

Welcome to your CDP Climate Change Questionnaire 2019

C0. Introduction

C0.1

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

Aspen is a pharmaceutical company listed on the Johannesburg Stock Exchange Limited (“JSE”). Aspen employs approximately 10 000 employees and its heritage dates back more than 160 years in South Africa. Aspen supplies branded and generic pharmaceutical products, infant milk nutritionals and consumer healthcare products in selected territories and into more than 150 countries worldwide. The Aspen brand has become synonymous with high quality and affordable products. Aspen recognises that climate change has potential direct and indirect implications on its operations and is therefore relevant to Aspen’s sustainability objectives. As at 30 June 2018, the Group had 25 manufacturing facilities across 17 sites. The manufacturing sites contribute to the bulk of Aspen’s carbon emissions and as such environmental reporting is focused at a manufacturing site level. The New Zealand New Milk facility is excluded from the reporting boundary as Aspen does not have operational control of this facility. The main contributors to Aspen’s Scope 1 emissions are natural gas, refrigerants and fuel consumption while Scope 2 emissions are comprised of purchased electricity and steam.

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, 2017	June 30, 2018	Yes	1 year

C0.3

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

- Australia
- Brazil
- France
- Germany
- Ghana
- Kenya

Mexico
 Netherlands
 South Africa
 United Republic of Tanzania
 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

C1. Governance

C1.1

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

Yes

C1.1a

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

Position of individual(s)	Please explain
Other, please specify Board/Executive board	One of the five strategic objectives that Aspen’s Board has approved is “To practice good corporate citizenship” and the Board is responsible for performance against this strategic objective by considering both the financial aspects of the business and impact that the business operations have on economic, physical and social environments in which Aspen operates. Aligned to the Group’s strategic objectives, the Board ratifies the Group’s material sustainability Key Performance Indicators (KPIs) annually, which includes, inter alia “Preserving the environment” and “Managing the efficient utilisation of scarce resources”. Achievement of the Group’s strategic and related sustainability objectives are monitored on the basis of these approved KPIs.

	Aspen's Social and Ethics Committee (a subcommittee of the Board) is responsible for the governance of the Group's social, environmental, human rights and ethics responsibilities in accordance with the relevant regulations, guidelines, recommendations.
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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 – some meetings	<ul style="list-style-type: none"> Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding business plans Monitoring implementation and performance of objectives Overseeing major capital expenditures, acquisitions and divestitures 	As per C1.1a) above, the Group's sustainability objectives and related KPI's are ratified by the Board on an annual basis. The Deputy Group CEO presents the Group's performance against these objectives and KPI's to the Board at each of its scheduled quarterly meetings. The Group's Executive Risk Forum (which comprises the Deputy Group CEO, the Group Chief Operating Officer and the Group Finance Officer) presents the top enterprise-wide risks to the Group Audit & Risk Committee at the scheduled quarterly meetings, after which the risk profile is included in this Committee's report to the Board. Should a significant climate-related risk be identified, the Board would review how the proposed risk mitigation has been considered in the business plan of the impacted business unit, and any major capital expenditure needed to implement the proposed mitigation would be included in the review and approval processes, as needed.

C1.2

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

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Other committee, please specify Social and Ethics Committee	Assessing climate-related risks and opportunities	Quarterly

Other C-Suite Officer, please specify Deputy Group Chief Executive	Both assessing and managing climate-related risks and opportunities	Quarterly
Chief Operating Officer (COO)	Both assessing and managing climate-related risks and opportunities	As important matters arise
Other C-Suite Officer, please specify Executive Head of Site	Both assessing and managing climate-related risks and opportunities	More frequently than quarterly
Other C-Suite Officer, please specify Executive Head of Site	Both assessing and managing climate-related risks and opportunities	More frequently than quarterly
Risk committee	Assessing climate-related risks and opportunities	Quarterly

C1.2a

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

The responsibility for climate-related issues in the first instance lies with the Site Head, who is responsible for developing and executing the business unit strategy in alignment with the overall Group strategy. The Site Head is responsible for conducting a site risk assessment, which would include climate-related risks and for driving performance aligned to the Group's KPI's. In respect of operational aspects, Site Heads report into Group Executives who ensure strategic alignment across the Group's operations. Technical input is provided by Group SHE. In respect of overall performance, Site Heads are ultimately accountable to the Group Chief Executive and Deputy Chief Executive. In respect of enterprise risk management, significant and material risks are reported by the Site Heads to the Executive Risk Forum (comprised of the Deputy Chief Executive, the Group Operating Officer and the Group Finance Officer) who then provide the Group A&R Committee with a Group view on the top risks and related mitigations. The Group A&R Committee report on this risk profile to the Board.

C1.3

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

Yes

C1.3a

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

Who is entitled to benefit from these incentives?

All employees

Types of incentives

Other non-monetary reward

Activity incentivized

Behavior change related indicator

Comment

In some operations such as South Africa and Tanzania, employees are rewarded for active participation and innovative ideas during environmental campaigns which include climate change, water security and global warming. The rewards take the form of prizes, recognition or give-aways to participants in the campaigns.

Who is entitled to benefit from these incentives?

All employees

Types of incentives

Recognition (non-monetary)

Activity incentivized

Energy reduction project

Comment

The Australian facility has employee recognition programmes aimed at promoting positive behaviours and resource conservation. Energy consumption is reported internally on a monthly basis. Recognition is given to the management teams and employees involved in the initiatives.

Who is entitled to benefit from these incentives?

Other, please specify
Engineering Managers

Types of incentives

Monetary reward

Activity incentivized

Energy reduction project

Comment

In the operations in South Africa, Brazil and Tanzania, energy reduction and efficiency projects form part of the Engineering Manager's key performance areas (KPA's), The

KPA's are directly linked to the performance appraisal process and the awarding of performance-based annual increases.

Who is entitled to benefit from these incentives?

All employees

Types of incentives

Recognition (non-monetary)

Activity incentivized

Energy reduction target

Comment

The Brazilian facility has a program for setting targets for atmospheric emissions. The results are measured monthly against the established targets.

Who is entitled to benefit from these incentives?

Energy manager

Types of incentives

Monetary reward

Activity incentivized

Energy reduction target

Comment

In Aspen France, incentives are given to energy managers and project participants when an energy reduction project is successfully implemented. The incentive is included as part of the management bonus.

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	2	None
Medium-term	2	5	None
Long-term	5	20	20 years and beyond.

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	1 to 3 years	Group-wide consideration of risks, with a formal measurement of the key environmental performance indicators for manufacturing facilities on a quarterly basis.

C2.2b

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

Risk management is an embedded attribute of Aspen's corporate culture and is inherent in all its business decisions, activities and transactions. An integrated approach to risk management is implemented giving due consideration to economic, environmental and social indicators impacting the Company and its stakeholders. Strategic, operational, financial and compliance risk assessments are conducted annually at a business unit level and at a company level and Quarterly updates are provided on the Top 5 Risks. Company-wide risks are identified by the Group Risk & Sustainability Manager and reported to the Executive Risk Forum, the risk assessment is performed in accordance with the approved Group Risk Management policy and Group Risk Management Framework. The following aspects are considered with specific reference to climate change: (i) The effectiveness of environmental management systems. (ii) Responsible management of energy and carbon footprint. (iii) Environmental risks. The risk assessment methodology requires the assessment of the identified risks in relation to the potential impact and the probability. A predefined 4-point scale categorises the impact from catastrophic to minor taking into account the potential financial impact, impact on the viability of the current and future planned business model and supporting systems; impact on compliance to regulations/legislation/ contractual agreements/internal governance procedures; and/or impact on the Group's reputation and/or its stakeholders. The application of a likelihood assessment (from "almost certain" to "unlikely") to the impact rating results in an overall inherent risk rating. The effectiveness the risk mitigations are assessed to determine the residual level of risk. These inherent and residual risk assessments are used to rank risks

relative to each other. Interdependent risks and/or risk concentrations are considered by the Executive Risk Forum and included in their Group risk report, as necessary. The business unit integrated risk assessments are supported by the SHE risk assessments which are conducted using a systematic approach for the identification and assessment of all safety, health and environmental risks, including climate change. All activities, processes, plant machinery and energy sources are taken into consideration under normal, abnormal and emergency conditions. Parameters such as severity, occurrence and exposure are used to calculate the inherent and residual risk, and then prioritised according to the determined risk levels. Proposed solutions and resources required for mitigating significant risks and impacts are presented to Executive Management for approval. The status of the risk mitigation plans are reported on a regular basis during the site SHE performance review meetings.

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	Our ability to ensure compliance with all current environmental regulation is relevant to all of our operations.
Emerging regulation	Relevant, always included	Emerging regulation relating to climate change increases the risk of non-compliance which could lead to fines, penalties and/or disruption to operations. Increased costs to adapt to new legislative requirements could also significantly impact both capital and operating costs.
Technology	Relevant, always included	In order to adapt to new legal requirements and/or adopt new technologies in line with our environmental policy objectives, technology risks are considered especially in relation to the capital investment required.
Legal	Relevant, always included	Linked to regulation above, legal risks relating to non-compliance to environmental related legislation are considered relevant to risk assessments.
Market	Relevant, always included	Risks arising from changing expectations from key stakeholders (for example, key customers and end consumers) are considered relevant, especially in respect of "social licence to operate" and reputational impacts.
Reputation	Relevant, always included	Usually as a consequence of not managing one of the other categories of risk, reputational risks are considered at both the Group and at the business unit level.

Acute physical	Relevant, always included	Physical risks are considered as part of the business continuity risk assessment process, and would include risk related to extreme weather events.
Chronic physical	Relevant, sometimes included	Chronic physical risks are relevant, but may not be discretely assessed in risk management processes, unless impacts are already being experienced. For example, changing weather patterns which may be contributing to the drought experienced in parts of South Africa. Water risk assessments are being conducted and will be expanded for climate change related risks going forward.
Upstream	Relevant, sometimes included	Climate change risks could impact the reliability of supply and costs associated with suppliers of raw materials (many of which are plant based), API and intermediary suppliers as well as suppliers of utilities (water, gas, fuel, electricity). While these risks are considered to some extent, this would tend to be in the short term horizon (and when impacts are already becoming evident), rather than in a longer term.
Downstream	Relevant, not included	Due to the complexities of the downstream supply chain it is not feasible to collect this data.

C2.2d

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

Risks and opportunities are prioritised by the business unit management teams in consultation with Group Executives Based on the inherent risk levels and current levels of risk mitigation (residual risk). Consideration is given to the impact of such risks to business sustainability, the value and opportunity cost of the applied environmental resources to the business, and the Group's strategic objectives. Based on the inherent risk levels and current levels of risk mitigation (residual risk), risks are ranked and prioritised.

Key risks/opportunities and the implementation of proposed mitigations/strategies are monitored by business unit management on an ongoing basis. The status of material risks is reported to the Executive Risk Forum on, at least, a quarterly basis although issues can be escalated at any time.

Management's self-assessment of the risk mitigation plan effectiveness is substantiated using the combined assurance model of internal and externally obtained assurances. Environmental legal compliance audits are conducted in accordance with an assurance plan. The material sustainability key performance indicators including environmental indicators, which are reported in the Group's Integrated Report, are verified by external auditors annually. Through the

Group's risk management processes and integrated reporting, the Audit & Risk Committee and Social & Ethics Committee monitor compliance and initiatives towards responsible environmental management on behalf of the Board. In this way, sustainability objectives are integrated into the risk management process and monitored by the Board collectively.

C2.3

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

Yes

C2.3a

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

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Transition risk

Primary climate-related risk driver

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

Type of financial impact

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

Company- specific description

South Africa is amongst the world's most carbon-intensive economies. Recognizing the importance of reducing carbon emissions and foreseeing the benefits that a low carbon economy can bring, the South African government has committed to ambitious greenhouse gas emission reductions of 34% by 2020 and 42% by 2025. This resulted in the formulation of the Carbon Tax Act and the Customs and Excise Amendment Act which came into effect on 1 June 2019. An immediate and direct impact was the tax imposed on petrol and diesel with a price increase of 7 cents per litre on petrol and 8 cents per litre for diesel. In the longer term, the taxing of the petrol and diesel value chains from oil production, transport and venting will likely be passed down to consumers. The tax is payable by companies which exceed the threshold of carbon emissions. The first phase of the tax is from 1 June to December 2022, with a tax rate of R120 (\$8.34) per tonne of carbon dioxide equivalent. The Carbon Tax Act makes the

following tax free thresholds/allowances: • A basic 60 per cent tax-free threshold during the first phase of the carbon tax, from implementation date up to 2022; • An additional 10 per cent per cent tax-free allowance for process emissions; • Additional tax-free allowance for trade-exposed sectors of up to 10 percent; • A carbon offset tax-free allowance of 5 to 10 percent. The combined effect of all of the above tax-free thresholds will be capped at 95 percent, and an initial marginal carbon tax rate of R120 per ton CO₂-e will apply. However, taking into account all of the above tax-free thresholds, the effective carbon tax rate will vary between R6 and R48 per ton CO₂-e. The further “allowances” mean that several of South Africa’s major emitting companies will pay a minimum of R6/ton. At current exchange rates, that is as little as \$0.42/ton, much lower than required globally. Should this carbon tax be levied after the tax-free basic threshold of 60% of Scope 1 GHG emissions before allowances and offsets, Aspen Pharmacare would incur additional costs. The potential impact on Aspen has been calculated and financial impact has been estimated. The details still need to be confirmed and finalised.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

0

Potential financial impact figure – maximum (currency)

800,000

Explanation of financial impact figure

When the 60% tax-free allowances and additional allowances are taken into account, the effective tax rate will range between R6- R48 per ton of CO₂e. Based on the current proposed tariff structure the potential impact is estimated to be under R800 000 for the South African Operations

Management method

In line with Aspen’s environmental management principles, Aspen has proactively implemented energy conservation and optimisation projects. The company’s commitment to the conservation of scarce resources will assist with mitigation of this risk.

Cost of management

0

Comment

Variable costs depending on projects.

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

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

Company- specific description

Fine Chemicals Corporation in Cape town is based in an area which has been experiencing severe drought conditions which pose a risk to supply and safety (lack of water or inadequate water pressure for firefighting). The site identified a number of water conservation and efficiency initiatives and investigated alternative water sources in mitigation of this risk. Implementation of mitigation programs identified is in progress. Financial impact includes increased cost of water supplied by the municipality, an increase in the cost of water by the use of borehole and energy-intensive water treatment plant.

Time horizon

Long-term

Likelihood

Very likely

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

0

Potential financial impact figure – maximum (currency)

12,000,000

Explanation of financial impact figure

The quantum of the potential financial impact is unknown, however, the cost of water could increase due to the potential tariff increase levied by the municipality in an attempt to decrease consumption and additional treatment of water from alternative sources. The facility would also incur capital expenditure costs in order to secure alternate water supply and to install water pressure regulators.

Management method

Installation of a borehole and a water purification plant in order to supplement the municipal water supply.

Cost of management

12,000,000

Comment

Approximately R12 million capital investment is required for installation of the borehole and the waste disposal of waste generated by the purification process.

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Transition risk

Primary climate-related risk driver

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

Type of financial impact

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

Company- specific description

Aspen makes use of HVAC and associated refrigerants in order to maintain the required environment for manufacture. As per the requirements of the Montreal Protocol, Aspen is required to seek alternative “ozone-friendly” refrigerants as per the mandatory timelines. The Montreal Protocol on Substances that Deplete the Ozone Layer is widely regarded as the world’s most successful environment protection agreement. It is the only treaty with universal ratification, with all 197 member countries of the United Nations having accepted legally-binding obligations to phase out the production and consumption of ozone-depleting substances. The Protocol sets out a mandatory

timetable for the phase out of ozone-depleting substances hydrochlorofluorocarbons (HCFC), such as R22 for developed and developing countries. R-22 has come under the spotlight because of its harmful impact on the ozone layer but also because it is classified as a greenhouse gas (GHG) which contributes to climate change. The deadline for developed countries for the complete phase-out is 2020 and 90% reduction in usage of R22 by 2015. In Europe, all HCFC top-ups were prohibited from 1 January 2015. In developing countries such as South Africa, Kenya, Tanzania, Ghana and Brazil, the deadline for the total ban of R22 is 2030.

Time horizon

Medium-term

Likelihood

Very likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The exact financial impact for the Group has not been quantified and will differ from country to country. Capital expenditure will be required for the replacement and refurbishment of HVAC units. In addition, a change to alternative refrigerants could increase the operational costs of the HVAC units.

Management method

The Aspen facilities have completed an inventory of all ozone-depleting substances and sites such as the Port Elizabeth site, Nutritionals site in Johannesburg and Vallejo in Mexico have developed a phase-out plan with respect to the use of Ozone depleting substances. Possible solutions include: 1. The replacement of existing units with new units that use alternatives to R22 such as R407c, R404a or Ammonia This is the most expensive but simplest option. 2. Conversion of existing units to enable them to utilise alternatives to R22 substitutes. While both options will incur costs, it is anticipated that the price of R22 will increase once the ban and import prohibition is in place.

Cost of management

0

Comment

The total cost has not been established although the average cost of a chiller unit is between R1,5 and R3 million. The average cost of a small air conditioner is between R5000 and R10 000.

Identifier

Risk 4

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Transition risk

Primary climate-related risk driver

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

Type of financial impact

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

Company- specific description

In Kenya, under the Air Quality Regulations; 2014, there is provision for quarterly boiler emission measurement as well as the measurement of other parameters. In addition, the facility is required to obtain an emission license on an annual basis. This will result in increased expenditure due to periodic emissions measurement and annual licensing fees.

Time horizon

Current

Likelihood

Virtually certain

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

0

Potential financial impact figure – maximum (currency)

75,000

Explanation of financial impact figure

This is the estimated cost of carrying out annual emission measurements and the application for an annual emission license.

Management method

Compliance with legal requirements and ensure that the boilers are adequately serviced and clean fuel is utilised in Aspen's operations.

Cost of management

75,000

Comment

Estimated cost of carrying out annual emission measurements and the application for an annual emission license.

Identifier

Risk 5

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Physical risk

Primary climate-related risk driver

Chronic: Rising mean temperatures

Type of financial impact

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

Company- specific description

Kenya, being at the equator generally has warm temperatures. The continuous increase in the temperatures will further require more use of air handling units within the facility. This translates into more energy consumption to drive the increased need for the same.

Climate change is bringing about droughts resulting in water shortage which impacts production.

Time horizon

Long-term

Likelihood

More likely than not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Costs would be incurred for the installation of additional ventilation.

Management method

Increasing more natural ventilation ways such as additional windows mostly in the office environments, taking into account a design and change management process in the facility's buildings

Cost of management

0

Comment

Costs not yet established.

Identifier

Risk 7

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

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

Company- specific description

Severe flooding has hit most parts of Mexico in the last few years. Weeks of heavy rain have brought widespread flooding to large areas of eastern and southern Mexico. Floods have a direct impact on the workforce due to payment of extra work hours, fatigue, incidents, and the cost for cleaning and draining the sewer. In addition, increased operational costs are incurred due to supply chain interruptions e.g. transportation delays, and there is risk unavailability of raw materials and product.

Time horizon

Current

Likelihood

Very likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Cannot be quantified at this stage

Management method

Not yet established.

Cost of management

0

Comment

No additional information at this stage.

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

Resource efficiency

Primary climate-related opportunity driver

Use of more efficient production and distribution processes

Type of financial impact

Reduced operating costs (e.g., through efficiency gains and cost reductions)

Company-specific description

In Aspen, all manufacturing facilities are required to include environmental indicators such as fuel consumption and electricity consumption for sustainability reporting. In line with one of Aspen's key values, i.e. innovation, and commitment to compliance with its ISO 14001 Environmental Management Systems,' the company strives for continual improvement. As such energy conservation and efficiency projects which create investment and improvement opportunities for the sustainable development of the business are promoted.

Time horizon

Current

Likelihood

Virtually certain

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The financial impact is dependent on the amount of capital expenditure required to fund the resource conservation initiative identified. In 2016/2017 the following investments were made in energy and resource efficiency projects:

- 1.Cape Town Facility: approximately R6,000,000
2. French Facility: R2,550,000
3. Nutritionals plant in Johannesburg : R65,000.

Strategy to realize opportunity

Resource availability, the potential impact on maintenance of GMP conditions and changes to environmental legislation in each territory are factors applied in the approval and prioritisation of conservation projects. In addition, investment in energy efficient technology is given due consideration during the construction of new facilities and when replacing equipment and machinery.

Cost to realize opportunity

0

Comment

Costs are variable.

Identifier

Opp2

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Energy source

Primary climate-related opportunity driver

Use of lower-emission sources of energy

Type of financial impact

Reduced operational costs (e.g., through use of lowest cost abatement)

Company-specific description

Due to the continuous rise in temperature and reduction in diurnal temperature changes each day as reported in the recent years, the South African and Kenyan facility are investigating opportunities to harness solar energy. Installation of solar panels and use of the sun as a source of energy will provide an alternative to the current energy sources in the facility. This could reduce the cost of electricity significantly.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Financial impacts for the projects not yet established.

Strategy to realize opportunity

Extensive research is being conducted to ensure that the facility partners with a reputable service provider ensuring that the most feasible photovoltaic (PV) solution in terms of durability of structures and components, acceptable payback periods and annual price increases are identified.

Cost to realize opportunity

0

Comment

Financial impacts for the projects not yet established.

Identifier

Opp3

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

Reduced operational costs (e.g., through use of lowest cost abatement)

Company-specific description

The German government is incentivising businesses to implement energy management systems by providing tax refunds and this facilitated? In the installation of a 600 kW CHP unit at the Aspen German facility.

Time horizon

Current

Likelihood

Virtually certain

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The German government is incentivizing businesses to implement energy management systems by providing tax refunds. Aspen Bad Oldesloe, the German facility, received tax refunds of approximately R2, 852,900 (€193.417) in the 2013 /2014 financial year, approximately R1, 868, 176 (€125.656, 21) in the 2014- 2015 financial year and approximately R1,003,860 (€78 000) in the 2015-2016 financial year. For the 2016/2017 financial year, it is anticipated that the site will receive a tax refund of approximately R R1,487,430 (€93,935).

Strategy to realize opportunity

The German site successfully implemented the ISO 50001 energy management system to provides a systematic approach to achieve continual improvement of energy performance, including energy efficiency, energy use and consumption, as well as the accurate monitoring and reporting thereof in order to demonstrate the corresponding decrease in emissions. Due to resource conservation as a result of the installation of the Combined Heat and Power (CHP) plant, the German facility qualifies for annual tax refunds.

Cost to realize opportunity

13,500,000

Comment

The German site invested approximately € 65 000 (R945 000) to implement the ISO 50001 system and to cover the on-going expenses linked to maintenance and auditing. The CHP cost approximately R12, 480,000 (€970 000).

C2.5

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

Impact	Description
--------	-------------

Products and services	Impacted	The process is not yet formalised.
Supply chain and/or value chain	Impacted	The process is not yet formalised.
Adaptation and mitigation activities	Impacted for some suppliers, facilities, or product lines	The process is not yet formalised.
Investment in R&D	Not evaluated	Not relevant for our business.
Operations	Impacted	The process is not yet formalised.
Other, please specify	Not evaluated	Not evaluated

C2.6

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

	Relevance	Description
Revenues	Not evaluated	The process is not yet formalised.
Operating costs	Impacted	The process is not yet formalised.
Capital expenditures / capital allocation	Impacted	The process is not yet formalised.
Acquisitions and divestments	Not evaluated	Not yet evaluated
Access to capital	Not evaluated	Not yet evaluated
Assets	Not evaluated	Not yet evaluated
Liabilities	Not evaluated	Not yet evaluated
Other	Not evaluated	Not evaluated

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?

No, but we anticipate doing so in the next two years

C3.1c

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

(i) Internal Process: Aspen's strategic objective, "To practise good corporate citizenship", supports the Group's objectives for climate change and responsible environmental management. To this end, Aspen's sustainability management initiatives promote the themes of "Preserving our environment" and "Managing efficient utilisation of scarce resources". These initiatives are monitored by the following material key performance indicators which are reported to the Board as per the agreed reporting timelines: Volume of carbon emissions (bi-annually); Volume of waste recycled (quarterly); Electricity consumed (quarterly); and Volume of water used (quarterly). These indicators flag areas of risks and opportunities within the environmental management systems and programmes. Aspen's business strategy is defined at a Board level and the Board is made aware of potential climate change risks and opportunities via existing reporting channels e.g. Audit & Risk Committee, Social & Ethics Committee and the Executive Risk Forum. Aspen's Group Environmental Management Principles formally describes the Group's commitment to the "Containment and reduction of our carbon footprint in our operations and in the broader supply chain in a technically and economically feasible manner through structured systems of environmental monitoring, reporting and management". This intent is integrated into strategies for the Group's manufacturing facilities, with formal conservation projects currently in progress at the facilities in South Africa, Australia, Kenya, Mexico, Brazil, Netherlands, France and Germany. Resource availability, cost and changes to environmental legislation in each territory are factors applied in the approval and prioritisation of conservation projects. In addition, investment in energy efficient technology is given due consideration during the construction of new facilities and when replacing equipment and machinery. Plans are in place to extend similar projects to other sites in the Group when appropriate.

ii) How the business strategy has been influenced: Resource availability, cost and changes to environmental legislation in each territory have played a role in the business strategy. With the ultimate goal of reducing Scope 2 and 3 emissions, the facilities have demonstrated increased commitment to resource conservation initiatives and the reduction in the quantity of waste disposed in landfills. For example, tax incentives offered in Germany supported the German site's implementation of an ISO 50001 energy management system and the installation of a Combined Heat and Power Unit. The South African Operations have adopted a zero waste to landfill strategy to support the Aspen Group Environmental Management Principles. In line with European legislation, none of the European facilities dispose of waste to landfill.

iii) Aspects influencing the strategy: Improving Aspen's carbon footprint as a responsible corporate citizen and potential regulatory changes (e.g. potential carbon tax implementation in South Africa and the introduction of energy reduction targets in Germany and Australia) are the major aspects that have influenced Aspen's strategy. Sustainable access to scarce resources e.g. water, the rising cost and security of electricity supply in South Africa and business disruptions due to bad weather, have also been key drivers behind Aspen's strategy of resource optimisation and conservation.

iv) Short term strategy (1-5 years): Although Aspen has not yet set formal targets linked to climate change; Aspen has implemented resource conservation projects, which ultimately

reduce our carbon emissions. An important component of our short-term strategy involves the energy efficient operation of utilities, which drive production processes and requirements for Good Manufacturing Practice, e.g. adjustment of the HVAC chiller controls, and management of HVAC load demand by the addition of a pre-cooling and dehumidification step prior to the main HVAC units.

v) Long term strategy (5 to 10 years): Aspen's long term strategy is to remain sustainable and to continue to deliver stakeholder value, be a good corporate citizen and ensure supply of quality, affordable medicines. Resource Conservation, in light of resource scarcity and price increases driven by climate change, and continuous improvement, are central to ensuring business sustainability.

vi) Strategic advantage: Aspen believes that resources such as energy and water will be further constrained in the future. Implementing proactive and voluntary management systems and programmes to increase resource efficiency and decrease consumption, will, therefore, be an advantage. These proactive systems will facilitate the management of future regulatory requirements and reduction of operational costs, resulting in a competitive advantage whilst fulfilling the Group's strategic objective of sustainably supplying affordable products to customers.

vii) Substantial business decisions that have been influenced by climate change include the following:

- The adoption of an internationally recognised environmental management system (ISO 14001) to formally manage continuous improvement projects linked to resource conservation and reduced environmental pollution at the majority of the manufacturing facilities, with certification awarded to the pharmaceutical and nutritional sites in South Africa, Mexico, France, Australia, Brazil and Germany. The Active Pharmaceutical Ingredient (API) facility in Netherlands achieved its certification in September 2018 and the South African API facility is targeting towards certification by 2019.
- The German (ABO) and France (NDB) sites implemented an ISO 50001 certified energy management system. The system enabled ABO to implement a systematic approach for managing continual improvement with respect to energy efficiency, energy security, energy use and consumption. The continuous reduction in energy use will ultimately result in lower energy costs and greenhouse gas emissions.
- The expansion of the carbon footprint boundary for CDP reporting with the inclusion of additional manufacturing sites within the Aspen global structure.
- The prioritization of energy, water and waste reduction projects at all manufacturing sites within the Aspen global structure.
- Investment in energy efficient technologies as a sustainable input into manufacturing processes.

C3.1g

(C3.1g) Why does your organization not use climate-related scenario analysis to inform your business strategy?

To be considered in the future.

C4. Targets and performance

C4.1

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

No target

C4.1c

(C4.1c) Explain why you do not have emissions target and forecast how your emissions will change over the next five years.

	Primary reason	Five-year forecast	Please explain
Row 1	We are planning to introduce a target in the next two years	An increase in the reporting of total energy consumption for the Aspen Group is expected over the next five years due to expansion projects currently in process.	Group-wide targets have not been implemented as yet although some business units have set individual targets at a site level. Focus is being given to implementing effective systems to measure energy usage and savings and to identify feasible conservation projects which will yield meaningful reductions within the Aspen Group. For example, significant work has been performed to establish appropriate intensity measures that take into account Aspen's varied production environments and provide a reliable baseline on which to base target reductions and measure performance. Once this is in place, the intention is to establish SMART (Specific, Measurable, Attainable, Realistic and Time-based) medium-term targets for energy conservation projects

C4.2

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

C4.3

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

Yes

C4.3a

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

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	4	163.85
To be implemented*	0	0
Implementation commenced*	25	5,746.71
Implemented*	10	62,754.34
Not to be implemented	0	0

C4.3b

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

Initiative type

Energy efficiency: Building services

Description of initiative

Building controls

Estimated annual CO2e savings (metric tonnes CO2e)

5.38

Scope

Scope 1

Voluntary/Mandatory

Voluntary

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

68,040

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

150,000

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

The upgrade of steam pipelines was successfully implemented in France.

Initiative type

Energy efficiency: Processes

Description of initiative

Process optimization

Estimated annual CO₂e savings (metric tonnes CO₂e)

63,417

Scope

Scope 1

Voluntary/Mandatory

Voluntary

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

756,000

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

105,000,000

Payback period

4 - 10 years

Estimated lifetime of the initiative

16-20 years

Comment

A new regeneration facility for solvent recovery successfully installed in the Netherlands.

Initiative type

Energy efficiency: Processes

Description of initiative

Other, please specify
Natural Gas project

Estimated annual CO₂e savings (metric tonnes CO₂e)

57.91

Scope

Scope 1

Voluntary/Mandatory

Voluntary

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

522,500

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

91,600

Payback period

4 - 10 years

Estimated lifetime of the initiative

16-20 years

Comment

Condensate recovery project successfully completed at Vallejo, Mexico.

Initiative type

Energy efficiency: Processes

Description of initiative

Cooling technology

Estimated annual CO2e savings (metric tonnes CO2e)

3.72

Scope

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

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

204,000

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

196,500

Payback period

<1 year

Estimated lifetime of the initiative

6-10 years

Comment

Temperature adjustments in cold production project successfully implemented at NDB in France.

Initiative type

Energy efficiency: Processes

Description of initiative

Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)

134.19

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

3,500,000

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

9,800,000

Payback period

4 - 10 years

Estimated lifetime of the initiative

16-20 years

Comment

Energy efficiency project successfully implemented in Oss, Netherlands

Initiative type

Energy efficiency: Building services

Description of initiative

Lighting

Estimated annual CO2e savings (metric tonnes CO2e)

75.65

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

1,420,000

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

2,155,000

Payback period

4 - 10 years

Estimated lifetime of the initiative

6-10 years

Comment

Three energy-saving LED lighting projects were implemented at 3 facilities i.e. East London and Johannesburg in South Africa, and in Vallejo, Brazil.

Initiative type

Energy efficiency: Building services

Description of initiative

HVAC

Estimated annual CO2e savings (metric tonnes CO2e)

0.66

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

9,500

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

10,000

Payback period

1-3 years

Estimated lifetime of the initiative

11-15 years

Comment

HVAC Optimisation project successfully implemented at Vallejo, Mexico.

C4.3c

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

Method	Comment
--------	---------

Dedicated budget for energy efficiency	Investment in emission reduction activities is primarily driven by Aspen's commitment to continual improvement as a responsible corporate citizen, in response to potential future regulatory changes, sustainable access to scarce resources e.g. water, and the rising cost and security of electricity supply. Energy efficiency is factored into all expansion and replacement projects and project teams are tasked with ensuring that equipment and processes are designed, procured and installed accordingly to consume the least possible amount of natural resources.
Employee engagement	Awareness campaigns on energy conservation and carbon footprint reduction are rolled out at all manufacturing sites on internationally recognised days such as World Environment Day and World Water Day.

C4.5

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

No

C5. Emissions methodology

C5.1

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

Scope 1

Base year start

July 1, 2011

Base year end

June 30, 2012

Base year emissions (metric tons CO₂e)

6,774

Comment

This is the first year that our emission calculation and methodology were externally verified.

Scope 2 (location-based)

Base year start

July 1, 2011

Base year end

June 30, 2012

Base year emissions (metric tons CO₂e)

88,008

Comment

This is the first year that our emission calculation and methodology were externally verified.

Scope 2 (market-based)

Base year start

July 1, 2011

Base year end

June 30, 2012

Base year emissions (metric tons CO₂e)

0

Comment

Not yet established

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.

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

C6. Emissions data

C6.1

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

Reporting year

Gross global Scope 1 emissions (metric tons CO₂e)

44,305

Start date

July 1, 2017

End date

June 30, 2018

Comment

Scope 1 total emissions for all 11 sites. The Aspen reporting boundary has increased significantly from 2011 when the base year was established.

Past year 1

Gross global Scope 1 emissions (metric tons CO₂e)

48,435

Start date

July 1, 2016

End date

June 30, 2017

Comment

Aspen's emission reporting is aligned to the financial year.

C6.2

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

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

9 facilities are reporting a location-based figure and 2 operations in France and Germany have electricity supplier emission factors.

C6.3

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

Reporting year

Scope 2, location-based

146,332

Scope 2, market-based (if applicable)

2,580

Start date

July 1, 2017

End date

June 30, 2018

Comment

Scope 1 total emissions for all 11 sites. The Aspen reporting boundary has increased significantly from 2011 when the base year was established.

Past year 1

Scope 2, location-based

158,157

Scope 2, market-based (if applicable)

2,080

Start date

July 1, 2016

End date

June 30, 2017

Comment

Aspen's emission reporting is aligned to the financial year.

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?

Yes

C6.4a

(C6.4a) Provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source

Corporate offices in South Africa i.e. Durban and Woodmead, Mexico City in Mexico and Sydney in Australia were excluded from the calculation.

Relevance of Scope 1 emissions from this source

Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source

Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source (if applicable)

No emissions from this source

Explain why this source is excluded

As per a study that was conducted in 2010, the emissions generated by the South African corporate offices were found to be negligible. Using this rationale, it was concluded that energy consumption in the corporate offices is very low in comparison to the consumption in manufacturing operations, therefore, will be excluded.

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

1,457

Emissions calculation methodology

The methodology used is based on the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard. Emission factors sources from DEFRA 2018.

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

100

Explanation

Water supply emission factor is 0.344 Water Treatment emission factor is 0.708

Capital goods

Evaluation status

Not relevant, explanation provided

Explanation

None

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

Evaluation status

Not relevant, explanation provided

Explanation

Fuel used in the production of steam is excluded because it is utilized by service providers. The purchased steam Aspen uses is included in Scope 2 calculation.

Upstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Explanation

This category has been excluded due to lack of available data and the insignificance in the size of emissions relative to the other categories. This is in accordance in accordance with the guidance by the World Resources Institute.

Waste generated in operations

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

95,701

Emissions calculation methodology

The methodology used is based on the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard. Emission factors sources from DEFRA 2018.

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

100

Explanation

Source of Emission Factors: DEFRA-Waste Disposal. Waste Data is provided by our service providers and the following waste types were considered: General waste, Glass, Cardboard and Paper, Plastic, Scrap Metal, Aluminium and Wood.

Business travel

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

11,390

Emissions calculation methodology

Methodology used is based on GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard. Emission factors sources from DEFRA 2017

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

100

Explanation

Business Travel data is only reported for the South African Operations, and is provided by Aspen's Travel service providers i.e. Car Hire and Air Travel.

Employee commuting

Evaluation status

Relevant, not yet calculated

Explanation

Not calculated due to the lack of available data.

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Explanation

Low volume of leased assets – emissions would be negligible.

Downstream transportation and distribution

Evaluation status

Relevant, not yet calculated

Explanation

We have engaged with some of our service providers - currently, there are no systems in place to calculate emissions exclusively for Aspen Pharmacare.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Explanation

The complexity and extent of the value chain prohibit accurate calculations.

Use of sold products

Evaluation status

Not relevant, explanation provided

Explanation

The complexity and extent of the value chain prohibit accurate calculations.

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Explanation

The complexity and extent of the value chain prohibit accurate calculations.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Explanation

Not calculated due to the lack of available data.

Franchises

Evaluation status

Not relevant, explanation provided

Explanation

Aspen Pharmacare has no franchises.

Investments

Evaluation status

Not relevant, explanation provided

Explanation

Not relevant to our business currently.

Other (upstream)

Evaluation status

Not evaluated

Explanation

None.

Other (downstream)

Evaluation status

Not evaluated

Explanation

None.

C6.7

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

No

C6.10

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

Intensity figure

0.0000045361

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

193,217

Metric denominator

unit total revenue

Metric denominator: Unit total

42,595,621,589

Scope 2 figure used

Location-based

% change from previous year

10

Direction of change

Decreased

Reason for change

Revenue growth was achieved in Commercial Pharmaceuticals with base organic growth in both the Anaesthetics and Thrombosis portfolios and the inclusion of a full year of sales of the Anaesthetics portfolios acquired during the course of the prior year. This performance was offset by declines in Manufacturing and the Nutritionals business. The increase in revenue further arose from the acquisition of the residual rights to the AstraZeneca anaesthetics portfolio.

Intensity figure

32.1171875

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

193,217

Metric denominator

full time equivalent (FTE) employee

Metric denominator: Unit total

6,016

Scope 2 figure used

Location-based

% change from previous year

10

Direction of change

Decreased

Reason for change

Scope 1 and Scope 2 emissions for the Group have decreased by 9,2% and 7,1%, respectively. Closure of the solvent recovery unit at the Moleneind site resulted in lower natural gas consumption which led to a reduction in Scope 1 emissions. Additionally, the reduction in Scope 1 emissions is partially attributable to the discontinuation of the use of refrigerant (R22) at the Vallejo and Johannesburg sites. The closure of the solvent recovery unit at the Moleneind site, reconfiguration of an HVAC system together with a reduction in the HVAC load at the sterile facilities in Port Elizabeth, and a change in the emission factor for Vallejo's electricity contributed to the reduction in Scope 2 emissions.

C7. Emissions breakdowns

C7.1

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

No

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	7,664
Germany	5,642
Australia	2,038
Netherlands	16,944
Brazil	481
Kenya	693
Ghana	68
United Republic of Tanzania	1,652
France	2,335
United States of America	875
Mexico	5,915

C7.3

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

By facility

By activity

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
Port Elizabeth (South Africa)	3,705	-33.9167	25.5667
East London (South Africa)	1,519	-32.981	27.8282
Johannesburg (South Africa)	144	-25.9874	28.8282
Cape Town (South Africa)	2,294	-33.9157	18.577
Bad Oldesloe (Germany)	5,642	53.8009	10.3983
Dandenong (Australia)	2,038	-37.981	145.215
Oss (Netherlands)	16,944	51.6225	5.1
Vitoria (Brazil)	481	-20.3222	-40.3381
Beta (Kenya)	693	-1.2833	36.8167
Shelys (Tanzania)	1,652	-6.8235	39.2695
Kama (Ghana)	68	5.556	-0.1969
Notre Dame de Bondeville (France)	2,335	49.4431	1.0993
Sioux City (United States of America)	875	43.5499	-96.7003
Vallejo (Mexico)	5,915	19.5018	-99.1674

C7.3c

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

Activity	Scope 1 emissions (metric tons CO2e)
Mobile Fuel Combustion: Diesel	292
Mobile Fuel Combustion: Gasoline	274
Stationery Fuel Combustion: Diesel	154
Stationery Fuel Combustion: Heavy Fuel Oil	5,405
Stationery Fuel Combustion: Natural Gas	33,182
Fugitive Emissions: Refrigerants	4,975
Liquid Petroleum Gas	23

C7.5

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

Country/Region	Scope 2, location-	Scope 2, market-	Purchased and consumed	Purchased and consumed low-carbon electricity,
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	based (metric tons CO2e)	based (metric tons CO2e)	electricity, heat, steam or cooling (MWh)	heat, steam or cooling accounted in market-based approach (MWh)
South Africa	108,791	0	102,862	0
Germany	0	2,224	0	4,277
Australia	13,833	0	12,808	0
Netherlands	20,920	0	32,717	0
Brazil	256	0	2,783	0
Kenya	295	0	1,057	0
Ghana	56	0	206	0
United Republic of Tanzania	1,213	0	2,416	0
France	0	356	0	13,201
United States of America	311	0	700	0
Mexico	657	0	0	0

C7.6

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

By facility

By activity

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)
Port Elizabeth (South Africa)	72,377	0
East London (South Africa)	16,802	0
Johannesburg Nutritionals (South Africa)	8,773	0
Cape Town (South Africa)	10,839	0
Bad Oldesloe (Germany)	0	2,224
Dandenong (Australia)	13,833	0
Oss (Netherlands)	20,920	0
Vitória (Brazil)	256	0

Beta (Kenya)	295	0
Shelys (Tanzania)	1,213	0
Notre Dame de Bondeville (France)	0	356
Sioux City (United States of America)	311	0
Vallejo (Mexico)	657	0
Toluca (Mexico)	0	0
Kama (Ghana)	56	0

C7.6c

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

Activity	Scope 2, location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Electricity	143,489	2,580
Steam	2,843	0

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		0	Not applicable.
Other emissions reduction activities	0	No change	0	Not applicable.

Divestment	0	No change	0	Not applicable.
Acquisitions	0	No change	0	Not applicable.
Mergers	0	No change	0	Not applicable.
Change in output	0	No change	0	Not applicable.
Change in methodology	0	No change	0	Not applicable.
Change in boundary	0	No change	0	Not applicable.
Change in physical operating conditions	0	No change	0	Not applicable.
Unidentified	0	No change	0	Not applicable.
Other	15,456		8	Scope 1 and Scope 2 emissions for the Group have decreased by 9,3% and 7,6%, respectively. Closure of the solvent recovery unit at the Netherlands site resulted in lower natural gas consumption which led to a reduction in Scope 1 emissions. Additionally, the reduction in Scope 1 emissions is partially attributable to the discontinuation of the use of refrigerant (R22) at the Mexican and Johannesburg sites. The closure of the solvent recovery unit, reconfiguration of an HVAC system together with a reduction in the HVAC load at the sterile facilities in Port Elizabeth, and a change in the emission factor for Vallejo's electricity, contributed to the reduction in Scope 2 emissions.

C7.9b

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

Location-based

C8. Energy

C8.1

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

More than 5% but less than or equal to 10%

C8.2

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

	Indicate whether your organization undertakes this energy-related activity
Consumption of fuel (excluding feedstocks)	No
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.

	MWh from renewable sources	MWh from non-renewable sources	Total MWh
Consumption of purchased or acquired electricity	17,478	166,843	184,321
Consumption of purchased or acquired steam	0	13,916	13,916
Consumption of self-generated non-fuel renewable energy	0		0
Total energy consumption	17,478	180,759	198,237

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	0	0	0	0
Heat	0	0	0	0
Steam	13,916	13,916	0	0
Cooling	0	0	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

Grid mix of renewable electricity

Low-carbon technology type

Solar PV

Wind

Biomass (including biogas)

Region of consumption of low-carbon electricity, heat, steam or cooling

Europe

MWh consumed associated with low-carbon electricity, heat, steam or cooling

4,277

Emission factor (in units of metric tons CO₂e per MWh)

0.252

Comment

The German plant makes use of a green energy mix made from renewable sources such as biomass, photovoltaic systems, and the wind.

Basis for applying a low-carbon emission factor

Grid mix of renewable electricity

Low-carbon technology type

Solar PV
Wind
Hydropower
Nuclear
Biomass (including biogas)

Region of consumption of low-carbon electricity, heat, steam or cooling

Europe

MWh consumed associated with low-carbon electricity, heat, steam or cooling

13,201

Emission factor (in units of metric tons CO₂e per MWh)

0.022

Comment

Average monthly emission factor for France was used.

C9. Additional metrics

C9.1

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

Description

Waste

Metric value

99,794.48

Metric numerator

Measures in Tonnes

Metric denominator (intensity metric only)

Not measured currently

% change from previous year

0

Direction of change

No change

Please explain

No significant change from the previous year.

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	No third-party verification or assurance

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

Moderate assurance

Attach the statement

 Aspen-Assurance-Statement.pdf

Page/ section reference

Assurance Statement is for Scope 1 and Scope 2 as indicated Page 1-5

Relevant standard

A1000AS

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

Moderate assurance

Attach the statement

 Aspen-Assurance-Statement.pdf

Page/ section reference

Assurance Statement is for Scope 1 and Scope 2 as indicated Page 1-5.

Relevant standard

A1000AS

Proportion of reported emissions verified (%)

100

Scope

Scope 2 market-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Moderate assurance

Attach the statement

 Aspen-Assurance-Statement.pdf

Page/ section reference

Assurance Statement is for Scope 1 and Scope 2 as indicated Page 1-5.

Relevant standard

A1000AS

Proportion of reported emissions verified (%)

100

C10.2

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

No, we do not verify any other climate-related information reported in our CDP disclosure

C11. Carbon pricing

C11.1

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

No, and we do not anticipate being regulated in the next three years

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?

No, and we do not currently anticipate doing so in the next two years

C12. Engagement

C12.1

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

Yes, our suppliers

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

% total procurement spend (direct and indirect)

0

% Scope 3 emissions as reported in C6.5

0

Rationale for the coverage of your engagement

Aspen has prioritized engagement with key service suppliers who are able to supply the required level of data and where the frequency or volume of transactions is significant especially for Scope 3 emissions.

Impact of engagement, including measures of success

Aspen has been successful in obtaining statistics relating to business travel i.e. flights and car rentals in for our South African facilities. We also engage with our waste services provides at manufacturing sites and obtain monthly reports on waste management. In both cases, the data is supplied by the service provider to Aspen in the form of reports. In some cases, e.g. downstream transport and distribution, the service providers have not been able to isolate emissions generated due to Aspen products specifically.

Comment

Aspen will be engaging with more suppliers during our Life Cycle Assessment process for our ISO 14001:2015 system.

C12.3

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

- Direct engagement with policy makers
- Trade associations

C12.3a

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

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Carbon tax	Undecided	Aspen continues to consult with its external tax advisors and with relevant industry forums on this matter.	Consider the objective of carbon taxes in relation to other commercial factors which impact the sustainability of business in the relevant countries. Aspen does however support incentives that encourage a reduction in carbon emissions.

Mandatory carbon reporting	Support	Aspen is committed to reporting to the Carbon Disclosure Project on an annual basis through the National Business Initiative.	Industry context to be applied in interpretation of information in CDP submissions, through direct engagement with the reporting company. Aspen South Africa is currently under the threshold for mandatory emission reporting to the Department of Environmental Affairs.
Clean energy generation	Support	The Clean Energy Regulator is the Government body responsible for administering legislation to reduce carbon emissions and increase the use of clean energy. Aspen Australia is a member of the “Australian Environment Business Network” (AEBN) AEBN’s position is to:1.Make companies aware of climate change2.Provide forums for government bodies to present current and future environmental policies and seek corporate feedback, often before launching these policies.	Aspen Australia participates as required to support and follow the Clean Energy Regulator guidelines.
Cap and trade	Support	The EU emissions trading system (EU ETS) is a cornerstone of the European Union's policy to combat climate change and its key tool for reducing industrial greenhouse gas emissions cost-effectively	Aspen Oss (Netherlands) will participate in EU-ETS as required when the installed capacity exceeds 20 MW.
Energy efficiency	Support	Aspen Oss (Netherlands) is a signatory to MEE (Methodology Energy Efficiency), a long-term energy efficiency agreement for ETS companies, an agreement between the Dutch government and heavy industry.	Although participation in MEE covenant is voluntary, Aspen Oss has made an obligation to target an annual energy reduction of 2%.
Energy efficiency	Support	At COP17, Aspen Pharmacare made a commitment to participate in the Energy Efficiency Leadership Network (EELN), where an Aspen representative provides input on matters impacting climate change, particularly groups focusing on the	Energy efficiency projects need to contribute to the business sustainability and must demonstrate return on investment. A national plan, which incentivises business to reduce their carbon footprint, will support the

		healthcare and pharmaceutical industries.	implementation of energy efficiency projects. In addition, national carbon reduction plans need to weight legislated obligations across industries appropriately with due regard of economic conditions impacting general industry sustainability in the relevant countries.
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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

Business Unity South Africa (BUSA)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

Business Unity in South Africa (BUSA) serves as the interface between businesses in SA and government on high level macroeconomic issues to ensure that businesses are able to play meaningful role in contributing to national objectives in a feasible manner for all stakeholders. BUSA supports the need to move to a lower carbon intensive economy, which is in the long term interest of South Africa. BUSA is in the process of engaging with the South African National Committee on Climate Change and the South African National Treasury on the following topics:

- Requirement for carbon tax to ensure adherence to Paris Agreement
- Introduction of duplicate carbon reduction mechanisms simultaneously
- Need to develop suitable administration instrument

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

Aspen is an active member of BUSA and participates in industry initiatives to address climate change objectives in South Africa.

C12.3f

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

Aspen's business activities and stakeholder engagement processes are aligned to the Group's strategic objectives. This alignment is monitored by Group Executives and the Aspen Board. The Group SHE department, under the direction of Group Operating Officer and Responsible Pharmacist develops and promotes Aspen's environmental management principles and standards and monitors the alignment of business unit environmental management systems to the Group standards and ensures consistency across the operations. Aspen's climate change strategy promotes containment and reduction of the Group's carbon footprint within Aspen's operations, in a technically and economically feasible manner through systems of environmental reporting, monitoring and management. This intent is fulfilled directly across the manufacturing facilities through identification and evaluation of energy efficient technologies and implementation of energy conservation initiatives. Energy savings initiatives are monitored and reported on a quarterly basis through the sustainability KPI Board reporting process. Site management teams monitor progress more frequently where practical. The sites based in Port Elizabeth, East London and Johannesburg in South Africa and Vallejo in Mexico are ISO 14001 certified. The sites in Germany and France are ISO 14001 and ISO 50001 certified. The sites in Australia and Brazil attained ISO 14001 certification in 2016. This demonstrates Aspen's commitment to responsible environmental management practices in accordance with international standards. A combined assurance audit plan is in place to monitor on-going alignment of environmental policies, procedures and systems to the relevant ISO standards. Identified risks are prioritised and addressed. Progress is monitored by Group SHE, site management teams; Group Executives and the Social & Ethics Committee. In addition, all direct and indirect activities are communicated as per the ISO 14001 Environmental Management Systems Communication procedure for ISO certified facilities, ensuring consistency with the overall group environmental management principles and sustainability reporting structures. A culture of continuous improvement exists across the Aspen Group.

C12.4

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


Publication


In mainstream reports

Status

Complete

Attach the document

 Aspen-2018-Sustainability-Data-Supplement.pdf

 Aspen-2018-Sustainability-Data-Supplement.pdf

Page/Section reference

Page 14 and 15.

Content elements

Governance

Strategy

Risks & opportunities

Emissions figures

Other metrics

Comment

Information on Aspen's 6 capitals. The Aspen Sustainability Supplement reports can be found at <https://www.aspenpharma.com/sustainability-overview/>

Publication

In mainstream reports

Status

Complete

Attach the document

 Aspen-2018-Integrated-Report.pdf

Page/Section reference

Page 38

Content elements

Governance

Strategy

Emissions figures

Other, please specify

Information on Aspen's 6 capitals

Comment

Information on Aspen's 6 capitals. The Aspen Integrated report can be found at <https://www.aspenpharma.com/results-and-reports/>

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.

No further information

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	Group Risk and Sustainability Manager	Environment/Sustainability manager

SC. Supply chain module

SC0.0

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

Aspen is a pharmaceutical company listed on the Johannesburg Stock Exchange Limited ("JSE"). Aspen employs approximately 10 000 employees and its heritage dates back more than 160 years in South Africa. Aspen supplies branded and generic pharmaceutical products, infant milk nutritionals and consumer healthcare products in selected territories and into more than 150 countries worldwide. The Aspen brand has become synonymous with high quality and affordable products. Aspen recognises that climate change has potential direct and indirect implications on its operations and is therefore relevant to Aspen's sustainability objectives. As at 30 June 2018, the Group had 25 manufacturing facilities across 17 sites. The manufacturing sites contribute to the bulk of Aspen's carbon emissions and as such environmental reporting is focused at a manufacturing site level. The New Zealand New Milk facility is excluded from the reporting boundary as Aspen does not have operational control of this facility. The main contributors to Aspen's Scope 1 emissions are natural gas, refrigerants and fuel consumption while Scope 2 emissions are comprised of purchased electricity and steam.

SC0.1

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

	Annual Revenue
Row 1	42,595,621,589

SC0.2

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

Yes

SC0.2a

(SC0.2a) Please use the table below to share your ISIN.

	ISIN country code (2 letters)	ISIN numeric identifier and single check digit (10 numbers overall)
Row 1	ZA	ZAE0000666

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.

Requesting member

Wal Mart de Mexico

Scope of emissions

Scope 2

Allocation level

Facility

Allocation level detail

Allocation based on Aspen Vallejo Facility in Mexico.

Emissions in metric tonnes of CO₂e

87

Uncertainty (±%)

10

Major sources of emissions

The emissions are from purchased electricity and steam used to power production lines, maintain Heating, Ventilation and Air Conditioning (HVAC) systems, lighting in offices etc.

Verified

No

Allocation method

Other, please specify
Allocation based on Cost of Sales

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The Scope 2 Emissions used to calculate the allocation are for Aspen Group. The corporate offices in South Africa i.e. Durban and Woodmead, Mexico City and Sydney Australia were excluded from the calculation. The Scope 2 emissions were verified by a third party and the revenue was audited. There is, however, an element of uncertainty with respect to the allocation as there is currently no scientific process in place to allocate emissions to customers.

SC1.2

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

Aspen's primary data, as per verified internal reporting mechanisms, was utilized to calculate the response provided in question C.10.

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
Customer base is too large and diverse to accurately track emissions to the customer level	A scientific process would need to be devised so that the emissions could be allocated to different customers. In addition, the financial and reporting systems would need to be adjusted to allow for the collection and recording of the data.

SC1.4

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

No

SC1.4b

(SC1.4b) Explain why you do not plan to develop capabilities to allocate emissions to your customers.

Aspen is willing to investigate ways in which to be able to provide this data in the long term. Currently, the focus is on developing a broader base with respect to Scope 3 emissions and establishing recording and reporting mechanisms for Aspen's supply chain sustainability data.

SC2.1

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

Requesting member

Wal Mart de Mexico

Group type of project

Other, please specify

No projects in process at this stage

Type of project

Other, please specify

No projects in process at this stage

Emissions targeted

Other, please specify

No targets at this stage

Estimated timeframe for carbon reductions to be realized

Other, please specify

0.00

Estimated lifetime CO2e savings

0

Estimated payback

Other, please specify

None

Details of proposal

Not applicable at this stage.

Requesting member

Johnson & Johnson

Group type of project

Other, please specify

No projects in process at this stage

Type of project

Other, please specify

No projects in process at this stage

Emissions targeted

Other, please specify
No targets at this stage

Estimated timeframe for carbon reductions to be realized

Other, please specify
None

Estimated lifetime CO2e savings

0

Estimated payback

Other, please specify
None

Details of proposal

Not applicable at this stage.

SC2.2

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

No

SC3.1

(SC3.1) Do you want to enroll in the 2019-2020 CDP Action Exchange initiative?

No

SC3.2

(SC3.2) Is your company a participating supplier in CDP's 2018-2019 Action Exchange initiative?

No

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?

No, I am not providing data

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