company Secretary

15 December 2022

GOVERNANCE

The SPAR board exercises oversight on climate change issues, and recognises the urgent need for climate action. We aim to evolve our corporate governance structure and develop the capabilities of our leadership in recognition of this crisis, and in response to the insights we gain from exploring, acting, and reflecting on our climate-related impacts, risks and opportunities.

The SPAR board of directors acts as custodian of the company. The SPAR board ensures that the company acts in the best interests of stakeholders, and safeguards the long-term success of the business. The board provides ultimate oversight on all aspects relating to the governance and management of the company, and plays a prominent role in the group's strategic development, risk management and sustainability processes. The board monitors the performance of executive management, and provides strategic direction and leadership in line with the company values to ensure profitability and sustainability.

The board has delegated primary responsibility on sustainability issues, including climate change, to the Social Ethics and Sustainability Committee (Sesco). The Risk Committee, Audit Committee, Nominations Committee, and Remuneration Committee also hold key supportive responsibilities relating to climate change. The board meets quarterly and receives regular reports from all board committees.

BOARD OVERSIGHT

The SESCO is accountable for overseeing strategy, management, compliance and performance regarding the company's environmental, social and governance (ESG) issues, including climate change. Responsibilities include developing and reviewing climate change policies and strategies, monitoring performance against key climate-related goals and targets, and reviewing the climate resilience of the business. The Chief ESG Officer and Company Secretary is responsible for driving the management of ESG issues, including climate change issues, and attends all SESCO meetings by standing invitation. The Chief Executive Officer (CEO) is also a member of the SESCO. The Chairman of the board, Lead Independent Director, and the Human Resources Executive also attend SESCO meetings by permanent invitation.

The Risk Committee is accountable for overseeing company-wide risk and opportunity assessment and management practice, including the enterprise risk management (ERM) policy and framework. Climate change is included in the scope of the ERM framework. The Chief ESG Officer and Company Secretary is responsible for driving the management of climate-related risks and opportunities, and attends all Risk Committee meetings by standing invitation. The SESCO works closely with the Risk Committee, which reports into SESCO on the key ESG risks and opportunities facing the group, including climate change. The SESCO and Risk Committee review the most material ESG risks and opportunities impacting the business, give guidance to the CEO and executive team on managing these issues, and review and report to the board on management approach and performance.

Climate change is a standing issue for both the board and the SESCO, and is liable to be discussed at all scheduled meetings, including how climate-related issues affect and are integrated into strategy, risk management, budgeting, capital allocation, business planning, target setting, and performance management. The SESCO meets twice a year, and reports to the board at every scheduled board meeting.

The Board Charter and terms of reference for all board committees are subject to the King IV™ Code on Corporate Governance 2016, which recommends that the board recognises the inseparability of value creation and sustainable development, and delegate responsibility for sustainable development to a dedicated committee. The terms of reference for the SESCO clearly orient the mandate of the committee towards supporting sustainable development, sustainable business practice, good corporate citizenship, ethical practice, social development, and environmental risk management. The terms of reference further stipulate that members of the committee "must have sufficient knowledge, skills, experience and capacity to execute their duties", "must remain current with developments relating to sustainable business practice", and "shall be provided with appropriate and timely training... on an ongoing basis".

Climate change capability

The board attended training on the TCFD recommendations, climate change risk, and climate scenario analysis in November 2022, as part of the climate change scenario process currently underway. The training built awareness of the specific climate change drivers relevant to SPAR, the climate related risks and opportunities that affect SPAR and its supply chain, the need to prioritise a just transition, and the associated expectations of stakeholders. It outlined SPAR's climate response to the impacts, risks and opportunities identified, and facilitated board input on SPAR's climate response. The Nominations Committee is accountable for overseeing the selection and training of board members, including training on sustainability and climate change. The Nominations Committee meets three times a year, and reports to the board at every scheduled board meeting.

Lobbying and advocacy activities

The SESCO is accountable for overseeing stakeholder relationships, and reviews lobbying and advocacy engagements that influence national policy or regulations, ensuring these activities align with SPAR's values, policies, strategies and commitments. We ensure that our climate-related stakeholder engagements contribute to the achievement of the group's strategic outcomes and support our commitment to achieving net zero emissions by 2050.

We engage directly and indirectly with regulators, local municipalities, industry associations, and non-profit organisations on climate change issues, including activities that could influence policies and regulations that may impact the climate. We engage directly and indirectly with Government on amendments to the National Environmental Management Waste Act. We engage indirectly with Government through our engagements with, and support of, the Consumer Goods Council of South Africa (CGCSA), National Business Initiative (NBI), and World-Wide Fund for Nature (WWF). We have evaluated these engagements and they are aligned with our net zero commitment and the goals of the Paris Agreement.

We also engage directly with our retailers, suppliers and communities to create awareness on climate change issues, encourage sustainable product development and transparent sourcing, and build resilience. Our SPAR retail operations team has developed manuals to assist retailers to understand the impact of solar energy and refrigeration, and through the scenario analysis process currently underway, are exploring the development of a SPAR retailer climate strategy and guidance offering (see page 11 – strategy).

MANAGEMENT'S ROLE

Climate change is a key strategic issue that falls under the management responsibility of the Chief ESG Officer and Company Secretary, who sits on the Executive Committee, and reports directly to the Chief Executive Officer (CEO) on sustainability- and climate-related issues. The CEO is responsible for leading the implementation and execution of approved strategy, policy and operational planning, and serves as the link between executive management and the board.

The Chief ESG Officer and Company Secretary is well-versed on climate change issues. He holds a master's degree in sustainability, and has significant experience in managing environmental impacts and risks for the group. He is supported by the group's sustainability team, and a team of risk managers and functional-area risk champions at each SPAR distribution centre. The Group Risk and Sustainability team is the core unit that leads the planning, implementation and management of climate change related programmes and initiatives. The Risk and Sustainability team lends support and guidance to the functional risk managers and risk champions in the management of climate-related impacts and risks at operations level.

The Chief ESG Officer and Company Secretary has a permanent invitation to meetings of the SESCO and Risk Committee, which report directly to the board on climate-related issues.

Executive remuneration

SPAR provides climate-related remuneration incentives for specific executives. The Chief ESG Officer and Company Secretary has a monetary incentive to achieve the group's GHG emissions reduction targets. The National Logistics Executive has a monetary incentive to achieve operational efficiencies in the group's distribution centres logistics fleet, including through energy efficiency, fuel efficiency, and renewable energy initiatives. The Remuneration Committee is accountable for overseeing the company's remuneration policy, including remuneration incentives. The Remuneration Committee reports to the board quarterly, at every scheduled board meeting.

RISK MANAGEMENT

Climate change is a key strategic risk for SPAR, with the potential to impact our business and value chain. We are exploring new approaches to deepen our understanding of climate-related risks and opportunities, and to advance the integration of climate change into our group risk management processes.

SPAR's enterprise risk management (ERM) framework includes a series of inter-connected processes to identify, assess, prioritise, and respond to risks and opportunities at strategic, functional and operational levels. Climate change is considered in the scope of our ERM processes, and has been identified as a key strategic risk for the business, yet there is scope to further integrate climate-related risks and opportunities into group risk management processes.

We have embarked on a climate change scenario analysis process (see page 11 – strategy), which has deepened our understanding of the physical and transition climate-related risks and opportunities facing SPAR. The scenario process included dedicated research and discussion to identify and assess SPAR's physical and transition climate-related risks and opportunities, and provided a valuable opportunity to discuss these issues with key stakeholders in our South African value chain. This has been a key preliminary step toward strengthening the integration of climate-related risks and opportunities into our ERM process for which we have already begun planning.

The scenario process led to the development of a draft SPAR Climate Change Strategic Roadmap (see page 25 – Strategic response). Drawing on our risk management capability, we identified risks to the successful delivery of this roadmap, and developed measures to mitigate these risks to ensure minimal barriers to our achievement of net zero by 2050.

IDENTIFYING RISKS AND OPPORTUNITIES

The identification of risks and opportunities is approached in a dialogical and multi-directional manner to facilitate collective input from across the business, and access a diverse range of internal and external perspectives. Risks and opportunities are understood to impact the business over different time horizons, with SPAR defining these horizons as follows: short-term (0-3 years), medium-term (3-10 years), and long-term (beyond 10 years). Climate-related risks and opportunities feature at a high level in these risk identification engagements, yet climate change issues are new to many of our people, and particularly our suppliers.

Risk identification

PROCESS	DESCRIPTION
TOP-DOWN	Executive managers identify and review strategic risks and opportunities, and consider risk management regarding strategy, business performance, and trends in the wider operating environment.
BOTTOM-UP	Divisional risk teams, and the sustainability team identify and review operational risks and opportunities, and consider the effectiveness of risk mitigation plans.
HORIZONTAL	Executive meetings at group-level, and monthly divisional risk meetings held at SPARs distribution centres, provide a platform for divisional risk managers to communicate risks to management, collectively review risk management across the group, and identify and discuss new and emerging risks and opportunities.
OUTSIDE-IN/ INSIDE-OUT	Annual supplier surveys and site-visits, and less formal engagements with our customers (i.e., retailers), inform our understanding of risks and opportunities in our supply and value chains.

ASSESSING RISKS AND OPPORTUNITIES

All identified strategic risks are included in the group strategic risk register rated and ranked according to impact categories, with each category having a distinct set of criteria to determine the severity of impact. Each risk is given a ranking on the risk register, based on likelihood and impact criteria. The severity of impact score ranges from (1) insignificant to (7) catastrophic, and the likelihood score ranges from (1) improbable to (6) certain. Each member of the Executive Committee makes an individual assessment on the likelihood and impact of the risk, and the average score across all inputs determines the final likelihood score. All risks are plotted on a risk matrix based on the likelihood and impact scores. A risk is considered to have a substantive strategic impact when the likelihood score is (4-6) and the impact score is (4-7). The table below reflects the environmental impact rating criteria for an environmental incident that would be considered catastrophic to the SPAR Group.

Risk assessment

NON-FINANCIAL CATEGORY	SEVERITY OF IMPACT	DESCRIPTION OF CRITERIA
ENVIRONMENTAL AND COMMUNITY	(7) Catastrophic	Incident that causes disastrous environmental or societal impact with long-term effect requiring major remediation. Will result in large scale class action.

PRIORITISING RISKS AND OPPORTUNITIES

Our risk identification and risk assessment processes result in a prioritisation of 10 key strategic risks for the group. Strategic risks are those that threaten to disrupt the achievement of the SPAR Group strategy and our ability to create value over the long term. One of the 10 key strategic risks is related to climate and environmental changes. Climate-related opportunities are those potential actions or investments that enable multiple wins through synergistic mitigation of more than one identified climate-related risk.

MANAGING RISKS AND OPPORTUNITIES

Each risk on the risk register is assigned an executive risk owner, who drives risk management and mitigation at operational level, together with the sustainability team. The Chief ESG Officer and Company Secretary drives risk management and mitigation at strategic- and group-level, engaging regularly with the Executive Committee, and reporting quarterly into the Risk Committee. The Risk Committee meets between three to four times a year, and makes quarterly reports to the board and the SESCO, providing updates on risk assessments, the risk register, and progress against the key strategic risk focus areas. The top 10 key strategic risks included on the risk register are used to guide strategic objectives and influence the budgeting of CAPEX and OPEX in line with the strategy (see page 11 – strategy).

STRATEGY

SPAR has embarked on a climate change scenario analysis process and is developing a Climate Change Strategic Roadmap to support the achievement of our net zero by 2050 commitment.

SPAR's business strategy is founded on a societal purpose *to inspire people to do and be more*, and seeks to create *sustainable stakeholder* value as a key strategic outcome (see Integrated Annual Report 2022). The strategy is supported by a sustainability policy and sustainability pledge that orient the company toward pursuing societal change and resource stewardship through the core activities of the business (see page 1 – about SPAR). Addressing climate change is included in this strategic societal orientation, yet there is scope to further integrate a strategic response to climate-related risks and opportunities into our core strategy.

We have embarked on a climate change scenario analysis process to deepen our understanding of the climate-related risks and opportunities facing the group, assess the impact and implications for the resilience of our strategy, and develop a strategic response.

SCENARIO ANALYSIS

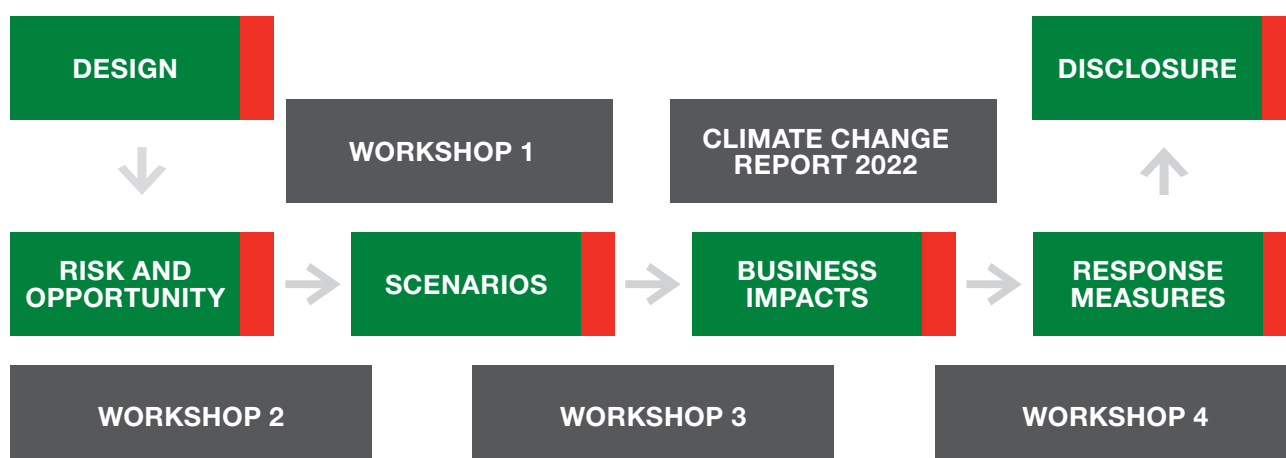
The SPAR scenario analysis is an exploratory process informed by the TCFD recommendations and guidance. The process involves establishing a set of plausible future scenarios, each based on different pathways, and drawing on the characteristics of these scenarios to assess the climate-related risks, opportunities, and business impacts, and explore the implications of these for the resilience of the business model and strategy going forward.

The process is being led internally by the Chief ESG Officer and Company Secretary and facilitated by external specialists. The initiative is being implemented across the group in three phases. Phase 1 has been completed, with Phase 2 currently underway, and Phase 3 forthcoming (see page 26 – next steps). Phase 1 is focused on SPAR's South African operations and value chain and sets the boundary for this first SPAR Climate Change Report 2022 (see page 3 – our climate change report).

The process-design of Phase 1, comprised a series of participatory workshops and bilateral discussions, supported by virtual planning meetings and preliminary specialist research. Participants included executive management, key SPAR technical personnel, and select external stakeholders and suppliers. The process was exploratory and dialogic in nature, with technical teams playing a key role in the largely qualitative analysis discussions.

Scenario Analysis Process

PHASE 1



A summary of the scenarios, risks and opportunities, and business impacts is presented on the following page.

Scenarios

The SPAR scenario analysis (Phase 1) established three scenarios against which to explore the implications of climate-related risks and opportunities for our South African operations and value chain. All three scenarios reflect different pathways, with each pathway representing a different anticipated warming in global average temperature and including both physical and transition-related aspects. A summary of these scenarios is presented below.

1.5°C – PROACTIVE CLIMATE WORLD	2°C – DELAYED RESPONSE	LIMITED RESPONSE
• Net zero GHG by 2050 • 1.5°C average global temperature increase by 2100 (RCP 1.9) • Rapid changes to 2030 • Supportive environment: high availability of mitigation technologies, financial incentives for SPAR, markets for low carbon products, more ‘carrots’ than ‘sticks’.	• Net zero GHG by 2060/70 • Up to 2°C average global temperature increase by 2100 (RCP 2.6) • Limited changes to 2030 and then drastic changes • Low to moderate physical climate disruptions and associated costs • Unsupportive environment: high transition costs, limited availability of feasible mitigation technologies, more ‘sticks’ than ‘carrots’.	• Dangerous climate change • 2.7 - 4°C average global temperature increase by 2100 (RCP 4.5 and 8.5) • High physical climate disruptions and associated costs.

Methodology

The scope of the analysis included short-, medium- and long-term horizons, and factored in high levels of uncertainty and potential for disruption.

The transition component of the scenario analysis was informed by the International Energy Agency (IEA) global energy scenarios (including their recent Net Zero scenario), the work undertaken by the South African National Business Initiative (NBI) as part of its ‘Just Transitions’ project exploring net zero pathways in the South African context, and various research reports relevant to SPAR’s value chain. The analysis explored risks relating to policy, legal, technology, market, reputational aspects, and opportunities relating to resource efficiency, energy source, products and services, and markets and resilience.

The physical component of the scenario analysis considered near-term (2020-2035) and mid-term (2040-2060) scenarios. An initial analysis of projected physical impacts across South Africa was undertaken using the Intergovernmental Panel on Climate Change’s (IPCC) Representative Concentration Pathways (RCP), specifically RCP 1.9, RCP 2.6, RCP 4.5 and RCP 8.5 warming scenarios. General circulation climate models (GCMs) were used in applying the RCP warming projections to highlight changes in physical impacts across South Africa, including for temperature, very hot days, heatwaves, drought, rainfall, and sea-level rise. The GCMs were sourced from the University of Cape Town’s Climate System Analysis Group, the CSIR, South African Weather Services, the World Bank, and the IPCC.

Following this analysis of national climate impact, further analysis was undertaken to determine specific physical risks and opportunities both within the SPAR direct operations (offices and distribution centres) and indirect operations (independent retailers). The analysis focused on areas of high SPAR presence and market penetration, determined by the presence of the head office, various distribution centres and large retail outlets. This included eThekweni (KwaZulu-Natal), Ekurhuleni (Gauteng), Mbombela (Mpumalanga), Polokwane (Limpopo), Cape Town (Western Cape), Gqeberha and Mthatha (Eastern Cape).

In addition, to gain insight on the impact of climate change on our food supply chain, we undertook a case study on the production of apples in the Western Cape (see page 21 – case study insert), and a comparative case study on two tomato growers in Limpopo: one a large-scale supplier and the other a small-scale supplier.

Following the initial results of Phase 1, we initiated a second phase (see page 26 – Next steps). This included an explicit focus on Build It. The analysis considered climate change impacts for Build It direct operations, and an initial assessment of impacts across the value chain. Case studies were conducted for a selection of retailers to explore physical risks, and supply chains for timber, cement, iron and steel, and copper to explore physical and transition risks and opportunities.

Every effort was made to draw on credible sources for outlining market, policy, legal, technology and reputational changes associated with different physical climate projections. There exists significant uncertainty regarding the development of policies and technology, and the associated impacts on supply and demand of SPAR products.

Physical risks and opportunities

The physical impacts of climate change will be experienced across the SPAR value chain from food growers, through distribution centres, to the livelihoods of consumers. The impacts will be localised and regional in scale, and acute and chronic in effect. The tables below provide a summary of the physical climate-related risks and opportunities facing SPAR across all three scenarios.

SPAR DIRECT OPERATIONS (OFFICES AND DCs)

Physical Risks and Opportunities to SPAR direct operations (SPAR offices and DCs)	
PHYSICAL IMPACT	RISKS
RISKS	Increased temperatures, very hot days and heatwave events
	Increased air pollution; employee health issues; water insecurity; increased energy consumption for air-conditioning and refrigeration; increased GHG emissions; risk to availability of products.
	Increased incidences of drought
	Increased need for supplemental water.
	Increased frequency and intensity of flood and flash flood events
RISKS	Service delivery disruption; damage to physical assets; damage to infrastructure (roads, waterworks, etc.); increased sewage spillage (health consequences for employees and consumers); increased insurance costs.
	Sea-level rise
	Increased frequency and intensity of coastal storms; seaport disruptions (logistics disruptions).
RISKS	Increased wind events
	Damage to owned assets and supplier assets. Damage to crops.
DIRECT OPPORTUNITIES	SUPPLY CHAIN OPPORTUNITIES
OPPORTUNITIES	Establish B2B relationships regarding re-use of effluents, waste materials and other circular economy opportunities.
	Provide access to markets for low-carbon microscale organic/non-organic food businesses.
	Participate in local food security initiatives.
	Participate in and promote local-level climate-resilient food programmes.
OPPORTUNITIES	Adopt rainwater and stormwater capture projects.
	Participate in and promote urban open-space and restoration projects.
OPPORTUNITIES	Adopt green building principles in owned assets.
	Promote conservation and climate-smart agriculture.

SPAR VALUE CHAIN (RETAIL OUTLETS)

Physical risks and opportunities to SPAR indirect operations (retail outlets)

	PHYSICAL IMPACT	RISKS
RISKS	Increased temperatures, very hot days and heatwave events.	Change in availability of local foods (quantities and diversity of foods); increased incidences of pests and pathogens in food production; increased air pollution; employee health issues; consumer vulnerability to diseases and ability to work; water insecurity; increased energy consumption for air-conditioning and refrigeration; increased GHG emissions.
	Increased incidences of drought.	Increased need for supplemental water; increased costs of foodstuffs to both retailers and consumers; job losses in agricultural sector affecting consumer purchasing power.
	Increased frequency and intensity of flood and flash flood events.	Service delivery disruption; damage to physical assets; damage to infrastructure (roads, stormwater systems, etc.); increased costs of supply; increased sewage spillage (health consequences for employees and consumers); increased insurance costs.
	Sea-level rise.	Increased frequency and intensity of coastal storms.
	Increased wind events.	Damage to owned assets and supplier assets. Damage to crops.
	DIRECT OPPORTUNITIES	SUPPLY CHAIN OPPORTUNITIES
OPPORTUNITIES	Establish B2B relationships regarding re-use of effluents, waste materials and other circular economy opportunities.	Participate in and promote local-level climate-resilient food programmes.
	Participate in local food security initiatives.	Diversify local food procurement.
	Adopt rainwater and stormwater capture projects.	Promote conservation and climate-smart agriculture.
	Adopt green building principles in owned assets (e.g., GHG and energy efficient refrigeration).	

Transition risks and opportunities

The impact of climate-related transition risks and opportunities on SPAR will depend significantly on how the company performs relative to its competitors. Our most material transition risks and opportunities are listed below, followed by a table summarising the impacts of transition risks and opportunities for each scenario.

OUR MOST MATERIAL CLIMATE-RELATED TRANSITION RISKS AND OPPORTUNITIES

- **Changing product demand patterns:** Increasing climate action by governments (impacting prices, consumers, pay), companies (impacting costs of products) and individuals (impacting buying preferences and patterns) will impact demand for SPAR products. This will be driven by changing consumer preferences (e.g., a move towards plant rich diets, low-carbon products, low-water products, and/or climate resilience-enabling products); the uptake of a circular economy (consumer drive to reduce consumption and purchase re-used or recycled products); and the impact on GDP and incomes (including social cohesion impacts).
- **Changing purchasing power:** The changing structure of the global economy will result in winners and losers. The transition will impact countries and societies differently. This will have an impact on countries' GDP and on social cohesion, affecting what SPAR's consumers can afford.
- **Changing market share (reputation):** The relative (real and perceived) climate performance of retailers will impact SPAR's market share through expectations of consumers (impacting foot traffic) and retailers (impacting the success of the voluntary trading model).
- **Increasing pressure to decarbonise:** New disclosure standards and activist investors, regulators and the public put pressure on companies to decarbonise and develop resilience strategies. SPAR's ability to decarbonise will be impacted by the availability of viable mitigation technologies (particularly related to freight transport and refrigeration).
- **Increasing pressure to decarbonise food systems:** The growing awareness of the significant role of food systems in the global effort to achieve the Paris Climate Goal will mean greater expectation that SPAR measure and contribute towards the reduction of GHG emissions in its value chain (scope 3).
- **Increasing costs:** Associated with carbon prices / decarbonisation and zero-carbon energy.
- **Changing access to capital:** Low-cost capital will be available for investments that align with development pathways consistent with the Paris Climate Goals and an increasing number of carbon intensive activities will not be able to access capital.
- **Business disruptions:** Transition impacts on GDP and on the poor could erode social cohesion and affect SPAR's ability to operate.

THE IMPACTS OF TRANSITION RISKS AND OPPORTUNITIES FOR EACH SCENARIO

RISK / OPPORTUNITY	1.5°C – PROACTIVE CLIMATE WORLD	2°C – DELAYED RESPONSE	LIMITED RESPONSE
Changing product demand patterns	• Significant increase in demand for low-carbon products (labelling NB); consumers will be willing to pay 35% premiums for low carbon products • High need for consumer guidance and understanding	• Delayed increase in demand for low-carbon products (labelling NB); consumers will be willing to pay 20% premiums for low carbon products • Moderate need for consumer guidance and understanding	• No significant change to the consumer choice of products
Changing purchasing power	• Limited impact on GDP (<10% decrease in 2050) and improved social cohesion = limited impact on incomes	• Limited impact on GDP (+/-10% decrease in 2050) and reduced social cohesion = moderate negative impact on incomes	• Significant impact on GDP (>10% decrease in 2050) and reduced social cohesion = significant negative impact on incomes

RISK / OPPORTUNITY	1.5°C – PROACTIVE CLIMATE WORLD	2°C – DELAYED RESPONSE	LIMITED RESPONSE
Changing market share (reputation)	High expectations: zero food waste across the value chain; significant packaging reductions, 100% recycled packaging, zero carbon packing by 2050; non-consumable product lives extended (flexible rather than replaceable) and 100% recycled at end of life; net zero direct operations and net zero food value chains by 2050	Moderate-high expectations: near zero food waste across the value chain; significant packaging reductions, 100% recycled packaging, zero carbon packing by 2070; non-consumable product lives extended (flexible rather than replaceable) and 80% recycled at end of life; net zero direct operations and net zero food value chains by 2070	Moderate expectation: reduced food waste associated with warehousing and retail stages of the value chain; significant packaging reductions, significant recycled packaging; significant decarbonisation of direct operations (some effort directed to decarbonising value chains)
Increasing pressure from key stakeholders to decarbonise (direct operations)	- Mandatory decarbonisation of direct operations: building and refrigeration in 2030, transport by 2050. - High availability of mitigation technologies (fast tracked, incl. zero-carbon plastics by 2050) – relatively low cost	- Mandatory decarbonisation of direct operations by 2050 - Moderate-high availability of mitigation technologies – relatively high cost (challenges around refrigeration and zero carbon plastics)	- Limited enforceable regulations to decarbonise - Low availability of affordable mitigation technologies for cooling and plastics
Increasing pressure to contribute to the decarbonisation of food systems (value chain)	Significant pressure to contribute to reduced food waste and facilitate renewables deployment in the short term. Pressure in the medium to long term to facilitate nature-based solutions (low carbon agricultural practices)	Moderate pressure to contribute to reduced food waste and facilitate renewables deployment in the short term. Pressure in the medium to long term to facilitate nature-based solutions (low carbon agricultural practices)	Limited pressure to contribute to decarbonisation outside of SPAR's direct operational control
Increasing costs	High carbon price ramping up over time (South Africa: \$45 in 2025, \$90 in 2030, \$160 in 2040, \$200 in 2050 (IEA, 2021); developed countries: \$75 in 2025, \$130 in 2030, \$205 in 2040, \$250 in 2050 (IEA, 2021)	High carbon price ramping up over time (South Africa: \$40 to \$60 in 2025 and \$125 to \$140 in 2040 (NBI (not yet public), 2021)	Low-moderate carbon price (South Africa: USD \$10 in 2025 and \$24 in 2040 (NBI (not yet public), 2021); developed countries: \$40 to \$60 in 2025 and \$125 to \$140 in 2040 (NBI (not yet public), 2021)

RISK / OPPORTUNITY	1.5°C – PROACTIVE CLIMATE WORLD	2°C – DELAYED RESPONSE	LIMITED RESPONSE
Changing access to capital	High access to low-cost climate finance for SPAR (in RSA)	Limited access to low-cost climate finance for SPAR	No access to low-cost climate finance for SPAR
Business disruptions	Low levels of business disruption (high levels of unity and social cohesion; employment rates are better than today Skilled jobs are more than unskilled jobs; Inequalities have decreased)	Moderate levels of business disruption (high levels of unity and social cohesion in 2050 but the road to 2050 sees periods of instability and unrest; employment rates are better than today in 2050 Unemployment is a concern, but it does not lead to significant social disruption Skilled jobs are more than unskilled jobs; inequalities have decreased)	Moderate to high business disruption (Social cohesion decreases over time; high rates of migration into South Africa; high rates of urbanisation; employment rates are significantly worse than today in 2050 Job creation is inadequate, and the population increase is excessive Inequalities significantly increase)

Business impacts

The table below summarises the business impacts associated with the climate-related physical and transition risks and opportunities for each scenario analysed. This qualitative assessment of business impacts provides a useful visual tool to assess the relative significance of the impacts identified, and to inform the prioritisation of strategic response measures.

KEY – LEVEL OF RISK OR OPPORTUNITY RELATIVE TO SPAR's CURRENT BUSINESS STRATEGY

RISK	None	Low	Medium	High	Very High
OPPORTUNITIES	None	Few	Some	Many	Very Many

CLIMATE RISKS & OPPORTUNITIES	IMPACTS	SCENARIOS			IMPLICATIONS
		1.5°C – PROACTIVE CLIMATE WORLD	2°C – DELAYED RESPONSE	LIMITED RESPONSE	
Changing product demand patterns	- Growing demand for low-carbon products ↑↓ - Shift to more online ↓ (relative to current business strategy) - Circular economy: decreased consumption ↓ (especially higher income consumers) - Physical climate change impacts on product prices: prices increase due to food and water insecurity. Average order value ↓ (especially lower income consumers); Volatility ↑				- Future cash flows: varied impact on revenues - Product impact information required (transparency and traceability) - Expectation to drive down product GHG footprints (evidence of investments in supply-chain GHG mitigation) - Depends on plans for e-commerce - Need to track trends. Need to inform trends (?) - Threat/opportunity to strategic objective: put consumers at our heart
Changing purchasing power	- Transition impact on incomes: average order value ↑↓ (especially lower income consumers) - Physical climate impact on incomes: increased impact on GDP with higher global warming, lower disposable incomes. Average order value ↓ (especially lower income consumers)				- Future cash flows: varied (most likely negative) impact on revenues - Threat to strategic objective: provide nutritious and affordable food
Changing market share (reputation)	Increased levels of climate performance expectations affecting reputation and brand ↑↓ (customer acquisition, retention and reactivation)				- SPAR impact disclosure - Expectation to drive down GHG footprint in SPAR's value chain - Need to track trends; need to inform trends (?) - Threat/opportunity to strategic objective: build our brands in hearts and minds

CLIMATE RISKS & OPPORTUNITIES

IMPACTS

SCENARIOS

IMPLICATIONS

1.5°C –
PROACTIVE
CLIMATE
WORLD

2°C –
DELAYED
RESPONSE

LIMITED
RESPONSE

Increasing pressure from key stakeholders to decarbonise (Direct operations)

- Failure to achieve targets will impact reputation and brand ↓ (customer acquisition, retention and reactivation)
- ↑ Increased costs (associated with decarbonisation)

- Asset impairment: potential stranded assets (high carbon)
- SPAR impact disclosure
- Need to collaborate and engage to ensure availability of required mitigation technologies
- Need to track trends
- Threat/opportunity to strategic objective: build our brands in hearts and minds

Increasing pressure to contribute to the decarbonisation of food systems (Value chain)

- ↑ Increased costs and other resources (notably human resources) to engage and contribute to collective efforts across the value chain

- Aligns with SPAR's sustainability pledge to create authentic shared value for stakeholders
- Threat/opportunity to strategic objectives: build our brands in hearts and minds and provide nutritious and affordable food

Increasing costs

- Physical climate impacts: ↑ in CAPEX and OPEX to adapt to climate stressors. Adaptation of physical assets. Increased costs of logistics.
- ↑ Increased costs (carbon price)

- Future cash flows: decreased profitability due to increased adaptation costs of DCs, SPAR retailers; increased costs of products (due to logistics costs and/or carbon prices) passed on to consumer. Lower order values.
- Threat to strategic objectives: put consumers at our heart and provide nutritious and affordable food.

Changing access to capital

- ↑↓ access to low carbon capital

- Future cash flows: positive or negative depending on SPAR performance and the evolution of capital markets
- Threat/opportunity to strategic objective: provide nutritious and affordable food.

CLIMATE RISKS & OPPORTUNITIES

IMPACTS

SCENARIOS

IMPLICATIONS

1.5°C –
PROACTIVE
CLIMATE
WORLD

2°C –
DELAYED
RESPONSE

LIMITED
RESPONSE

Business disruptions

- ↑ extreme weather-related business disruptions: direct operations – South Africa
- ↑ extreme weather-related business disruptions: indirect operations (retail customers) – South Africa
- ↑ extreme weather-related business disruptions: value chain – Commodity case study: tomatoes, Limpopo Province
- ↑ extreme weather-related business disruptions: value chain – Commodity case study: apples, Western Cape Province (to be finalised)
- ↑ internal climate migrations

- Future cash flows: negative impact on revenues.
- Asset impairments.
- Extreme heat events, drought, floods, coastal surges and drought will damage owned-assets, supply chain logistics and public infrastructure. Increased mitigation/adaptation costs, and increased costs for repairs. Loss of revenue due to business delays.
- Limited climate change already happening. Market price of commodity increases. Disruption in supply reduces availability. Change in location of production could increase or decrease logistics costs.
- Climate change already being experienced.
- Increased mitigation costs to producers.
- Price fluctuations:
 - Change in market – lower quality product, reduced exports, increased volumes in SA. Could lower price to consumer.
- Supply chain disruptions leading to increased costs.
- Changing markets.
- Threat to strategic objectives: put consumers at our heart drive our future voluntary trading model.

BUILD IT: CLIMATE RISKS AND OPPORTUNITIES

The physical climate risks to Build It are similar to those identified in the initial Phase 1 analysis focused on SPAR. Given the drop-shipment model of the business, more of the risk lies in the Build It value chain, particularly around the supply chain, logistics and retail sites. Our case study on timber explored the climate change awareness, impacts and response of one key supplier to Build It. The supplier demonstrated a strong level of climate change awareness, having experienced climate impacts and made efforts to understand future climate impacts, and developed a response strategy. The supplier partnered with academic institutions and invested in specific responses, including silviculture practices to enhance the resilience and sustainability of timber forestry. Overall, the climate risk to Build It is low given the awareness and maturity of the organisation. Some negative impacts are projected, such as increased pests and fires, but so are some positive impacts, such as an increased growth rate of trees for timber, associated with higher temperatures.

The transition component focused on climate impacts on GDP, carbon prices, changing demand for products (particularly steel, cement and copper), product prices and pressure to decarbonise. Although risks were identified, none were found to be material in the short and medium term. Longer-term risks may prove to be more material but there is significant uncertainty regarding changing demand and prices for construction materials. Build It will continue its efforts to decarbonise and improve climate resilience, and will monitor developments and explore appropriate partnerships to respond to evolving climate transition risks in their value chains.

CASE STUDY: THE IMPLICATIONS OF CLIMATE CHANGE ON THE GROWING OF APPLES IN THE WESTERN CAPE

To gain insight on the impact of climate change on our food supply chain, we have started to investigate the implications of climate change for our suppliers of key agricultural and food products. We have recently completed a case study on the production of apples (pome fruit) in the Western Cape, involving in-depth interviews with two key suppliers.

Context

Apples grown in the Western Cape include red and green varieties, and make up approximately 30% of deciduous fruit grown in South Africa. The key apple growing areas within the Western Cape include: *Groenland (26%), Ceres (29%), Villiersdorp (16%) and Langkloof East (18%)*. The Western Cape apple industry is a large regional employer, employing approximately 26 823 people in permanent roles for production and processing, and seasonal roles for harvesting and packing. The apple supply value chain includes suppliers of farming inputs, producers, fresh produce markets, retailers, processors, cold storage and packhouse operators, transporters, exporters, quality control and certification agents, terminal and port operators, and local and international consumers. Just under 50% of annual production is exported, with the remaining volume split between domestic markets and food processing. The Western Cape Department of Agriculture is currently spearheading a multistakeholder process to evaluate climate-related risks to the pome fruit industry in the province.



Physical climate change impacts for pome fruit in the Western Cape

The physical impacts of climate change projections for pome fruit in the Western Cape include higher temperatures, increased water-stress, increased incidence of catastrophic events, and greater variability in rainfall and rainfall events. The scenarios used in this analysis project an increase in temperatures by as much as 2°C by 2035, 2.5°C by 2040-2060, and 3-6°C by 2080-2100. Areas inland could experience up to 20 additional days a year where temperatures exceed 35°C. Across all regions there will be more hot days, and fewer cold and frost days.

The physical impacts of climate change on pome fruit production are likely to be area specific, but will nonetheless result in shifts to the geographic areas climatically suitable for commercial pome fruit cultivation. Pome fruit production is most at risk in the south-western coastal production regions (e.g., Elgin and Villiersdorp) owing to losses in winter chill, but these areas become more suited to stone and other fruit types. The north-western high-lying regions (e.g., Bokkeveld and Wolseley) remain suited to pome fruit production from a winter chill perspective, but growers will have to adapt to warmer conditions and high temperature risks. Some of the largest and most disruptive impacts could result from changing patterns of hailstorms, strong winds, and pests and diseases, which are unpredictable.

PHYSICAL CLIMATE CHANGE IMPACTS	ASSOCIATED RISKS
Higher temperatures	• Heat stress – risk of sunburn • Poor red colour development • Higher evaporation and increased irrigation requirements • Insufficient chilling in autumn and winter – poor flowering, yield and fruit quality • Lower human productivity on farms during hot conditions • Higher potential for post-harvest disease, damage and decay • Warmer winters – favourable for pests and diseases
Increased water stress	• Water shortages – insufficient water for irrigation • Potential conflict over shared limited water resources • Plant water stress – reduction in growth, yield and fruit quality • Potential concentration of pollutants in waterways
Increased incidence of catastrophic events	• Hailstorms and strong winds – crop damages and fruit blemishes • Occasional frost in coldest areas – damage to flowers and young fruit • Storm and flood events – infrastructure damage and transport interruptions • Increased risk to human health by drought and flood events
More variable rainfall and rainfall events	• Changes in surface water runoff, and groundwater recharge – effecting irrigation • Increased annual number of dry spells and decreased wet spells (2-3 consecutive months) • Heavy rainfall leads to localised flooding for an extended period (in areas of poor drainage) – negative impacts on trees and fruit • Impact on regional irrigators and water resource managers

Likely value chain impacts

The implications of physical climate change impacts on the value chain are likely to be most severe for farmers and consumers, and include the following:

- Increased variability in supply timing and quality, including changes in the value of the crop, will affect price and incomes, disrupt marketing windows, and potentially result in less export quality fruit and more local and/or processing grade fruit
- A warmer climate will increase the demand for and cost of energy for production, packaging, cold storage, refrigerated transport, processing and cooling of retailer shelves
- Storm or flood damage to transport, energy, water and sewage infrastructure, buildings and ports, are likely to exacerbate the above impacts, increase risk of harvest spoilage, and lead to the contamination of water with impacts for processing and packaging facilities
- Potential contamination of water from damage to sewage and water treatment plants – affect processing and packaging facilities that require high quality water

Potential adaptations

Timely investment in adaptation has the potential to cushion the expected impacts. Risk reduction is currently handled almost solely by farmers. Adaptation is likely to increase the cost of apple production, affecting profit margins and re-investment opportunities. Effective adaptation will likely be beyond the reach of many apple farmers, with large-scale producers and exceptionally high-yielding orchards having a higher adaptive capacity. Collaborative solutions across the value chain would benefit the whole system.

Examples of supplier response in the South African market

Our engagements with two key suppliers have highlighted differing positions and approaches to sustainability management and climate change adaptation. These direct engagements offer deeper insight that will help inform future supplier engagements and potential adaptation solutions and partnerships within the apple industry and other sectors.

POTENTIAL ADAPTATION MEASURES:

- Regenerative agricultural practices and nature-based solutions
- Enhanced orchard management practices
- Increased monitoring and control of quality along the value chain
- Efficient soil and water management practices
- Change and R&D in more resilient apple variants
- Advanced irrigation technologies and systems
- Innovative pest control
- Smart use of weather and climate data

SUPPLIER #1

RISK / OPPORTUNITY	RESPONSE IN THE SA MARKET – VARIETY OF APPLES (GREEN AND RED)
Irregular rainfall and periods of drought pose a risk of insufficient irrigation (uncontrollable)	• Have had experience e.g., 2015-18 drought in the Western Cape. See the opportunity to not just sit back but actively using technologies to ‘change climate’ • Research on irrigation timing and types to know when irrigation is most important for the trees – able to maximise the water supply they have at the time • Probability of sustained drought is a bigger risk – looking at ways to adapt and actively change the climate
Higher temperatures pose a risk of insufficient chill (needed to ‘activate’ fruiting of apple trees)	• Already experienced in certain areas e.g., Grabouw • Rest breaking is well-understood in the industry and can be controlled by using chemicals to augment chill
Higher temperatures causing sunburn of crops	• Nets and cooling technologies (but this is costly) • Can use forecasting to ascertain when to implement protection mechanisms
Increased incidences of catastrophic events	• Includes hail and stronger winds, response is controllable – e.g., netting to protect crops
Higher temperatures impact the red colour development of apples	• Need cool temps for colour development – select varieties with more colour (branch mutation) • Opportunity to use genome editing – e.g., CRISPR technology

SUPPLIER #1

RISK / OPPORTUNITY	RESPONSE IN THE SA MARKET – VARIETY OF APPLES (GREEN AND RED)
Damage due to fungi and diseases introduced or exacerbated by climate change	• Non-indigenous fruit have non-indigenous pest loads. Have seen increasing damage to apples due to different types of fungi – can be treated. • Damage due to codling moth and fruit flies pose a risk in the future, but has not been an issue yet.
Internal gas damage due to higher CO ₂	• Have seen increasing incidences over last 10 years – affects marketable fruit quality and is costly
Other financial risks e.g., infrastructure damage, increasing cost of energy, decline in worker productivity	• Opportunity to use global financial modelling and risk calculations

SUPPLIER #2

RISK / OPPORTUNITY	RESPONSE IN THE SA MARKET – VARIETY OF APPLES (GREEN AND RED)
Sustainability and climate change as prominent topics that need to be considered	• Track carbon footprint using inputs (electricity, fuel, fertilisers) to decrease carbon emissions per kg fruit • Developing a sustainability framework with external consultants, strategies include: • Decreasing water in packing • Increasing productivity and efficiency of orchards (increase kg fruit per unit water usage) • Fewer external inputs – decreasing fertilisers and pesticides required • Reducing fruit waste by processing lesser quality fruits and using pulp for composting • Decrease general waste, recycling, and composting – no waste to landfill
Winters become too warm; summers become too hot (risk of sunburn and poor colour development)	• Look towards varieties that are adapted to warmer climates in the long term • Shade nets to protect against sun (some more successful than others) • Natural techniques in the short-term • Better site selection – microclimates in orchards means shade cover differs across sites
Catastrophic events such as stronger winds and hail	• These occur seldomly and risk is not seen as big enough to warrant the costs of netting to protect crops • When events become more frequent, this can be reconsidered • The wheel turns slowly in the apple industry – adapt when risks are concrete
Climate change as a long-term phenomenon	• Some varieties are more prone to risks than others • Varieties moving from success to failure is a slow process • Use long-term trends in apple varieties to make the change when they see the change
Financial risks	• Financial viability of every orchard every year • Can we influence and improve, or should we replace • The future is always re-evaluated to improve and avoid financial loss

STRATEGIC RESPONSE

The climate change scenario analysis process (Phase 1) has been highly successful in supporting the development of a SPAR strategic climate change response, with executive-level sponsorship being a key success factor.

The process has deepened our understanding of the climate-related risks and opportunities most material to our South African operations and value chain, and the impact these have on the business. The process has proved a critical first step toward strengthening the integration of climate-related risks and opportunities into group risk management processes (see page 9 – risk management), has informed a board ESG training session, and led to the production of this first climate change report, strengthening the alignment of our activities and disclosure with the recommendations of the TCFD (see page 2 – our integrated reporting process and 3 – our climate change report).

Just Transition

During the discussions, the team raised important concerns regarding the lack of representation of marginalised stakeholders in the process, and the risk this posed for biased outcomes that inadequately address the need for a Just Transition, particularly in the South African context. Consequently, a Just Transition Framework was developed to factor inclusion, diversity and transformation principles into the analysis process. The framework includes a specific analytic tool – *Power-Risk-Climate Analysis* – which is being applied to the assessment of potential climate change response measures. The tool analyses response measures regarding their impact on the distribution of agency, risk and benefit among stakeholders, and thereby supports the prioritisation of Just Transition pathways in the development of SPAR's strategic response.

Our case study of two contrasting tomato growers in Limpopo – one a large-scale supplier and the other a small-scale supplier – highlighted the real vulnerability of growers to the physical impacts of climate change, and the limited adaptive capacity of smaller suppliers. Supply-chain response measures that are shaped by socially just concerns are an imperative, with opportunities to support socially just outcomes through nature-based solutions.

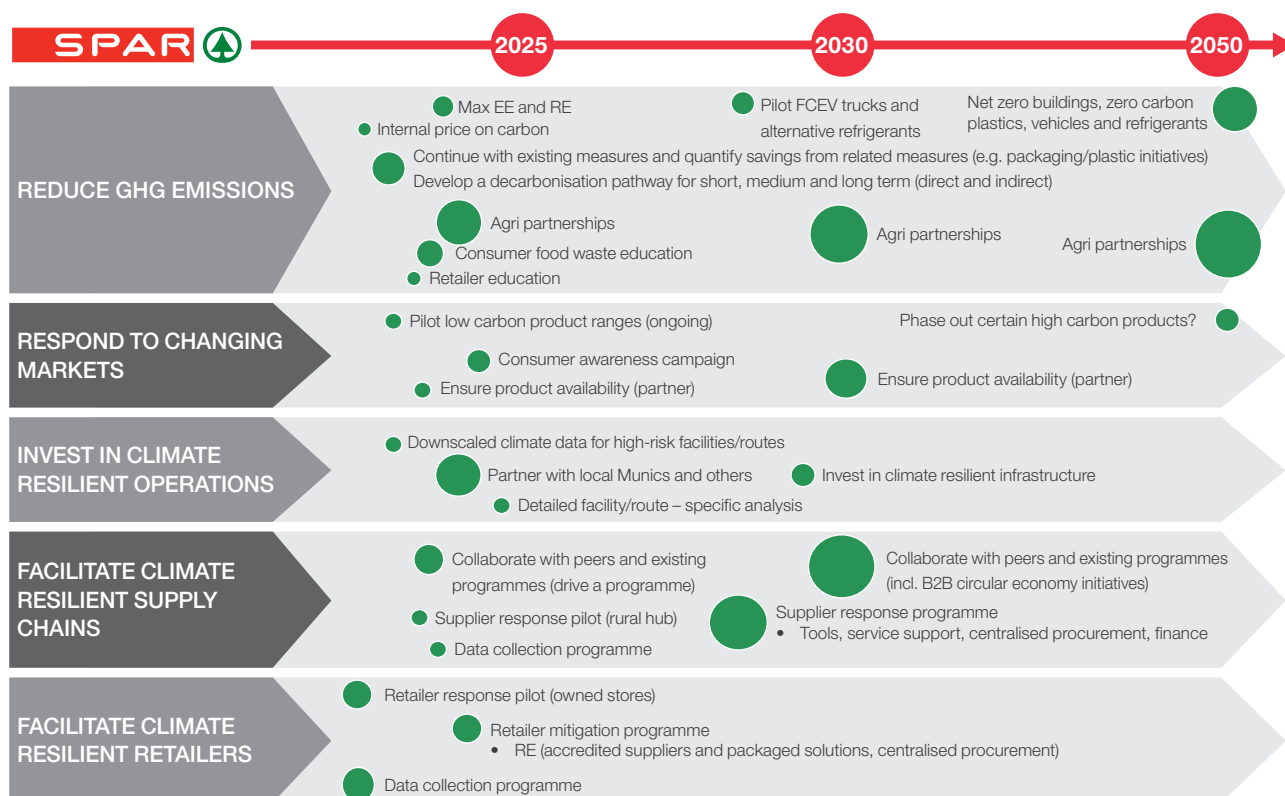
Strategic roadmap

The key strategic outcome of the process has been the development of a draft SPAR Climate Change Strategic Roadmap. The strategic roadmap supports SPAR's commitment to become net zero by 2050, and seeks to generate short-, medium- and long-term value for the business through mitigating global warming, and adapting to the risks of rising temperatures and reduced water availability. The roadmap establishes a pathway and plan to achieve our emission reduction targets and guide our emissions reduction activities (see page 27 – metrics and targets).

SPAR CLIMATE CHANGE STRATEGIC ROADMAP

The roadmap was developed with reference to SPAR's strategy, and included a review-process to align the strategic response with existing SPAR initiatives, as well as local and international climate and development initiatives and objectives. These included the UN Sustainable Development Goals (SDGs), South Africa National Development Plan (NDP), South Africa Climate Commitment, and the evolving conceptualisation of a Just Transition. This process helped prioritise and inform the extent of the effort to be associated with different response measures and ensure alignment with SPAR's strategic vision, and broader societal needs and objectives.

Finalising the draft Climate Change Strategic Roadmap is a key focus of Phase 2 of the scenario process. This will include prioritising short-term actions to be implemented. We have taken initial steps to quantify the financial implications of climate-related risks and opportunities for the business, which will be expanded on in subsequent reports.



Note: the size of the green ball represents the relative emphasis, and associated resources (financial, human and other), attached to each strategic action.

Next steps

Phase 2 of the process is extending the South African scenario analysis to include *Build It* more explicitly (this has been completed), to undertake financial impact case studies, to further apply the *power-risk-climate* tool, finalise the climate change strategic roadmap, and explore the development of a retailer climate strategy and guidance pack.

Phase 3 of the process will look to design and implement the other roadmap actions, particularly the efforts to facilitate climate-resilient supply chains and to extend our efforts to contribute to decarbonisation across our value chain.

METRICS AND TARGETS

SPAR is committed to achieving net zero emissions across our value chain by 2050. We are currently updating our science-based emissions reduction targets in accordance with the SBTi Corporate Net-Zero Standard to align with a 1.5°C pathway.

Our approach is to abate our emissions as far as possible before permanently removing residual emissions through carbon removals. A key challenge is facilitating decarbonisation in our value chain, and we are currently developing a retailer decarbonisation offering in response. Our aim is to leverage innovative financing with clean and smart technologies, and easy-to-implement interventions, to create a cost-effective package that provides a strong value proposition for retailers. We are also exploring programmes to facilitate decarbonisation in our supply chains, where collaboration will be critical to effecting change outside of our direct operational control.

TARGETS

In 2017, we developed a set of science-based targets for the reduction of our absolute direct (scope 1) and indirect (scope 2) emissions, aligned with a 2°C pathway. In 2022, the initial results of our climate change scenario analysis showed that it is critical we achieve net zero under a 1.5°C pathway. We are now updating our emissions reduction targets to align with a 1.5°C pathway, and plan to have these targets verified by the SBTi in 2023.

OUR SCIENCE-BASED EMISSIONS REDUCTION TARGETS:

- Reduce absolute carbon emissions from our South African transport operations 33% by 2030 and 100% by 2050, from 2017 levels
- Reduce absolute carbon emissions from our South African warehousing operations 51% by 2030, and 100% by 2050, from 2017 levels

Our science-based targets are calculated from a 2017 baseline and in accordance with the SBTi. Progress against our scope 1 target is evaluated by considering the current year scope 1 diesel emissions against the base year scope 1 diesel emissions. Progress against our scope 2 target is evaluated by considering the current year electricity-consumption emissions against the base year electricity-consumption emissions, factoring in the impact of various energy-efficiency and renewable electricity projects. Our emissions have increased since the baseline year for these targets, as our reporting boundary has changed. We are investigating this aspect of our target setting as we recalculate our targets in accordance with the SBTi.

In addition to our emissions reduction targets, we aim to adopt energy-efficient practices based on available technology, implement circular-economy systems that reduce emissions from packaging and food waste, and ultimately source all of our electricity from renewable sources. To support our adaptation to climate change impacts, we implement water management practices and aim to install water-efficient equipment based on available technology. More information on these initiatives is available in our Environmental, Socio-Economic and Governance Supplementary Report 2022.

EMISSIONS

In 2022, SPAR was responsible for 113 060 tonnes of direct (scope 1) and indirect (scope 2) carbon dioxide equivalent (CO₂e) emissions from vehicles, warehousing, cooling and air conditioning facilities, and electricity consumed. Our scope 1 and scope 2 emissions figures have been independently verified by an accredited service provider. We purchased a total of 63 051 437 MWh of electricity in 2022. This is an 80% increase from 34 988 391 MWh in 2021, due to the inclusion of our corporate stores.

Our direct (scope 1) and indirect (scope 2) emissions figures are calculated according to the International Greenhouse Gas (GHG) Protocol Corporate Accounting and Reporting Standard. No market-based instruments were purchased in 2022, and so the location-based and market-based figure for our scope 2 emissions is the same. The emissions reporting boundary includes the SPAR head office, seven distribution centres with their associated distribution fleets, our 38 corporate stores, and Build It. It excludes S Buys and SPAR's operations outside South Africa. We are working on a detailed scope 3 accounting process that will allow us to identify the major risks and opportunities in our supply chain.

Our GHG emissions:

GHG EMISSIONS (TCO ₂ E)*	2022	2021	2020	2019	2018
Total GHG emissions ¹	113 060	79 563	80 478	82 896	81 763
Scope 1 (direct) GHG emissions ²	46 225	42 475	41 424	38 175	39 882
Scope 2 (indirect) GHG emissions ³	66 835	37 087	39 054	44 721	47 881

* All emissions figures are calculated according to the International Greenhouse Gas (GHG) Protocol Corporate Accounting and Reporting Standard, and rounded off to the nearest whole number.

¹ Total GHG emissions figures include all scope 1 and 2 emissions, and exclude scope 3 emissions

² Scope 1 (direct) emissions include GHG emissions from vehicles, warehousing, cooling and air conditioning facilities

³ Scope 2 (indirect) emissions include GHG emissions from electricity consumption

OUR KEY EMISSION REDUCTION INITIATIVES:

- Energy-efficient lighting: SPAR aims to convert 100% of lighting in our warehouses to energy-efficient LEDs. Various LED retrofits were implemented in 2022, at a total cost of R988 324.
- Renewable energy at distribution centres: SPAR has solar PV installations at all DCs in South Africa, excluding Build It. During 2022, these installations generated 9 130 MWh of renewable energy. This helps reduce SPAR's reliance on electricity service providers and costs associated with generators during loadshedding (planned power outages). These solar installations started in 2017 in our South Rand distribution centre and were completed in May 2020 with our Eastern Cape Distribution centre. Solar PV related costs in 2022 amounted to R321 052.
- Energy-efficient transport: SPAR is implementing various energy-efficiency initiatives to reduce the GHG emissions from our transport operations. We improved outbound efficiencies through routing design improvements, and are piloting various battery-electric truck refrigeration systems, and a live fuel probe technology to monitor fuel efficiency and theft.

More information on these initiatives is available in our Environmental and Socio-Economic and Governance Supplementary Report 2022.

INVESTMENT

The Greenhouse Gas Emissions Regulations in South Africa came into effect in 2017 and the Carbon Tax Act came into effect in 2019. Under the current legislation, SPAR is liable for carbon tax for diesel and liquified petroleum gas used in SPAR's distribution centres and corporate-owned stores, representing 3.3% of our total scope 1 emissions in South Africa. The legislated price of carbon in South Africa is currently R144 per tonne of CO₂e, and SPAR paid R15 700 in 2022. However, our scenario analysis found that our direct and indirect carbon price liability is going to increase significantly in the future. The reduction of carbon tax liability is a key motivation for reducing carbon emissions across the group. SPAR designed an Internal Carbon Pricing methodology and anticipates that this methodology will be incorporated into strategic decision-making around the climate-related risks and opportunities facing the group, following the final outcomes of the climate scenario process (see page 11 – strategy).

The monetary savings from reduced operating-costs resulting from energy-use savings through the installation of LED lighting and solar PV motivate for further investments in similar initiatives that also reduce GHG emissions. We are investigating further solar PV installations at Build It distribution centres and satellite warehousing hubs.

Unplanned capital was allocated for the group to undertake the climate change scenario analysis. The scenario analysis process has deepened our understanding of the longer-term risks facing SPAR due to climate change. This new knowledge, and the related approach to integrating climate change issues into our risk management (see page 9 – risk management) and strategy development processes (see page 11 – strategy), are reshaping our impetus towards climate change mitigation and adaptation investment.

DIRECTORATE AND CORPORATE INFORMATION

DIRECTORS:

MJ Bosman**, BW Botten (Group CEO), MW Godfrey (Group CFO), JA Canny**, LM Koyana**, M Mashologu**, P Mnganga**, ST Naran**, GO O'Connor*, AG Waller***

* Non-executive

** Independent non-executive

***Lead Independent.

COMPANY SECRETARY:

KJ O'Brien

THE SPAR GROUP LTD (SPAR) or (the company) or (the group)

Registration number: 1967/001572/06

ISIN: ZAE000058517

JSE share code: SPP

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SUPERSPAR 

SPAR 

KWIKSPAR 

SPAR 
express

tops!
all brands

SPAR
SaveMor

SPAR
SaveMor
Liquors

Build it

 S.Buys Pharmacy
of SPAR
Distribution Centre

 Pharmacy
of SPAR

EUROSPAR 

 MACE



Londis

VALUE CENTRE

maxi

TopCC

oncore