

C0. Introduction

C0.1

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

Sasol is an international integrated chemicals and energy company, proudly rooted in our South African heritage, delivering superior value to our stakeholders. In South Africa, in addition to our coal to liquids and chemicals and our gas to chemicals facilities, we also refine imported crude oil and retail liquid fuels through our network. We also supply fuels to other licensed wholesalers in the region. We have chemical manufacturing and marketing operations in South Africa, Europe, the Middle East, Asia and the Americas. Climate change potentially poses various risks to our business. These risks include meeting anticipated legislative and policy requirements, increasing customer and investor pressure to reduce emissions and adapting to its potential physical impacts. Identifying appropriate responses that balance the needs for economic development, job creation, energy security, sustainability and emission reductions represent one of the greatest challenges to our generation. Sasol supports an international agreement that defines how countries will share efforts to reduce GHG emissions, in line with the principle of common but differentiated responsibilities. As a South African based company, we are of the view that an agreement that provides assurance for all can only be delivered through an international multilateral rule based process such as the United Nations Framework Convention on Climate Change (UNFCCC) i.e. the Paris Agreement (COP 21).

In assessing Sasol's responses to this questionnaire, it is important to note that Sasol's primary disclosure is through its annual suite of reporting publications which can be accessed on the following website www.sasol.com. These documents cover climate change considerations and its impact on Sasol's businesses and strategy and the related risk management and governance processes in a holistic way which may not be covered in the same way by the responses to this questionnaire. The prompts in the questionnaire, especially in so far as the risk identifiers, time horizons, likelihood and magnitude of impact are concerned, differ in some aspects from our internal approach. We have used best efforts in responding to these questions in alignment with our internal approach. For instance, we have reflected the financial impact in accordance with what we believe the range could be, consistent with the application of our own risk matrixes for purposes of assessing significance. Lastly, it is important to note that we are continuously refining our approach through scenario work to inform the robustness testing of our strategy and associated mitigation and adaptation responses.

C0.2

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

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Row 1	July 1 2016	June 30 2017	No	<Not Applicable>
Row 2	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Row 3	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Row 4	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>

C0.3

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

China
Germany
Italy
Mozambique
South Africa
United States of America

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-CH0.7

(C-CH0.7) Which part of the chemicals value chain does your organization operate in?

Row 1

Bulk organic chemicals

Lower Olefins (cracking)
Aromatics
Ethylene Oxide & Ethylene glycol
Ethanol
Methanol
Polymers

Bulk inorganic chemicals

Ammonia
Fertilizers
Nitric acid
Chlorine and Sodium hydroxide
Carbon black
Hydrogen
Oxygen
Other industrial gasses

Other chemicals

Specialty chemicals
Specialty organic chemicals
Other, please specify (• Chemicals and Fuels)

C-OG0.7

(C-OG0.7) Which part of the oil and gas value chain and other areas does your organization operate in?

Row 1

Oil and gas value chain

- Upstream
- Downstream
- Chemicals

Other divisions

- Coal mining

C1. Governance

C1.1

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

Yes

C1.1a

(C1.1a) Identify the position(s) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Board/Executive board	The Sasol Limited Board and its Committees provides oversight of its risk management activities and considers the top risks. Climate change has been identified as one of the top risks for the group and as such the issue of climate change is addressed at this level. In addition, Sasol has appointed a new non-executive board member with sustainability and climate change experience to enhance the Board's oversight role in this regard.

C1.1b

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

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – all meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Setting performance objectives Monitoring implementation and performance of objectives Overseeing major capital expenditures, acquisitions and divestitures Monitoring and overseeing progress against goals and targets for addressing climate-related issues	The Sasol Limited Board including its committees provides oversight of its risk management activities and considers the top risks which includes climate change. In October 2017, Sasol approved the progressive advancement of Sasol specific climate change disclosure objectives aligned to the Task Force for Climate-Related Financial Disclosure (TCFD) recommendations. These disclosures support Sasol in providing the necessary assurances on its management of climate change as a material matter and top risk event for the Company. Climate change management, being a top risk for the company, is reported to the Board with oversight provided in the context of the long term strategy and organisational resilience and consideration in terms of: <ul style="list-style-type: none"> • Determining and setting the requirements for Sasol as a responsible corporate citizen, which includes assessing and responsibly responding to the negative consequences of Sasol's activities and outputs in terms of economy, society and the environment in which it operates and the Capitals it uses and affects; and • Setting direction on Sasol's risk management and strategy, including taking account of risks and opportunities that the company may be exposed to.

C1.2

(C1.2) Below board-level, provide the highest-level management 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
Chief Executive Officer (CEO)	Both assessing and managing climate-related risks and opportunities	More frequently than quarterly
Other committee, please specify (Group Executive Committee)	Both assessing and managing climate-related risks and opportunities	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.

Accountability for our response to the climate change challenge rests with Sasol's Group Executive Committee (GEC), which receives advice and assistance from various GEC subcommittees, specialist committees, functions and subject matter experts. The GEC, comprising of Sasol's executive management (Executive Vice Presidents) and co-chaired by the Joint Presidents and Joint Chief Executive Officers, guides

environmental and climate change management throughout the group and coordinates development of the group's objectives, targets and projects in this area. Formalised governance structures are in place to address climate change challenges facing the group including a newly established Climate Change and Environmental Policy Committee (CCEP). A dedicated climate change team reporting to the CCEP focuses on developing a coordinated internal approach to climate change and to align external communication, stakeholder engagement and regulatory responses. The Executive Vice President: Operations at Sasol, is the chair of the CCEP, with the Senior Vice President for Legal, Intellectual Property and Regulatory Services, leading the climate change team. In addition, the CCEP ensures our response to climate change is integrated with our core strategy, and co-ordinates our engagement with government and other stakeholders on regulatory and related climate change developments. The CCEP which comprises cross-functional team members meets monthly and is attended by EVPs and other Senior Vice Presidents, Vice Presidents and respective specialists. Group Risk and SHE remains accountable for specialist advice on GHG data management, setting of targets and reporting performance against targets. In addition, an Investment Committee informs our strategy and investment decisions.

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.

Who is entitled to benefit from these incentives?

Chief Executive Officer (CEO)

Types of incentives

Monetary reward

Activity incentivized

Efficiency target

Comment

A single Short-Term Incentive (STI) structure applies to all employees globally including the Joint CEOs. The STI includes a target weighting for Safety, Health and Environment, of which 3.4% applies to the achievement of the energy efficiency target.

Who is entitled to benefit from these incentives?

Corporate executive team

Types of incentives

Monetary reward

Activity incentivized

Energy reduction target

Comment

Performance against SHE and climate change indicators. Specific members of the executive management are incentivised on management of climate change. For the CCEP chair, this is linked to performance of the CCEP, who in turn ensures that this performance indicator is addressed by the CCEP team members from both Group Strategy, Regulatory and the Risk and SHE function, including the VP: SHE Strategy and Sustainability and the SHE Policy and Sustainability Advisor. By including these measures in performance indicators, it is directly tied to a monetary reward system.

Who is entitled to benefit from these incentives?

Other, please specify (Climate Change Specialists and Managers)

Types of incentives

Other non-monetary reward

Activity incentivized

Other, please specify (Behavior change related indicator)

Comment

Sasol has specifically appointed a Principal SHE Policy and Sustainability Advisor as well as a Head of Air and GHG Emissions in the Risk and SHE Function who are incentivised to assist the organisation by creating an enabling environment (through development of procedures and processes) for Sasol to meet its GHG reduction objectives. These individuals report to the VP: SHE Strategy and Sustainability and the VP: SHE Enablement within the Risk and SHE function who in turn are incentivised around performance with respect to climate change. Another indicator that individuals are measured on is communication of climate change issues within the Group and specifically to Operating Model Entities (OMEs). The VP: Regulatory is also incentivised to meet climate change targets.

Who is entitled to benefit from these incentives?

Energy manager

Types of incentives

Monetary reward

Activity incentivized

Efficiency target

Comment

An assessment of delivery against Sasol's climate change commitments (specifically Energy Efficiency) forms part of the key performance indicators, personal appraisals and incentive schemes of relevant Sasol managers. For example at our operating facility in Secunda, operational managers have targets to achieve energy efficiency which is included in key performance indicators applicable to their areas of accountability. This is tracked quarterly.

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	0	5	
Medium-term	5	10	
Long-term	10	30	

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.

	Frequency of monitoring	How far into the future are risks considered?	Comment
Row 1	Six-monthly or more frequently	>6 years	Climate change risks are reported to the GEC, the Policy, Sustainability and Stakeholder Relations (PSSR), a GEC sub-committee and to the Safety, Social and Ethics Committee of the Sasol Board at least annually. These climate change risks, opportunities and performance are also publicly reported through our Annual Reports. Given that climate change is regarded as a group top risk and a material issue, enhanced engagements are ongoing with external stakeholders through the reporting process. In addition, as a requirement of the New York listing, Sasol is required to disclose information to the United States Securities and Exchange Commission, through the Form 20-F. This provides detail on material risks, including climate change directly to shareholders. On a regular basis, changes and/or developments in both the internal or external environment that impact each of the top risks are reviewed and an analysis of the risk is presented to the GEC, including through the Strategy process.

C2.2b

(C2.2b) Provide further details on your organization's process(es) for identifying and assessing climate-related risks.

Sasol has a comprehensive enterprise risk management (ERM) process in place, which focuses on all business-related risks, including climate change. The ERM process ensures that climate change risks are systematically identified, assessed and managed. Climate change related issues have been identified in this process as one of the top risks facing the organisation. The prompts in the questionnaire, especially in so far as the risk

identifiers, time horizons, likelihood and magnitude of impact are concerned, differ in some aspects from our internal approach. We have used best efforts in responding to these questions in alignment with our internal

approach. For instance, we have reflected the financial impact in accordance with what we believe the range could be, consistent with the application of our own risk matrixes for purposes of assessing significance. Lastly, it is important to note that we are continuously refining our approach through scenario work to inform the robustness testing of our strategy and associated mitigation and adaptation responses.

Sasol makes use of the bow-tie methodology for exploring, analysing and identifying controls for the climate change related risks. In this regard, we look at certain key undesirable events, associated with climate change,

and identify the causes and consequences associated with these for purposes of optimising our control regime from a preventative and corrective control identification point of view. We determine our Group top risks

through a review process that analyses the risks facing the Group and OMEs, in relation to Sasol's strategy, longer-term aspirations and top priorities, in the context of the internal and external environment.

Being a group top risk, climate change developments are monitored and tracked on at least a quarterly basis at a Group level, and daily at an operating compliance level. Climate change risks are focused on the short,

medium and long term and are reported to the relevant governance structures taking these timeframes and developments into account. Effectively managing our climate change related risks is an important part of our

commitment to long-term stakeholder value. It is our intention to measure and report against the risk, and we will present appropriate disclosure of the challenges faced. Sasol continues to refine and assess its risk

landscape on an annual basis taking developments in the internal and external environment into account.

Sasol's risk management approach delivers risk profiles at a Group and OME level. OMEs include our operating business units, regional operating hubs, strategic business units and functions. Sasol uses a standard risk matrix

to analyse, rank and prioritise climate change risks in terms of likelihood and potential impact. Our impact criteria includes both quantitative and qualitative impacts e.g. financial and reputational damage. As risks relates

to uncertainty, the quantitative impacts expressed are based on the potential and not the absolute impact of the risk occurring. The substantive financial impacts related to climate change risks are aligned with Sasol's risk

matrix, where potential substantive financial impact typically ranges from >ZAR 300 million to ZAR 4.5 billion. The assessment of climate change risks have been conducted utilising the Sasol's risk matrix and has been

aligned as far as reasonably possible to the CDP reporting requirements.

C2.2c

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

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Incoming and existing regulations relating to the Paris Agreement are addressed through Sasol's risk assessment process and developments are tracked as these laws may have a significant operational and financial impact on our operations. For example, our European operations are directly impacted by the EU ETS allowance process and any shortfall attracts potential financial liabilities. These risks are included as risk drivers in the climate change bow-tie risk process.
Emerging regulation	Relevant, always included	Sasol monitors all emerging legislation (including changes to current regulations) in the countries in which we operate. The draft Climate Change Bill in South Africa will be the first key piece of legislation aimed at developing a country specific climate change response. Sasol has utilised its opportunity to partake in the public commenting process and will closely monitor the finalisation and implementation of the Bill. Sasol has also recently commented on the draft Carbon Tax Bill and is busy participating in the Parliamentary process which is expected to reconvene in mid-August 2018.
Technology	Relevant, always included	There are limited technology options to affordably reduce carbon emissions as Secunda's GHG emissions, our largest emitter, are primarily process emissions. Sasol continuously monitors and tracks technology developments to inform the business strategy in order to reduce its carbon footprint. Technology risks are included as a risk driver in the climate change bow-tie risk process. Sasol has already made strides early on by introducing gas into our facilities, a key mitigation for our operations, which has significantly changed our emissions profile in Sasolburg and Secunda.
Legal	Relevant, always included	We consider legal risks from a climate change perspective in the climate change bow-tie risk process. We consider these risks relevant in the medium to long-term given the rise in litigation linked to specific climate change legislation.
Market	Relevant, always included	Changes in consumer behaviour, pressure from capital markets including societal pressure and community activism, together with increasing environmental awareness may impact Sasol's market access and product competitiveness, particularly in more mature regions such as Europe and North America. These risks are considered as a risk driver in the climate change bow-tie risk process and are relevant for Sasol's operations.
Reputation	Relevant, always included	Sasol supports enhanced climate change disclosure aligned to the TCFD recommendations in its financial filings amongst others and engages government departments and other key stakeholders on climate change mitigation policy, to build trust-based relationships and position Sasol as a credible stakeholder partner to strengthen our reputation. Reputational risks are considered as a risk driver in the climate change bow-tie risk process and are relevant considering Sasol's operations.
Acute physical	Relevant, always included	Increased severity of extreme weather events such as cyclones and floods are considered material for our business more specifically our North America Operations. As an example, hurricane Harvey (in August to September 2017) had a significant impact in the U.S. Gulf Coast oil industry. The Lake Charles Chemical Project suffered a schedule delay of approximately four weeks and additional costs of ~R1.7 billion.
Chronic physical	Relevant, always included	Changes in precipitation patterns as a result of climate change are considered as a risk for Sasol's value chain. The persistent drought in South Africa was declared a national state of disaster under the provisions of the Disaster Management Act. This poses a significant risk for water security. Sasol therefore considers induced changes in water availability in South Africa as a key driver in the climate change bow-tie assessment and a material issue.
Upstream	Relevant, always included	Sasol has an integrated value chain with upstream operating assets which include exploration for gas and coal mining activities. Sasol has just started a process to engage with upstream suppliers on climate change and the outcomes from this will be integrated into our processes.
Downstream	Relevant, always included	Sasol considers downstream to be customers and consumers. Changes in consumer behaviour, pressure from capital markets including societal pressure and community activism, together with increasing environmental awareness may impact Sasol's market access and product competitiveness, particularly in more mature regions such as Europe and North America. These risks are considered as a risk driver in the climate change bow-tie risk process and are relevant considering Sasol's operations.

C2.2d

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

Sasol has a Risk Policy in place. The policy speaks to risk and opportunity, strengthens the link between risk and strategy, provides emphasis on embedding risk management into key decision-making processes and requires assurance of effective risk management to the Sasol Limited Board. Sasol's ERM process ensures that climate change risks are systematically identified, assessed and managed. At a group executive level, the PSSR and the Safety, Social and Ethics Committees provides oversight of our risk management activities and considers Sasol's top risks that impact the group's ability to achieve its strategic objectives on a sustainable basis. Climate change related issues have been identified in this process as one of the top risks facing the organisation.

Through this process and the strategy development process, it is also recognised that climate change related impacts represents a potential opportunity to integrate lower carbon energy sources and efficiency improving technologies within our operations. Climate change risks and opportunities at the OME level (asset level) are identified through the prescribed risk management process, tracked and managed through SHE which include legal compliance audits, site improvement plans, emergency preparedness procedures and processes. In response to these risk and opportunity identification processes, Sasol continues to investigate available energy efficiency; carbon efficiency and carbon offset opportunities through its environmental project improvement roadmaps.

At a group level, group top risks and emerging risk themes are reported to the PSSR Committee as well as to Board Committees. At OME level, OME top risks are reported to the OME Executive Committee. Risks are reported at various levels to ensure appropriate attention to risk decision-making and oversight. Emphasis is placed on risks and opportunities that have a direct potential impact on income, expenditure and capital as these are the main drivers of the approved financial risk appetite and tolerance metrics, achievement of strategic objectives (medium-to-longer term), reputation and/or delivery on short-term business plans. Sasol has environmental incident and reporting processes in place at all our operations and daily OME leadership reviews in place to ensure response is effective and timeously.

For example, a transitional risk discussed at the highest levels within Sasol relates to carbon pricing. This risk is relevant for Sasol's South African operations where there is a potential carbon tax that may be implemented within the next year which will have a financial impact on Sasol. Physical risk relates to the impact of extreme weather events such as cyclones and floods specifically on our North America Operations. As an example, hurricane Harvey (in August to September 2017) had a significant impact in the U.S. Gulf Coast oil industry. The Lake Charles Chemical Project suffered a schedule delay of approximately four weeks and additional costs of approximately R1.7billion.

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) 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

Physical risk

Primary climate-related risk driver

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

Type of financial impact driver

Reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions)

Company- specific description

Assessments undertaken informed our climate change response and provides insights into the types and financial loss which arose due to extreme weather events over the past decade. The risk of flooding was noted as facing the Secunda operations in South Africa. Overall historical flooding events in Secunda point to the following risks: • Slowdowns and downtime (trips, reduction in gas loads) and subsequent production losses (at both Secunda and Sasolburg); • Wet coal and subsequent downtime within the plant; • Flooding of neighbouring streams; • Contamination of neighbouring streams and resulting non-compliance; • Reputational risk; • Community complaints; • Media attention; and • Increased water purchases. Further, we identified additional risks posed by rainfall to Sasol's activities, including: - In the past, excessive rainfall has led to flooding of sections of the EN1 highway in Mozambique, with negative consequences for the supply chain to and from the Central Processing Facility (CPF) in Mozambique. - Flooding in and around Vilanculos in 2012 resulted in a cholera outbreak close to the CPF; however this was controlled on site and did not affect staff or contractors. The assessment also analysed climate change projections for our operations in Sasolburg, Secunda, Mozambique, Houston and Lake Charles. Climate change models suggest that wet season (i.e. summer) rainfall could increase in the short to medium term in our Southern African operations, with potential implications for the existing flood risk in these areas. And hence it is expected that changes in precipitation patterns into the future may amplify the existing risk posed by flooding/ heavy rainfall to Sasol's operations.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Medium

Potential financial impact

331000000

Explanation of financial impact

Based on recorded incidents of production loss due to flooding and heavy rain, six events between 2004 – 2010 cost Sasol an estimated R300million - R362 million in lost production.

Management method

Sasol's central regime includes: - Ensuring maintenance plans and monitoring of systems to manage weather risk. - Adequate incorporation of weather risks in business unit risk registers. - Comparing facilities' operating envelopes with projected future climatic conditions. - Reviewing emergency preparedness procedures at the business unit level. - Revising operating philosophy of effluent dams; since the design to manage 1-in-50 year flood scenario was deemed no longer sufficient. Adaptation actions and measures to manage the current and future risk posed by rainfall and flooding, includes: - Engaging with other operations experiencing similar impacts; - Improving preparation procedures; - Improving recording and reporting around rainfall and flooding events to continually improve understanding of the risks; - Implementing low cost adaptation measures (including systematic improvement of maintenance efforts). A weather readiness guideline was developed and approved by the then Executive SHE Committee as a tool aimed to equip the OMEs to mitigate the risk associated with an extreme weather event. Sasol is advancing work to inform our adaptation strategy. The direct cost of the past assessments and risk analysis was approximately R950 000. There are also internal human resource, capital and maintenance costs associated with managing this risk not included in the figure below.

Cost of management

950000

Comment

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Physical risk

Primary climate-related risk driver

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

Type of financial impact driver

Reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions)

Company- specific description

Assessments undertaken informed our climate change response and provides insights into the types and financial loss which arose due to extreme weather events over the past decade. Extreme temperatures are regarded as a material risk at the Secunda and Sasolburg operations. The following site-specific risks impacts were noted: - Temperatures less than -6°C cause problems as the temperature design specification for the plant is -6°C to 36°C -stream traps have frozen historically resulting in downtime; and - Higher temperatures reduce the efficiency of the gas turbines by 15-20MW between winter and summer, which has economic consequences and increase the use of firewater to cool equipment. Extreme high temperatures as having adverse impacts on staff productivity (and can result in heat stress) in our Mozambique and Lake Charles operations and work outdoors is restricted in certain extremes. Climate change models suggest that summer temperatures are likely to increase across the sites assessed in the short term, which will amplify the risk posed by high temperatures.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Low

Potential financial impact

20000000

Explanation of financial impact

It has been estimated that Sasol incurred approximately R10 million to R30 million in production loss by FY 2012 as a result of extreme temperatures based on recorded historical incidents.

Management method

Adaptation efforts are focused on strengthening the resilience of infrastructure, improving emergency preparedness and increasing employee awareness around climate change issues. Further, our position in Southern Africa continue to be informed by the risk and vulnerability atlas (www.rvatlas.org) which provides a useful basis for assessing the risk and vulnerability of specific regions and sectors to change. As part of the central regime for management, low-cost adaptation measures and actions were identified to manage the risk of extreme temperatures, including: • Engaging with other operations experiencing similar impacts (lesson sharing); • Improving Preparation procedures (and putting in place procedures where they do not exist, including heat stress management plans); • Improving recording and reporting around extreme temperatures and their impacts to continually improve understanding of the risks; • A weather readiness guideline was developed and approved by the then Executive SHE Committee as a tool aimed to equip the Operations to mitigate the risk associated with an extreme weather event. We are advancing work to inform our adaptation strategy. The direct cost of the assessments and risk analysis was approximately R950 000. There are also internal human resource costs and capital and maintenance costs associated with managing this risk that are not included in this cost.

Cost of management

950000

Comment

Sasol is advancing work to inform our adaptation strategy. The direct cost of the assessments and risk analysis was approximately R950 000. There are also internal human resource costs and capital and maintenance costs associated with managing this risk that are not included in the figure below.

Identifier

Risk 3

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 driver

Reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions)

Company- specific description

Water is a critical feedstock for our business and many of our current or planned facilities are located in areas with water quantity, quality or delivery challenges. Water security has been identified as a Group top risk for Sasol and it is understood that the effects of climate change in the future may exacerbate this risk further, particularly for our South African operations. For example, in September 2016 due to drought conditions the Department of Water Affairs and Sanitation (DWS) imposed water restrictions on the Vaal River system (IRVS) users which resulted in Sasol Operations having to reduce potable water demand by 15%.

Time horizon

Long-term

Likelihood

Very unlikely

Magnitude of impact

Medium-high

Potential financial impact

800000000

Explanation of financial impact

Our South African operations is at greatest risk of water supply interruptions. These operations are integrated and a water supply interruption could result in a production interruption ultimately impacting turnover. A utility supply interruption (both electricity and water) could impact turnover of our South African Operations directly. Turnover in FY17 was R80 billion. If Sasol were to experience a river water supply interruption for a short period, of 1 to 2 weeks, planning could potentially absorb such an interruption. However if such an interruption persists for a longer period this could potentially have a direct impact on production hence impacting the turnover of our South African Operations. A 1% loss in production can potentially result in a R600 million to a R1 billion loss in turnover. Our SA operations however has not experienced a river water supply disruption in the past hence the probability of this risk materialising is small.

Management method

Sasol has been shaping water offsetting as an incentive-based partnership policy for consideration by the Department Water and Sanitation (DWS). We have been showcasing through a number of case studies that far greater water savings can be achieved by investing beyond the factory fence. In 2016 Sasol continued with its partnership with the Metsimaholo Local Municipality (MLM) in Sasolburg, in collaboration with Rand Water (as implementing agent), German Development Agency (GiZ) and the DWS. Sasol's investment in advanced pressure reduction assisted the municipality achieve a 23% (3.1 ML/day) saving on potable water demand in the greater Zamdela area in Sasolburg. The DWS contributed R4 million, Sasol R2.9 million and GiZ 60,000 Euros.

Cost of management

7830000

Comment

Identifier

Risk 4

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Physical risk

Primary climate-related risk driver

Acute: Increased severity of extreme weather events such as cyclones and floods

Type of financial impact driver

Reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions)

Company- specific description

Assessments undertaken informed our climate change response and provides insights into the types and financial loss which arose due to extreme weather events over the past decade. The risk of tornadoes was noted as a potential risk for the Sasolburg operation which is located within a tornado belt, although the plant has not been hit in the past. Further, Sasol Petroleum International's facility in Mozambique is at risk from cyclones which can result in landfalls in northern Mozambique on average every four years. Within Mozambique episodes of high storm activity reduce the ability of trucks to be able to deliver condensate to clients causing a condensate backlog with the risk of breaching client contracts. Cyclone Favio in 2007 caused infrastructural damage to the Central Processing Facility (CPF) and cost in the region of \$250 000. All non-essential expat personnel and families are evacuated from the plant during cyclone events (including near misses) which also represents a cost, but this has not been quantified. Hurricanes have affected our Houston and Lake Charles operations on a number of occasions. Hurricane Harvey (in August to September 2017) had a significant impact in the U.S. Gulf Coast oil industry. The Lake Charles Chemical Project suffered a construction schedule delay of approximately four weeks and additional costs of ~US\$130 million (~R1.7billion). Once the facility is complete further assessments will be undertaken as part of advancing our adaptation strategy.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Medium-high

Potential financial impact

1700000000

Explanation of financial impact

The Lake Charles Chemical Project suffered a schedule delay of approximately four weeks and additional costs of ~US\$130 million (~R1.7billion). There are probabilities for other major events for the next year but to date the impacts have been minor.

Management method

The risks associated with hurricanes and cyclones are well managed in our Houston office, Lake Charles and Mozambique operations using robust preparedness measures. Low cost adaptation measures and actions were identified to manage the risk, including: - Engaging with other operations experiencing similar impacts (lesson sharing); - Improving preparation procedures; - Improving recording and reporting around cyclone, hurricane and tornado events and their impacts to continually improve understanding of the risks; - Implement low-cost adaptation measures (including improving maintenance contracts systematically), - Continue to engage with government to feed into policy development process on a national level and to support development of adaptation interventions on a wider scale. Existing operations are built to withstand extreme weather conditions and through design measures new plants are also being built to withstand weather events. A weather readiness guideline was developed and approved by the Group Executive SHE Committee as a tool aimed to equip the Operations to mitigate the risk associated with an extreme weather event. We are advancing work to inform our adaptation strategy. The direct cost of the assessments and risk analysis was approximately R950 000. There are also internal human resource costs and capital and maintenance costs associated with managing this risk that are not included in this cost.

Cost of management

950000

Comment

Identifier

Risk 5

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Transition risk

Primary climate-related risk driver

Policy and legal: Increased pricing of GHG emissions

Type of financial impact driver

Policy and legal: Increased operating costs (e.g., higher compliance costs, increased insurance premiums)

Company- specific description

The Paris Agreement, a global climate agreement, was reached, to commit countries, including key role players to a lower carbon economy. Sasol's carbon footprint in South Africa is significant and the company is exposed to the introduction of stringent GHG pricing. In South Africa a domestic carbon tax is anticipated to be introduced from 2019 that is being driven independently by National Treasury. The Revised Carbon Tax Bill was released in December 2017. The tax is based on fossil fuel inputs and the use of approved methods stipulated in the National Greenhouse Gas Emission Reporting Regulations (NGERs) developed by the Department of Environmental Affairs (DEA). There are a number of transitional tax-free allowances provided. The proposed headline carbon tax is R120 per ton of CO₂e for emissions above the tax-free thresholds. At the same time the Department of Environmental Affairs is developing carbon budgets. The first phase of the carbon budgets (2016 – 2020) which is non-mandatory, albeit subject to government approval, is being used as a pilot phase to test the system and structures required to move to a mandatory phase from 2021. Currently, there is uncertainty on how the mandatory phase will be implemented. Uncertainty and therefore risk remains on how these limits as well as the carbon budget approach will influence Sasol's business for the subsequent phases. A substantial carbon tax may negatively impact free cash-flows generated from South African operations with limited opportunity to pass the cost through to our customers. There will likely be a capital layout for meeting stringent GHG budgets in South Africa.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

Medium-high

Potential financial impact

1350000000

Explanation of financial impact

Sasol's preliminary estimate is that the impact of the tax can range between about R 0.7 and R 2 billion pre-tax from FY19 per year with an escalation-based inflation.

Management method

Sasol supports the transition to a lower-carbon economy and has outlined several initiatives being undertaken by the group to align our business with such a shift. These include: • Continued engagement with relevant government departments through the Climate Change Working Team on mitigation policy. Sasol is committed to working with stakeholders in the countries where we operate to achieve optimum management solutions. We believe that business is part of the solution and that only through working with national and international stakeholders in developing climate change related policies will we achieve the required impetus and solutions. • Focused participation at international forums such as the UNFCCC, NY Climate Week and the Climate Summits to track international trends. • Investigating and implementing available energy and carbon efficiency and offset/budget trading potential opportunities through roadmap development. Sasol recently signed up to the EP100 initiative to further progress our energy efficiency efforts and also exploring options to integrate renewables into our facilities. Considering sustainable lower carbon technologies (gas monetisation options) in order to reduce carbon footprint. Sasol invests in lower carbon technologies and an example involves electricity generation using natural gas from Mozambique to generate 140MW of electricity in Sasolburg, a gas turbine in Secunda and gas engines in Mozambique.

Cost of management

3800000

Comment

A dedicated climate change management budget of R3.8 million was allocated in FY 2017 excluding the capital allocation budget.

Identifier

Risk 6

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Transition risk

Primary climate-related risk driver

Technology: Costs to transition to lower emissions technology

Type of financial impact driver

Technology: Costs to adopt/deploy new practices and processes

Company- specific description

The Paris Agreement, a global climate agreement, was reached, to commit countries, including key role players to a lower carbon

economy. Key processes in South Africa, especially coal gasification and combustion, result in relatively high carbon dioxide emissions. In South Africa a domestic carbon tax is proposed for introduction from 2019. In parallel the Department of Environmental Affairs is developing carbon budgets. The risk to Sasol is that a large portion of our GHG emissions are process emissions which are directly linked to the volume of production. As a result, the available mitigation technologies are limited given our past reductions and at high cost. This poses a risk to Sasol in meeting both voluntary and mandatory GHG targets in the long term, however Sasol remains compliant to all environmental regulations. Therefore Sasol's ability to develop and implement an appropriate climate change mitigation response poses a material transitional risk for our current business in South Africa. A medium to long-term option for Sasol to reduce these emissions is the further introduction of natural gas and implementation of Carbon Capture and Storage (CCS) which becomes even more costly within a complex and integrated process and integrating renewables. While there is more scope to reduce the balance of Sasol's emissions, projects associated with this reduction are capital intensive.

Time horizon

Long-term

Likelihood

More likely than not

Magnitude of impact

Medium-high

Potential financial impact

1350000000

Explanation of financial impact

This risk has been quantified based on the carbon tax liability and it is likely over time that the costs associated with the tax or other punitive measures will increase. Sasol's preliminary estimate is that the impact of the tax can range between about R 0.7 and R 2 billion pre-tax from FY19 per year with an escalation-based inflation.

Management method

We are focusing on a variety of measures that also involve the exploration of long-term technology solutions including outside the boundaries of our existing business portfolios. One of these solutions is CCS. We have resourced ourselves to monitor and influence CCS initiatives which includes representation, participation and engagement on various local and international bodies/platforms considering the sustainability and deployment of CCS. Sasol invested in Technology Centre Mongstad (TCM) in Norway between 2010 and 2017 where several completed test runs further informed our understanding of large scale capture of CO2. The South African Centre for Carbon Capture and Storage (SACCCS), of which Sasol is a founding member, is currently investigating the viability for geological storage of CO2 in South Africa. Natural gas is an essential feedstock for its operations in South Africa and is supplied by its operations in Southern Mozambique and is transported via a pipe line to its operations in Secunda and Sasolburg. Sasol has also completed work to secure additional gas as part of its license agreement in Mozambique and is primarily targeted to meet the in-country gas monetisation requirements. In addition we also acquired an additional exploration license in Mozambique. Should these activities be successful they may provide opportunities to prolong the supply of gas to its own facilities or else increase the supply of gas to the market and displace higher carbon sources.

Cost of management

3800000

Comment

A dedicated climate change management budget of R3.8 million was allocated in FY 2017, excluding the gas and CCS budget. Costs of mitigation include a 140MW natural gas plant at Sasolburg has been calculated at an estimated cost of R1.9 billion. Recent investments include gas engines in our Sasolburg, Secunda, and Mozambican operations.

Identifier

Risk 7

Where in the value chain does the risk driver occur?

Customer

Risk type

Transition risk

Primary climate-related risk driver

Reputation: Increased stakeholder concern or negative stakeholder feedback

Type of financial impact driver

Reputation: Reduced revenue from decreased demand for goods/services

Company- specific description

Environmental awareness, particularly in the climate change arena, has grown rapidly significantly as technological innovation continues to drive efficiency and disrupt business models. More stakeholders globally are now aware of climate change and

sustainability and have increased disclosure requirements. Some trends observed include: • Increased pressure on institutional investors to divest from fossil fuel (coal-based) companies and invest in sustainable businesses using alternative clean energy sources; • Socio-political drivers resulting in increased stricter legal regulation requiring entities to reduce their environmental footprint; • Increased demand for environmentally friendly products that use energy more efficiently and have a smaller environmental footprint; and • Increased activity and use of legal mechanisms by civil society, global influencers and activists calling on governments, industry and wider society to drive outcomes that create a better, sustainable environment for future generations. The emergence of these trends are playing out within the context of the Paris Agreement. These trends are relevant as there could be impacts on Sasol's reputation resulting in limited market access and the competitiveness of our products particularly in more mature environments such as Europe and North America. For example, we engage with our investors on climate change impact and product performance from our CTL process. We have aligned to the Task Force for Climate Related Financial Disclosures and recognise the need for increased transparency on climate change.

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

Medium-high

Potential financial impact

1250000000

Explanation of financial impact

This risk has been quantified by assuming that the operating profit of our Base Chemicals operations in Secunda, which is GHG intensive, will be eroded from anywhere between approximately R1 – 1.5 billion.

Management method

Sasol currently calculates the gate-to-gate carbon footprint of a number of its chemical products at its Sasolburg and Secunda operations. These carbon footprint numbers are reported to Sasol's customers when requested. Sasol has been consistently among the top performers in the JSE SRI and DJSI index. Sasol is committed to understanding and reporting on our sustainability performance and GHG emissions as well as responding to the CDP survey annually. This year Sasol adopted the TCFD and has appointed a climate champion on the Board. We undertake training and educating our staff on the importance of sustainability, providing the necessary systems and processes to report its sustainability data as well as providing sufficient human resource manpower at head office to compile its annual integrated and sustainability reports. Next year Sasol will updating its Climate Change Report which will provide further information on our scenario analysis, targets and governance approach.

Cost of management

3800000

Comment

A dedicated climate change budget has been allocated amounting to R3.8 million in FY 2017.

C2.4

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

Yes

C2.4a

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

Identifier

Opp1

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Energy source

Primary climate-related opportunity driver

Use of supportive policy incentives

Type of financial impact driver

Other, please specify (Tax incentives)

Company- specific description

There are a number of tax incentives, research and development incentives and government grants in the area of energy and climate change. The most relevant is the Section 12L Tax Incentive which is managed by the South Africa Department of Energy and provides tax reduction incentives for businesses to claim if they can show measurable and verifiable savings in all energy forms. The tax relief was recently increased to 95 cents deduction on taxable income per kilowatt-hour of energy saved – subject to all the conditions in the 12L regulations being met. Sasol Secunda Synfuels Operations, through its energy efficiency initiatives, and implementing the principles of ISO 50001, saved approximately 9 686 GWh (FY14 to FY17) of utility and process energy input, and was able to take full advantage of the Section 12L incentive. The Sasolburg combined savings (utility and process) through the implementation of capital projects were 1 484 GWh, and the 12L tax certificates were successfully issued for the financial years 2015 through to 2017. Currently there are eight registered energy efficiency initiatives with the South African National Energy Development Institute (SANEDI). The initiatives relates to assessments from 2014 to 2018. Eight SANEDI certificates to the value of R9,8bn have been issued and claimed in Sasol South Africa's tax returns to date.

Time horizon

Current

Likelihood

Virtually certain

Magnitude of impact

High

Potential financial impact

2500000000

Explanation of financial impact

In terms of Section 12L of the South Africa Income Tax Act, the above listed claims were verified by an independent Monitoring and Verification auditor, and a tax certificate was issued by SANEDI. These tax certificates, translated in shareholder value terms, after costs, resulted in an approximate savings of R 2.5 billion for Sasol.

Strategy to realize opportunity

Sasol is managing this opportunity through regular identification of energy efficiency projects. A selection of these projects have been identified as appropriate for the section 12L tax incentive. Ongoing efforts focusing on an energy improvement roadmap at all our operational sites, seeks to deliver sustained improvements in efficiency through low capital and operating cost initiatives. The energy efficiency improvement program is further complimented by the 'Best Practice Energy Efficiency Improvement Initiatives', examples of which include: steam trap maintenance, waste heat recovery and optimisation of operating philosophies. The cost to audit and verify the savings of a project vary according to project complexity but can typically account for 20% - 50% of the achieved savings for a single year. The cost of external services related to obtaining the incentive and Measurement and Verification amounted to R166 million.

Cost to realize opportunity

166000000

Comment

Identifier

Opp2

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Resilience

Primary climate-related opportunity driver

Other

Type of financial impact driver

Increased reliability of supply chain and ability to operate under various conditions

Company- specific description

As flooding and heavy rain occurrences are predicted to increase with climate change, more failures of community water systems can increasingly be expected. Sasol believes there is an opportunity to assist in advancing water security for the country as a whole, beyond just the gates of its own operations. Sasol views water security as a material significant risk to our operations (especially in South Africa). Accordingly, Sasol has established an overarching water position throughout the organisation. This is aligned with the six key focus areas of United Nation's CEO Water Mandate namely; direct operations, supply chain and catchment management, collective action, public policy, community engagement and transparency, which we endorse. The water conservation projects initiated with local municipalities aimed to fix leakages in public and private water systems and further increase public awareness of water issues, employment creation and improved capacity within local government structures.

Time horizon

Current

Likelihood

Likely

Magnitude of impact

Medium

Potential financial impact

1400000000

Explanation of financial impact

Sasol's demand on the Vaal River System is 121 million m³/annum. A 15% reduction in demand could equate to 18 million m³/annum. Based on the Metsimaholo Municipality case study it was observed that a R3 million investment in advanced pressure reduction realised a 1 million m³/annum savings outside our operations. Therefore Sasol believes the opportunity to save 18 million m³/annum or more outside our operations is more effective. Potential opportunities could focus on installing advanced pressure reduction installations at municipalities in the Vaal River System. The total opportunity in the catchment equates to approximately R1.4 billion based on R7/m³ tariff rate. The cost to realise the opportunity is still being investigated. In order for this to happen the DWS needs to support the development of an incentive based policy framework.

Strategy to realize opportunity

Sasol has been shaping water offsetting as an incentive-based partnership policy for consideration by government. We have been showcasing through a number of case studies that far greater water savings can be achieved by investing beyond the factory fence. In 2016 Sasol continued with its partnership with the Metsimaholo Local Municipality (MLM) in Sasolburg, in collaboration with Rand Water (as implementing agent), German Development Agency (GiZ) and the DWS. The DWS contributed R4 million, Sasol R2.9 million and GiZ 60,000 Euros. Sasol's investment in advanced pressure reduction assisted the municipality achieve a 23% (3.1 ML/day) saving on potable water demand in the greater Zamdela area. Rand Water has initiated Project 1600. Project 1600 is to provide guidance, support, oversight of progress made by municipal sector to reduce their water demand in order for Rand Water to comply with the abstraction limit of 1600 million m³/annum. Rand Water is implementing license targets to its municipal customers in order to comply with their license requirements. This could result in municipalities restricting customers hence creating an opportunity for business to partner with municipalities to comply with their license condition in exchange for ensuring their security of supply.

Cost to realize opportunity

Comment

The cost to realise the opportunity is still being investigated. In order for this to happen the DWS needs to support the development of an incentive based policy framework.

Identifier

Opp3

Where in the value chain does the opportunity occur?

Supply Chain

Opportunity type

Resilience

Primary climate-related opportunity driver

Other

Type of financial impact driver

Other, please specify (Provision of job transition plans)

Company- specific description

Sasol has identified the opportunity to progressively integrate renewable power into its facilities from other sources. However, the company will need to consider the socio-economic impacts in the largely coal mining areas of Mpumalanga where our facilities are

situated. Sasol has therefore embarked on work with the Energy Intensive User Group (EIUG) and others to consider options regarding the location of renewables and other opportunities to better manage the negative socio-economic impacts.

Time horizon

Long-term

Likelihood

More likely than not

Magnitude of impact

Medium

Potential financial impact

1500000000

Explanation of financial impact

Between 5% and 30% of electricity costs based on assessments concluded up to 2050.

Strategy to realize opportunity

Sasol together with others are advancing work in terms of the transition to a lower carbon economy. Sasol has furthermore engaged a number of research institutions to understand the full implication of what opportunities exist to pro-actively manage the jobs transition.

Cost to realize opportunity

1500000000

Comment

Exceeds R1.5billion per year given the implication on the full costs of job transition impacts.

C2.5

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

	Impact	Description
Products and services	Impacted for some suppliers, facilities, or product lines	Sasol supplies a number of customers with natural gas and a similar energy product, methane-rich gas (MRG) as an energy source. This enables customers to carry out a fuel switch from coal to gas. Emissions are avoided so long as the customer consumes the alternative fuel source, the period of which is negotiated between the gas supplier, Sasol Gas, and the customer. Ultra-high pure alumina (UHPA) from Brunsbuttel (Germany) and Lake Charles (U.S.) Ziegler alcohol units enable more efficient reactions and reduced material consumption that reduce third party energy use (GHG emissions) and embodied product emissions. For example, UHPA is used to produce energy efficient lighting (LED lighting, florescent lighting and sodium vapour lamps). Sasol's high purity alumina is used as a precursor to sapphire which is used in LED, fluorescent, metal halide and sodium vapour lamp applications. The magnitude of this positive impact is significant and is happening currently and is anticipated to increase over time as the demand for these products increases.
Supply chain and/or value chain	Impacted	Environmental awareness, particularly in the climate change arena, has grown significantly as technological innovation continues to drive efficiency and disrupt business models. More stakeholders globally are now aware of climate change and sustainability. This is particularly relevant given the fact that our CTL process is GHG intensive. There could be an impacts on Sasol's reputation if our customers switch to alternative products, which could have a material impact.
Adaptation and mitigation activities	Impacted	Sasol has a year on year improvement process with further plans to achieve a potential additional 8% energy efficiency improvement by FY30. These projects are tracked on dedicated roadmaps at operational level and have been committed to as part of the mandatory Pollution Prevention Plan in South Africa as well as through legislation in the other countries where we operate. Ongoing efforts focusing on an energy improvement roadmap at key operational sites, seeks to deliver sustained improvements in efficiency through low capital and operating cost initiatives. The energy efficiency improvement program is further complimented by the 'Best Practice Energy Efficiency Improvement Initiatives', examples of which include: Thermal insulation and steam trap maintenance, waste heat recovery, efficient boiler operation and optimisation of operating philosophies. This initiative is currently being developed and will require additional resources for full implementation and tracking. Sasol also has a roll-out plan through the Sasol Energy Management Team for energy management throughout the organisation. These efforts have been recognised through the South African Section 12 L Income Tax incentive which we successfully accessed. The magnitude of the mitigation activities is high. For example, the tax certificates, translated in shareholder value terms, after costs, resulted in an approximate savings of R2.5 billion for Sasol. With regards to adaptation an assessment of the types and financial loss which arose due to extreme weather events over the past decade was undertaken. The magnitude of the adaptation impacts is significant. For example, the Lake Charles project had a weather related impact costing approximately R1.7 billion.
Investment in R&D	Impacted	Group Technology R and T, a division within Sasol, is engaged in landscaping analysis focusing on emerging technology trends that could have a material impact on Sasol's future. The front-end studies range from topics that could benefit specific operations (like new chemical technologies and advanced materials) to more general topics (like CO2 sequestration, renewable energy, water and the circular economy) that will be important to the Sasol Group in future. For example Sasol conducted a carbon offsets landscaping study to identify projects that could be pursued to fulfil the 5-10% offsetting allowance as stipulated in the Carbon Tax Draft Bill (December 2017). Offset opportunities are an important lever for Sasol.
Operations	Impacted	As a GHG intensive organisation, Sasol faces significant transitional and physical risks. This is particularly relevant for the Secunda operations in South Africa that utilizes coal as the main feedstock. With a pending carbon tax in South Africa and limited options to mitigate the process-related emissions from these operations, Sasol is likely to face financial impacts. The carbon tax, for example, could impact the organisation by up to R2 billion pre-tax for the first year.
Other, please specify	We have not identified any risks or opportunities	

C2.6

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

	Relevance	Description
Revenues	Not impacted	In terms of our risks, the financial impact on revenue did not materialise in the reporting year. However in line with Sasol's strategic growth ambitions there will be increased revenue from lower carbon generating businesses such as Lake Charles Chemicals Project (LCCP). As LCCP ramps up production the % revenue contribution from Sasol's CTL facilities will dilute with increased contribution from lower carbon generating businesses. The project is on track for startup during the second half of calendar year 2018. LCCP is projected to add up to 20% to the earnings profile which is considered significant.
Operating costs	Impacted	Sasol is focused on efficient value chains with competitive feedstock positions. Secunda Synfuels Operations has saved 9686 GWh from FY14 to FY17 of utility and process related input and was able to utilise the South Africa Section 12 L income tax incentive. For Sasolburg, including spend on capital projects, the operation has saved 1484GWh. Rebate tax certificates translated into shareholder value returns after costs resulted in significant savings of approximately R2.5 billion. Further opportunities to integrate bought in low carbon sources of energy into Sasol's integrated facilities are being explored within an offsets and internal mitigation framework.
Capital expenditures / capital allocation	Impacted	Sasol has transitioned away from growth in highly carbon intensive coal to liquids, further investments in greenfields GTL and investments in crude oil refining capacity based on economic and environmental considerations. Sasol's long-term strategy is now focused on growth in upstream (oil and gas), chemicals (bias towards specialty chemicals) and growing its liquid fuels retail footprint in South Africa. In addition, Sasol focuses on continuing the drive towards operations excellence (including energy efficiency, digitalisation and use of newer technologies) in its existing asset base. Sasol aims to allocate capital in a balanced and diversified manner in order to improve shareholder value.
Acquisitions and divestments	Impacted for some suppliers, facilities, or product lines	Mergers and acquisitions will be an important component of Sasol's value-based strategy, and we will consider opportunities in all our identified growth areas. Sasol is undertaking a holistic performance review on our existing assets. Through this process, unsustainable, non-strategic assets will be identified for divestment and/or discontinuation of operations. Climate change related risks will be considered in our decision making process for both mergers and acquisitions and our asset reviews.
Access to capital	Not yet impacted	To date, access to capital has not been impacted by climate change risks and opportunities. Should access to capital be impacted by climate change this will likely restrict growth or increase the cost of borrowing which will reduce profitability. Sasol continues to evaluate this landscape to ensure that the risk of not accessing capital due to environmental issues is appropriately managed. Given the importance of climate change, this impact may happen in the longer term. In addition, Sasol is in the process of developing an Environmental, Social and Governance (ESG) framework to supplement its existing disclosure and approach to improving ESG issues transparency.
Assets	Impacted for some suppliers, facilities, or product lines	Sasol will focus on improving the performance of its existing asset base through higher productivity, increased operational efficiency, leveraging existing and emerging technologies to reduce emissions. Secunda and Sasolburg operations have saved 11 170GWh from FY14 to FY17 through direct interventions and will continue to build on this trend. This has resulted in a significant R2.5 billion tax rebate.
Liabilities	Not yet impacted	Sasol does recognise that climate change represents a potential risk given the emissions profile associated with its CTL operations in South Africa. Since 2004, Sasol has implemented emission reduction activities and continues to explore, develop and execute further feasible mitigation options (such as exploration for gas, evaluation of integrating renewables into its sites, etc.). The potential risk for Sasol's CTL integrated facilities to become a stranded asset could result in liabilities, should mitigation opportunities be unable to sufficiently reduce its emission profile. This impact could potentially play out in much longer term.
Other	We have not identified any risks or opportunities	

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

(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

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

Sasol's vision is to be a leading integrated global chemical and energy company, proudly rooted in our South African heritage, delivering superior value to our stakeholders. Our value based growth strategy has been

developed by leveraging our core strengths in response to global megatrends, which includes the impacts of climate change. Sasol utilises scenario analysis which informed and influenced our long term strategy. There are various broad factors impacting Sasol's businesses with four megatrends emerging:

- Population growth and rising incomes;
- Environmental pressures and new technologies, where Sasol sees an increased shift towards lower-carbon fuels. There will be increased pressure to reduce CO2 emissions and there will be growth in alternative and more efficient means of mobility;
- Drive for better performance (both in terms of yield efficiencies and cleaner processes); and
- Digitalisation.

As part of our value-based growth strategy, climate change considerations, amongst other economic drivers influenced Sasol's decision to no longer consider investments in greenfield CTL and GTL facilities, and further

increasing Sasol's current crude oil refining capacity. This is an example of substantial business decisions (considering Sasol's history and expertise in the CTL & GTL business) that has been influenced by climate-related

issues. Sasol will therefore focus on lower carbon intensive value-based growth through:

- Expanding our specialty chemicals business;
- Growing our exploration and production portfolio, including securing additional natural gas for our South African operations, and potentially aiding in the decarbonisation of the Southern Africa electricity sector; and
- Expanding our fuels retail footprint.

Sasol's foundation business in South Africa will continue to utilise coal as its primary feedstock. We will, however, manage our risk exposure to climate change by continuing to incrementally reduce our emissions profile

by:

- improving the carbon and energy efficiency of our processes thereby reducing GHG and energy intensity;
- increasing the use of natural gas, where such alternatives are available and feasible;
- researching the potential for offsetting GHG emissions in Southern Africa, which could include renewable energy and community

energy usage programmes; and

- monitoring and influencing the development of carbon capture and storage (CCS) as a long-term solution.

Sasol recognises that our foundation business in South Africa has a significant environmental footprint, resulting in climate change being identified as one of the Group's top risks. Through the current Climate Change and

Environmental Policy Committee (which is chaired and well represented by our Group Executive Committee), information from Sasol's policy engagement process on climate change issues feeds into the internal risk

review process thereby ensuring the relevant information on managing this risk. Furthermore, GHG information is collected, aggregated and reported through the Sasol sustainability reporting process which includes

reporting to the Board and its sub-committees.

The draft South African National Energy Efficiency Strategy for 2030 sets a national objective of a 16% improvement relative to the 2015 baseline by 2030, which relates to a 1% annual improvement for industry. Sasol

supports the 1% annual energy efficiency improvement target and has set an objective to exceed a 15% improvement by 2030 in addition to the 16.6% improvement under the Energy Efficiency Accord. This commitment was reconfirmed by Sasol signing up to the Energy Productivity 100 Initiative to advance our energy efficiency activities.

Given the developments in the Climate Change Landscape, Sasol has undertaken additional work to better understand the rapidly evolving climate change landscape and elevated this conversation in our corporate

strategy conferences earlier this year. In addition, further work is being planned to test the robustness of Sasol's corporate strategy against climate change scenarios.

C3.1d

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

Climate-related scenarios	Details
Other, please specify (• Sasol's internally generated scenarios)	Sasol's value-based growth strategy is based on leveraging its strengths in response to global megatrends. Scenarios, including climate change related trends, are used by Sasol to inform and test the robustness of our business strategy. The inputs to the qualitative scenarios undertaken by Sasol included views on a cooperative and fragmented world considering possible outcomes from the Paris agreement. Our scenario analyses take a medium to long term view in helping shape and refine our business strategy. The areas covered in the scenario analyses include those significant areas of Sasol's operations including Europe, US and particularly Southern Africa given our large presence (both in terms of our product volumes and our environmental footprint) in South Africa. The time horizons for the scenario analyses are aligned to Sasol's business strategy, which is being implemented in phases up to 2030 and beyond. Examples of outcomes of specific scenario analysis includes a rise in renewables in the power sector as low-carbon energy becomes increasingly more cost competitive. Changes to fuel demand as alternative technologies (such as electric vehicles) and internal combustion engine efficiency improvements temper oil demand for passenger transport, were also considered. As a result of these integrated assessments Sasol has focused its growth strategy away from the carbon intensive coal-to-liquid process towards the lower carbon intensive oil, gas and specialty chemicals sectors. In addition, Sasol has also decided to no longer consider greenfield investments in gas-to-liquids (GTL) facilities. Conducting scenario analyses enables Sasol to make decisions such as these.

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

Scope 1

% emissions in Scope

90

% reduction from base year

0

Base year

2014

Start year

2016

Base year emissions covered by target (metric tons CO₂e)

57954000

Target year

2020

Is this a science-based target?

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

% achieved (emissions)

0

Target status

Underway

Please explain

Sasol has been issued an approved carbon budget (emission limit) by the South African Department of Environmental Affairs (DEA) applicable for 2016 – 2020 for our South African operations on a voluntary basis. This carbon budget is our absolute GHG target for our South African operations. In total, our budget contemplates a limit of 301,7Mt CO₂e over the five years, making provision for growth. From 2020 onwards, mandatory budgets will be set in line with government requirements. We anticipate that this will be set in the next 18 months and will be an absolute reduction budget. This is the second year of the 5-year target and hence we are 40% in terms of time. The target is an absolute increase in emissions as the carbon budget that we have been set allows for growth in line with national objectives to peak, plateau and decline emissions to 2050. From 2020 onwards, mandatory budgets will be set in line with government requirements. However mitigation projects are still required through the mandatory Pollution Prevention Plan.

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 2 (location-based)

% emissions in Scope

40

% reduction from baseline year

15

Metric

Other, please specify (GJ per ton of production)

Base year

2015

Start year

2015

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

7569000

Target year

2030

Is this a science-based target?

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

% achieved (emissions)

6

Target status

Underway

Please explain

Sasol has voluntarily committed to a government strategy for energy efficiency of our utilities (in South Africa only). This initiative ran from 2000 to 2015 initially. At the end of 2015, industry voluntarily committed to an additional 1% reduction per year on the 15% reduction and Sasol subsequently adopted this as a target. Operations in South Africa currently exceeds the cumulative internal target of 2% (1% per year) with excellent performance over the past two years resulting in a approximately 6% improvement against the FY15 baseline. The EE target is now also linked to our commitment to EP100 which was recently approved by the company, and which commits Sasol to key criteria against which energy management is undertaken.

% change anticipated in absolute Scope 1+2 emissions

11

% change anticipated in absolute Scope 3 emissions

0

C4.2

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

C-OG4.2a

(C-OG4.2a) Explain, for your oil and gas production activities, why you do not have a methane-specific emissions reduction target or do not incorporate methane into your targets reported in C4.2; and forecast how your methane emissions will change over the next five years.

Sasol is not an oil and gas company. For our Sasol Mining activities, methane emissions are included in our carbon budget target.

C4.3

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

Yes

C4.3a

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

	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	1	0
To be implemented*	1	610000
Implementation commenced*	1	100000
Implemented*	2	225000
Not to be implemented	0	0

C4.3b

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

Activity type

Energy efficiency: Processes

Description of activity

Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)

215000

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

134380000

Investment required (unit currency – as specified in CC0.4)

400000000

Payback period

1-3 years

Estimated lifetime of the initiative

Ongoing

Comment

Ongoing efforts focusing on an energy improvement roadmap at our Secunda complex, which seeks to deliver sustained improvements in efficiency primarily through low capital and operating cost initiatives. Examples include: steam trap maintenance waste heat recovery and optimisation of operating philosophies.

Activity type

Energy efficiency: Processes

Description of activity

Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)

10000

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

Investment required (unit currency – as specified in CC0.4)

Payback period

4 - 10 years

Estimated lifetime of the initiative

Ongoing

Comment

Implementation of different energy saving packages at Eurasian locations (e.g. exchange of compressor, fuel switch, pumping equipment/process optimisations). Investment required and savings are not disclosed due to the high number of small individual projects. The validation of the increase in energy efficiency forms the baseline for other benefits (e.g. tax reductions).

C4.3c

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

Method	Comment
Dedicated budget for low-carbon product R&D	Sasol continues to advance investigations on implementing solutions to reduce the emissions intensity of its current operations, for example, through energy efficiency projects. In this regard, investments to date include gas engines in our Sasolburg, South Africa, and Mozambican operations. This has already resulted in Sasol earmarking investment in various projects focusing on energy and process efficiency projects.
Compliance with regulatory requirements/standards	Compliance to existing legislation in Sasol's operations that are covered by the EU-ETS in Germany and Italy are an absolute requirement and in all instances dictates investment decisions.
Other	Targets: The Board Safety, Social and Ethics Committee approves environmental targets and standards, which form part of the Group's indicators of performance. Meeting these targets drives investment in reduction activities. KPIs are aligned with achieving Sasol's climate change mitigation objectives.

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?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.

Level of aggregation

Product

Description of product/Group of products

Sasol supplies a number of customers with Natural Gas and a similar energy product, methane-rich gas (MRG) as an energy source. This enables customers to carry out a fuel switch from coal to gas thereby reducing their direct emissions. As Sasol increased its intake of natural gas, it is able to increase its supply of both NG and MRG to the market. Total MRG supplied to customers in FY 2017 amounted to 23.2 Petajoules. Total NG sales in FY 2017 in South Africa and Mozambique amounted to 68.2 Petajoules Emissions are avoided so long as the customer consumes the alternative fuel source, the period of which is negotiated between the gas supplier, Sasol Gas, and the customer. Comparing the emissions factors for combustion of different fuels, the total direct emissions avoided by customers who purchased and used these fuels in FY 2017 is 3.5 million tons CO2.

Are these low-carbon product(s) or do they enable avoided emissions?

Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Addressing the Avoided Emissions Challenge- Chemicals sector

% revenue from low carbon product(s) in the reporting year

0

Comment

Sasol does not currently disclose a percentage value to quantify the revenues that are generated based on the usage of our products. Note: the following is assumed in the calculation: Coal = 0.089 t CO2 / GJ (source: EIA/DOE) Gas = 0.05 t CO2 / GJ (source: EIA/DOE) MRG = 0.05 t CO2/GJ (source: Sasol). Sasol has considered originating carbon credits from this activity, together with downstream customers. A methodology was developed and approved however due to concerns regarding calculation of reductions, projects have not to date been successfully registered.

Level of aggregation

Group of products

Description of product/Group of products

Fischer-Tropsch (FT) hard waxes. In candles, FT waxes displace paraffin and palm fat candles. In construction applications, these waxes are emulsified and then applied in reconstructed fibreboards which are used indoors for flooring, construction material or wooden equipment. Relative to paraffin wax, less FT wax is required per unit of fibreboard, reducing volatile organic compound

emissions. FT waxes used for asphalt modification result in lower energy consumption (reduced asphalt production temperature), reduced emissions and enhanced pavement performance and durability.

Are these low-carbon product(s) or do they enable avoided emissions?

Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Addressing the Avoided Emissions Challenge- Chemicals sector

% revenue from low carbon product(s) in the reporting year

0

Comment

Sasol does not currently disclose a percentage value to quantify the revenues that are generated based on the usage of our products.

Level of aggregation

Group of products

Description of product/Group of products

Inorganics, e.g. Ultra High purity aluminas (UHPA). UHPA is used in a wide range of technically demanding applications like catalysts, bioceramics, synthetic sapphires for lasers and modern light-emitting diode (LED) lighting, high performance abrasives, coatings and polymer additives. As a support for catalysts, UHPA enables refineries to meet stringent final fuel specifications, reduce air emissions from their direct operations and also serves as a support for particulate emission filters in vehicle diesel engines. UHPA enable the production of LEDs, which, when used in lighting applications such as LEDs, UHPA enables greenhouse gas emission reductions relative to conventional incandescent bulbs.

Are these low-carbon product(s) or do they enable avoided emissions?

Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Addressing the Avoided Emissions Challenge- Chemicals sector

% revenue from low carbon product(s) in the reporting year

0

Comment

Sasol cannot currently provide an accurate percentage value to quantify the benefits that are generated based on the usage of our products. We are exploring such assessments going forward. Sasol used life cycle analysis (LCA) to understand the potential GHG abatement impact of Sasol-manufactured UHPA on the global lighting market. The study found the annual net effect reduction in emissions from switching to LEDs would increase from 3Mt CO2e in 2012 to 300Mt CO2e by 2020. For every LED lamp produced using Sasol UHPA, it is calculated that around 1% of the GHG emissions throughout the LED lifecycle are attributable to Sasol. It was calculated that the Sasol-enabled annual GHG reduction effect would grow from 1Mt CO2e in 2015 to 23 Mt CO2e in 2020.

C-OG4.6

(C-OG4.6) Describe your organization's efforts to reduce methane emissions from oil and gas production activities.

Sasol does not undertake traditional oil and gas activities. Methane reduction projects are incorporated in our core processes and included in the carbon budget.

COG4.7

(C-OG4.7) Does your organization conduct leak detection and repair (LDAR) or use other methods to find and fix fugitive methane emissions from oil and gas production activities?

Yes

C-OG4.7a

(C-OG4.7a) Describe the protocol through which methane leak detection and repair or other leak detection methods, are conducted for oil and gas production activities, including predominant frequency of inspections, estimates of assets covered, and methodologies employed.

According to the South African National Environmental Management Air Quality Act of 2004, leak detection and repair program (LDAR) is required for the storage tanks of petroleum products, tanks used in tar processing activities and tanks used in the organic chemical industry. The primary aim of the LDAR program is to control fugitive emissions released from process equipment by identifying and repairing leaks. These emissions are mainly composed of volatile organic compounds (VOCs) released into the atmosphere due to a gradual loss of tightness of process equipment designed to contain an enclosed fluid. This is commonly referred to as an equipment leak, releasing process streams into the environment.

The LDAR program is conducted in terms of US EPA method 21 for "determination of volatile organic compound leaks. The monitoring of process equipment is performed using predetermined inspection routes.

C-OG4.8

(C-OG4.8) If flaring is relevant to your oil and gas production activities, describe your organization's efforts to reduce flaring, including any flaring reduction targets.

Sasol is not an oil and gas company however flaring emission reductions are already accounted for in Sasol's carbon budget.

Flares are important safety devices used in refineries and petrochemical facilities. Flares are used to safely burn excess hydrocarbon gases which cannot be recovered or recycled.

Various operational improvement initiatives are ongoing within the organisation in order to continue to reduce flaring.

C5. Emissions methodology

C5.1

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

Scope 1

Base year start

July 1 2016

Base year end

June 30 2017

Base year emissions (metric tons CO2e)

57281000

Comment

Scope 2 (location-based)

Base year start

July 1 2016

Base year end

June 30 2017

Base year emissions (metric tons CO2e)

7659000

Comment

Scope 2 (market-based)

Base year start

Base year end

Base year emissions (metric tons CO2e)

0

Comment

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?

Row 1

Gross global Scope 1 emissions (metric tons CO2e)

57281000

End-year of reporting period

<Not Applicable>

Comment

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 no operations where we are able to access electricity supplier emission factors or residual emissions factors and are unable to report a Scope 2, market-based figure

Comment

Sasol currently reports its Scope 2 emissions as location-based Scope 2 figures. Sasol does not have operations in markets where market-based Scope 2 figures could be reported.

C6.3

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

Row 1

Scope 2, location-based

7659000

Scope 2, market-based (if applicable)

<Not Applicable>

End-year of reporting period

<Not Applicable>

Comment

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

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

Purchased goods and services

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

7566

Emissions calculation methodology

Sasol estimated emissions associated with selected purchased goods and services. Only emissions associated with the treatment and supply of purchased water is included. Water data is collected from invoices from water suppliers. Activity data is attributed on an operational control basis. This activity data is multiplied by the appropriate emission factor. Calculation of the carbon footprint complies with the criteria of the ISO-14064 part 1 Standard and GHG Protocol –Corporate Value Chain (scope 3) Accounting and Reporting Standard. No specific assumptions were made. The following DEFRA 2017 emission factors were used: treatment - 0.708 kg CO₂e/m³; supply - 0.344 kg CO₂e/m³. GWPs used by DEFRA are based on the IPCC Fourth Assessment Report (AR4) (GWP for CH₄ = 25, GWP for N₂O = 298).

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

100

Explanation

Capital goods

Evaluation status

Not relevant, explanation provided

Metric tonnes CO₂e

Emissions calculation methodology

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

Explanation

This category includes all upstream (i.e., cradle-to-gate) emissions from the production of capital goods purchased or acquired by the reporting company in the reporting year. These emissions can be attributed to the purchase of new equipment and new vehicles associated with new project development. Based on analysis undertaken previously on the emissions associated with purchasing new equipment, Sasol has found these emissions to be not material to the overall Scope 3 emissions inventory (less than 1%). However, these emissions may be considered in future reporting.

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

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

9165

Emissions calculation methodology

This category includes emissions related to the production of fuels and energy purchased and consumed by Sasol in the reporting year and that are not included in Scope 1 or Scope 2. The activity data was obtained from supply chain records of the quantity of each type of fuel purchased. The DEFRA 2017 well-to-tank (WTT) emission factors have been used to account for the upstream Scope 3 emissions associated with extraction, refining and transportation of the raw fuel sources to Sasol's sites, prior to their combustion - Diesel (100% mineral diesel): 0,06264 KgCO₂e/KWh; Petrol (100% mineral petrol): 0,06552 KgCO₂e/KWh). GWPs used by DEFRA are based on the IPCC Fourth Assessment Report (AR4) (GWP for CH₄ = 25, GWP for N₂O = 298) to remain consistent with UK GHG Inventory reporting under the Kyoto Protocol. Sasol's direct emissions are based on the IPCC Third Assessment Report GWPs based on guidance around national inventory reporting. No such guidance exists for Scope 3 emissions and therefore the DEFRA potential, as embodied in the factors, are deemed the most appropriate. WTT emission factors were multiplied by the diesel and petrol consumption. This assessment was undertaken in accordance with The Greenhouse Gas Protocol: A Corporate Accounting and reporting Standard (Revised Edition), and The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard.

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

100

Explanation

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

567300

Emissions calculation methodology

Sasol undertook a study in 2009 to assess the emissions associated with the transportation of our products. Sasol pays for the transport of products and therefore this data is not included in the “downstream transportation and distribution” category. This study is in the process of being updated. The GHG Protocol was utilised for the purposes of this assessment, distance and volume data were used to calculate the resulting CO₂e emissions. Emission factors are based on the IPCC 2006 guidelines and GWPs are based on the SAR.

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

80

Explanation

Waste generated in operations

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

32787

Emissions calculation methodology

The methodology used to estimate the emissions focused on multiplying tons of non-hazardous waste going to a landfill (154 kt) by an applicable average emission factor for waste treated/disposed in a landfill. DEFRA 2017 default factors were used (average of 213 kg CO₂e / tonne of municipal waste that goes to landfill). GWPs used by DEFRA are based on the IPCC Fourth Assessment Report (AR4) (GWP for CH₄ = 25, GWP for N₂O = 298) to remain consistent with UK GHG Inventory reporting under the Kyoto Protocol. Sasol's direct emissions are based on the IPCC Third Assessment Report (TAR) GWPs based on guidance around national inventory reporting. No such guidance exists for Scope 3 emissions and therefore the DEFRA potential, as embodied in the factors, are deemed the most appropriate.

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

100

Explanation

Business travel

Evaluation status

Relevant, calculated

Metric tonnes CO2e

6792

Emissions calculation methodology

Business travel accounted for includes the emissions associated with charter flights for SPI of workers to and from Vilanculos in Mozambique and that which was booked through HRG Rennies Travel, including Avis, Europcar & Protours (this included flights and car hire). The charter company provides Sasol with the amount of Jet Fuel that is used, and Sasol then calculated the associated scope 3 emissions using emission factors based on the IPCC 2006 guidelines and GWPs based on the TAR. The remainder of Sasol's business travel emissions are calculated using Greenstone's Enterprise Environmental software Version 3.1. The assessment methodology applied to this report follows the reporting principles and guidelines provided by the Greenhouse Gas Protocol. The methodology to estimate emissions involved multiplying activity data for mode of transport (e.g. distance travelled) by an applicable emission factor for that mode of transport (e.g. tCO2/km). Flights were categorised as being either long- (> 3700km), short-(<1000 km) or medium (1001 - 3700) haul flights. The emission factors in this report are derived from two sources: the US EPA's Climate Leaders program and the UK's Department for Environment, Food and Rural Affairs (DEFRA). GWPs used by DEFRA are based on the IPCC Fourth Assessment Report (AR4) (GWP for CH4 = 25, GWP for N2O = 298) to remain consistent with UK GHG Inventory reporting under the Kyoto Protocol. Sasol's direct emissions are based on the IPCC Third Assessment Report (TAR) GWPs based on guidance around national inventory reporting. No such guidance exists for Scope 3 emissions and therefore the DEFRA potential, as embodied in the factors, are deemed the most appropriate. It was assumed that standard sedan vehicles were used on all hiring occasions. Business travel includes both flights (local and international) for business purposes as well as kilometers travelled in hired cars and taxis.

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

80

Explanation

Employee commuting

Evaluation status

Relevant, calculated

Metric tonnes CO2e

60639

Emissions calculation methodology

The assessment only includes emissions associated with South African employee commuting. The emissions associated with employee commuting were calculated using the emissions-based screening assessment equation from the Scope 3 Accounting and Reporting Standard: Total number of employees x average (conservative) distance from place of work (km) x 10 trips per week x 52 weeks per year x national average emission factor of private vehicle (kg CO2e/passenger-km). • 59% commute to work with privately owned vehicles (Sasol management) • Employees travel an average of 21km to work • Fuel efficiency: 10 km/litre Petrol emission factor: 2.61 kg CO2/litre [2006 IPCC Guidelines]. The prescribed default factor has been applied. It is assumed that employees work 264 days (average of 22 working days per month). It was also assumed that majority of employees live less than an hour away from the plant, travelling by taxi or bus. DEFRA factors use AR4 GWPs and assessments using IPCC factors use TAR GWPs.

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

50

Explanation

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

We own and operate most of our assets. The portion of office buildings or vehicles that Sasol may lease is deemed to be insignificant in relation to its total carbon footprint and thus is reported to be zero. In accordance with the GHG Protocol Corporate Value Chain Accounting and Reporting Standard the emissions reported should be relevant in reflecting the GHG emissions for a reporting company. The GHG emissions from upstream leased assets are not relevant to Sasol's FY 2017 GHG inventory and were therefore excluded. Furthermore, the time and effort required to obtain this data did not justify its inclusion.

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

Customers often request impact profiles and data up to the point at which they accept the product. Sasol's LCA work has therefore focused on cradle-to-gate emissions. Estimating the use and disposal phases is also challenging due to variance of customer location and use. Sasol also has no control over the use and disposal of our products. Based on these reasons and other requests for information from stakeholders, Sasol does not feel that a detailed assessment of the use and disposal phases of our products is necessary, at this stage. We thus regard and report this category as zero.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

Customers often request impact profiles and data up to the point at which they accept the product. Sasol's LCA work has therefore focused on cradle-to-gate emissions. Estimating the use and disposal phases is also challenging due to variance of customer location and use. Sasol also has no control over the use and disposal of our products. Based on these reasons and other requests for information from stakeholders, Sasol does not feel that a detailed assessment of the use and disposal phases of our products is necessary, at this stage. We thus regard and report this category as zero.

Use of sold products

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

21584212

Emissions calculation methodology

The methodology used to estimate emissions involved multiplying the amount of gas, diesel and petrol (Sasol's most significant products) sold by an applicable average emission factor for fuel conversion. DEFRA 2017 default factors were used (for gas 0.18645 kg CO₂e/ kWh, for petrol 2.3007 kg CO₂e/ litre and for diesel 2.6719 kg CO₂e/ litre). The Greenhouse Gas Protocol: A Corporate Value Chain (Scope 3) Accounting and Reporting Standard was used to calculate emissions based on the activity data. GWPs used by DEFRA are based on the IPCC Fourth Assessment Report (AR4) (GWP for CH₄ = 25, GWP for N₂O = 298) to remain consistent with UK GHG Inventory reporting under the Kyoto Protocol. Sasol's direct emissions are based on the IPCC Third Assessment Report (TAR) GWPs based on guidance around national inventory reporting. No such guidance exists for Scope 3 emissions and therefore the DEFRA potential, as embodied in the factors, are deemed the most appropriate.

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

80

Explanation

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Metric tonnes CO₂e

Emissions calculation methodology

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

Explanation

Customers often request impact profiles and data up to the point at which they accept the product. Sasol's LCA work has therefore focused on cradle-to-gate emissions. Estimating the use and disposal phases is also challenging due to variance of customer location and use. Based on this and other requests for information from stakeholders, Sasol does not feel that a detailed assessment of the use and disposal phases of our products is necessary, at this stage. We thus regard and report this category as zero.

Downstream leased assets

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

151920

Emissions calculation methodology

The methodology followed to estimate the emissions from Sasol's leased assets involved multiplying the estimated energy use per building by an applicable factor for each of Sasol's owned properties. Sasol owns between 40 and 100% of 17 buildings. This includes investments in office, retail and specialised buildings as well as investments in property companies. Based on historical data, it was assumed that office buildings consumed on average 200 kWh/m² (the maximum annual consumption per office according to SANS 10400-XA (DSS3) and retail consumed on average 259 kWh/m² (according to (Matsho, J. 2010. A dissertation submitted in fulfillment of the Degree of M.Com. in Economics. (Student No.: 20052459) University of Zululand. Supervisor: Prof. B.C Shrestha. Co-Supervisor: Mr. I Kaseeram. 8th February 2010). The South African grid emission factor (0.99 kgCO₂e/kWh) was multiplied by the estimated electricity usage. This assessment was undertaken in accordance with The Greenhouse Gas Protocol: A Corporate Accounting and reporting Standard (Revised Edition), and The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard.

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

100

Explanation

Franchises

Evaluation status

Relevant, calculated

Metric tonnes CO2e

3077

Emissions calculation methodology

The methodology followed to estimate the emissions from Sasol franchises (Sasol and Excel Service stations in South Africa) involved multiplying the number of franchises by the estimated energy use per station, multiplied by an emission factor. An energy use factor of 261 kWh/m² was used (Matsho, J. 2010. A dissertation submitted in fulfillment of the Degree of M.Com. in Economics. (Student No.: 20052459) University of Zululand. Supervisor: Prof. B.C Shrestha. Co-Supervisor: Mr. I Kaseeram. 8th February 2010). The South African grid emission factor (0.99 kgCO₂e/kWh) was multiplied by the estimated electricity usage. This assessment was undertaken in accordance with The Greenhouse Gas Protocol: A Corporate Accounting and reporting Standard (Revised Edition), and The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard. TAR GWPs were used. TAR GWPs were used.

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

100

Explanation

Investments

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

Sasol has a number of Joint Ventures (JVs) over which we do not have operational control and therefore have limited influence over the emissions associated with those JVs. We do not have access to information on the GHG emissions associated with these operations, but we do engage with our JV partners to ensure that any climate change risks are adequately managed. For example, we have a joint venture monomer and polymer interest in Malaysia and the Escravos GTL plant in Nigeria. We engage directly with Petlin and Chevron (controlling partners) around issues related to climate change. Chevron discloses information on climate change management and performance via the CDP.

Other (upstream)

Evaluation status

Not evaluated

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

Other (downstream)

Evaluation status

Not evaluated

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

C6.7

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

Yes

C6.7a

(C6.7a) Provide the emissions from biologically sequestered carbon relevant to your organization in metric tons CO2.

1410

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

0.000392

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

67631200

Metric denominator

unit total revenue

Metric denominator: Unit total

172407000000

Scope 2 figure used

Location-based

% change from previous year

2

Direction of change

Decreased

Reason for change

Our revenue (turnover) decreased from Rm 172 942 in FY 2016 to Rm 172 407 in FY 2017 and our GHG emissions decreased by 2.3%. The reduction in revenue can be attributed to lower Rand per barrel price. The change in emissions can be attributed to emission reduction activities during the year. The intensity metric decreased as the revenue number reduction was less than the GHG emissions reduction number.

Intensity figure

3.66

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

67632000

Metric denominator

unit of production

Metric denominator: Unit total

18472000

Scope 2 figure used

Location-based

% change from previous year

0.56

Direction of change

Decreased

Reason for change

GHG emissions intensity decreased to 3,66 in 2017 from 3,68 in 2016 due to more stable operations and emission reduction initiatives, resulting in a lower GHG intensity for the Group.

C-OG6.12

(C-OG6.12) Provide the intensity figures for Scope 1 emissions (metric tons CO2e) per unit of hydrocarbon category.

C-OG6.13

(C-OG6.13) Report your methane emissions as percentages of natural gas and hydrocarbon production or throughput.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization have greenhouse gas emissions other than carbon dioxide?

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
CH4	2553000	IPCC Third Assessment Report (TAR - 100 year)
N2O	151000	IPCC Third Assessment Report (TAR - 100 year)
CO2	57281000	IPCC Third Assessment Report (TAR - 100 year)

C-OG7.1b

(C-OG7.1b) Break down your total gross global Scope 1 emissions from oil and gas value chain production activities by greenhouse gas type.

	Gross Scope 1 CO2 emissions (metric tons CO2)	Gross Scope 1 methane emissions (metric tons CH4)	Gross Scope 1 emissions (metric tons CO2e)	Comment
Fugitives (Oil: Total)				N/A: We are not an oil and gas company
Fugitives (Oil: Venting)				N/A: We are not an oil and gas company
Fugitives (Oil: Flaring)				N/A: We are not an oil and gas company
Fugitives (Oil: E&P, excluding venting and flaring)				N/A: We are not an oil and gas company
Fugitives (Oil: All Other)				N/A: We are not an oil and gas company
Fugitives (Gas: Total)				N/A: We are not an oil and gas company
Fugitives (Gas: Venting)				N/A: We are not an oil and gas company
Fugitives (Gas: Flaring)				N/A: We are not an oil and gas company
Fugitives (Gas: E&P, excluding venting and flaring)				N/A: We are not an oil and gas company
Fugitives (Gas: Midstream)				N/A: We are not an oil and gas company
Fugitives (Gas: All other)				N/A: We are not an oil and gas company
Combustion (Oil: Upstream, excluding flaring)				N/A: We are not an oil and gas company
Combustion (Gas: Upstream, excluding flaring)				N/A: We are not an oil and gas company
Combustion (Refining)				N/A: We are not an oil and gas company
Combustion (Chemicals production)				N/A: We are not an oil and gas company
Combustion (Electricity generation)				N/A: We are not an oil and gas company
Combustion (Other)				N/A: We are not an oil and gas company
Process emissions				N/A: We are not an oil and gas company
Emission not elsewhere classified				N/A: We are not an oil and gas company

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	55270000
United States of America	978000
Mozambique	260000
Other, please specify (Europe, Asia and North Africa)	773000

C7.3

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

By facility

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
CTL/GTC South Africa	54351000	-26.539253	29.180121
Mining South Africa	16000	-26.507572	29.176174
Chemical Complex NAO	978000	30.245755	-93.27757
Chemical Complex Eurasia	773000	53.550747	10.025634
Gas Upstream (SEPI)	260000	-21.750824	35.058217
Oil & Gas downstream (Natref)	903000	-26.816937	27.784282

C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

	Gross Scope 1 emissions, metric tons CO2e	Net Scope 1 emissions , metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	56118000	<Not Applicable>	This includes Sasol's mining activities.
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Electric utility generation activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	260000	<Not Applicable>	We are not an oil and gas company however we do have oil and gas activities.
Oil and gas production activities (downstream)	903000	<Not Applicable>	We are not an oil and gas company however we do have oil and gas activities.
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

C7.5

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

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
South Africa	7129000	0	7103880	0
Eurasia	170000	0	353565	0
United States of America	360000	0	308338	0
Mozambique	0	0	0	0

C7.6

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

By facility

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)
CTL/GTC South Africa	6152000	0
Mining South Africa	712000	0
Chemical Complex NAO	360000	0
Chemical Complex Eurasia	170000	0
Gas Upstream (SEPI)	0	0
Oil and Gas downstream	265000	0

C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7

(C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7) Break down your organization's total gross global Scope 2 emissions by sector production activity in metric tons CO2e.

	Scope 2, location-based, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	7394000	0	Includes Sasol Mining.
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	0	0	We are not an oil and gas company however we have oil and gas activities.
Oil and gas production activities (downstream)	265000	0	We are not an oil and gas company however we have oil and gas activities
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

C-CH7.8

(C-CH7.8) Disclose the percentage of your organization’s Scope 3, Category 1 emissions by purchased chemical feedstock.

Purchased feedstock	Percentage of Scope 3, Category 1 tCO2e from purchased feedstock	Explain calculation methodology
Methanol	0	We do not currently calculate Scope 3, Category 1 emissions comprehensively.
Ethanol	0	We do not currently calculate Scope 3, Category 1 emissions comprehensively.
Polymers	0	We do not currently calculate Scope 3, Category 1 emissions comprehensively.
Specialty chemicals	0	We do not currently calculate Scope 3, Category 1 emissions comprehensively.
Other base chemicals	0	We do not currently calculate Scope 3, Category 1 emissions comprehensively.
Coal	0	We do not currently calculate Scope 3, Category 1 emissions comprehensively.
Gas oil	0	We do not currently calculate Scope 3, Category 1 emissions comprehensively.
Lubricants	0	We do not currently calculate Scope 3, Category 1 emissions comprehensively.
Natural gas	0	We do not currently calculate Scope 3, Category 1 emissions comprehensively.

C-CH7.8a

(C-CH7.8a) Disclose sales of products that are greenhouse gases.

	Sales, metric tons	Comment
Carbon dioxide (CO2)	65614	Carbon dioxide from our Sasolburg plant and joint venture refinery plant in South Africa is sold to downstream customers for uses including carbonated drinks and water treatment.
Methane (CH4)	1640369	Natural gas and methane-rich gas product supplied to the market in Mozambique and from our Secunda complex.
Nitrous oxide (N2O)		N/a
Hydrofluorocarbons (HFC)		N/a
Perfluorocarbons (PFC)		N/a
Sulphur hexafluoride (SF6)		N/a
Nitrogen trifluoride (NF3)		N/a

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		
Other emissions reduction activities	225000	Decreased	0.32	The total estimated CO2e savings from energy and process efficiency initiatives in FY2017 was 225,000 t CO2e. This figure was divided by the total reduction in Scope 1 and 2 emissions (1,618,260 t CO2e) and multiplied by the percentage change in Scope 1 and 2 emissions (-2.3%) to estimate the percentage change in emissions as a result of emission reduction activities.
Divestment	0	No change		
Acquisitions	0	No change		
Mergers	0	No change		
Change in output	1393260	Decreased	1.98	There was a reduction in output from 18807 kilotons in 2016 to 18474 kilotons in 2017. The relationship between production and emissions is not linear as Sasol operates an integrated value chain. Change in output was therefore assumed to account for the balance of Sasol's total Scope 1 and 2 emission reductions (1,618,260-225,000=1,393,260 t CO2e).
Change in methodology	0	No change		
Change in boundary	0	No change		
Change in physical operating conditions	0	No change		
Unidentified	0	No change		
Other	0	No change		

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 10% but less than or equal to 15%

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)	0	27123691	27123691
Consumption of purchased or acquired electricity	<Not Applicable>	0	7765784	7765784
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	0	72565626	72565626
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	0	<Not Applicable>	0
Total energy consumption	<Not Applicable>	0	107455101	107455101

C-CH8.2a

(C-CH8.2a) Report your organization's energy consumption totals (excluding feedstocks) for chemical production activities in MWh.

	Heating value	Total MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	23671946
Consumption of purchased or acquired electricity	<Not Applicable>	6788392
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	72565626
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	0
Total energy consumption	<Not Applicable>	103025963

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 steam	Yes
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

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

Fuels (excluding feedstocks)

Gas Oil

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

299750

MWh fuel consumed for the 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

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Fuels (excluding feedstocks)

Motor Gasoline

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

11930

MWh fuel consumed for the 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

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Fuels (excluding feedstocks)

Fuel Gas

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

18883262

MWh fuel consumed for the 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

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

C8.2d

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

Fuel Gas

Emission factor

Unit

Please select

Emission factor source

Comment

Mass balance approach

Gas Oil

Emission factor

74.1

Unit

kg CO2e per GJ

Emission factor source

IPCC

Comment

Motor Gasoline

Emission factor

69.3

Unit

kg CO2e per GJ

Emission factor source

IPCC

Comment

C8.2e

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

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	7929363	7929363	0	0
Heat	0	0	0	0
Steam	72565626	72565626	0	
Cooling	0	0	0	0

C-CH8.2e

(C-CH8.2e) Provide details on electricity, heat, steam, and cooling your organization has generated and consumed for chemical production activities.

	Total gross generation (MWh) inside chemicals sector boundary	Generation that is consumed (MWh) inside chemicals sector boundary
Electricity	7681282	7681282
Heat	0	0
Steam	72565626	72565626
Cooling	0	0

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>

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

C-CH8.3

(C-CH8.3) Disclose details on your organization’s consumption of feedstocks for chemical production activities.

Feedstocks

Coal

Total consumption

18157000

Total consumption unit

metric tons

Inherent carbon dioxide emission factor of feedstock, metric tons CO2 per consumption unit

96.1

Heating value of feedstock, MWh per consumption unit

5.25

Heating value

LHV

Comment

Due to our highly integrated production processes, we are not practically able to separate emissions, electricity or steam intensity or heat recovery between energy consumption and chemical products. This is in accordance with the IPCC approach for calculating GHG emissions associated with Sasol process for making liquid fuels and chemicals.

Feedstocks

Natural gas

Total consumption

2007000

Total consumption unit

metric tons

Inherent carbon dioxide emission factor of feedstock, metric tons CO2 per consumption unit

56.1

Heating value of feedstock, MWh per consumption unit

13.3

Heating value

LHV

Comment

Due to our highly integrated production processes, we are not practically able to separate emissions, electricity or steam intensity or heat recovery between energy consumption and chemical products. This is in accordance with the IPCC approach for calculating GHG emissions associated with Sasol process for making liquid fuels and chemicals.

Feedstocks

Other, please specify (Crude oil)

Total consumption

4379000

Total consumption unit

metric tons

Inherent carbon dioxide emission factor of feedstock, metric tons CO2 per consumption unit

73.3

Heating value of feedstock, MWh per consumption unit

11.75

Heating value

LHV

Comment

Due to our highly integrated production processes, we are not practically able to separate emissions, electricity or steam intensity or heat recovery between energy consumption and chemical products. This is in accordance with the IPCC approach for calculating GHG emissions associated with Sasol process for making liquid fuels and chemicals.

C-CH8.3a

(C-CH8.3a) State the percentage, by mass, of primary resource from which your chemical feedstocks derive.

	Percentage of total chemical feedstock (%)
Oil	18
Natural Gas	8
Coal	74
Biomass	0
Waste	0
Fossil fuel (where coal, gas, oil cannot be distinguished)	0
Unknown source or unable to disaggregate	0

C9. Additional metrics**C9.1**

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

C-OG9.2a

(C-OG9.2a) Disclose your net liquid and gas hydrocarbon production (total of subsidiaries and equity-accounted entities).

	In-year net production	Comment
Crude oil and condensate, million barrels		
Natural gas liquids, million barrels		
Oil sands, million barrels (includes bitumen and synthetic crude)		
Natural gas, billion cubic feet		

C-OG9.2b

(C-OG9.2b) Explain which listing requirements or other methodologies you use to report reserves data. If your organization cannot provide data due to legal restrictions on reporting reserves figures in certain countries, please explain this.

C-OG9.2c

(C-OG9.2c) Disclose your estimated total net reserves and resource base (million boe), including the total associated with subsidiaries and equity-accounted entities.

	Estimated total net proved + probable reserves (2P) (million BOE)	Estimated total net proved + probable + possible reserves (3P) (million BOE)	Estimated net total resource base (million BOE)
Row 1			

C-OG9.2d

(C-OG9.2d) Provide an indicative percentage split for 2P, 3P reserves, and total resource base by hydrocarbon categories.

	Net proved + probable reserves (2P) (%)	Net proved + probable + possible reserves (3P) (%)	Net total resource base (%)
Crude oil / condensate / Natural gas liquids			
Natural gas			
Oil sands (includes bitumen and synthetic crude)			

C-OG9.2e

(C-OG9.2e) Provide an indicative percentage split for production, 1P, 2P, 3P reserves, and total resource base by development types.

C-CH9.3a

(C-CH9.3a) Provide details on your organization's chemical products.

Output product

Other base chemicals

Production (metric tons)

3106000

Capacity (metric tons)

0

Direct emissions intensity (metric tons CO2e per metric ton of product)

0

Electricity intensity (MWh per metric ton of product)

0

Steam intensity (MWh per metric ton of product)

0

Steam/ heat recovered (MWh per metric ton of product)

0

Comment

Due to our highly integrated production processes, we are not practically able to separate emissions, electricity or steam intensity or heat recovery per product line. These performance metrics are therefore incorporated into the Sasol-wide figures reported in questions 6, 7 and 8.

Output product

Specialty chemicals

Production (metric tons)

3541000

Capacity (metric tons)

0

Direct emissions intensity (metric tons CO2e per metric ton of product)

0

Electricity intensity (MWh per metric ton of product)

0

Steam intensity (MWh per metric ton of product)

0

Steam/ heat recovered (MWh per metric ton of product)

0

Comment

Due to our highly integrated production processes, we are not practically able to separate emissions, electricity or steam intensity or heat recovery per product line. These performance metrics are therefore incorporated into the Sasol-wide figures reported in questions 6, 7 and 8.

Output product

Other, please specify (Liquid fuels)

Production (metric tons)

8776800

Capacity (metric tons)

0

Direct emissions intensity (metric tons CO2e per metric ton of product)

0

Electricity intensity (MWh per metric ton of product)

0

Steam intensity (MWh per metric ton of product)

0

Steam/ heat recovered (MWh per metric ton of product)

0

Comment

Due to our highly integrated production processes, we are not practically able to separate emissions, electricity or steam intensity or heat recovery per product line. These performance metrics are therefore incorporated into the Sasol-wide figures reported in questions 6, 7 and 8.

Output product

Other, please specify (natural/ methane rich gas)

Production (metric tons)

1206432

Capacity (metric tons)

0

Direct emissions intensity (metric tons CO₂e per metric ton of product)

0

Electricity intensity (MWh per metric ton of product)

0

Steam intensity (MWh per metric ton of product)

0

Steam/ heat recovered (MWh per metric ton of product)

0

Comment

Due to our highly integrated production processes, we are not practically able to separate emissions, electricity or steam intensity or heat recovery per product line. These performance metrics are therefore incorporated into the Sasol-wide figures reported in questions 6, 7 and 8.

C-OG9.3a

(C-OG9.3a) Disclose your total refinery throughput capacity in the reporting year in thousand barrels per year.

	Total refinery throughput capacity (Thousand barrels per day)
Capacity	

C-OG9.3b

(C-OG9.3b) Disclose feedstocks processed in the reporting year in million barrels per year.

	Throughput (Million barrels)	Comment
Oil		
Other feedstocks		
Total		

C-OG9.3c

(C-OG9.3c) Are you able to break down your refinery products and net production?

Please select

C-OG9.3e

(C-OG9.3e) Please disclose your chemicals production in the reporting year in thousand metric tons.

Product	Production, Thousand metric tons	Capacity, Thousand metric tons
---------	----------------------------------	--------------------------------

C-CH9.6

(C-CH9.6) Disclose your organization's low-carbon investments for chemical production activities.

Investment start date

July 1 2016

Investment end date

June 30 2017

Investment area

Products

Technology area

Product redesign

Investment maturity

Applied research and development

Investment figure

30000000

Low-carbon investment percentage

0 - 20%

Please explain

Sasol continues to work closely with our customers to stay aligned with changing sustainability needs for mutual top-line growth. Increasingly, our customers are seeking to collaborate on developing chemical products that help to meet their goals and societal needs; they seek more sustainable products, supply chain innovation, and ethical partners with strong corporate social responsibility practices. Customers are focused on products that improve their energy efficiency, while at the same time reduce waste. Efforts are underway to understand our portfolio of 'sustainable products' – products that impart downstream value-chain sustainability relative to conventional analogous products. (including decreased energy consumption, decreased water consumption, decreased waste generation, GHG emissions reduction, pollution reduction, decreased raw material consumption, or increased product durability/longevity)

C-CO9.6/C-EU9.6/C-OG9.6

(C-CO9.6/C-EU9.6/C-OG9.6) Disclose your investments in low-carbon research and development (R&D), equipment, products, and services.

C-OG9.7

(C-OG9.7) Disclose the breakeven price (US\$/BOE) required for cash neutrality during the reporting year, i.e. where cash flow from operations covers CAPEX and dividends paid/ share buybacks.

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

Scope 1

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Reasonable assurance

Attach the statement

Sasol 2017_sustainability-report.pdf

Page/ section reference

Pages 28 - 29

Relevant standard

ISAE 3410

Proportion of reported emissions verified (%)

100

Scope

Scope 2 location-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Reasonable assurance

Attach the statement

Sasol 2017_sustainability-report.pdf

Page/ section reference

Pages 28 - 29

Relevant standard

ISAE 3410

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

Biennial process

Status in the current reporting year

Complete

Attach the statement

Assurance Report_Scope3_Sasol_final Signed.pdf

Page/section reference

Relevant standard

ISAE 3410

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	Year on year change in emissions (Scope 1)	• AA1000AS • ISAE3000 • ISAE 3410	The trend in emissions between the last reporting year and this reporting year was reviewed as part of the assurance process
C6. Emissions data	Year on year change in emissions (Scope 2)	• AA1000AS • ISAE3000 • ISAE 3410	The trend in emissions between the last reporting year and this reporting year was reviewed as part of the assurance process
C9. Additional metrics	Other, please specify (Production (External Sales))	• AA1000AS • ISAE3000 • ISAE 3410	Production data was verified as part of the assurance process

C11. Carbon pricing

C11.1

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

Yes

C11.1a

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

EU ETS

C11.1b

(C11.1b) Complete the following table for each of the emissions trading systems in which you participate.

EU ETS

% of Scope 1 emissions covered by the ETS

97.8

Period start date

January 1 2017

Period end date

December 31 2017

Allowances allocated

207215

Allowances purchased

97600

Verified emissions in metric tons CO₂e

264046

Details of ownership

Facilities we own and operate

Comment

Sasol Germany GmbH only

C11.1d

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

During the last 5 years Sasol Eurasia operations has been following a differentiated strategy to refill the gap between allocation and consumption with the overall situation balanced up to 2020. Within that strategy the following steps are implemented or still in progress:

- The maximum use of CER's for compliant issues
- Application of additional allocation
- Optimization of the quality of the emission reports to minimize quantities, which have to be returned,
- Usage of green energy input
- Contradiction to the allocation permits in Germany to achieve more certificates
- Development of a buy in strategy of certificates (e.g. from Sasol Italy/markets) to reducing allocations increasing consumptions, changing market situations and implementation of a regular follow
- Preparation of an additional allocation of certificates due to increasing operations.

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
Stress test investments
Identify and seize low-carbon opportunities

GHG Scope

Scope 1
Scope 2

Application

Corporate division and some of the projects in certain jurisdictions

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

120

Variance of price(s) used

Regional specific and depends on the prevailing price in the areas we operate. E.g. in South Africa price is R120 escalating as per the draft carbon tax bill.

Type of internal carbon price

Shadow price

Impact & implication

Sasol analyses the external environment and the impact of carbon prices. This analysis includes carbon pricing outlooks for a number of geographic areas, which have been tested. In South Africa, our carbon price assumptions are aligned with the National Treasury's carbon tax proposal, while we also consider the Department of Environmental Affairs' carbon budget proposals. These carbon prices, along with the potential CO2 footprint of our businesses and potential investment projects, are considered in both our investment evaluations and long-term budgeting process.

C12. Engagement

C12.1

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

Yes, our suppliers
Yes, our customers

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

0.5

% total procurement spend (direct and indirect)

65

% Scope 3 emissions as reported in C6.5

5

Rationale for the coverage of your engagement

This was the first year that Sasol engaged with its suppliers on climate change. This was done through a questionnaire to its top 40 suppliers (selected by Rand spent) and top 20 suppliers (selected by absolute emissions) to self-evaluate themselves against sustainability issues, including climate change. As a first step these were considered the most important to engage with.

Impact of engagement, including measures of success

Suppliers were asked about measurement and reporting of GHG emissions as well as carbon risks and opportunities. It provides an initial landscape view of its suppliers with regards to climate change. The information that the suppliers provided was used to understand whether the suppliers have adequate measures to address sustainability risks, including those related to water and climate change. The next steps will be to engage with the suppliers more formally. Sasol will also develop a strategy where all the relevant environmental information will be gathered from suppliers on an annual basis. The current on-boarding and supplier selection processes will also be reviewed to allow for applicable environmental and climate change matters. Given that this was the first year this was done, a reasonable measure of success is an adequate response rate to the questionnaire. Sasol received a response rate of 28 out of 60 questionnaires which is an indication of an initial measure of success.

Comment

C12.1b

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

Type of engagement

Education/information sharing

Details of engagement

Share information about your products and relevant certification schemes (i.e. Energy STAR)

Size of engagement

0.1

% Scope 3 emissions as reported in C6.5

1

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

We engage key customers who request information regarding our product lifecycle inventories. Customers wish to assess whether their suppliers have an understanding of the carbon impact of supplied products throughout lifecycle

Impact of engagement, including measures of success

Sasol receives requests from certain of its customers to provide greenhouse gas data. It engages directly with these customers by calculating the gate-to-gate carbon footprint of the particular product and disclosing that information to that customer. In addition, Sasol conducted a sustainable product survey in the reporting year where interviews with sales and marketing managers of the relevant products were held. Strategy for prioritising engagements and how success is measured – we prioritised the engagements based on the specific requests that we receive from our customers and on the products that have some form of downstream environmental improvement benefit. We measure success based on the feedback we receive from our customers and our ability to respond with the appropriate data.

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
- Funding research organizations
- Other

C12.3a

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

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Mandatory carbon reporting	Support	Sasol has been engaging on the process on the development of mandatory GHG reporting for South Africa which culminated in the promulgation of mandatory GHG reporting regulations released on March 2017. Sasol has been a proponent of reporting for many years and has been voluntarily submitting GHG data to government since the country's earliest GHG Inventories. It our belief that for reductions to take place, an emissions baseline is critical. Sasol's first mandatory GHG submission was submitted in March 2018.	Mandatory GHG Reporting Regulations for South Africa which were promulgated in March 2017.
Energy efficiency	Support	As a founding signatory to the South African Energy Efficiency Accord (the Accord), Sasol has a long-standing commitment (since 2005) to promoting energy efficiency as a key business driver, in addition to the benefit of GHG reductions. Sasol recently committed to EP100 and supports the South African National Energy Efficiency Strategy of a 1% annual Energy Efficiency improvement target. Sasol has set an objective of a 15% improvement between 2015 and 2030 in addition to the 16.6% improvement under the Energy Efficiency Accord during the time period of 2000 to 2015. Sasol is in the process of setting new targets for our international operations. Following the utility energy efficiency improvement Sasol achieved under the Accord for South African operations in which we continued to set appropriate interim improvement objectives for several of our South African operations. Once the South African Department of Energy publishes the new 2030 National Energy Efficiency Strategy, Sasol will set new improvement targets aligned to the national objectives. Sasol's global operations are in the process of implementing standard utility energy efficiency measurements and reporting practices. Once baseline performance measurements have been determined, appropriate global improvement targets aligned with the respective national objectives will be set.	South African National Energy Efficiency Strategy.
Adaptation or resilience	Support	Sasol is not only an emitter of GHGs, we are also vulnerable to the impacts of climate change and have undertaken work to better understand our climate change exposure for our people and operations. Through an assessment of the impacts of climate change on our operations, we are taking steps to ensure that we are resilient to these impacts which include increased flooding from heavy rains, rising sea levels, extreme weather events such as hurricanes and tornadoes and heat stress in some regions where we operate. In this regard, Sasol is advancing work in developing an adaptation strategy for the identified key priority regions such as Lake Charles, Secunda and Sasolburg.	South African National Adaptation Strategy that takes into account business impacts by climate change and its implications for the country.

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Carbon tax	Oppose	We have and continue to provide extensive input to the development of the National Treasury's carbon tax proposal for South Africa. National Treasury published a carbon offsets paper for public comment in April 2014 and subsequently a Draft Carbon Tax Bill in November 2015 with a second draft bill in December 2017. Early on in the policy making process, Sasol contributed information both generated internally and through independent third party consultants in order that policy development takes account of the broadest spectrum of issues facing business and the economy which in addition to the long term structural challenge the country faces, a number of short-to-medium term economic challenges due to low commodity prices and the substantial increases in electricity prices in recent years. Where specific documents are produced by policy makers, Sasol provides detailed comments on policy intent and structure and will continue to engage with National Treasury and related governmental departments such as the Department of Environmental Affairs via various forums. A key purpose of Sasol's contributions is to try and ensure that policy does not result in unintended consequences for business, society and the broader economy and that policy is cohesive, implementable and workable. It is also to ensure that policies so selected must be implementable having due regard to the energy mix in the country and its development status.	While Sasol supports a transition to a lower-carbon economy we remain concerned that the proposed stand-alone carbon tax will further diminish the country's investment attractiveness and competitiveness. The introduction of the carbon tax is inappropriate given the following: <ul style="list-style-type: none"> • It will exacerbate the current challenges faced by the industrial sector of the economy in light of the rapid rise in electricity prices over the last few years and challenges faced at Eskom; and • It is unnecessary to implement the tax now in light of the fact that South Africa's greenhouse gas (GHG) emissions are below the international targets it committed to. Hence South Africa has time to develop an integrated mitigation policy within a well-designed climate change policy and legislative framework • The adoption of the Bill as it stands may increase investor uncertainty; • Lack of clear policy alignment with other environmental policies such as the carbon budgets will result in two economic instruments addressing the same set of emissions; and • Lack of clarity as to the nature of the climate change regime post 2020. We support Government utilising the time and carbon space created by our current GHG emissions trajectory to develop a properly integrated climate change policy and legislation rather than rushing with the adoption of the carbon tax bill at this stage.
Other, please specify (Mitigation system & Carbon Budgets)	Support	Sasol has engaged directly with various stakeholders on matters related to climate change. The nature of the engagement is tailored to the specific needs of the policy debate at a specific time. During the year, for our South African operations, we continued to participate in the roll-out of the National Climate Change Response Policy and the development of the newly proposed draft Climate Change Bill with the Department of Environmental Affairs both on our own and through business and trade associations. Sasol has been and is fully participating in the carbon budget process and is actively engaging on the development of an integrated mitigation system including carbon offsets and trading of budgets.	Sasol is committed to playing our part in South Africa's transition to a lower carbon and more climate resilient economy within the context of it being a developing country. We recognise that we have a particular responsibility and opportunity to contribute to finding solutions to this challenge. We believe that meeting the growing global demand for energy will accelerate GHG emissions unless viable technological solutions are developed and implemented in an economically sustainable manner. We actively engage with government and various stakeholders on our approach to responsibly manage these challenges.

C12.3b

(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?

Yes

C12.3c

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

Trade association

Chemical and Allied Industries' Association (CAIA)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

CAIA members are well aware that a business as usual scenario is not feasible and are committed to playing their part in developing and implementing a national climate change response policy that places South Africa on a lower carbon growth path while at the same time addressing developmental imperatives. The chemical industry recognizes its responsibility to contribute to efforts to mitigate climate change. The industry's goals in this regard are to reduce its own emissions by improving its processes and to encourage the use of chemical products that create a net emission reduction along the value chain. The chemical industry is also addressing the challenge of adaptation to climate change through its commitment to improving water use efficiency.

How have you, or are you attempting to, influence the position?

Sasol plays an active role in developing and implementing the global chemical industry's Responsible Care® initiatives. We participate in working groups of the European Chemical Industries' Council (CEFIC), and South African Chemical and Allied Industries' Association (CAIA).

Trade association

South African Petroleum Industry Association (SAPIA)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The cycle of developing, producing, transporting, refining and delivering oil to end-users presents significant environmental challenges. In response to these challenges, the industry has embarked on a number of initiatives to ensure that it will continue reducing its environmental impact into the future. The SAPIA Engineering and Environmental Committee's anti-pollution strategies include: Development of a common emission management strategy, common emission reporting protocol and common flaring report protocol by the Refinery Managers' Environmental Forum (RMEF) to manage the environmental implications of their activities. Individual refineries have invested heavily in the installation of new emission control technology.

How have you, or are you attempting to, influence the position?

Sasol plays an active role in all SAPIA meetings, including the Climate Change Committee.

Trade association

Minerals Council of South Africa

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The mining industry can demonstrate its commitment to improving energy efficiency and managing climate change by developing a detailed inventory of carbon emission, showing what energy savings have taken place and perhaps set its own targets for energy efficiency (most companies have already signed the Energy Efficiency Accord). This would demonstrate that the industry is serious about dealing with national challenges.

How have you, or are you attempting to, influence the position?

Sasol plays an active role in Chamber of Mines meetings.

Trade association

Business Unity South Africa (BUSA)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

BUSA is a confederation of business organisations including chambers of commerce and industry, professional associations, corporate associations and unisectoral organisations. It represents South African business on macro-economic and high-level issues that affect it at the national and international levels. BUSA's function is to ensure that business plays a constructive role in the country's economic growth, development and transformation and to create an environment in which businesses of all sizes and in all sectors can thrive, expand and be competitive. As a principal representative of business in South Africa, BUSA represents the views of its members in a number of national structures and bodies, both statutory and non-statutory. BUSA also represents businesses' interests in the National Economic Development and Labour Council (NEDLAC).

How have you, or are you attempting to, influence the position?

Sasol plays an active role in various BUSA meetings and co-chairs the BUSA Environmental Sub-committee.

Trade association

Industry Task Team on Climate Change (ITTCC)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The ITTCC is a non-profit organization that represents energy-intensive industries. It is committed to working with industry, business groups and government departments to ensure sustainable economic growth while transitioning South Africa to a lower-carbon economy. The ITTCC's role is to undertake technical, fact-based studies to ensure that South Africa's policies regarding climate change are based on the best information, best practice and prescribe tangible, achievable ends.

How have you, or are you attempting to, influence the position?

Sasol actively participates in meetings, provides expert advice and supports various pieces of work to provide a fact base to inform climate change policy development. Sasol is currently the Vice Chair of the ITTCC.

C12.3d

(C12.3d) Do you publicly disclose a list of all research organizations that you fund?

No

C12.3e

(C12.3e) Provide details of the other engagement activities that you undertake.

Sasol is committed to working with all in the countries where we operate to achieve optimum GHG management solutions balanced with economic development and growth drivers. We believe that business is an

essential part of the solution to the climate change challenge and that only through working collaboratively with national and international stakeholders in developing climate change related policies both in South Africa

and globally, will we achieve the required impetus and solutions .

We engage directly with regulators and policymakers, as well as indirectly through relevant national and international business associations and task teams. At an international level, we work through organisations such

the International Chamber of Commerce (ICC), and the International Council of Chemical Associations (ICCA). This provides us access to thought leadership, particularly around improving climate change data reporting

and energy efficiency. Our national operations engage directly and through organized business associations such as the American Chemistry Council (ACC), BUSA, Business Leadership South Africa (BLSA), National

Business Initiative (NBI), CAIA and Industry Task Team on Climate Change (ITTCC). Sasol has attended and participated consistently in the Conference of the Parties (COP) since COP 15 and supports the Paris

Agreement.

In terms of recent policy developments, the regulatory issues that have a particularly profound potential impact on our South African activities are those relating to the proposed carbon tax (and associated regulations

including carbon offsets) and carbon budgets, clean fuel specifications, air quality, water and waste management. A multi-disciplinary team has been in existence for 8 years to consider climate change policy and this has

now been widened to environmental policy as well. The Stakeholder Affairs department which is part of the multi-disciplinary team arranges our engagement with key stakeholders. The aforementioned team derives its

mandate through a sub-committees of the Group Executive Committee (GEC).

We believe that a consistent approach to engaging with various tiers of government on critical policy and regulatory issues is contributing to a more productive and mutually beneficial relationship. It is also

encouraging further alignment between the regulatory requirements of different government departments in South Africa.

These engagements also allow Sasol to learn and share work and experiences with government and other organisations – an example is Sasol's participation with the South African government and wider business at

COP 23 in Germany showcasing the significant advances made on both climate change mitigation and adaptation by government and business.

In addition to this, Sasol engaged with key shareholders, including the Raith Foundation, regarding a proposed shareholder resolution requiring a separate Climate Change Report to be developed and published in August 2019. Sasol supports this objective and confirmed its intent to publish an enhanced Climate Change Report in August 2019, which by and large aligns with key areas included in the proposed resolution, subject to its

internal governance processes. Accordingly, the Report aims to include an update of Sasol's climate change scenario work, an overview of the activities to manage our risk and opportunities related to climate change; an

overview of our adaptation strategy and Sasol's view of long term GHG targets and internal fiscal instruments. Sasol believes that oversight of this process through its governance structures, including Board

sub-committees, provides sufficiently for independent views given the representation by external, non-executive directors.

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?

Identifying and responding to our material and top risk climate change issues is critical to our ability to execute our sustainable growth strategy. Our identification process encompasses an assessment of our group-wide

risks, identified through our internal risk assessment process, as well as careful consideration of the legitimate interests and expectations of our internal and external stakeholders. We continually enhance our issues

management process, which seeks to address those matters that are likely to impact our common objectives, strategy and growth targets. In identifying the issues, we ensure that the pertinent implications of policy and regulatory changes as well as the socioeconomic and reputational drivers are properly understood. Equally important, we seek to take proactive steps to limit the possibility that a particular issue becomes a longer-term

risk for the group. As climate change has been identified as top risk within the Group we are continuously ensuring through our risk management methodology (the Bow Tie) that we incorporate actions that are

consistent with our strategy.

Sasol's Climate Change and Environmental Policy Committee includes a stakeholder engagement track which specifically looks at an engagement strategy and approach that involves categories of stakeholders to engage at various levels on different matters for example on carbon tax and budgets and the proposed South African Climate Change Bill. This roadmap is a plan to effectively identify and engage, key individuals who will

collaborate on issues of mutual interest regarding policy and regulatory development.

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 other regulatory filings

Status

Underway – previous year attached

Attach the document

Content elements

- Governance
- Strategy
- Risks & opportunities
- Emissions figures
- Emission targets
- Other metrics

Publication

In mainstream reports in accordance with the CDSB Framework

Status

Complete

Attach the document

- Sasol 2017_Integrated-report.pdf
- Sasol 2017_sustainability-report.pdf

Content elements

- Governance
 - Strategy
 - Risks & opportunities
 - Emissions figures
 - Emission targets
 - Other metrics
-

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.

Disclosure Committee including Senior Vice Presidents of Strategy, Legal and SHE & Risk

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	Disclosure Working Group Senior Vice Presidents – Strategy, Risk and SHE and Legal	Other, please specify

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	

SC0.2

(SC0.2) Do you have an ISIN for your company that you would be willing to share with CDP?

Please select

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges
-----------------------	--

SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

Please select

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?

Please select

SC3.1

(SC3.1) Do you want to enroll in the 2018-2019 CDP Action Exchange initiative?

Please select

SC3.2

(SC3.2) Is your company a participating supplier in CDP's 2017-2018 Action Exchange initiative?

Please select

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services, if so, what functionality will you be using?

Please select

SC4.2d

(SC4.2d) Have any of the initiatives described in SC4.2c been driven by requesting CDP Supply Chain members?

Please select

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	Are you ready to submit the additional Supply Chain Questions?
I am submitting my response	Public	Investors Customers	Yes, submit Supply Chain Questions now

Please confirm below

I have read and accept the applicable Terms