Tiger Brands - Climate Change 2019



C0. Introduction

C0.1

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

Tiger Brands Limited is a Top 40 JSE Limited company that operates mainly in South Africa and selected emerging markets. Its main activities are manufacturing, processing and distribution of branded food as well as home, personal and baby care products. Tiger Brands is one of the largest manufacturers and marketers of FMCG products in Southern Africa, and has been for several decades. Tiger brands has 100% shareholding in the biscuit company Deli foods, 49% shareholding in UAC Foods. In South Africa, Tiger Brands owns and operates +40 manufacturing sites. Within Central Africa – Cameroon, we have 74.7% interest in Chococam manufacturing / marketing confectionery, beverages and spreads brands. Tiger Brands has a 37.4% share in the branded grains business National Food Holdings Limited which is placed in the Southern Africa region of Zimbabwe. Furthermore, we hold a meaningful minority share in Empresas Carozzi, a leading branded foods business in South America – Chile, Peru.

The company has grown over many decades through the acquisition and clustering of businesses. Our success comes from the perpetual renovation and innovation of our brands, while our approach to expansion, acquisitions and joint ventures has given traction to a distribution network that now spans more than 22 African countries.

Our people work tirelessly towards a single goal - to drive sustainable growth in Africa. We continuously strive to create a great place for our diverse people to thrive, grow and innovate. Our purpose is "To nourish and nurture more lives every day". In journeying towards this, we have put in place a four-pronged strategy that acts as a guide and allows us to hold ourselves accountable.

Drive Growth - Clear strategies to win in each category, channel and customer.

Be Efficient - Efficiency in all we do, cost effective & an advantaged integrated supply chain.

Great People - A great place to work with a winning culture. Agile & customer-obsessed.

Sustainable Future – Sustainable planet, communities and company.

Our wide range of brands are underpinned by comprehensive research and meaningful insights into each of the markets in which Tiger Brands operates. Tiger Brands is a world–class operation and will continue to hold and grow its position through constant investment in every asset of the business, be it in people, brands, technology, efficiency, quality or sustainability.

At Tiger Brands, we are passionate about long-term sustainability. We want to leave a lasting legacy for all our stakeholders by ensuring that what we do today will not compromise the future of the planet or of the communities we service. We revel in the idea of people being better off because Tiger Brands exists and therefore, at every touch-point, we aim to be an organization that does business with a conscience. Our key focus areas which guide our sustainability efforts are encapsulated within our Environment, Social, Transformation agendas. In all these we align with national and global priorities to ensure that our mission to nourish and nurture more lives everyday goes beyond delivering quality products to also leaving a legacy that we can be proud of.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date		Select the number of past reporting years you will be providing emissions data for
Row 1	January 1 2018	December 31 2018	No	<not applicable=""></not>

C0.3

(C0.3) Select the countries/regions for which you will be supplying data. Cameroon South Africa

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 consolidation approach to your Scope 1 and Scope 2 greenhouse gas inventory.

Operational control

C-AC0.6/C-FB0.6/C-PF0.6

(C-AC0.6/C-FB0.6/C-PF0.6) Are emissions from agricultural/forestry, processing/manufacturing, distribution activities or emissions from the consumption of your products – whether in your direct operations or in other parts of your value chain – relevant to your current CDP climate change disclosure?

	Relevance	
Agriculture/Forestry	Elsewhere in the value chain only [Agriculture/Forestry/processing/manufacturing/Distribution only]	
Processing/Manufacturing	Both direct operations and elsewhere in the value chain [Processing/manufacturing/Distribution only]	
Distribution	Both direct operations and elsewhere in the value chain [Processing/manufacturing/Distribution only]	
Consumption	Yes [Consumption only]	

C-AC0.6b/C-FB0.6b/C-PF0.6b

(C-AC0.6b/C-FB0.6b/C-PF0.6b) Why are emissions from agricultural/forestry activities undertaken on your own land not relevant to your current CDP climate change disclosure?

Row 1

Primary reason

Do not own/manage land

Please explain

Tiger Brand's is a food converter, therefore does not directly own any farms but engages with agricultural activities through the company's supply chain.

C-AC0.7/C-FB0.7/C-PF0.7

(C-AC0.7/C-FB0.7/C-PF0.7) Which agricultural commodity(ies) that your organization produces and/or sources are the most significant to your business by revenue? Select up to five.

Agricultural commodity Sugar

% of revenue dependent on this agricultural commodity 60-80%

Produced or sourced Sourced

Please explain

Sugar is used in majority of the products manufactured at Tiger Brands.

Agricultural commodity

Other, please specify (Vegetables)

% of revenue dependent on this agricultural commodity 40-60%

Produced or sourced Sourced

Sourceu

Please explain

Vegetables are use in the Groceries, Baby Foods plus Langerberg & Asthon facilities.

Agricultural commodity

Other, please specify (Maize and Sorghum)

% of revenue dependent on this agricultural commodity 40-60%

Produced or sourced

Sourced

Please explain

Maize and Sorghum are used for the majority of the Grains products e.g. Bread, Flour, Baking Pre-Mixes, Pasta, Cereals and the Breakfast portfolio. Tiger Brands is highly dependent on Maize and Sorghum for the Grains Division product categories.

Agricultural commodity

Other, please specify (Fruit)

% of revenue dependent on this agricultural commodity 20-40%

Produced or sourced Sourced

Please explain

Used to manufacture Baby Food, Jam, Condiments e.g. Chutney, Tomato Sauce, Preserved Fruits and in the Langerberg & Ashton facilities.

Agricultural commodity

Wheat

% of revenue dependent on this agricultural commodity 20-40%

Produced or sourced

Sourced

Please explain

Wheat is used for the majority of the Grains product within the Mill-Bake category. Tiger Brands is dependent on Wheat for our Bread, Rolls , Whole-wheat Pasta range and other baked goods.

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 climaterelated issues.

Position of individual(s)	Please explain
Other, please specify (Chief Supply Chain Officer)	The CSCO has been appointed with overall responsibility to Environmental responsibility to RISK & SET committees where climate change impact and mitigation is tabled plus discussed.
Other, please specify (Group Corporate Affairs and Sustainability)	The role plays a critical accountability and execution role in CSI initiatives plus projects managed through external stakeholders and set partnerships. The role further sits in the RISK plus Social, Ethics and transformation committees.
Other, please specify (Risk and Environmental Sustainability Department)	Group responsibility for sustainability.
Chief Executive Officer (CEO)	Appointed by board for full accountability on climate change issue management and progressive project mitigation and adaptability where there is fit for purpose actions to be undertaken. The CEO ensures that the sustainability strategy and objectives are effectively integrated into the business. He is also a member of the Risk Committee and the Social, Ethics and Transformation Committee.
Other, please specify (Chief Growth Officer: Consumer Brands)	Portfolio responsibility for Environmental Sustainability.
Other, please specify (Chief Growth Officer: Exports & International)	Portfolio Responsibility for Environmental Sustainability.
Other, please specify (Chief Growth Officer Grains & Bakeries)	Portfolio Responsibility for Environmental Sustainability.
Other, please specify (Social, Ethics and Transformation Committee)	Committee nominated by board, chairman and non-executive directors.
Other, please specify (Chairman)	Group and Business Lead - the CEO reports into him. Chairman sits in the nominated committed i.e. RISK and SET plus the Governance - which all work through issues related to Climate Change.
Other, please specify (Risk Committee)	Executive Director chairs the Risk and Sustainability Committee. This committee plays the role of assisting, monitoring and influencing the aspects of sustainability in relation to minimizing the organizational climate change impact.
Other, please specify (Board and Executive Board)	The Tiger Brands Board accepts overall responsibility for the delivery of the Sustainability Agenda. They are part of the Risk plus Social & Ethics Committees as appointed by the shareholders.

C1.1b

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

with i which i climate- i related i	Governance mechanisms into which climate- related issues are integrated	Please explain
- all meetings	guiding strategy Reviewing and guiding major plans of action	Scheduled meetings - Risk committee, Social Ethics Transformation Committee, Governance Forum, Board Meeting, External and Internal Audits In the above scheduled meetings, the attendees have the responsibility to ensure that the Group Environmental sustainability strategy, the Social, Ethics and Transformational Strategy plus the Diversity and Inclusivity Strategy are all delivered and executed on. This is to ensure that we position Tiger Brands in a strategic position which will differentiate and innovate products or services as a solution to societal challenges. Risk exposure to climate change (Water, Energy, GHG Emissions, Carbon Tax, Temperature changes (Heat-wave days), Rainfall pattern changes (difer conditions), Regulatory and Legislative changes, etc.) is assessed at an operational level and the necessary mitigation plans are reviewed on a quarterly basis in the appointed Committees plus reported on to the Board.

C1.2

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

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate- related issues
Risk committee	Both assessing and managing climate-related risks and opportunities	Quarterly
Other C-Suite Officer, please specify (Chief Growth Officers; Chief Supply Chain Officer; Chief Corporate Affairs Officer; Chief Human Resources Officers; Portfolio Supply Chain Directors Risk and Sustainability Director Environmental & Sustainability Director)	Other, please specify (Defining and executing the sustainability initiatives / objectives.)	More frequently than quarterly

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

The highest level of climate change responsibility ultimately lies with the Board and Chairman. The Tiger Brands Risk and Sustainability Committee plus the Social, Ethics and Transformation Committee have been established by the Chairman. The Risk and Sustainability Committee reviews the company's carbon footprint, energy risks and efficiency progress quarterly as part of an overall good business practice measurement. At an operational level the manufacturing units report on environmental indicators which are collated into an overall scorecard for the purposes of quarterly reporting to the executive committees.

Cova Fernandez is the Risk and Sustainability Committee chairlady. The committee is made up of four non-executive directors and three Chief Growth Officers, Investor Relations Director, Chief Supply Chain Officer, Company Secretary, Chief Corporate Affairs, Chief Financial Officer and the Chief Executive Officer. The three Chief Growth Officers have full responsibility and accountability for their divisional performance. In addition the Chief Supply Chain officer, who reports directly to the CEO, takes operational accountability for climate change.

In summary, the key personnel indicated below are imperative in driving the Tiger Brands sustainability strategy implementation:

Patrick Sithole – Chief Supply Chain Officer

Mary Jane Morifi- Chief Corporate Affairs and Sustainability Officer

Julie Ntsekhe - Risk and Sustainability Director

Risk and Sustainability Committee

Peter Spies - Chief Growth Officer Grains & Bakeries

Yokesh Maharaj - Chief Growth Officer Exports and International

Chief Growth Officer Consumer Brands

Sinenhlanhla Magagula - Chief Human Resources Officer

Social, Ethics and Transformation Committee

C1.3

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

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).

Who is entitled to benefit from these incentives?

Types of incentives Monetary reward

Activity incentivized Efficiency target

Comment

Efficiency targets encompasses the drive to transform the business culture in line with the Sustainability aspirations. This really focuses on business performance being delivered as we create shared value in the context of sustainability. The connection between societal and economic progress needs to ensure that we address our environmental and climate change impacts that range from Reduction in GHG Emissions, efficient use of energy, understanding our water business risks, and the need to deliver sustainable product innovation . KPIs measured under this include % reduction in the following: Water Usage, Energy, Waste Reduction, Packaging, GHG Emissions and Capital investment delivered in line with Green Technology choices.

Who is entitled to benefit from these incentives?

Other, please specify (Facilities managers - Engineering, Risk Officers and Operations Director)

Types of incentives Monetary reward

Activity incentivized

Efficiency project

Comment

Emissions reduction, Water Saving, Efficient Energy Use, Reduction in process and product waste plus packaging innovation in line with the environmental friendly packaging agenda – these are all projects driven at the operations with the support of Marketing, New Product development, External environmental experts and environmental research bodies. Critical to being successful is the behavioral changes journey which is led by the site leadership team. The roles that contribute to this performance are Site Engineering, Utilities Managers, CAPEX Project management, Environmental Sustainability Management and Production personnel. Through the Individual Performance Appraisal system, these Managers are rewarded / incentivized for their performance in the core Climate Change initiatives that are set by the organization.

Who is entitled to benefit from these incentives?

Board/Executive board

Types of incentives Monetary reward

Activity incentivized

Efficiency project

Comment

This scope also delivers on - Emissions reduction project; Emissions reduction target; Energy reduction project; Energy reduction target Efficiency project; Efficiency target Environmental criteria included in purchases. Targets set for achievement of bonuses. Inclusion of Environmental KPI's. Targets must be met or executed

Who is entitled to benefit from these incentives?

Chief Procurement Officer (CPO)

Types of incentives Monetary reward

Activity incentivized Efficiency project

Comment

Environmental Criteria Included in Purchases - Energy reduction projects and technology investments that take into consideration total cost of ownership in line with environmental performance is critical for the business. These two departments work closely with the manufacturing and logistics functions to ensure capital expenditure decisions take into account the TCO. Targets must be met or executed / exceeded for bonus processing Supplier Evaluation inclusive of Environmental practices Procurement preference given to Sustainability sourced materials and services.

Who is entitled to benefit from these incentives? Chief Procurement Officer (CPO)

Activity incentivized

Environmental criteria included in purchases

Comment

Energy reduction projects and technology investments that take into consideration total cost of ownership in line with environmental performance is critical for the business. These two departments work closely with the manufacturing and logistics functions to ensure capital expenditure decisions take into account the TCO. Targets must be met or executed / exceeded for bonus processing Supplier Evaluation inclusive of Environmental practices Procurement preference given to Sustainability sourced materials and services

C2. Risks and opportunities

C2.1

(C2.1) Describe what your organization considers to be short-, medium- and long-term horizons.

	From (years)	To (years)	Comment
Short- term	1	3	The strategic business plans focus on short term volume, cost and operational effectiveness that informs actions to be undertaken in order to be profitable. The CAPEX and Investment decisions also align to these strategic intents. Some of the key deliverable for Tiger Brands include the following: ISOMETRIX implementation; Driving GHG Reporting to DEA; Setting Science based targets to have a set target to reduce GHG emissions; Installations of Energy Efficient Technologies; Execution of LED Lighting rollout strategy; ISO 14001 certification retained; Energy efficient operations; Reduction in Waste (solid, hazardous & electronic); Water stewardship and conservation through reduced water consumption and restored water stream health; Air & GHG emissions reduced; Managing scarce resources - online metering solution for recording, monitoring and managing utilities (Energy, Steam System and Water); Product stewardship Cradle to cradle; Compliance to Carbon Policy; Agriculture impact due to climate change; Municipal Infrastructure challenges affecting operational conditions.
Medium- term	4	7	From the 4th / 5th Year, we take into consideration market trends, insight research input, customer and consumer preference. These shape the forward-looking business plans whilst also pre-empting new regulatory and legislative changes. The medium term is both Micro and Macro value proposition that Tiger requires in order to remain relevant in the industry and lead within certain categories. Examples of what is taken into account here, include: Implementing ISO 50001 External partnerships; Sustainable sourcing of ingredients; Packaging innovation through collaboration with suppliers; Implementation of Carbon offset projects and initiatives. Year-on-Year Reduction on Energy – 7%; Water – 7.5%; Waste – 8%; Packaging – 5% Implementation of Green supply chain management Understanding our risk exposure in relation to Carbon Tax phase II rate.
Long- term	7	10	Understanding the global trends and influences in the south African market which are specific to these industries - Food, Beverage, Home Care and Personal Care. The need to survive as an organization would require us to look towards moving off the current energy grid system by using renewable energy for our manufacturing operations.

C2.2

(C2.2) Select the option that best describes how your organization's processes for identifying, assessing, and managing climate-related issues are integrated into your overall risk management.

Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes

C2.2a

(C2.2a) Select the options that best describe your organization's frequency and time horizon for identifying and assessing climate-related risks.

		How far into the future	Comment
	monitoring	are risks considered?	
Row 1	Six-monthly or more frequently		Risks are considered for all areas where Tiger Brands manufacturing and distribution sites are located. On a quarterly basis the Risk and Sustainability Committee review the identified risks and ensure that mitigation plans are still relevant or rework these where applicable. Sustainability is always considered in business decision making and is included in all capex documents. A risk register and materiality matrix are tools used and managed internally incorporating climate related risks.

Tiger Brands first and foremost considers legislation as the most important climate risk. We ensure that the company is aware and complies with all legislation that will impact the company. Over and above this, we have a defined Group Risk Management framework that consolidated the pertinent objectives and associated risk management commitments. These Group Risk Registers include the climate related issues and they are complimented with a business continuity plan. The business units adhere to a well-defined governance, risk and compliance process when they document their facility risk register. The compliance with KING IV is a critical requirement from both the financial and investor relations C-Suite leads.

The Risk Registers and Business Continuity plans are presented to the Risk Committee who are responsible for oversight of risk register suitability and delivery on mitigation plans in line with the risks identified. The committee reviews and signs-off on the risk profiles as documented by the operations. Progress on risk management and mitigation is undertaken on a quarterly basis.

Within Governance, Tiger Brands discloses all the operational risk registers climate related risk and opportunities. This is also published in the Integrated plus Sustainability reports. A risk management program is in place which is managed internally by Tiger Brands. We partner with industry communities and associations to validate and verify the FMCG industry risks. These are then also included in the organisational risk registers and materiality matrix. Environmental risks and opportunities are embedded into business processes. Through the Risk Committee, systems are presented to illustrate how we manage or eliminate the risk of failure or to maximise opportunities to achieve business objectives. Risk management frameworks and methodologies are regularly assessed and enhanced where appropriate to ensure that the Group's ability to anticipate and adequately respond to unpredictable risks is improved.

Through our operations, the senior management identify critical operational and financial risks, including risks related to climaterelated issues, promote awareness, introduce and maintain appropriate control environments and procedures and apply riskmonitoring techniques. Meetings are held regularly within each business function to update, re-assess and comment on the risks identified as well as give assurances on controls in place to mitigate the risks identified. The business continuity matrices are also aligned to the business risks that have been identified in order to minimize the impact to the operations.

Accountability to manage any identified risks lies with business leadership, supply chain executives, Portfolio Supply Chain Directors and the managing directors. They have the role to design, implement, monitor all processes to manage the risks and also to ensure integration of the daily activities as defined through the strategic frameworks. The identification, assessment and monitoring of key financial / non-financial risks is also undertaken by these business leaders. All risks identified are assessed and prioritized in terms of the following based on pre-defined scales:

- · Impact i.e. the potential financial effect on the business of the risk event;
- Likelihood, i.e. the probability of the occurrence of the risk event; and
- Control effectiveness, i.e. how well management perceives the identified controls to be working in effectively managing the risks.

Management's treatment of risks is aligned to the risk appetite and levels of tolerance approved by the Board. Appropriate risk response strategies in relation to the Group's major risks are then developed and implemented. The adequacy and effectiveness of these strategies are reviewed on an ongoing basis to ensure that they are responsive to changes in the dynamic environment in which the organization operates.

C2.2c

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

	Relevance	Please explain
	& inclusion	
Current regulation	Relevant, always included	Current regulatory risks relating to air pollution limits and effluent are considered when assessing climate-related risk. In the manufacturing plants various management process controls are implemented to control odours and prevent air pollution. Furthermore, an Environmental Air Quality management procedure is in place throughout the business. The objective of this procedure is to provide reasonable measures for protection and are considered when managing environmental performance that include energy, water, effluents and waste.
Emerging regulation	Relevant, always included	For a very long time there was discussions around the Carbon Tax regulation which has an impact on the Tiger Brands operations. The latest regulation on IWMP is also a key influence to the our operational environment. South Africa's IWMP and Carbon Tax which will increase operational costs and as such it has resulted in a focus to reduce coal consumption, emissions, improve product innovation to reduce the amount of packaging waste and the tax liability at the operations. Similarly, for the national greenhouse gas reporting regulations we had assessed all facilities to determine if we need to register with the DEA, using a specific template of the National Atmospheric Emissions Inventory system (NAEIS). The March deadline of GHG emission data submission to DEA was met by Tiger Brands.
Technology	Relevant, sometimes included	New technologies are assessed and sometimes piloted in operations to determine feasibility in order for Tiger Brands to achieve energy- sufficient, water-smart and waste-free operations. This is further assessed in the upgrade of our assets and new facilities being designed as this helps to lower climate risk.
Legal	Relevant, always included	Imperative to the organisation as we will receive penalties for non-compliance - Climate-related litigation claims could stem from non- compliance with the National Ambient Air Quality Standards, the proposed carbon tax, national greenhouse gas reporting regulations and the draft bill on climate change and could include monetary fines and/or prison sentences for those responsible of such oversight. Compliance risks are identified and assessed as part of the compliance management processes. Feedback on issues is reported as per the risk registers delivered to the Risk Committee by the different operations.
Market	arket Relevant, Helps with competitive advantage, understanding of the operating environment and also operating as a sustainable v always shared value creation organisation. Being a national producer of foods in various product categories, we are at the ce diverse value chain that extends from raw material production to the end-users of our products and the communities i As such, its material risks and environmental footprint are significant and diverse – as are the social, environmental a that influence its business, either directly or through the supply chain and resource base. For this reason, the business requires us to manage a continually evolving set of issues in order to sustain what it does, both now and in the future pessimistic and business as usual view. Climate-related market risk considered in risk assessments include fresh pro and value added meat product prices. The price of procured maize, wheat, sunflower seeds, soya oil, sorghum, fruits cocoa and ground nuts fluctuate depending on climate events such as drought or floods. The fluctuations in pricing in conversion costs plus the operating costs and profit.	
Reputation	Relevant, always included	Imperative to the organisation as the brand of the company needs to be protected and helps with competitive advantage. We consider reputation risk as a critical focal point for the business. Tiger Brands is involved in multiple community initiatives, These includes working with the community on enterprise development projects such as vegetable gardens, water recovery and reuse in the community gardens, use of organic waste from our operations to do composting and soil enrichment / rehabilitation.
Acute physical	Relevant, As an organisation, acute physical risks includes weather-related disruptions such as storms or floods that could damage	
Chronic physical		
Upstream	Relevant, always included	In the last few years it has become critical to partner with our suppliers in order to manage the upstream risks associated with Climate Change. We have been working closely with small-scale growers to improve their agricultural practices, enhance their competitiveness and better their livelihoods. Tiger Brands doesn't own farms however we work operationally with the farmers to improve the yields, raw material quality and to ensure that fertilizers used do not erode the soil and also partner with the farmers to educate them on crop rotation.
Downstream	Relevant, always included	In terms of downstream, we consider the logistics plus technology risks related to its ambition to become an energy self-sufficient business through investment in energy sufficient operations, investigating innovative technology and supporting the generation of renewable resources at a rate greater than it consumes. Waste to energy projects, waste to composting (depending on the type of waste), industrial symbiosis and recycling initiatives - these are all ongoing projects which are delivered against in order to reduce the environmental impact. Furthermore, the logistics networking for the delivery of the products is reworked on an ongoing basis. This ensures that our scope 3 emissions is also reduced where possible.

C2.2d

(C2.2d) Describe your process(es) for managing climate-related risks and opportunities.

A risk register and materiality matrix are tools used and managed internally by Tiger Brands. We further partner with industry

communities and associations to validate and verify the FMCG industry risks. These are then also included in the organisational risk registers and materiality matrix. Environmental risks and opportunities are embedded into business processes. This ensures that risks and opportunities are identified and applied throughout the business units. Environmental indicator reports are completed by Consumer, Grains and International manufacturing sites. These sites are able to keep track of non-financial as well as related financial data. Therefore, the sites can highlight risks and opportunities relating to climate change issues, report them to the Sustainability Committee and in turn the Board, who are able to respond to these issues in a timely manner.

The process of identifying risks per division is also driven by the central environmental/climate change function within Tiger Brands. The results filter down to individual units (operational) where the impact at an asset level can be determined.

The process of identifying risk involves a series of steps which are:

Step 1 - Data gathering, analysis and brainstorming

Step 2 - Determine the probability of the event occurring (Past Events)

Step 3 - Quantifying the risk in terms of monetary value

Step 4 - Prioritize risk in terms of monetary value utilizing the following formula:

(Existing Risk × Projected Climate Change = Future Climate Risk)

Existing Risk = Related Risk (Rands)

Projected Climate Change = Frequency of the event happening (%)

Future Climate Risk = Rand Value (Projected Risk)

Risk is prioritized by identifying the impact of climate change on revenue generation for the business plus the social impact especially in the communities that we operate in. The risks that could also have a reputational or ethical impact to the Tiger Brands corporate image are also taken into consideration. This evaluation is conducted across the supply chain and is categorised as follows:

Raw material supply

Utility requirements

Business Continuity (impact to running business as usual)

Logistical considerations

Societal Impact

Sustainable sourcing and partnerships with the Value Chain

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 Transition risk

Primary climate-related risk driver

Policy and legal: Enhanced emissions-reporting obligations

Type of financial impact

Increased operating costs (e.g., higher compliance costs, increased insurance premiums)

Company- specific description

Increase in operating costs due to carbon taxation. The debate on implementation of a carbon tax and or a carbon budget is still inconclusive. This creates a particular level of uncertainty for planning. The carbon tax will add additional costs to Tiger Brands bottom line, which could impact on competitiveness. Further, Eskom might be taxed too and will most likely pass on the costs, which will increase operational costs (electricity bills). The carbon tax may also prompt an increase in prices generally, leading to reductions in the disposable income of consumers.

Time horizon Short-term

Likelihood Virtually certain

Magnitude of impact High

Are you able to provide a potential financial impact figure? Yes, a single figure estimate

Potential financial impact figure (currency)

12000000

Potential financial impact figure – minimum (currency) <Not Applicable>

Potential financial impact figure – maximum (currency) <Not Applicable>

Explanation of financial impact figure

Business performance - increased input costs, risk adverse increased, insurance for input and climate change impact higher - A carbon tax based on R120 per tCO2e calculated on our current Scope 1 emissions from stationary combustion above the 60% basic tax-free threshold without taking into account additional allowances and offsets, is estimated to be an additional cost of about R12 million per annum as more than 90% of emissions are as a result of coal use.

Management method

We continue to participate in industry discussions and to also discuss with our stakeholders, through a range of regulatory bodies / industry associations, in order to influence and lobby policy makers regarding the legislation that affect business e.g. on Carbon Tax and IWMP. Tiger Brands implemented an Environmental Strategy, where a key focus area is on energy consumption. The company aims to reduce its Scope 1 energy consumption therefore reducing energy consumption and in turn carbon tax liability. - Ongoing tracking of initiatives to monitor the reduction in carbon emissions against the year on year scope 1 intensity targets. - Reporting of progress to the business units and board sub-committees. Upgrading the Boiler systems has managed to reduce our GHG emissions and also to ensure that we meet the newly legislated emitting levels as defined by NEMA-AQA.

Cost of management

Comment

The cost of managing the Environmental Strategy has been absorbed internally. Costs to reduce Scope 1 emissions differ per site.

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type Transition risk

Primary climate-related risk driver

Policy and legal: Enhanced emissions-reporting obligations

Type of financial impact

Other, please specify (No monetary impact. The requirement to do the annual GHG reporting to the DEA is time consuming due to the admin requirements.)

Company- specific description

Minimum reporting obligations imposed on SA businesses would increase cost base and operational complexity. Reporting criteria would increase over time increasing the need for resources and skills internally to comply with the requirements. Tiger Brands has submitted their GHG emissions in line with the DEA NEMA-AQA requirements

Time horizon

Short-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)

<Not Applicable>

Potential financial impact figure – minimum (currency) 50000

Potential financial impact figure – maximum (currency) 150000

Explanation of financial impact figure

Adherence to policy and governance mandates set - adaptability plus transitional programs require capital investment. The cverification of DATA that is to be publicly disclosed is crucial. This cost is for the verification that is done by an external organisation

Management method

Tiger Brands keep up to date with current and pending emission reporting obligations. It is the responsibility of the Risk and Sustainability committee and the Manufacturing Excellence manager to identify, manage and prioritize environmental sustainability risks; through this process the committee review current and pending regulations, including emissions reporting obligations. The organisation calculates its carbon footprint quarterly and discloses to the CDP.

Cost of management 15000000

Comment

No comment

Identifier

Risk 3

Where in the value chain does the risk driver occur? Direct operations

Risk type Transition risk

Primary climate-related risk driver Policy and legal: Enhanced emissions-reporting obligations

Type of financial impact

Other, please specify (External reporting requirements to DEA, Environmental institutions and suppliers (upstream) plus the customers (downstream of our operations))

Company- specific description

In order for South Africa to meet its international GHG commitments and deliver on trade and sustainability agreements; widespread initiatives are required from the county's energy provider and industry. This is a potential risk to Tiger Brands as cleaner technologies are expensive. The cause and effect of this operational costs are: 1) Eskom's cost to implement the technologies may be passed to the consumer, therefore rising the cost of electricity. 2) In order to meet government targets Tiger Brands may need to invest in cleaner energy solutions, therefore increasing the capital expenditure required to retrofit sites.

Time horizon

Medium-term

Likelihood Virtually certain

Magnitude of impact Medium

Are you able to provide a potential financial impact figure? No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact figure

loss of supply - increased value chain impact beyond the business operations. Impact from suppliers to also the customers with losses incurred in our operations. It becomes a cumulative cost

Management method

A key focus area of the Tiger Brands Environmental strategy is Energy and Climate Change. Tiger Brands have outlined immediate and long term solutions to reduce energy consumption, therefore reducing GHG emissions. These actions include investigating renewable energy, waste to energy, conducting energy audits and implementing an online metering solution. Energy efficiency initiatives are already in various stages of development. Completed projects which reduce Tiger Brands reliance on grid supplied electricity include the installation of efficient lighting.

Cost of management

1800000

Comment

Tiger Brands Environmental Strategy is managed internally, therefore there are few additional direct costs. Costs of reducing GHG emissions differ substantially per site.

Identifier

Risk 4

Where in the value chain does the risk driver occur?

Risk type Transition risk

Primary climate-related risk driver

Policy and legal: Mandates on and regulation of existing products and services

Type of financial impact

Please select

Company- specific description

SANS 941, for energy efficiency of electrical and electronic equipment is a voluntary standard which is likely to be regulated, in the future, by the National Regulator for Compulsory Specification. The aim of the product labelling standard is to eliminate inefficient electrical appliances from the market. The standard is likely to increase demand for efficient products. As consumers become more environmentally aware, this may call for a revision of the standard to include energy ratings on an increased array of consumer products. Regulation of the standard poses a non-compliance risk; fines and penalties may be incurred in the short term and the removal of inefficient products from the South African market in the long term.

Time horizon

Medium-term

Likelihood Virtually certain

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure? Please select

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency) <Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact figure

The financial implications are difficult to quantify. It is anticipated that affected products will require innovative solutions to meet minimum energy requirements. These solutions will differ from product-to-product and will increase production costs as well as artwork, marketing and sales processes - ZAR 5mil - for key SKUs

Management method

Closely monitor product labeling regulations

Cost of management 10000000

Comment ZAR 10mil for maintenance of labelling change requests and maintenance there-off.

Identifier Risk 5

Where in the value chain does the risk driver occur? Supply chain

Risk type Transition risk

Primary climate-related risk driver Policy and legal: Exposure to litigation

Type of financial impact

Increased operating costs (e.g., higher compliance costs, increased insurance premiums)

Company- specific description

Stricter emission limits would imply increased capital cost requirements to improve emissions for compliance. Currently, Tiger Brands is a large user of coal as a primary driver for energy.

Time horizon

Short-term

Likelihood Virtually certain

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency) 882000

Potential financial impact figure – maximum (currency) 1000000

Explanation of financial impact figure

Changes in air emissions act requires extensive maintenance of boilers (bag filters, gritter installations, etc.). The cost of current boiler replacement to meet newly defined standards / targets - ZAR 15mil per unit with PM below 250.

Management method

Steam generation is an operational requirement therefore compliance is imperative. Stack emissions testing are conducted for each boiler on an annual basis to monitor air emissions limits.

Cost of management

4000000

Comment Mainetance is ZAR 1mil per unit

Identifier

Risk 6

Where in the value chain does the risk driver occur?

Supply chain

Risk type Transition risk

Primary climate-related risk driver

Policy and legal: Other

Type of financial impact

Other, please specify (Compliance to newly defined legislation and regulations e.g. IWMP, CARBON TAX, GHG EMISSIONS REDUCTION, POLLUTION PREVENTION PLANS)

Company- specific description

Uncertainty around new regulations is a risk to Tiger Brands. New legislation could reduce the cost competitiveness of products. An example of this would be imported goods; as the legislation preventing imported goods may increase operational costs. Future legislation requirements poses a risk to product development as there is increased direct compliance concerns and indirect access to cost effective goods throughout the supply chain. It is clear however that legislative requirements would drive improved compliance and climate change actions however, what is unclear, is how this would be driven and what is expected from business.

Time horizon

Long-term

Likelihood About as likely as not

Magnitude of impact Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

18000000

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact figure

The estimated financial implications of future regulations are difficult to quantify due to the high level of uncertainty. Upgrade of the Grist Arrestor, investment of low emitting boilers, conversion of coal fired steam systems to gas

Management method

Tiger Brands keep up to date with new regulations, compliance issues and draft policies which may impact the company. Tiger Brands operations adhere to all relevant environmental regulations.

Cost of management

1500000

Comment

At present the cost of management is minimal as management is absorbed internally. However as new regulations come into play the cost of management to comply with legislation may increase significantly.

Identifier

Risk 7

Where in the value chain does the risk driver occur? Supply chain

Risk type

Physical risk

Primary climate-related risk driver

Chronic: Changes in precipitation patterns and extreme variability in weather patterns

Type of financial impact

Reduced revenue from decreased production capacity (e.g., delayed planning approvals, supply chain interruptions)

Company- specific description

South Africa is an arid country approaching physical water scarcity. This would imply failed crops and lower crop yields locally. Farm lands would need to adopt and change. With increased global warming and change in rainfall patterns and the further increased pressure for population increases, water would be a scarce and expensive resource posing a huge threat to our businesses both locally and abroad. Pollution of these natural resources and poor management of current stock could fast track shortages in the near future. This would imply inadequate supply required to produce our goods which depend heavily on a clean high quality water supply. According to S A Dept. of Environmental Affairs, South Africa water percentage as a percentage of total water available would reduce to more than 40% in 2025.

Time horizon

Current

Likelihood Very likely

Magnitude of impact

High

Are you able to provide a potential financial impact figure? Yes, a single figure estimate

Potential financial impact figure (currency) 25000000

Potential financial impact figure – minimum (currency) <Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact figure

ZAR 25Mil - impact to ingredients procurement sourcing. In SA it is expected that a 1% decline in rainfall will yield a 1.1% decrease in maize production and 0.5% decrease in wheat production. Placing pressure on SA's water resources as farmers attempt to maintain crop yields. This raises the costs of raw materials; impacting operating costs, or in a worst case scenario extinguishes the production of maize and wheat based products. The financial implications will be significant and will potentially extend further than staple crops.

Management method

The agricultural experts and market intel relationships that Tiger Brands has, help to identify initiatives which assist suppliers and the procurement team in adapting to climate change plus sourcing of materials in order to allow for smooth operation.

Cost of management

15000000

Comment

Consultancy fees for Insights and Research plus alternative sourcing (cost carriers; strategic sourcing of input raw materials especially the fresh commodities) - ZAR15mil

Identifier

Risk 8

Where in the value chain does the risk driver occur?

Risk type

Supply chain

Physical risk

Primary climate-related risk driver

Chronic: Changes in precipitation patterns and extreme variability in weather patterns

Type of financial impact

Please select

Company- specific description

Climate change effects have led to a greater probability of weather extremes and drought. This would result in failed and lower crop yields locally. Raw material would need to be sourced from new locations. Increases in rainfall is predicted as per S A Dept. of Environmental Affairs for certain regions of the country whilst the Western Cape faces sever droughts. Global warming and changes in rainfall patterns would considerably affect production processes and availability of farmed stock.

Time horizon

Long-term

Likelihood Very likely

Magnitude of impact Medium-high

Are you able to provide a potential financial impact figure? No, we do not have this figure

Potential financial impact figure (currency) <Not Applicable>

Potential financial impact figure – minimum (currency) <Not Applicable>

Potential financial impact figure – maximum (currency) <Not Applicable>

Explanation of financial impact figure

Change in precipitation extremes and drought result in deceased crop yield, therefore increased costs for raw material to convert to food. This will have significant financial implications for Tiger Brands, the exact values have not yet been quantified as the implications are wide ranging.

Management method

Understanding of River Basins that are at risk of drought

Cost of management 5000000

Comment

Working with Municipalities and research insights on alternative source of supply for the affected raw materials - ZAR5MIL

Identifier

Risk 9

Where in the value chain does the risk driver occur? Supply chain

Risk type Physical risk

Primary climate-related risk driver

Chronic: Changes in precipitation patterns and extreme variability in weather patterns

Type of financial impact

Please select

Company- specific description

Severe weather conditions, heat & cold, could also cause crops and livestock losses reducing availability and creating further cost pressure due to rise in supply chain costs. Further, availability of raw materials would become a serious concern. Global weather patterns are changing and increases in temperature is evident particularly in SA. This implies hotter summer and colder winters. Crop losses due to these extremes would increase. Black frost is a key contributor to crop loss for Tiger and certain regions currently used for farming would have increased potential risks.

Time horizon

Medium-term

Likelihood Very likely

Magnitude of impact Medium

Are you able to provide a potential financial impact figure? Yes, an estimated range

Potential financial impact figure (currency) <Not Applicable>

riot pphotolor

Potential financial impact figure – minimum (currency) 2000000

Potential financial impact figure – maximum (currency) 5000000

Explanation of financial impact figure

Crop losses due to these extremes would increase. Potential impact is approximated to ZAR250mil

Management method

Temperature changes tracking - temperature maps received from climate change understudies

Cost of management 3500000

0000000

Comment

Not paid for - membership with research institutes allows for free receipt of information on temparture changes in global markets

Identifier

Risk 10

Where in the value chain does the risk driver occur? Direct operations

Risk type

Physical risk

Acute: Other

Type of financial impact

Please select

Company- specific description

Inability to understand demand and availability of raw materials putting constraints on the planning and setting of long term business goals. This may lead to loss in market share or and over investment with the inability to meet demand due to stock outs from our supply chain due to reduced yields. Due to supply and demand and a demising supply of crops / livestock, aside from the high costs for these goods, our business would struggle to be able to supply the market with high quality goods. This would result in stock outs and poor service level. This would thus result in loss of customer and market share. Majority of the agricultural goods we consume in our factories to produce our brands would be under serious threat due to shortages in food stock supply due to poor / reducing yields from farms. Furthermore, the quality of the stock is also essential for us to produce a Hugh quality branded product. All of this would mean increased cost pressures and limited output. As per IMF Regional Economic Outlook, UN March 2010 Snapshot of Food Security, South Africa is Medium risk food security region. It is not clear what effect climate change will have in the medium to long term. There is a lot in uncertainty which puts business in a difficult position. This makes risk mitigation and long term planning difficult.

Time horizon

Long-term

Likelihood More likely than not

Magnitude of impact High

Are you able to provide a potential financial impact figure? No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency) <Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

Financial risk calculated using worst case scenarios as part of the risk assessments performed - ZAR 300mil

Management method

Full analysis of impact to input and output materials (including those supplied for key SKUs)

Cost of management 10000000

Comment Estimated calculation of ZAR10mil

Identifier

Risk 11

Where in the value chain does the risk driver occur? Direct operations

Risk type Physical risk

Primary climate-related risk driver Chronic: Other

Type of financial impact Please select

Company- specific description

Tiger Brands dependence on coal and grid supplied electricity poses a risk to the organisation as changes in natural resources are

incurred. South Arica's coal supply internally is under strain as exports increase to international markets. Lower quality coal causes the company to burn more coal for the same energy output; a total lack of supply would cause disruptions in production. Eskom will suffer the same low-grade coal issues as Tiger Brands. Therefore the constantly rising electricity and fossil fuel costs will have an impact on Tiger Brands operational costs.

Time horizon Medium-term

Likelihood More likely than not

Magnitude of impact High

Are you able to provide a potential financial impact figure? Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency) 20000000

Potential financial impact figure – maximum (currency) 50000000

Explanation of financial impact figure Financial risk calculated using worst case scenarios as part of the risk assessments performed - ZAR 30mil

Management method Full analysis of impact to input and output materials (including those supplied for key SKUs)

Cost of management 10000000

Comment Estimated calculation of ZAR10mil

Identifier

Risk 12

Where in the value chain does the risk driver occur? Direct operations

Risk type Transition risk

Primary climate-related risk driver

Market: Changing customer behavior

Type of financial impact

Please select

Company- specific description

Consumers are directly affected by the economic conditions of a country. This results in consumers becoming more demanding and taking an active role in ensuring responsible purchasing of goods and value offerings. This is forcing companies to produce greener goods to meet requirements and ensure market position and sustainability of the business. Tiger Brands embraces these changes and aims to create a competitive edge in the market.

Time horizon Long-term

Likelihood More likely than not

Magnitude of impact High

Are you able to provide a potential financial impact figure? No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact figure

Tiger Brands have implemented a number of initiatives to ensure business practices are environmentally responsible. The company aims to take advantages of the green goods markets by ensuring products are sustainable throughout the supply chain. The financial implications are wide ranging as they extend further than the operational control of the organisation.

Management method

Consumer insight surveys continue to be the applied management method for this potential risk. To ensure products are sustainable, to keep up with consumer demand; Tiger Brands have implemented and Environmental Strategy which focusses on the following key areas: - Energy - Air Emissions - Water - Packaging - Waste Tiger Brands engage with suppliers to ensure they are environmentally responsible and assist is enhancing suppliers sustainability practices and crop yields. Tiger Brands are investigating conducting LCA's to gain an enhanced understanding of a products value chain.

Cost of management

50000

Comment

Membership of research institutes and survey reports - Once off fee per annum ZAR50k The cost of management includes the cost of implementing the environmental strategy, the agricultural teams engagements, LCA's on key products, etc.

Identifier

Risk 13

Where in the value chain does the risk driver occur? Direct operations

Risk type Transition risk

Primary climate-related risk driver Reputation: Other

Type of financial impact

Please select

Company- specific description

Lack of raw materials could potentially result in not meeting service levels and customer expectations. This could potentially result in stock outs and loss of market share to competitors. Brand damage. This could result in loss in confidence in Tiger Brands as a company. Tiger Brands reputation is enhanced by taking an active role in the transition to a low carbon economy and ensuring that the company operates within the parameters of sustainable business practices and good corporate governance. Businesses with a sound reputation in relation to environmental issues are seen as responsible producers. These organisations shall ensure that they retain and even grow their market share. Tiger Brands are aware that ensuring sound and leading environmental practices is key to maintaining a market leader position. Financial performance in the long term would depend and green choices now.

Time horizon

Long-term

Likelihood More likely than not

Magnitude of impact High

Are you able to provide a potential financial impact figure? No, we do not have this figure

Potential financial impact figure (currency) <Not Applicable>

Potential financial impact figure – minimum (currency) <Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact figure

Loss not calculated.

Management method

Procurement analysis, market research and industry surveys continue to be the applied management method for this potential risk

Cost of management

50000

Comment

Membership of research institutes and survey reports - Once off fee per annum ZAR50k

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? Supply Chain

Opportunity type Products and services

Primary climate-related opportunity driver Other

Type of financial impact Other, please specify (Premium price opportunities)

Company-specific description

Due to rainfall and weather changes, potential for new farmlands would be presented as an opportunity for Tiger to assist budding farmers and secure raw material supply. Furthermore, more environmentally friendly methods could be used to ensure greener products are produced. This could add a strategic advantage to the business and command a premium price point.

Time horizon Long-term

Likelihood More likely than not

Magnitude of impact Medium-high

Are you able to provide a potential financial impact figure? Yes, an estimated range

Potential financial impact figure (currency) <Not Applicable>

Potential financial impact figure – minimum (currency) 3500000

Potential financial impact figure – maximum (currency) 8000000

Explanation of financial impact figure

The financial implications of changes in global temperature are difficult to quantify as the implications are wide-ranging and differ from region-to-region. Tiger Brands believe that enhancing employee's skills is a key method to ensure opportunities are recognised and implemented; going forward the company will be investing in in-house training.

Strategy to realize opportunity

A key component of Tiger Brands procurement policy is to secure supply requirements from sustainable sources. In order to achieve this, Tiger Brands have built strong partnerships with key growers. Tiger Brands aim to maintain these partnerships while continuously analysing climate change developments to ensure access to prosperous and sustainable raw material suppliers.

Cost to realize opportunity

0

Comment

In the short term, costs to change agricultural processes and systems need to be incurred. This must be aligned with the environmental goals and aspirations of the business. Long term, there should be a return on this investment by means of increased throughput of fresh produce.

Identifier

Opp2

Where in the value chain does the opportunity occur? Direct operations

Opportunity type Products and services

Primary climate-related opportunity driver Other

Type of financial impact

Other, please specify (Increased demand for existing products/s)

Company-specific description

Changes in average global temperature impact agriculture, market conditions and customer requirements. A decline in agriculture conditions in vulnerable parts of Africa could increase Tiger Brands exports to these areas. The effects of changes in global temperatures are difficult to quantify as regions are impacted differently, while crop yield may decrease in one region, it could increase in other.

Time horizon Long-term

Likelihood More likely than not

Magnitude of impact Medium-high

Are you able to provide a potential financial impact figure? Please select

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency) <Not Applicable>

Potential financial impact figure – maximum (currency) <Not Applicable>

Explanation of financial impact figure

The financial implications of changes in global temperature are difficult to quantify as the implications are wide-ranging and differ from region-to-region. Tiger Brands believe that enhancing employee's skills is a key method to ensure opportunities are recognised and implemented; going forward the company will be investing in in-house training.

Strategy to realize opportunity

Tiger Brands are aware of the vulnerability of the agricultural sector in relation to climate change. Changes in global temperature poses both risks and opportunities. Tiger Brands engage with suppliers to ensure risks are mitigated and opportunities are investigated. Tiger Brands Academy manages in-house training for the organisation. Employees are also further developed using our existing service providers and also looking at customised courses by institutions like the NCPC. Management methods also include the implementation of energy reduction targets which will aid in improving production efficiencies and in turn increased product supply. The introduction of focused risk management systems looking at climate change issues will ensure that this criteria is embedded into decision making processes and strategy within the Tiger group. This will further ensure success of the business and growth for shareholders.

Cost to realize opportunity

0

Comment

In the short term, costs to changes production processes and systems need to be incurred. This must be aligned with the environmental goals and aspirations of the business. Long term, there should be a return on this investment by means of increased production throughput.

Identifier

Opp3

Where in the value chain does the opportunity occur? Supply Chain

Opportunity type

Resilience

Primary climate-related opportunity driver Resource substitutes/diversification

Type of financial impact

Other, please specify (Induced changes in natural resources)

Company-specific description

Induced changes in natural resources could present opportunities for Tiger Brands to develop new products as certain raw materials become more abundant or scarce. New products/business services

Time horizon

Long-term

Likelihood More likely than not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact figure

The financial implications of induced changes in natural resources are difficult to quantify. The development of new products will require significant capital investment in the research and development phase, and the implementation phase.

Strategy to realize opportunity

Tiger Brands sustainability committee keep up to date with climate change developments and changes in the agricultural landscape.

Cost to realize opportunity

0

Comment

Current costs of management are absorbed internally by the sustainability committee. Costs of new product development will require significant capital which will only be assessed on a need-to-know basis.

Identifier

Opp4

Where in the value chain does the opportunity occur? Direct operations

Opportunity type Markets

Primary climate-related opportunity driver

Access to new markets

Type of financial impact

Other, please specify (Reputation)

Company-specific description

Tiger Brands reputation is enhanced by taking an active role in the transition to a low carbon economy and ensuring that the company operates within the parameters of sustainable business practices and good corporate governance. Businesses with a sound reputation in relation to environmental issues are seen as responsible producers. These organisations shall ensure that they retain and even grow their market share. Tiger Brands are aware that ensuring sound and leading environmental practices is key to maintaining a market leader position. Financial performance in the long term would depend and green choices now. Tiger Brands have a number of strategic food security partnerships.

Time horizon

Medium-term

Likelihood Virtually certain

Magnitude of impact High

Are you able to provide a potential financial impact figure? Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency) 1500000

Potential financial impact figure – maximum (currency) 2000000

Explanation of financial impact figure

A reputable company is likely to reap financial benefits, including possible increase in market share and investment opportunities. The cost to maintain the company's reputation is broad as costs fall within different sectors of the business. agency fees and memberships with insight organisations

Strategy to realize opportunity

Tiger Brands aims to be a climate change leader in its industry. The company has engaged in a number of activities to build and manage its reputation; these include but are not limited to: - Developing an annual integrated report, which includes sections on sustainability and good governance. - Responding to the CDP - Company Policies (e.g. preferential procurement, CSI, environmental) - Member to business groups such as Business Unity South Africa (BUSA) and The South African Chamber of Commerce & Industry (SACCI) - Engaging with local communities and implementing a number of CSI projects

Cost to realize opportunity 1500000

Comment

The cost of management is wide-ranging.

Identifier

Opp5

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

Other

Type of financial impact

Other, please specify (Increased demand for existing products/s)

Company-specific description

Consumers are directly affected by the economic conditions of a country. This results in consumers becoming more demanding and taking an active role in ensuring responsible purchasing of goods and value offerings. This is forcing companies to produce greener goods to meet requirements and ensure market position and sustainability of the business. Tiger Brands embraces these changes and aims to create a competitive edge in the market.

Time horizon

Medium-term

Likelihood Virtually certain

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact figure

Tiger Brands have implemented a number of initiatives to ensure business practices are environmentally responsible. The company aims to take advantages of the green goods markets by ensuring products are sustainable throughout the supply chain. The financial implications are wide ranging as they extend further than the operational control of the organisation.

Strategy to realize opportunity

To ensure products are sustainable, to keep up with consumer demand; Tiger Brands have implemented an Environmental Strategy which focuses on the following key areas: - Energy - Air Emissions - Water - Packaging - Waste Tiger Brands engage with suppliers to ensure they are environmentally responsible and assist is enhancing suppliers sustainability practices and crop yields. Tiger Brands are investigating conducting LCA's to gain an enhanced understanding of a products value chain.

Cost to realize opportunity

1000000

Comment

The cost of management includes the cost of implementing the environmental strategy, the agricultural teams engagements, LCA's on key products, etc

C2.5

(C2.5) Describe where and how the identified risks and opportunities have impacted your business.

	Impact	Description
Products and services	Impacted	Short supply of required input material - also lack of operation excellence performance due to compromised quality of utilities performance. The consumers prefer the sustainable, less energy-intensive products with reduced packaging. Tiger Brands is committed to sound environmental stewardship and would like to be seen as a leader in environmental packaging supplying products that can help in the transition to a low carbon economy Cost in the supply chain and operations are contained by managing waste and introducing recycled products in the various processes of manufacture. We aspire to be waste free and we continually seek new ways ways to turn waste into value (through circular economy principles), and minimise waste to landfill. Through the year we ensured that waste generated is carefully managed in operations and at licensed waste disposal facilities in accordance with legislative requirements. All types of waste material generated was analyzed, options for possible reuse and disposal assessed and the waste management hierarchy applied to ensure that waste is used or disposed of in the most environmentally friendly way. Packaging is used to preserve, protect, contain, transport, inform consumers and sell products. Only a small number of resources used to make a product are allocated to product packaging. We therefore strives to develop "fit-for-purpose" packaging that preserves the products while maximising the use of recycled or recyclable substrates and avoiding unnecessary waste-to-landfill. Greater visibility of data in the Consumer division resulted in innovative new packaging resulting in materials deferred from landfill sites annually and reduced carbon emissions.
Supply chain and/or value chain	Impacted	Supplier reliability is critical for the supply chain. The long-term sustainability of the small-scale growers is crucial to the Grains and Consumer Divisions within Tiger Brands. e.g. Wheat, Sorghum, Maize, sugar, Vegetables and Fruit in the supply chain. We work closely with small-scale growers and farmers to improve their agricultural practices, enhance their competitiveness and better their livelihoods. The Agriculturists partnered with multiple land claim beneficiary trusts in the to grow and harvest crops that are needed in the business.
Adaptation and mitigation activities	Impacted for some suppliers, facilities, or product lines	Farming - crop rotation to reduce soil erosion; Reduced us of pesticides and fertilizers; Lack of water for irrigation and agro-processing . In South Africa rainfall over the past few years has been significantly below the long-term average. Dam levels have fallen materially and severe irrigation restrictions have been imposed. During the year water allocations in various areas were severely rationed due to the drought. By partnering with the farmers we look for innovative ways to farm e.g. to maximise the right volume of irrigation is applied at the right time, probes were installed over the whole cane operations area to monitor soil water availability resulting in reduced water use and leaching of nutrients.
Investment in R&D	Impacted	Renovation and Innovation process - alternatives for packaging and working with suppliers to improve packaging durability, alternatives that are environmentally. friendly, etc. We aspire to become an energy self-sufficient business and will invest in energy sufficient operations, investigate innovative technology and support the generation of renewable resources at a rate greater than it consumes. With energy self-sufficiency and price certainty as objectives - waste to energy solutions continue to be opportunities that we look into. We are investigating complementing technologies which target significant water re-use opportunities.
Operations	Impacted	Resource availability and Opportunities to generate electricity from waste and from other renewable energy sources exist. Tiger Brands created an Energy Roadmap, which aims to ensure price certainty and secure long-term supply of electricity to its business. The three-step phased approach focuses on first creating energy self-sufficiency in a business unit, then within the wider business and lastly exporting energy through a trading platform. Our ambition is to become an energy self-sufficient business and will invest in energy sufficient operations, investigate innovative technology and support the generation of renewable resources at a rate greater than it consumes. Solar PV projects are underway for some of the operations where it has been deemed feasible. These will reduce carbon emissions.
Other, please specify	Not yet impacted	SME and Enterprise development small holdings

C2.6

(C2.6) Describe where and how the identified risks and opportunities have been factored into your financial planning process.

	Relevance	Description
Revenues	Impacted	Profitability, adaptability funding, sourcing strategy, etc. Dam levels have fallen materially and severe irrigation restrictions have been imposed in various areas due to the drought. The supply has increased despite the worst drought on record as a result of RCL Foods' support and technical advice to small-scale growers to improve their agricultural practices, enhance their competitiveness and better their livelihoods. Impact - Lutzville and Musina were not running in FY18 full season periods
Operating costs	Impacted	ROI and RONA impact - Operating costs will be increased due to increase in the price of resources such as energy and water. Carbon tax and regulatory reporting requirements will also negatively effect operating costs. We have assessed all its facilities to determine if it needs to register with the DEA through NAEIS. The impact is low as it also aligned its systems for data capture, analysis and opportunity identification throughout all operations and compiled its carbon footprint in-house for the first time. Tiger Brands also appointed an independent third party (Terra Firma) to verify the carbon footprint inventory to ensure it is free of material misstatements.
Capital expenditures / capital allocation	Impacted	CAPEX spend and delivery on growth strategy with profitable margins to be realized. We aspire to become an energy self-sufficient business and will invest in energy sufficient operations, investigate innovative technology and support the generation of renewable resources at a rate greater than it consumes. Through an Energy Roadmap it aims to ensure price certainty and secure long-term supply of electricity to its business which requires capital investment.
Acquisitions and divestments	Impacted	We have pulled out of HACO (Kenya in the past fiscal year).
Access to capital	Not impacted	We have strong balance sheet which allows for us to invest in our own capital investments
Assets	Impacted for some suppliers, facilities, or product lines	Existing and new assets are being impacted by current risks and opportunities as climate resilient infrastructure is being implemented, e.g. the installation of a rooftop solar plant , CIP Processes, energy intensive technologies
Liabilities	Not impacted	No direct impact on liabilities have been reported nor identified
Other	Not evaluated	To be determined

C3. Business Strategy

C3.1

(C3.1) Are climate-related issues integrated into your business strategy? Yes

C3.1a

(C3.1a) Does your organization use climate-related scenario analysis to inform your business strategy? Yes, qualitative and quantitative

C-AC3.1b/C-CE3.1b/C-CH3.1b/C-CO3.1b/C-EU3.1b/C-FB3.1b/C-MM3.1b/C-OG3.1b/C-PF3.1b/C-ST3.1b/C-TO3.1b/C-TS3.1b

(C-AC3.1b/C-CE3.1b/C-CH3.1b/C-CO3.1b/C-EU3.1b/C-FB3.1b/C-MM3.1b/C-OG3.1b/C-PF3.1b/C-ST3.1b/C-TO3.1b/C-TS3.1b) Indicate whether your organization has developed a low-carbon transition plan to support the long-term business strategy. In development, we plan to complete it within the next 2 years

(C3.1c) Explain how climate-related issues are integrated into your business objectives and strategy.

I. The Chief Supply Chain Officer is accountable for the environmental component of the organisation's corporate sustainability. The Manufacturing Excellence Executive is responsible for the environmental strategy development with input from appointed committee members (the Risk and Sustainability Committee). Through a team effort with the Supply Chain Leadership team, the Manufacturing Excellence manager is responsible for the implementation of the environmental strategy, raising awareness and communicating the strategy to the broader business and to keep key stakeholders informed of strategy implementation progress. Where necessary the suppliers are kept informed of the initiatives being undertaken in order to successfully achieve the set milestones as defined by the strategy. Climate change poses both risks and opportunities to all parts of the business. Tiger believes in playing its part in increasing energy efficiency and reducing carbon emissions. Tiger's environmental strategy has been influenced by good governance; following the requirements of King III and integrated reporting, as well as ensuring inclusion on the JSE SRI index, which is important to the company.

II. Tiger Brands current focus areas are on reducing the organisation's operational water footprint, implementing a group-wide energy efficiency and carbon management plan, and the reduction of waste (including a current study for alternative use of the waste to generate renewable energy). These priorities are driven by rising costs, the regulatory environment, and stakeholder preferences. Sustainability is seen as a key factor to ensure long term business growth and retention of current market share. This is key to ensure that investors are kept satisfied and customer expectations are being met. Ensuring an integrated triple bottom line approach is critical to Tiger's long term sustainable growth. Tiger has developed several partnerships with NGO's where the company receives general advice, as well as engaging on particular issues.

III. Priority targets have been agreed upon and are being measured across the group. This would assist the group to align their efforts and responses to climate change. Climate change risks have been incorporated into the risk framework and are mitigated by using the aforementioned business processes. This is currently headed by the Group Supply Chain Executive and a subcommittee of the board. These measures are seen as critical and key to delivering a sound performance by reducing operational expenses, improving efficiencies, and delivering products that contribute to a low carbon economy.

IV. In the long term, the Risk and Sustainability committee will provide assurance to the board that key sustainability issues are identified and addressed. Some of the long term issues being addressed as part of the strategy are the availability of water and future energy supply. Climate change issues affect Tiger Brand's long term business strategy, these include increased GHG's contributing to global warming, increased intensity and frequency of extreme natural events impacting trade routes, products supply chain and company owned infrastructure and change in rainfall patterns affecting water availability and crop yields. This influences long term business decisions when considering relocating plants and developing increased capacity at existing sites. Tiger acknowledges that carbon tax, emissions trading and removing government subsidies will all result in the cost of fossil fuels increasing which ultimately affects the company's bottom line profits.

V. Tiger's environmental strategy provides the company with a number of opportunities. This includes highlighting and decreasing supply chain inefficiencies, reducing operating costs and therefore the cost of product manufacturing. Sustainable business practices allow Tiger Brands to become a sustainability leader in the industry; enhancing the company's reputation and meeting growing consumer and investor expectations. Reduced operating costs and an improved environmentally sustainable brand is a strategic advantage for the company thus being an additional enabler to sustainable business growth. Raw material shortages due to climatic changes also have an influence on strategies towards procurement initiatives. Alternative suppliers for raw materials have had to be identified to ensure sustainable practices are followed and meet market demands. The business has gained strategic advantage over competitors in the following areas:

- Procuring of some of the raw materials at a cheaper price due to change in purchase location

- A reduction in utility usage at a site level, resulting in decreased GHG emissions.

- Light weighting of packaging material has not only reduced the waste footprint impact by our consumers but also significantly decreased business expenditure on packaging requirements.

VI. The key areas of the environmental strategy aim at positioning Tiger as an environmentally sustainable leader in the industry by reducing consumption and improving business practices. The focus on energy is directly relevant to reducing carbon emissions for the business. The strategy provides a platform for highlighting and managing climate change related risks and opportunities. A number of climate change related aspects have influenced the implementation and growth of the strategy, including increased GHG emissions, water and raw material availability, infrastructure damage, etc. Increased GHG's contributing to global warming have resulted in countries and organisation's taking action to reduce their GHG impact. As a primarily South African based organisation Tiger is aware of the environmental impact of high electricity consumption due to the fact that Eskom's grid supplied electricity is largely coal generated.

Climate change and environmental related concerns have been integrated into current business processes which relate to the manufacture of food, home, personal, and baby care products. The need for adaptation and regulatory changes due to climate change has necessitated the integration of the following key areas into the Tiger Brands strategy:

Energy consumption - Find alternative energy sources due to load shedding;

Carbon Emissions - Expected introduction of carbon tax and the Air Emission Act which requires companies to meet legal requirements by 2019;

Water utilization - Water scarcity in the Western Cape

Waste management practices & packaging contribution to waste generation - Introduction of the Waste Act

Environmental with sustainability is one of the drivers underpinning the Group's vision, is committed to reducing the levels of resource consumption (energy, fuels, water and packaging) and has an environmental policy providing the framework for setting and reviewing environmental objectives and targets. Environmental management programmes and key performance indicators are monitored regularly to assess progress.

C3.1d

(C3.1d) Provide details of your organization's use of climate-related scenario analysis.

Climate- related scenarios	Details
2DS	We try to identify and quantify the disciplines across the business (extending to other areas outside of the organization) in order to understand any new categories of risk over extended period of time e.g. with our internal agriculturists who work with the farmers supplying the company. We undertake the climate scenario analysis as it allows for us to plan for operations that are flexible for a range of futures, it also gives us a better understanding of the strategic implications of climate related risks and opportunities. Furthermore, the information is used for stakeholder engagement around how the company will adapt to water risks and climate change impact - Plans can then be developed to ensure that the business is ready for the transition.
DDPP	We try to identify and quantify the disciplines across the business (extending to other areas outside of the organization) in order to understand any new categories of risk over extended period of time e.g. with our internal agriculturists who work with the farmers supplying the company. We undertake the climate scenario analysis as it allows for us to plan for operations that are flexible for a range of futures, it also gives us a better understanding of the strategic implications of climate related risks and opportunities. Furthermore, the information is used for stakeholder engagement around how the company will adapt to water risks and climate change impact - Plans can then be developed to ensure that the business is ready for the transition.

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year? Both absolute and intensity targets

C4.1a

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

Target reference number Abs 1

Scope 3: Upstream transportation & distribution

% emissions in Scope 100

Targeted % reduction from base year 5

Base year 2016

Start year 2017

Base year emissions covered by target (metric tons CO2e)

Target year 2022

Is this a science-based target? No, but we anticipate setting one in the next 2 years

% of target achieved 25

Target status Underway

Please explain

The target is made in conjunction with our logistics service providers - we track performance quarterly with trends presented to the RISK & SET Committee.

C4.1b

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

Target reference number Int 1 Scope

Scope 1

% emissions in Scope

100

Targeted % reduction from base year

5

Metric

Metric tons CO2e per metric ton of product

Base year

2016

Start year

2017

Normalized base year emissions covered by target (metric tons CO2e)

0.1055

Target year 2022

Is this a science-based target?

No, but we anticipate setting one in the next 2 years

% of target achieved 30

Target status

Underway

Please explain

Tiger Brands uses a year on year rolling target. Our aim is to reduce Scope 1 intensity by 5% per annum. We have started engaging carbon footprint certification bodies to assist with setting the science based target. We have done upgrades to our Boilers which is yielding significantly low emissions.

% change anticipated in absolute Scope 1+2 emissions

10

% change anticipated in absolute Scope 3 emissions

25

Target reference number Int 2

Scope Scope 1+2 (location-based)

% emissions in Scope 100

Targeted % reduction from base year 5

Metric Metric tons CO2e per metric ton of product

Base year 2016

Start year 2017

Normalized base year emissions covered by target (metric tons CO2e) 0.133

Target year 2022

Is this a science-based target?

No, and we do not anticipate setting one in the next 2 years

Target status Replaced

Please explain

Tiger Brands uses a year on year rolling target. Our aim is to reduce Scope 2 intensity by 5% per annum. We have started engaging carbon footprint certification bodies to assist with setting the science based target.

% change anticipated in absolute Scope 1+2 emissions

% change anticipated in absolute Scope 3 emissions

C4.2

(C4.2) Provide details of other key climate-related targets not already reported in question C4.1/a/b.

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 CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	5	27006
To be implemented*	6	23538
Implementation commenced*	3	12719
Implemented*	8	45718
Not to be implemented		

C4.3b

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

Initiative type Energy efficiency: Processes

Description of initiative

Process optimization

Estimated annual CO2e savings (metric tonnes CO2e) 18637

Scope

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4) 2240760

Investment required (unit currency – as specified in C0.4) 50000

Payback period

<1 year

Estimated lifetime of the initiative

6-10 years

Comment

Retrofit Energy Efficient Lighting (LED) Technology; Implement multi-compressor control strategy to optimise -15 C Header Ammonia Compressor Energy Use; Implement a motor management system with retrofitting IE3 motors on selected systems; Reduce steam leaks through improved plant maintenance; Install transparent sheeting on the covered area behind the Kitchen Plant and switch lights off during the day; Install energy efficient motors on failure on selected Mayonnaise and Tomato Sauce Motors.

C4.3c

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

Method	Comment	
Internal finance mechanisms	Current internal finance mechanisms are used for all types of Capex related projects	
Compliance with regulatory requirements/standards	o ensure that all new equipment purchased makes use of refrigerants other than Freon (R22), Boilers that are not coal fired; Fechnology which is energy efficient'; CIP Processes that use less energy - which is in the process of being phased out.	
Dedicated budget for energy efficiency	CAPEX allocation for renewable energy projects. There are also multiple investigations into energy consumption reduction and alternative energy sources such as biogas digesters and solar PV systems.	
Partnering with governments on technology development	The partnership with DTI, for tax incentives (12i and 12L) and the Eskom Demand Side Management (DSM) subsidies and rebates when available to help defray the capital costs of equipment.	

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?

No

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start January 1 2016

Base year end December 31 2016

Base year emissions (metric tons CO2e)

263746

Comment

The data provided above is for the all the facilities in Tiger Brands, these include Beverages, Culinary, HPCB, Snacks and Treats, VAMP, Albany Bakeries, Jungle, King Food, Mills, Pasta, Tastic, International (Chococam, Davita and Langerberg and Ashto Foods).

Scope 2 (location-based)

Base year start January 1 2016

Base year end December 31 2016

Base year emissions (metric tons CO2e)

323261

Comment

The data provided above is for the all the facilities in Tiger Brands, these include Beverages, Culinary, HPCB, Snacks and Treats, VAMP, Albany Bakeries, Jungle, King Food, Mills, Pasta, Tastic, International (Chococam, Davita and Langerberg and Ashto Foods).

Scope 2 (market-based)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Not included.

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions.

IPCC Guidelines for National Greenhouse Gas Inventories, 2006 The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

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) 208725

Start date

January 1 2018

End date December 31 2018

Comment

A decrease was noted from last year date of 268779.

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 have operations where we are able to access electricity supplier emission factors or residual emissions factors, but are unable to report a Scope 2, market-based figure

Comment

We calculate this scope based on the Eskom Integrated Annual Report (2018) emissions factor for Electricity.

C6.3

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

Reporting year

Scope 2, location-based 313729

Scope 2, market-based (if applicable) <Not Applicable>

Start date

January 1 2018

End date December 31 2018

Comment

A slight increase was noted from last year date of 308643.

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure? No

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

Purchased goods and services

Evaluation status

Relevant, not yet calculated

Metric tonnes CO2e <Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation

As a food company / convertor we use a large volume of packaging materials and raw materials to convert our products. We therefore depend on a host of suppliers to produce these input goods. All these stages results in a carbon footprint. We currently are investigating ways of tracking these footprints for our business. this is important and need to be addressed in the near future. LCA on cocoa beans performed, the cocoa production makes the largest contribution to the environmental impacts of eutrophication, ozone layer depletion, freshwater aquatic eco-toxicity, human toxicity, and terrestrial eco-toxicity, with average contributions greater than 96%. The analysis revealed that production and use of fertilizers and pesticides were a major cause of the environmental burdens in the cocoa production stage. Ozone layer depletion is caused by the emission of halogens and CFCs during the production of pesticides. Eutrophication is mainly caused by leakage of nutrients during cultivation and emission of phosphorus fertilizers. For all the three toxicity categories the main contributors are heavy metals content in phosphorus fertilizers and leakage of pesticides.

Capital goods

Evaluation status

Relevant, not yet calculated

Metric tonnes CO2e <Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners <Not Applicable>

Explanation

As South Africa's Largest Food Manufacture we do procure new capital goods namely Equipment, typically these equipment's will come from vast amounts of suppliers and we have not yet looked into partnering up with our suppliers to track cradle to gate emissions factors. Transmission and Distribution losses from purchased electricity KWhs consumed were used to calculate emissions according to the GHG Protocol using Defra's 2018 emission factors for transmission & distribution, South Africa. Assumptions: Kilowatt hours of electricity purchased was calculated using the available records.

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

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation

The total Energy and Fuel associated with the manufacturing operations has been covered in Scope 1 and scope 2 emissions reporting.

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Metric tonnes CO2e 31331

Emissions calculation methodology

Outsourced third-party transport Litres of diesel consumed by third party vehicles were used to calculate emissions according to the GHG Protocol using Defra's 2018 emission factors for fuel. Assumptions: Fuel consumed by third party vehicles was calculated using the available records.

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

70

Explanation

We currently have a 3rd party transport company for our distribution and have engaged them since 2016 for mapping out the total distance travelled for the services they provide. The focus areas in 70% of the Inbound and Outbound logistics services. Outsourced third-party transport Litres of diesel consumed by third party vehicles were used to calculate emissions according to the GHG Protocol using Defra's 2018 emission factors for fuel. Assumptions: Fuel consumed by third party vehicles was calculated using the available records.

Waste generated in operations

Evaluation status Relevant, calculated

Metric tonnes CO2e 2503

Emissions calculation methodology

Data in relation to waste sent to landfill form the various operations is collated. A defra emissions factor is then used to determine the equivalent CO2 emissions. Waste to landfill and recycled Tonnes of wet waste to landfill and tonnes of municipal waste recycled were used to calculate emissions according to the GHG Protocol using Defra's 2018 emission factors for municipal waste. GHG emission factors developed for the collection, transport and landfilling of municipal waste in South African municipalities. Assumptions: Waste from operations was calculated using the available records.

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

80

Explanation

Tiger Brands currently has various 3rd party waste management companies that remove waste from our sites. We are working towards obtaining supplier specific emission data.

Business travel

Evaluation status

Relevant, calculated

Metric tonnes CO2e 2614

Emissions calculation methodology

Tiger Brands Scope 3 business flights are recorded by the company's travel agents. A decrease can be noted from last years 2802. Car rental & travel claims - kilometres travelled, litres of petrol consumed, engine size and type of fuel used provided by service provider. Defra's 2017 emission factors for business travel - land used. Air travel - flight information provided by service provider, including distance and class of travel, departure dates and destination of each leg. Defra's 2018 emission factors for business travel - air used. Hotel accommodation - bednights provided by service provider. Emissions factor sourced from UNEP World Meteorological Organisation Climate Change And Tourism Report; A2.2.3 Accommodation. Emissions were calculated according to the GHG Protocol. It is assumed that there is one occupant per vehicle rented. All fights are booked through the company therefore there are no privately booked flights that are not accounted for. Hotel accommodation was based on estimated number of nights away on business travel and calculations were based on 1 person occupying a room per night. Emissions from travel claims were calculated using the available

Percentage of emissions calculated using data obtained from suppliers or value chain partners 100

Explanation

This value consists of air travel by Tiger Brands employees

Employee commuting

Evaluation status Relevant, not yet calculated

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation

Tiger Brands as a large FMCG business employs a large number of employees to conduct their business. They commute daily to our facilities and offices resulting in carbon emissions.

Upstream leased assets

Evaluation status

Relevant, not yet calculated

Metric tonnes CO2e <Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation

Tiger Brands has no leased assets that may have a direct or indirect carbon footprint. This is important and needs to be addressed.

Downstream transportation and distribution

Evaluation status

Relevant, not yet calculated

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation

Tiger Brands does not have insight into logistics from our distributions centers as there are vast amount of companies we supply with goods.

Processing of sold products

Evaluation status

Relevant, not yet calculated

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation

Tiger Brands products are at the final; stage prior to be consumed. No further manufacturing or conversion would be required. The foods or products that require processing after the FG is based on how the consumer utilizes the product. The work undertaken has been for minimal portfolios of our products and not the full product listing.

Use of sold products

Evaluation status Relevant, not yet calculated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation

Packaging forms a large part of our sold product when used and influencing consumer behavior can be difficult, however working to influence consumer behavior and recycling would be beneficial

End of life treatment of sold products

Evaluation status

Relevant, not yet calculated

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation

As a FMCG business as indicated above we have a host of packaging material. In turn we generate a lots of waste directly and indirectly. In most cases product waste is salvaged and sold as animal feed but packaging waste is still generated. We strive to manage the waste streams to reduce waste to land fill sites by in-house waste segregation programmes. This is an import contributor as a food manufacturer and we need to address and measure these impacts.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners <Not Applicable>

Explanation

Tiger Brands has no leased asset down stream.

Franchises

Evaluation status Not relevant, explanation provided

Metric tonnes CO2e <Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation

Not applicable to Tiger Brands.

Investments

Evaluation status Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners <Not Applicable>

Explanation

Not applicable to Tiger Brands.

Other (upstream)

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation

Not applicable to Tiger Brands.

Other (downstream)

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation Not applicable to Tiger Brands.

C-AC6.6/C-FB6.6/C-PF6.6

(C-AC6.6/C-FB6.6/C-PF6.6) Can you break down your Scope 3 emissions by relevant business activity area? No

C-AC6.6b/C-FB6.6b/C-PF6.6b

(C-AC6.6b/C-FB6.6b/C-PF6.6b) Why can you not report your Scope 3 emissions by business activity area?

Row 1

Primary reason

Insufficient data on operations

Please explain

Not detailed measures in all areas to be able to break it down plus validated accurate data for this process.

C6.7

(C6.7) Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization? No

C-AC6.8/C-FB6.8/C-PF6.8

C-AC6.9/C-FB6.9/C-PF6.9

(C-AC6.9/C-FB6.9/C-PF6.9) Do you collect or calculate greenhouse gas emissions for each commodity reported as significant to your business in C-AC0.7/FB0.7/PF0.7?

Agricultural commodities

Sugar

Do you collect or calculate GHG emissions for this commodity?

No, not currently but intend to collect or calculate this data within the next two years

Please explain

We intend to investigate commodity related environmental impacts, this includes climate and water impacts. This will be done through a cross functional sourcing, sustainability team with the NPD and R&D departments.

Agricultural commodities

Wheat

Do you collect or calculate GHG emissions for this commodity?

No, not currently but intend to collect or calculate this data within the next two years

Please explain

Planning to investigate commodity related environmental impacts, this includes climate and water impacts. This will be done through a cross functional sourcing, sustainability team, R&D and NPD

Agricultural commodities

Other (Sorghum)

Do you collect or calculate GHG emissions for this commodity?

No, not currently but intend to collect or calculate this data within the next two years

Please explain

Preparing to investigate commodity related environmental impacts, this includes climate and water impacts. This will be done through a cross functional sourcing, sustainability team. Alternative agricultural practices associated with soil rehabilitation, sorghum processing and increased yields would be beneficial for this work stream

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 0.2144

Metric numerator (Gross global combined Scope 1 and 2 emissions) 522454

Metric denominator metric ton of product

Metric denominator: Unit total 2436053.13

Scope 2 figure used Location-based

% change from previous year 30.84

Direction of change

Decreased

Reason for change

Disruption in some of the VAMP operations; Lutzville and Musina not running due to severe drought issues; Reduced travel in the business with improved IT Infrastructure Use of Telecon, Skype, Video Conference); Change in the distribution network and routes for outbound logistics

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 CO2e)	GWP Reference
CO2	206871.55	IPCC Fifth Assessment Report (AR5 – 100 year)
CH4	89.58	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	1763.87	IPCC Fifth Assessment Report (AR5 – 100 year)
Please select		Please select

C7.2

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

Country/Region	Scope 1 emissions (metric tons CO2e)	
South Africa	206507	
Cameroon	2218	

C7.3

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

By business division

By facility

C7.3a

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

Business division	Scope 1 emissions (metric ton CO2e)
Consumer. This division consist of the following manufacturing facilities: • Beverages • Culinary • HPCB • Snacks & Treats • VAMP	100116.02
Grains. This division consist of the following manufacturing facilities: • Albany • Jungle • King Food • Mills • Pasta • Tastic	80970.5
International. This division consist of the following manufacturing facilities: • Chococam • Davita • Langerberg and Ashton Foods	27638.71

C7.3b

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

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
Albany Bellville	6511	-33.924754	18.661036
Albany Germiston	10002	-26.217557	28.144175
Albany Maitland	246	-29.925861	30.975039
Albany Margate	1764	-30.851719	30.37974
Albany Mobeni	3903	-29.5971	30.41127
Albany Pietermaritzburg	8123	-33.92641	18.49088
Albany Pretoria	10516	-26.82529	27.83247
Albany Randfontein	4784	-26.495982	29.215838
Albany Sasolburg	2769	-26.22	28.29
Albany Secunda	4880	4.038893	9.731628
Albany Virginia	3056	27.9784	27.0264
Albany Manna	2380	26.093611	28.00639
Chococam Douala	2218	-33.76528	18.96556
Culinary Jam Paarl	4970	-31.55486	18.34676
Culinary Boksburg	47572	-26.165157	27.710828
Culinary Lutzville	5	-24.984	29.28734
Culinary Marble Hall	190	-25.723467	28.312979
Culinary Musina	11686	-22.36	30.03
Culinary Peanut Butter	1181	-26.165157	27.710828
Davita Crown Mines	0	-26.219954	27.999726
Enterprise Factory Germiston	3506	-26.216116	28.177045
Enterprise Factory Olifantsfontein	7548	-25.96751	28.23643
Enterprise Factory Polokwane	4181	-23.783853	29.509716
HPCB Isando	731	-26.13915	28.20068
JBF Ndabeni	67	-33.93	18.5
Jungle Maitland	2824.3	-33.926385	18.487971
King Food Potchefstroom	15691	-26.71453	27.097048
L&AF Ashton West/ Ashton East	25421	-33.892512	18.630438
Milling Pietermaritzburg	100	-33.834813	20.052716
Milling Bellvile	159	-27.992697	27.016595
Milling Henneman	125	-29.596794	30.406077
Milling Randfontein	235	-26.165157	27.710828
Pasta Isando	2543	-26.14389	28.20716
S,T&B Roodekop	2143	-26.302204	28.192286
S,T&B Candy & Liquorice	11115	-29.940135	30.959193
S,T&B Chocolate	0	-29.935503	30.976399
S,T&B Mallows & Jellies	5222	-29.795513	30.829674
Tastic Rice Mobeni	358	-29.930915	30.964084

Final Summary Carbon footprint 2018 For submission 17052019.xlsx Carbon Data Scope 1 2 3.xlsx

C-AC7.4/C-FB7.4/C-PF7.4

(C-AC7.4/C-FB7.4/C-PF7.4) Do you include emissions pertaining to your business activity(ies) in your direct operations as part of your global gross Scope 1 figure?

Yes

C-AC7.4b/C-FB7.4b/C-PF7.4b

(C-AC7.4b/C-FB7.4b/C-PF7.4b) Report the Scope 1 emissions pertaining to your business activity(ies) and explain any exclusions. If applicable, disaggregate your agricultural/forestry by GHG emissions category.

Activity

Processing/Manufacturing

Emissions category

<Not Applicable>

Emissions (metric tons CO2e)

208725.23

Methodology

Default emissions factor

Please explain

Exclusion of farming / agricultural areas - part of sourcing.

C7.5

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

	· · ·	based (metric tons	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
South Africa	312435.9		
Cameroon	1293.02		

C7.6

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

By business division

By facility

C7.6a

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

Business division	Scope 2, location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Consumer. This division consist of the following manufacturing facilities: • Beverages • Culinary • HPCB • Snacks & Treats • VAMP	132151.95	
Grains. This division consist of the following manufacturing facilities: • Albany • Jungle • King Food • Mills • Pasta • Tastic	163447.58	
International. This division consist of the following manufacturing facilities: • Chococam • Davita • Langerberg and Ashton Foods	18129.39	

C7.6b

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

Facility	Scope 2 location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Albany Bellville	7068	
Albany Germiston	13041.18	
Albany Maitland	382.13	
Albany Margate	1148.78	
Albany Mobeni	6751.28	
Albany Pietermaritzburg	7200.78	
Albany Pretoria	7190	
Albany Randfontein	4961.64	
Albany Sasolburg	2335.11	
Albany Secunda	4820.62	
Albany Virginia	2685.93	
Albany Manna	2148	
Chococam Douala	1293.02	
Culinary Jam Paarl	4701.64	
Culinary Boksburg	17165.35	
Culinary Lutzville	192.19	
Culinary Marble Hall	475.39	
Culinary Musina	2078.5	
Culinary Peanut Butter	946	
Davita Crown Mines	2171.57	
Enterprise Factory Germiston	11740.68	
Enterprise Factory Olifantsfontein	7242.86	
Enterprise Factory Polokwane	13186.85	
HPCB Isando	4780.56	
JBF Ndabeni	14432.7	
Jungle Maitland	6001.4	
King Foods Potchefstroom	13118.95	
L&AF Ashton West/ Ashton East	14664.79	
Milling Pietermaritzburg	19075.3	
Milling Bellvile	6271.4	
Milling Henneman	17576.66	
Milling Randfontein	26279.96	
Pasta Isando	10345.4	
S,T&B Roodekop	8184.69	
S,T&B Candy & Liquorice	12052.92	
S,T&B Chocolate	14319	
S,T&B Mallows & Jellies	21596.68	

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?

Decreased

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	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	0	No change		No t applicable
Other emissions reduction activities	54968	Please select		Energy efficiency initiatives; Business interruptions; Change in Electricity purchases from Eskom ; use of peach / appricotpip plus husks for boiler fuel compliment
Divestment	0	Please select		HACO had not been included in last years submission as such there is no difference in the numbers reported to date.
Acquisitions	0	No change		No new acquisitions made in this reporting period
Mergers	0	No change		Not applicable
Change in output	0	No change		Business disruptions included in the figure reported above
Change in methodology	0	No change		No changes in methodology in-between the reporting periods
Change in boundary	0	No change		No changes in boundary
Change in physical operating conditions	0	No change		Not applicable as operating condition changes were accounted for in the number indicated above
Unidentified	0	No change		Not applicable
Other	0	No change		Nothing additional has been identified

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?

Location-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy? More than 5% but less than or equal to 10%

C8.2

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

	Indicate whether your organization undertakes this energy-related activity
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	Yes
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

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 MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)			17422216.74
Consumption of purchased or acquired electricity	<not applicable=""></not>			314631.68
Consumption of purchased or acquired heat	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	<not Applicable></not
Consumption of purchased or acquired steam	<not applicable=""></not>			80999.78
Consumption of purchased or acquired cooling	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	<not Applicable></not
Consumption of self-generated non-fuel renewable energy	<not applicable=""></not>		<not applicable=""></not>	0
Total energy consumption	<not applicable=""></not>			17817848.2

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	Yes
Consumption of fuel for the generation of cooling	Yes
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.

Fuels (excluding feedstocks)

Coal

Heating value LHV (lower heating value)

Total fuel MWh consumed by the organization 413781.55

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self-generation of cooling

0

MWh fuel consumed for self-cogeneration or self-trigeneration

<Not Applicable>

Comment

For the manufacturing operations, we use coal on the boilers which makes up our steam systems and heat generation based on the process need

Fuels (excluding feedstocks) Liquefied Petroleum Gas (LPG)

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

6353.24

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self-generation of cooling

0

MWh fuel consumed for self-cogeneration or self-trigeneration

<Not Applicable>

Comment

LPG use is mainly for the FLT which are used in Logistics (Inbound and Outbound), Manufacturing facilities and also in Engineering workshops

Fuels (excluding feedstocks)

Natural Gas

Heating value LHV (lower heating value)

Total fuel MWh consumed by the organization

144011.11

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam 0

MWh fuel consumed for self-generation of cooling

MWh fuel consumed for self-cogeneration or self-trigeneration <Not Applicable>

Comment

0

0

0

0

0

0

0

0

Natural gas used on Boilers (Personal Care and Beverages) plus also on the Bakery Ovens

Fuels (excluding feedstocks) Diesel **Heating value** LHV (lower heating value) Total fuel MWh consumed by the organization 4018.72 MWh fuel consumed for self-generation of electricity MWh fuel consumed for self-generation of heat MWh fuel consumed for self-generation of steam MWh fuel consumed for self-generation of cooling MWh fuel consumed for self-cogeneration or self-trigeneration <Not Applicable> Comment Used on the Generators which act as back-up power supply in the factories for critical process and packaging areas in Manufacturing Fuels (excluding feedstocks) Other, please specify (Parraffin) **Heating value** LHV (lower heating value) Total fuel MWh consumed by the organization 17604.26 MWh fuel consumed for self-generation of electricity MWh fuel consumed for self-generation of heat MWh fuel consumed for self-generation of steam MWh fuel consumed for self-generation of cooling MWh fuel consumed for self-cogeneration or self-trigeneration <Not Applicable> Comment Also utilized in the Bakeries for the Ovens Fuels (excluding feedstocks) Other, please specify (Poly Fuel) **Heating value** LHV (lower heating value)

Total fuel MWh consumed by the organization 25170.18

MWh fuel consumed for self-generation of electricity

0

 MWh fuel consumed for self-generation of heat
 0

 MWh fuel consumed for self-generation of steam
 0

 MWh fuel consumed for self-generation of cooling
 0

 MWh fuel consumed for self-generation of steam
 0

 MWh fuel consumed for self-generation of self-trigeneration
 0

 MWh fuel consumed for self-cogeneration or self-trigeneration
 0

 Vent Applicable>
 Comment

 Used for the Boilers and some Bakery operations
 0

(C8.2d) List the average emission factors of the fuels reported in C8.2c.

Coal

Emission factor

2458

Unit

kg CO2e per metric ton

Emission factor source

The Green House Gas Protocol: Emission Factors from Cross Sector Tool (2015).

Comment

Diesel

Emission factor 3205

Unit

kg CO2e per metric ton

Emission factor source

The Green House Gas Protocol: Emission Factors from Cross Sector Tool (2015).

Comment

Liquefied Petroleum Gas (LPG)

Emission factor 2993

Unit kg CO2e per metric ton

Emission factor source

The Green House Gas Protocol: Emission Factors from Cross Sector Tool (2015).

Comment

Natural Gas

Emission factor 56267

Unit kg CO2e per metric ton

Emission factor source

The Green House Gas Protocol: Emission Factors from Cross Sector Tool (2015).

Comment

Other

Emission factor 3168

Unit

kg CO2e per metric ton

Emission factor source

The Green House Gas Protocol: Emission Factors from Cross Sector Tool (2015).

Comment

Paraffin emission factor.

C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Generation that is consumed by the organization (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity		314631.68
Heat		
Steam		80999.78
Cooling		

C8.2f

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

Basis for applying a low-carbon emission factor

No purchases or generation of low-carbon electricity, heat, steam or cooling accounted with a low-carbon emission factor

Low-carbon technology type <Not Applicable>

Region of consumption of low-carbon electricity, heat, steam or cooling <Not Applicable>

MWh consumed associated with low-carbon electricity, heat, steam or cooling <Not Applicable>

Emission factor (in units of metric tons CO2e per MWh) <Not Applicable>

Comment

Figures reported are location based

C9. Additional metrics

C9.1

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

Description Waste

Metric value 2503

Metric numerator Tons of waste reported in FY18

Metric denominator (intensity metric only)

% change from previous year 27.32

Direction of change Decreased

Please explain

Waste minimisation involves a range of straightforward methods to 'design-out' waste from a project and limit waste arising during the construction phase. Waste management then involves identifying potential waste streams, setting target recovery rates and managing the process to ensure that these targets are met. Opportunities to reduce waste exist throughout a project, specifically in design, procurement and logistics. Underpinning all of these is a need for effective communication. We partner with industry experts to find ways to reduce, reuse and recycle waste in our operations. This helps to lower CO2 emissions; reduce material and disposal costs through a reduction in the materials ordered and waste taken to landfill; increase competitive advantage through differentiation;

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 and/or Scope 2 emissions and attach the relevant statements.

Scope 1

Verification or assurance cycle in place

Annual process

Status in the current reporting year Underway but not complete for current reporting year – first year it has taken place

Type of verification or assurance

Third party verification/assurance underway

Attach the statement

Tiger Brands_CFA Verification_Statement_Jan-Dec2018.pdf Tiger Brands_CFA Verification_Report_Jan-Dec2018.pdf

Pagel section reference Please see pages 4 to 15 in report document.

Relevant standard Verification as part of Carbon Trust standard certification

Proportion of reported emissions verified (%) 100

Scope 2 location-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year Underway but not complete for reporting year-previous statement of process attached

Type of verification or assurance

Third party verification/assurance underway

Attach the statement

Tiger Brands_CFA Verification_Statement_Jan-Dec2018.pdf Tiger Brands_CFA Verification_Report_Jan-Dec2018.pdf

Page/ section reference Please see pages 4 to 15 in report document.

Relevant standard Verification as part of Carbon Trust standard certification

Proportion of reported emissions verified (%) 100

C10.1b

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

Scope Scope 3- at least one applicable category

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Underway but not complete for reporting year - previous statement of process attached

Attach the statement

Tiger Brands_CFA Verification_Statement_Jan-Dec2018.pdf Tiger Brands_CFA Verification_Report_Jan-Dec2018.pdf

Page/section reference

Please see pages 4 to 15 in report document.

Relevant standard

Verification as part of Carbon Trust standard certification

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
C6. Emissions data	Product footprint verification		The life cycle analysis conducted for our key SKU e.g. Bread, KOO Beans, VAMP selected products, Chocolates, Cocoa, Purity variants in Jars, Sorghum Beer.

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)? No, but we anticipate being regulated in the next three years

C11.1d

(C11.1d) What is your strategy for complying with the systems in which you participate or anticipate participating?

The carbon Tax Bill has been implemented from 1 June 2019. Tiger Brands will be looking at projects to reduce the carbon emissions produced at the facilities. The facilities are already budgeting the tax they will be liable to pay and this has been included in the new budget period.

Tiger Brand has reported on its GHG emissions and has registered with the DEA as per the NEMA-AQA requirements

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period? 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.

Objective for implementing an internal carbon price

Navigate GHG regulations Change internal behavior Drive energy efficiency Drive low-carbon investment Identify and seize low-carbon opportunities Supplier engagement

GHG Scope

Scope 1

Application

The company has adopted the proposed worst case scenario of Carbon Tax to be introduced without applying any threshold to the R120.00 per ton of CO2 : i) Scope 1 ii) Tiger Brands rationale for employing a rate of R120.00 for the internal price of carbon is related to aligning with the fee initially set by the Government of South Africa. Discussions, between government and businesses, with regards to establishing an appropriate framework (Taxing) is currently in progress. Tiger Brands will continue to utilise the R120.00 rate until all concerns aligned to all parties (government and business) have been resolved. iii) R120.00 per ton of carbon emissions released is the rate that is charged to all Scope 1 emissions emitted from facilities within the borders of South Africa. iv) Variances in prices over time will be considered once the framework is formalised. v) Risk and Sustainability Committee

Actual price(s) used (Currency /metric ton)

120

Variance of price(s) used

Variances in prices over time will be considered once the framework is formalised.

Type of internal carbon price Internal fee

Impact & implication

Carbon Tax could act as a barrier to industrial and commercial progress. A country which is particularly dependant on fossil-fuels for its generation of energy, it is believed that South African companies will find it difficult to influence reductions in emissions. Companies with carbon-intensive operations, products or supply chains are likely to be concerned about their ability to compete against lower carbon sector peers in South Africa, or against competitors in countries that do not price carbon yet. This could limit their ability to pass on some or all of the tax to business customers or consumers.

C12. Engagement

C12.1

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

Yes, our suppliers

Yes, our customers

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 behavior)

Details of engagement

Collect climate change and carbon information at least annually from suppliers

% of suppliers by number

20

% total procurement spend (direct and indirect)

45

% Scope 3 emissions as reported in C6.5

65

Rationale for the coverage of your engagement

The engagement is based on risk exposure and business continuity requirements. The other driver is Investor requirements, legislation updates and also industry lobbying for policy development.

Impact of engagement, including measures of success

This would active engagement on how to be compliant and also to look at ways of being innovative in our operations in order to better improve the current performance. A key one has also been the collaboration realised through CSIR, NBI, CGSA, SWPN, Govt. Relations, UNIDO and Manufacturing Circle with multiple external and global parties has been the most valuable in this fiscal year.

Comment

No additional comment

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

Type of engagement

Education/information sharing

Details of engagement

Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services

% of customers by number

5

% Scope 3 emissions as reported in C6.5

10

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

Through the Tiger Brands Foundation and feeding schemes that are delivered through the partner schools, there are numerous awareness campaigns and educational sessions delivered where we educate the consumers and customers on our products and how they can be effectively utilized in order to reduce environmental impacts

Impact of engagement, including measures of success

Recycling initiatives - post consumer packaging recovery e.g. tins, glass and paper packaging - tons collected Educational Sessions - headcount impact

Type of engagement

Collaboration & innovation

Details of engagement

Run a campaign to encourage innovation to reduce climate change impacts

% of customers by number 10

% Scope 3 emissions as reported in C6.5

5

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

Understanding of customer expectations and how these can be met through the production innovation - NPD Process inputs; Consumer Insights; Light weighting of packing; Alternative packaging use and reuse of the packaging post consumption of the product

Impact of engagement, including measures of success

Change in behaviour of the customers. Key packaging suppliers have been requested to start measuring their Scope 1 CO2e emissions and partner with us on customer / consumer behaviour change initiatives. We have also engaged them on energy reduction strategies, re-use opportunities as well as recycling – these strategic shifts create an environment for change and innovation of packaging.

C12.1c

• **Resource efficiency cleaner production (RECP)** – RECP expert level program from NCPC through CSIR is rolled out to drive (i) optimisation of productive use of natural resources – materials, energy and water; (ii) minimising the impact to the environment and nature; (iii) capability building to drive minimal exposure and risk to people and communities; (iv) waste reduction and identification of alternative use of waste streams to avoid the use of landfill for waste disposal.

• **Reduction in energy consumption and energy savings delivery** – through the NCPC-SA developmental programs, capability building was delivered at Randfontein Milling, Mayonnaise Unit, King Food, Snacks & Treats (Jacobs site) and Albany Germiston. The sites are working on energy savings projects.

• Waste stream mapping and waste reduction assessments - Conducting operational waste assessments for (I) identification and quantification of major waste and effluent arising from the production processes; (II) carrying out basic process mapping to determine associated volumes and costs for different waste types; and (III) identifying opportunities to reduce waste at source and identify possible alternate use of waste by other entities (waste symbiosis).

C-AC12.2/C-FB12.2/C-PF12.2

(C-AC12.2/C-FB12.2/C-PF12.2) Do you encourage your suppliers to undertake any agricultural or forest management practices with climate change mitigation and/or adaptation benefits? No

C-AC12.2c/C-FB12.2c/C-PF12.2c

(C-AC12.2c/C-FB12.2c/C-PF12.2c) Why do you not encourage your suppliers to undertake any agricultural/forest management practices with climate change mitigation and/or adaptation benefits?

	Primary reason	Please explain
Row	Lack of internal	We try to influence the farmers through the Agriculturists that work for Tiger. They provide the seedlings and support the farmers to
1	resources	increase the product yields and follow good farming practices

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

Direct engagement with policy makers Trade associations

C12.3a

(C12.3a) On what issues have you been engaging directly with policy makers?

Focus of legislation		Details of engagement	Proposed legislative solution
Carbon tax	Support with minor exceptions	To obtain the appropriate costing model for the carbon tax implications going forward.	Implementation of the Carbon Tax with exceptions due to a lack of clarity on the framework to be used.
Mandatory carbon reporting	Support	To get organisations to voluntarily report on their carbon emissions based on the nature of their operations.	Further engagement between DEA, Business Organisations and Legal advisory boards on a suitable reporting framework.
Energy efficiency	Support	The need to look at Energy Management / Efficiency projects being delivered from business units. Partnership with the CSIR -NCPC on the roll out of the RECP Programme at site level. Development and ongoing support by UNIDO for EnMS Programs in manufacturing / supply chain organisations.	Accept Energy Efficiency legislated initiatives
Other, please specify (Green Economy Document)	Support	To assist government with regards to setting up parameters that will promote a greener economy in South Africa	Supported
Other, please specify (National Climate Action Plan)	Support	To assist government in drafting a plan of action to mitigate all the risks associated with climate change	Participative Associate Member
Other, please specify (Waste Act)		Pricing Strategy Amendment - To provide assistance with waste management in order to protect health and the environment by providing reasonable measures for the prevention of pollution and ecological degradation and for securing ecologically sustainable development	Ongoing engagement and support for changes pre- empted
Other, please specify (Pesticide Policy)	Support Support To provide a solution or a Plan of Action in regards to mitigating risks involved with Pesticides which impact the farming aspect of the business.		Accept
Other, please specify (Air Quality Act)	Support	To provide input on air quality regulation in order to protect the environment by providing reasonable measures for the prevention of pollution and ecological degradation and for securing ecologically sustainable development while promoting justifiable economic and social development; to provide for national norms and standards regulating air quality monitoring, management and control.	Accept proposed changes
Adaptation or resilience	Undecided Looking at actions taken to counteract new or changing environmental challenges and reduce the vulnerability of human systems to the effects of climate change. Based on Agriculture and the farming partnerships we have with the DAFF department, we are working on adjustments through climate planning as well as autonomous reactions by individuals and public bodies with the farmers and Govt. representatives. As Tiger Brands we are conscious that the policy implications or adaptation relate to the specific risks that climate change poses to an area or sector and the practical steps needed to reduce those risks. The environmental impact of increases in heavy rain, for example, will not affect settlements on higher ground in the same way as it does those on flood plains. Different adaptation, and policy, responses are therefore required for different areas.		Accept

C12.3b

C12.3c

(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.

Trade association

Milling Association South Africa

Is your position on climate change consistent with theirs? Consistent

Please explain the trade association's position Framework for Crop Protection Regulatory Harmonization;

How have you influenced, or are you attempting to influence their position?

Yes - as an organisation we work closely with farmers to educate them on the need for crop rotation and how it helps to reduce impact to soil erosion

Trade association

NBI

Is your position on climate change consistent with theirs? Consistent

Please explain the trade association's position

To provide leadership to assist business in driving down GHG emissions and impacts of climate change. Be a thought leader with climate change.

How have you influenced, or are you attempting to influence their position?

We agree with the position and participate in debates and discussion sessions with NBI and other stakeholders to influence legislative policy and sector interpretations of the requirements.

Trade association

MLFB

Is your position on climate change consistent with theirs? Consistent

Please explain the trade association's position

Reduce GHG emissions by focusing on multi-layer plastics and technologies that can be developed to recycle and reduce multilayer plastics that end up on landfills.

How have you influenced, or are you attempting to influence their position?

Tiger has been a founding member and as such has helped to develop the required vision and focus areas for the foundation

Trade association

Manufacturing Circle

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

Provide and create mitigation plans in regards to problems experienced through load and water shedding. Municipalities and business engagement is key to resolve issues collectively

How have you influenced, or are you attempting to influence their position?

Tiger has been a founding member and as such has helped to develop the required vision and focus areas for the foundation

Trade association

SAAPA

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

To understand and provide risks within the agricultural space

How have you influenced, or are you attempting to influence their position?

Provide solution and mitigation plans in relation to the agriculture space. To also understand what are the possible risks associated with climate change

Trade association

BLSA

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

Discuss issues and risks associated with climate change and how they impact the business.

How have you influenced, or are you attempting to influence their position?

Provide and discuss appropriate solutions which need businesses can adapt in their respective strategies to mitigate climate risks changes

Trade association

CGCSA

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

Discuss issues and risks associated with climate change and how it impacts the customer

How have you influenced, or are you attempting to influence their position?

Provide and discuss methods to reduce the costs associated to mitigate the increase of products for the end user.

Trade association

BUSA

Is your position on climate change consistent with theirs? Mixed

Please explain the trade association's position

Discuss issues and risks which are involved in conducting business within the context of South Africa. As a result engage necessary stakeholder as a collective in terms of how we need to resolve them as a unit

How have you influenced, or are you attempting to influence their position?

Create and provide all necessary stakeholders with the appropriate solutions that can help businesses function well within South Africa

C12.3f

(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

The Tiger Brands environmental strategy is driven centrally to ensure alignment of approach and standardization across the group. This central function is responsible for linking direct and indirect activities that influence policy to the Tiger Brands climate change strategy. Further, the Risk and Sustainability board subcommittee is accountable for ensuring that all adopted policies are consistent with the climate change strategy.

The central sustainability team review each business unit's strategy and progress against their particular strategy {including the initiatives undertaken to address initially identified gaps} and the scorecard on a quarterly basis to ensure that the strategy is implemented in a consistent way across the organisation.

Through the Stakeholder Engagement internal department, we have representatives who engage with Government, Regulators, Industry Bodies and Business Partners on policy issues impacting the business including climate-related issues. The various operating unit representatives meet on a regular basis with their associations to debate and give recommendations on various topics to ensure sustainability in their business models. Feedback on issues is reported to the Risk and SET Committees. This is further shared with the business leaders who compile the risk registers and the business continuity plans

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, in line with the CDSB framework (as amended to incorporate the TCFD recommendations)

Status Complete

Attach the document

RISK WKSHP - CDP.pdf Risk-and-Sustainability-Committee-Terms-of-Reference.pdf

Page/Section reference

https://www.tigerbrands-online.co.za/reports/ir-2018/sd/index.php https://www.tigerbrands-online.co.za/reports/ir-2018/sd/environmental-sustainability.php https://www.tigerbrands-online.co.za/reports/ir-2018/sd/performance-review.php https://www.tigerbrands-online.co.za/reports/ir-2018/sd/our-communities.php

Content elements

Governance Strategy Risks & opportunities

Comment

Risk Committee terms of reference - Governance Environmental Sustainability summary highlights and strategic framework

C14. 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.

Additional Information supplied includes - Scenario of Carbon Tax implications; example of RECP Assessment report for one of the facilities done in 2018; confirmation of GHG Emissions submission to DEA Tiger Brands Submission.pdf Carbon Budget Calc.xlsx RECP Mayo Plant 12 May2019.pdf

C14.1

(C14.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	CHIEF SUPPLY CHAIN OFFICER RISK & SUSTAINABILITY DIRECTOR	Other C-Suite Officer

Submit your response

In which language are you submitting your response? English

Please confirm how your response should be handled by CDP

	Public or Non-Public Submission	I am submitting to	
I am submitting my response	Public	Investors	

Please confirm below

I have read and accept the applicable Terms