

Module: Introduction

Page: Introduction

0.1

Introduction

Please give a general description and introduction to your organization

Aspen Holdings Limited, listed on the Johannesburg Stock Exchange, is Africa's largest pharmaceutical manufacturer and major supplier of branded and generic pharmaceutical and nutritional products to the Southern African and more than a hundred territories worldwide. Aspen is the largest generics manufacturer in the southern hemisphere and is also the leading supplier of generic medicines to both private and public sector. It is one of the top 20 generic manufacturers worldwide and South Africa's number one generic brand. Aspen acknowledges that climate change is no longer a theory but is indeed, a fact. Aspen is aware and alert of the risks of climate change, its consequences and that it is continuously being impacted by the increasing greenhouse gases concentrations in the atmosphere. This phenomenon however needs to be addressed with urgency since it is now conclusive that climate change is manmade according to the Intergovernmental Panel on Climate Change and therefore within our means to control it. We recognise that climate change is a real global and community concern and Aspen commits itself to address this global challenge within the Group and to work with external authorities in order to find long term solutions.

0.2

Reporting Year

Please state the start and end date of the year for which you are reporting data.

The current reporting year is the latest/most recent 12-month period for which data is reported. Enter the dates of this year first.

We request data for more than one reporting period for some emission accounting questions. Please provide data for the three years prior to the current reporting year if you have not provided this information before, or if this is the first time you have answered a CDP information request. (This does not apply if you have been offered and selected the option of answering the shorter questionnaire). If you are going to provide additional years of data, please give the dates of those reporting periods here. Work backwards from the most recent reporting year.

Please enter dates in following format: day(DD)/month(MM)/year(YYYY) (i.e. 31/01/2001).

Enter Periods that will be disclosed

Enter Periods that will be disclosed

Wed 01 Jul 2009 - Wed 30 Jun 2010

0.3

Country list configuration

Please select the countries for which you will be supplying data. This selection will be carried forward to assist you in completing your response

Select country

South Africa

0.4

Currency selection

Please select the currency in which you would like to submit your response. All financial information contained in the response should be in this currency.

ZAR (R)

0.5

Please select if you wish to complete a shorter information request

0.6

Modules

As part of the Investor CDP information request, electric utilities, companies with electric utility activities or assets, companies in the automobile or auto component manufacture sectors and companies in the oil and gas industry should complete supplementary questions in addition to the main questionnaire.

If you are in these sectors (according to the Global Industry Classification Standard (GICS)), the corresponding sector modules will be marked as default options to your information request. If you want to query your classification, please email respond@cdproject.net.

If you have not been presented with a sector module that you consider would be appropriate for your company to answer, please select the module below. If you wish to view the questions first, please see <https://www.cdproject.net/en-US/Programmes/Pages/More-questionnaires.aspx>.

Further Information

No further information.

Module: Management [Investor]

Page: 1. Governance

1.1

Where is the highest level of direct responsibility for climate change within your company?

Individual/Sub-set of the Board or other committee appointed by the Board

1.1a

Please identify the position of the individual or name of the committee with this responsibility

Risk and Sustainability Committee which is a sub-committee to the Board.

1.2

Do you provide incentives for the management of climate change issues, including the attainment of targets?

No

1.2a

Please complete the table

Who is entitled to benefit from these incentives?	The type of incentives	Incentivised performance indicator
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Further Information

No incentives regarding to climate change initiatives are given at this stage.

Page: 2. Strategy

2.1

Please select the option that best describes your risk management procedures with regard to climate change risks and opportunities

Integrated into multi-disciplinary company wide risk management processes

2.1a

Please provide further details (see guidance)

At Aspen, risk management is an integral part of the business's strategic process. The Group Risk's audit approach follows a top-down risk based approach to risk management giving consideration to economic, environmental and social risk indicators which impact the company.

This entails the following:

- Reviewing key business objectives as determined by management;
- Identifying and assessing the business risks directly relating to these key objectives;
- Evaluating the controls in place to determine their adequacy, appropriateness and effectiveness in mitigating the business risks identified.

This process also covers all business risks including SHE issues such as waste management and disposal, air monitoring and procedure compliance.

SHE Risk Assessment Procedure: A qualitative risk assessment is conducted using a systematic approach for the identification and assessment of all safety, health and environmental risks. All activities, plant, machinery and energy sources are taken into consideration under normal, abnormal and emergency conditions. Three parameters, i.e. severity, occurrence and exposure are used to calculate both raw and residual risk.

Other processes of identifying significant risks are through objectives and targets, working within ISO guidelines and reporting through King III and Sustainability Reporting guidelines. In order to include climate change and carbon emissions as an exclusive parameter within the risk process described above, Aspen is looking to develop a central carbon data management database which will allow continuous and systematic monitoring of carbon data. This will ease the collation and management of data and enhance its accuracy and consistency. This will also allow for the designation of risks and opportunities based on analysis of collected GHG/carbon data.

The results are presented to the Head of Operations and action plans are compiled to implement the controls to manage these risks. SHE Management action plans are monitored and reported on a monthly basis in SHE management meetings.

Please see attached SHE and Environmental Policy for Aspen Pharmacare.

2.2

Is climate change integrated into your business strategy?

Yes

2.2a

Please describe the process and outcomes (see guidance)

Climate change is integrated into the business through facets such as energy consumption and waste reduction. As a business, (the South African Operations), we set objectives and targets for energy reduction and investigate areas of growth within the business to increase energy efficiency.

The progress of these initiatives are monitored and reported monthly as well as in our Sustainability and Annual reports. Long term strategies for energy efficiency are currently being investigated and other alternative sources of energy for future development plans within the company.

Aspen Pharmacare is in the process of identifying and incorporating climate change effects and risks into the existing business continuity plans. Electricity and water have been identified as scarce resources and cognisance is taken of potential electricity and water shortages and the impact thereof to the Group business continuity.

All South African Operations have embarked on shifting to usage of energy saving lights mainly in offices, warehouses and selected parts of the factories. In PE, installation of energy saving lighting in Liquids and Solids packing areas is now complete, a total of 125 units of 400w were replaced with energy savers of 175w each. This did not only result in power saving but also in efficiency improvement in that it took 10min for high bay light to come back on after power dip while the new lights come on instantaneously after any power outage. Motion detectors have been installed in some administration offices and in new manufacturing Facilities. In PE, we are also making use of the condenser heat recovery whereby large amounts of heat rejected by the chillers is captured and reused thereby

reducing energy consumption. In East London and Nutritionals, high wattage lighting is being replaced with high efficiency lights in the warehouses as and when the lights fail, as the capital outlay is too great for a complete overhaul. There has been increased awareness on all sites on energy saving and wastage awareness. We are currently investigating another lighting system that has the potential of yielding a higher energy reduction.

Reduction of land filled waste

Through maximising recycling opportunities the land filling of waste has decreased by approximately 10% within a 4 month period for the Port Elizabeth site, with an average of 25% of waste being recycled. The Nutritional facility recycles approximately 80% of waste every month. This was primarily achieved through effective waste separation by waste yard operators and environmental awareness training campaigns for all employees. Specific projects are underway to identify all printed waste/reject components from the Packing Departments and Component Stores that could be defaced (shredded) and recycled to prevent recovery and reduce land filling.

Reverse Osmosis (RO) water

In the Port Elizabeth plant, the Manufacturing processes have 2 Reverse Osmosis (RO) plants for water purification. In normal running process the plants reject up to 30% water and this water was initially drained away as effluent. The RO Project entailed the use of this water for other utilities' processes e.g. cooling towers that each requires water up to 40KL /d and Ablution Facilities. Normally these utilities draw water directly from Municipal supply. Although the reject water cannot fully satisfy the cooling tower requirements it is supplementary. The project has yielded up to 6% less water drawn from Municipality. A third Reverse Osmosis plant will be commissioned in June 2011 and this will reduce the amount obtained from the Municipality by a further 1 %.

Process Emissions

We also measure our fugitive emissions (NOx, SOx, VOCs and particulate matter) after every 2 years, mainly to ensure the effectiveness of our HVAC systems as very minute quantities and have been recorded (not detectable in some instances).

To ensure that our employees are aware of all local and global environmental issues – we conduct awareness training sessions annually in accordance to the World Environment Day theme. Previous themes included Climate Change, effects of global warming, as well as suggested ways to reduce your individual carbon footprint.

Please see attached SHE and Environmental Policy for Aspen Pharmicare.

2.2b

Please explain why not

2.3

Do you engage with policy makers to encourage further action on mitigation and/or adaptation?

No

2.3a

Please explain (i) the engagement process and (ii) actions you are advocating

Further Information

No. However, we do not have any affiliations with policy makers at this stage although we do participate in legal workshops whereby comments are required from industry.

Information provided for South African operations exclude Woodmead and Fine Chemical Corporation (FCC) which are part of South African operations but the data is not available currently.

Attachments

[https://www.cdproject.net/Sites/2011/69/1069/Investor CDP 2011/Shared Documents/Attachments/InvestorCDP2011/2.Strategy/SHE Policy.pdf](https://www.cdproject.net/Sites/2011/69/1069/Investor%20CDP%202011/Shared%20Documents/Attachments/InvestorCDP2011/2.Strategy/SHE%20Policy.pdf)

[https://www.cdproject.net/Sites/2011/69/1069/Investor CDP 2011/Shared Documents/Attachments/InvestorCDP2011/2.Strategy/Environmental Policy Signed.pdf](https://www.cdproject.net/Sites/2011/69/1069/Investor%20CDP%202011/Shared%20Documents/Attachments/InvestorCDP2011/2.Strategy/Environmental%20Policy%20Signed.pdf)

Page: 3. Targets and Initiatives

3.1

Did you have an emissions reduction target that was active (ongoing or reached completion) in the reporting year?

No

3.1a

Please provide details of your absolute target

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions (metric tonnes CO2e)	Target year	Comment
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3.1b

Please provide details of your intensity target

ID	Scope	% of emissions in scope	% reduction from base year	Metric	Base year	Base year emissions (metric tonnes CO2e)	Target year	Comment
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3.1c

Please also indicate what change in absolute emissions this intensity target reflects

ID	Direction of change anticipated in absolute Scope 1+2 emissions at target completion?	% change anticipated in absolute Scope 1+2 emissions	Direction of change anticipated in absolute Scope 3 emissions at target completion?	% change anticipated in absolute Scope 3 emissions	Comments
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3.1d

Please provide details on your progress against this target made in the reporting year

ID	% complete (time)	% complete (emissions)	Comment
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3.1e

Please explain (i) why not; and (ii) forecast how your emissions will change over the next five years

No – we do not have direct emissions reduction initiatives at this stage but we do have energy and water reduction as well as waste minimisation objectives which also indirectly result in emission reductions.

Aspen Pharmacare is in the process of identifying and incorporating climate change effects and risks into the existing business continuity plans. Electricity and water have been identified as scarce resources and cognisance is taken of potential electricity and water shortages and the impact thereof to the Group business continuity.

All South African Operations have embarked on shifting to usage of energy saving lights mainly in offices, warehouses and selected parts of the factories. In PE, installation of energy saving lighting in Liquids and Solids packing areas is now complete, a total of 125 units of 400w were replaced with energy savers of 175w each. This did not only result in power saving but also in efficiency improvement in that it took 10min for high bay light to come back on after power dip while the new lights come on instantaneously after any power outage. Motion detectors have been installed in some administration offices and in new manufacturing Facilities. In PE, we are also making use of the condenser heat recovery whereby large amounts of heat rejected by the chillers is captured and reused thereby reducing energy consumption. In East London and Nutritionals, high wattage lighting is being replaced with high efficiency lights in the warehouses as and when the lights fail, as the capital outlay is too great for a complete overhaul. There has been increased awareness on all sites on energy saving and wastage awareness. We are currently investigating another lighting system that has the potential of yielding a higher energy reduction.

Reduction of land filled waste

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Process Emissions

We also measure our fugitive emissions (NOx, SOx, VOCs and particulate matter) after every 2 years, mainly to ensure the effectiveness of our HVAC systems as very minute quantities and have been recorded (not detectable in some instances).

To ensure that our employees are aware of all local and global environmental issues – we conduct awareness training sessions annually in accordance to the World Environment Day theme. Previous themes included Climate Change, effects of global warming, as well as suggested ways to reduce your individual carbon footprint.

Please see attached SHE and Environmental Policy for Aspen Pharmacare.

3.2

Does the use of your goods and/or services directly enable GHG emissions to be avoided by a third party?

No

3.2a

Please provide details (see guidance)

3.3

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

No

3.3a

Please provide details in the table below

Activity type	Description of activity	Annual monetary savings (unit currency)	Investment required (unit currency)	Payback period
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3.3b

What methods do you use to drive investment in emissions reduction activities?

Method	Comment
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3.3c

If you do not have any emissions reduction initiatives, please explain why not

We do not have direct emissions reduction initiatives at this stage but we do have energy and water reduction as well as waste minimisation objectives which also indirectly result in emission reductions.

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Further Information

No further information.

Attachments

[https://www.cdproject.net/Sites/2011/69/1069/Investor CDP 2011/Shared Documents/Attachments/InvestorCDP2011/3.TargetsandInitiatives/Environmental Policy Signed.pdf](https://www.cdproject.net/Sites/2011/69/1069/Investor%20CDP%202011/Shared%20Documents/Attachments/InvestorCDP2011/3.TargetsandInitiatives/Environmental%20Policy%20Signed.pdf)

Page: 4. Communication

4.1

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

Publication	Page/Section Reference	Identify the attachment
In annual reports (complete)	79	Annual Report 2010

Further Information

No further information.

Please view Aspen Annual report on <http://www.aspenpharma.com/>

Module: Risks and Opportunities [Investor]

5.1

Have you identified any climate change risks (current or future) that have potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

- Risks driven by changes in regulation
- Risks driven by changes in physical climate parameters
- Risks driven by changes in other climate-related developments

5.1a

Please describe your risks driven by changes in regulation

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
1.	International agreements	International agreements such as the Kyoto Protocol and the subsequent Copenhagen Accord and Cancun Agreement are likely to influence future South African legislation in South Africa. This in turn would have an impact on Aspen's environmental management protocols. Our manufacturing and supply protocols promote the on-going review and continuous improvement of operating policies and procedures in an effort to deliver high quality products to the market responsibly, on time and at competitive prices. In doing so cognisance is taken of developments in environmental legislation, related technological enhancements relevant to the Company's operations, resource conservation systems and environmental management guidelines. Agreements agreed to in these global negotiations are not yet binding but Aspen will start taking action in order to prepare for anticipated legislation in this area. Aspen has put energy	Increased operational cost	1-5 years	Direct	More likely than not	High

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		management programmes in place and monitoring is in progress. We also are making plans to roll out a full carbon footprint for all Aspen South African operations.					
2.	Carbon taxes	South Africa's national GHG emissions are mainly as a result from the use of coal energy. As above, national reduction targets will have an impact on existing and new permissions as well as potential energy costs. The Minister of Finance announced that a carbon tax is highly likely in the near future. Depending on the structure of this tax the magnitude of impact could be very high, especially if Eskom, the electricity producer, is taxed and the costs are passed onto consumers (especially industrial consumers).	Increased operational cost	1-5 years	Direct	Virtually certain	High
3.	General environmental regulations, including planning	Electricity and water are regarded as scarce resources in South Africa. Water regulations may become stricter due to climate change related effects in precipitation patterns and related regulatory changes which will impact on Aspen operations. The national climate change response green paper has been released for comment in 2010 and this starts to define an ultimate policy objective and certain principles and strategies to be utilised to achieve the objective. The finalisation of this document may provide further insight into the environmental regulations that may become stricter due to climate change related effects.	Reduction/disruption in production capacity	1-5 years	Direct	Likely	Medium
4.	Uncertainty surrounding new regulation	Time frames for regulatory reform in South Africa are not yet clear but regulatory uncertainty remains a significant risk to operations.	Other: Uncertainty of the future and the resulting steps required.	6-10 years	Direct	More likely than not	Medium

5.1b

Please describe (i) the potential financial implications of the risk before taking action; (ii) the methods you are using to manage this risk; and (iii) the costs associated with these actions

Financial implications of these risks have not yet been calculated - Aspen is looking to develop a central carbon data management database which will allow continuous and systematic monitoring of GHG/carbon data. As part of this process the financial implications of these risks will be calculated. It is therefore not possible to determine actual costs.

1. The implications of the above mentioned group of risks (1-4) are essentially increased operational costs which would impact product cost.
2. There are certain methods in place to manage risks mentioned (1-4). These include the implementation of energy management systems, as well as the planned implementation of carbon data management database which will allow continuous and systematic monitoring of GHG/carbon data. This process will also allow for the management of other aspects associated with climate change/carbon emissions such as water management.
3. An investment is expected to be made towards the development of a carbon data management database, the associated carbon footprint and the calculation of associated risks.

5.1c

Please describe your risks that are driven by change in physical climate parameters

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
1.	Change in mean (average) precipitation	Climate change may result in water scarcity in some areas in which Aspen operates. It is an opinion of many in the region that Port Elizabeth rainfall patterns have been erratic. This effects Aspen's key manufacturing site.	Reduction/disruption in production capacity	Current	Direct	Virtually certain	High
2.	Induced changes in natural resources	Although the IPCC predicts possible rising crop yields associated with global temperature increases of 1-2 degrees in some high latitude regions, falling crop yields are expected in many areas of the world for temperature changes greater than 1 degree. This may affect raw material production, food security, forestry and agricultural industries.	Reduction/disruption in production capacity	>10 years	Indirect (Supply chain)	About as likely as not	Low
3.	Change in precipitation pattern	Changes in precipitation patterns may result in excessive amounts of precipitation over a certain time period resulting in flooding. This would have detrimental impacts on the business (potential reductions in production capacity). A larger impact on the business would be caused if changes in rainfall patterns resulted in less than average rainfall over extended periods of time, due to the fact that water is an important utility in the manufacturing process thereby increasing the risk to the business. Good quality water is required for the consumption of medicines.	Reduction/disruption in production capacity	Unknown	Direct	Very likely	High

5.1d

Please describe (i) the potential financial implications of the risk before taking action; (ii) the methods you are using to manage this risk; and (iii) the costs associated with these actions

Financial implications of these risks have not yet been calculated - Aspen is looking to develop a central carbon data management database which will allow continuous and systematic monitoring of GHG/carbon data. As part of this process the financial implications of these risks will be calculated. It is therefore not possible to determine actual costs.

1. The implications of the above mentioned group of risks (1-4) are essentially reduction or disruption in production capacity which would result in a decreased turnover.
2. There are certain methods in place to manage risks mentioned (1-4). These include the implementation of energy management systems, as well as the planned implementation of carbon data management database which will allow continuous and systematic monitoring of GHG/carbon data. This process will also allow for the management of other aspects associated with climate change/carbon emissions such as water management.
3. An investment is expected to be made towards the development of a carbon data management database, the associated carbon footprint and the calculation of associated risks

5.1e

Please describe your risks that are driven by changes in other climate-related developments

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
1.	Reputation	There is a reputational and brand equity risk associated with not addressing climate change issues appropriately and effectively.	Reduced demand for goods/services	Unknown	Direct	Unlikely	High

5.1f

Please describe (i) the potential financial implications of the risk before taking action; (ii) the methods you are using to manage this risk; (iii) the costs associated with these actions

Financial implications of these risks have not yet been calculated - Aspen is looking to develop a central carbon data management database which will allow continuous and systematic monitoring of GHG/carbon data. As part of this process the financial implications of these risks will be calculated. It is therefore not possible to determine actual costs.

1. The implications of the above mentioned group of risks (1-4) are essentially increased operational costs which would impact product cost.
2. There are certain methods in place to manage risks mentioned (1-4). These include the implementation of energy management systems, as well as the planned implementation of carbon data management database which will allow continuous and systematic monitoring of GHG/carbon data. This process will also allow for the management of other aspects associated with climate change/carbon emissions such as water management.
3. An investment is expected to be made towards the development of a carbon data management database, the associated carbon footprint and the calculation of associated risks.

5.1g

Please explain why you do not consider your company to be exposed to risks driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

5.1h

Please explain why you do not consider your company to be exposed to risks driven by physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

5.1i

Please explain why you do not consider your company to be exposed to risks driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

Further Information

No further information.

Page: 6. Climate Change Opportunities

6.1

Have you identified any climate change opportunities (current or future) that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

Opportunities driven by changes in regulation

Opportunities driven by changes in other climate-related developments

6.1a

Please describe your opportunities that are driven by changes in regulation

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
1.	Product efficiency regulations and standards	This presents opportunities for the business to increase energy efficiency and alternative cleaner production initiatives. This allows for increased production capacity potentially through the application of energy storage systems. It may also result indirectly in increased demand for goods that may meet certain standards .	Increased production capacity	1-5 years	Direct	Likely	High
2.	Carbon taxes	The implementation of environmental protocols which are closely aligned to international and/or legislated guidelines could present an opportunity for being granted tax credits.	Reduced operational costs	Unknown	Direct	About as likely as not	Low-medium

6.1b

Please describe (i) the potential financial implications of the opportunity; (ii) the methods you are using to manage this opportunity; (iii) the costs associated with these actions

Financial implications of these opportunities have not yet been calculated - Aspen is looking to develop a central carbon data management database which will allow continuous and systematic monitoring of GHG/carbon data. As part of this process the financial implications of these risks and opportunities will be calculated. It is therefore not possible to determine actual costs.

1. The implications of the above mentioned opportunities are essentially increased production capacity, reputationa and reduced operational costs which would impact product cost and turnover revenue.
2. There are certain methods in place to manage opportunities mentioned (1-4). These include the implementation of energy management systems, as well as the planned implementation of carbon data management database which will allow continuous and systematic monitoring of GHG/carbon data. This process will also allow for the management of other aspects associated with climate change/carbon emissions such as water management.
3. An investment is expected to be made towards the development of a carbon data management database, the associated carbon footprint and the calculation of associated risks and opportunities.

6.1c

Please describe the opportunities that are driven by changes in physical climate parameters

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
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6.1d

Please describe (i) the potential financial implications of the opportunity; (ii) the methods you are using to manage this opportunity; (iii) the costs associated with these actions

6.1e

Please describe the opportunities that are driven by changes in other climate-related developments

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
1.	Reputation	The global pursuit to mitigate the effects and consequences of	New	6-10 years	Direct	Likely	Medium-

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		climate change has brought the realisation of the effective exploring ideas of the triple bottom line and new ways of doing business which have been explored and developed to their full potential. For instance, introduction of efficient technologies are becoming more commercially available resulting in reduced GHG emissions. The philosophy of less water, less waste and less energy, which Aspen is practising, also results in environmental improvements as well as financial benefits.	products/business services				high

6.1f

Please describe (i) the potential financial implications of the opportunity; (ii) the methods you are using to manage this opportunity; (iii) the costs associated with these actions

Financial implications of these opportunities have not yet been calculated - Aspen is looking to develop a central carbon data management database which will allow continuous and systematic monitoring of GHG/carbon data. As part of this process the financial implications of these risks and opportunities will be calculated. It is therefore not possible to determine actual costs.

1. The implications of the above mentioned opportunities are essentially increased production capacity, reputationa and reduced operational costs which would impact product cost and turnover revenue.
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3. An investment is expected to be made towards the development of a carbon data management database, the associated carbon footprint and the calculation of associated risks and opportunities.

6.1g

Please explain why you do not consider your company to be exposed to opportunities driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

6.1h

Please explain why you do not consider your company to be exposed to opportunities driven by physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

Raw materials procured for the manufactured product are largely sourced from commodity based crops. This requires climatic conditions to prevail - any change in such climatic conditions is considered to have a potentially adverse impact on the sustained supply of the raw materials as opposed to a beneficial impact.

6.1i

Please explain why you do not consider your company to be exposed to opportunities driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

Further Information

No further information.

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading [Investor]

Page: 7. Emissions Methodology

7.1

Please provide your base year and base year emissions (Scopes 1 and 2)

Base year	Scope 1 Base year emissions (metric tonnes CO2e)	Scope 2 Base year emissions (metric tonnes CO2e)
Wed 01 Jul 2009 - Wed 30 Jun 2010	13149	34934

Base year	Scope 1 Base year emissions (metric tonnes CO2e)	Scope 2 Base year emissions (metric tonnes CO2e)

7.2

Please give the name of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

Please select the published methodologies that you use
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
US EPA Climate Leaders: Direct Emissions from Stationary Combustion
Defra Voluntary Reporting Guidelines

7.2a

If you have selected "Other", please provide details below

Not Applicable.

7.3

Please give the source for the global warming potentials you have used

Gas	Reference
CO2	IPCC Second Assessment Report (SAR - 100 year)

7.4

Please give the emissions factors you have applied and their origin; alternatively, please attach an Excel spreadsheet with this data

Fuel/Material/Energy	Emission Factor	Unit	Reference
Diesel/Gas oil	2.67	kg CO2 per litre	Emission Factors in the cross-sector tools
Motor gasoline	2.27	kg CO2 per litre	Emission Factors in the cross-sector tools
Kerosene	2.52	kg CO2 per litre	Emission Factors in the cross-sector tools
Electricity	0.93	kg CO2 per MWh	Emission Factors in the cross-sector tools

Further Information

These tools and emission factors used are found on the Greenhouse Gas protocol website.
www.ghgprotocol.org

Attachments

[https://www.cdproject.net/Sites/2011/69/1069/Investor CDP 2011/Shared Documents/Attachments/InvestorCDP2011/7.EmissionsMethodology/WRI_Transport_Tool.xls](https://www.cdproject.net/Sites/2011/69/1069/Investor%20CDP%202011/Shared%20Documents/Attachments/InvestorCDP2011/7.EmissionsMethodology/WRI_Transport_Tool.xls)
[https://www.cdproject.net/Sites/2011/69/1069/Investor CDP 2011/Shared Documents/Attachments/InvestorCDP2011/7.EmissionsMethodology/Stationary_combustion_tool_\(Version4 ANSWER\).xlsx](https://www.cdproject.net/Sites/2011/69/1069/Investor%20CDP%202011/Shared%20Documents/Attachments/InvestorCDP2011/7.EmissionsMethodology/Stationary_combustion_tool_(Version4_ANSWER).xlsx)
[https://www.cdproject.net/Sites/2011/69/1069/Investor CDP 2011/Shared Documents/Attachments/InvestorCDP2011/7.EmissionsMethodology/Compilation of emission factors used in the cross-sector tools.xls](https://www.cdproject.net/Sites/2011/69/1069/Investor%20CDP%202011/Shared%20Documents/Attachments/InvestorCDP2011/7.EmissionsMethodology/Compilation%20of%20emission%20factors%20used%20in%20the%20cross-sector%20tools.xls)

Page: 8. Emissions Data - (1 Jul 2009 - 30 Jun 2010)

8.1

Please select the boundary you are using for your Scope 1 and 2 greenhouse gas inventory

Operational control

8.2a

Please provide your gross global Scope 1 emissions figure in metric tonnes CO2e

13110

8.2b

Please provide your gross global Scope 1 emissions figures in metric tonnes CO2e - Part 1 breakdown

Boundary	Gross global Scope 1 emissions (metric tonnes CO2e)	Comment
----------	---	---------

8.2c

Please provide your gross global Scope 1 emissions figures in metric tonnes CO2e - Part 1 Total

Gross global Scope 1 emissions (metric tonnes CO2e) - Total Part 1	Comment
--	---------

8.2d

Please provide your gross global Scope 1 emissions figures in metric tonnes CO2e - Part 2

Gross global Scope 1 emissions (metric tonnes CO2e) - Other operationally controlled entities, activities or facilities	Comment
---	---------

8.3a

Please provide your gross global Scope 2 emissions figure in metric tonnes CO2e

34934.05

8.3b

Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e - Part 1 breakdown

Boundary	Gross global Scope 2 emissions (metric tonnes CO2e)	Comment
----------	---	---------

8.3c

Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e - Part 1 Total

Gross global Scope 2 emissions (metric tonnes CO2e) - Total Part 1	Comment
--	---------

8.3d

Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e - Part 2

Gross global Scope 2 emissions (metric tonnes CO2e) - Other operationally controlled entities, activities or facilities	Comment
---	---------

8.4

Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions which are not included in your disclosure?

8.4a

Please complete the table

Reporting Entity	Source	Scope	Explain why the source is excluded
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8.4

Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions which are not included in your disclosure?

Yes

8.4a

Please complete the table

Source	Scope	Explain why the source is excluded
Woodmead Healthcare Office Park	Scope 1 and 2	Data is not available at this stage.
Fine Chemicals Cooperation	Scope 1 and 2	FCC is in the process of being divionalised into Aspen Pharmacare. Currently it is a separate entity and our environmental protocol is in the process of being rolled out at this facility.

8.5

Please estimate the level of uncertainty of the total gross global Scope 1 and Scope 2 figures that you have supplied and specify the sources of uncertainty in your data gathering, handling, and calculations

Scope	Uncertainty Range	Main sources of uncertainty	Please expand on the uncertainty in your data
Scope 1	More than 5% but less than or equal to 10%	Assumptions Metering/ Measurement Constraints Published Emissions Factors	- Published emission factors were used hence accuracy of these could not be verified. - Data used also is dependant on the accuracy of Municipal bills
Scope 2	More than 5% but less than or equal to 10%	Assumptions Metering/ Measurement Constraints Published Emissions Factors	- Published emission factors were used hence accuracy of these could not be verified. - Data used also is dependant on the accuracy of Municipal bills

Scope	Uncertainty Range	Main sources of uncertainty	Please expand on the uncertainty in your data

8.6

Please indicate the verification/assurance status that applies to your Scope 1 emissions

Not verified or assured

8.6a

Please indicate the proportion of your Scope 1 emissions that are verified/assured

8.6b

Please provide further details of the verification/assurance undertaken, and attach the relevant statements

Type of verification or assurance	Relevant standard	Relevant statement attached

8.7

Please indicate the verification/assurance status that applies to your Scope 2 emissions

Not verified or assured

8.7a

Please indicate the proportion of your Scope 2 emissions that are verified/assured

8.7b

Please provide further details of the verification/assurance undertaken, and attach the relevant statements

Type of verification or assurance	Relevant standard	Relevant statement attached
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8.8

Are carbon dioxide emissions from the combustion of biologically sequestered carbon (i.e. carbon dioxide emissions from burning biomass/biofuels) relevant to your company?

No

8.8a

Please provide the emissions in metric tonnes CO₂e

Further Information

No further information.

Page: 9. Scope 1 Emissions Breakdown - (1 Jul 2009 - 30 Jun 2010)

9.1

Do you have Scope 1 emissions sources in more than one country or region (if covered by emissions regulation at a regional level)?

No

9.1a

Please complete the table below

Country	Scope 1 metric tonnes CO2e
---------	----------------------------

9.2

Please indicate which other Scope 1 emissions breakdowns you are able to provide (tick all that apply)

By facility

9.2a

Please break down your total gross global Scope 1 emissions by business division

Business Division	Scope 1 metric tonnes CO2e
-------------------	----------------------------

9.2b

Please break down your total gross global Scope 1 emissions by facility

Facility	Scope 1 metric tonnes CO2e
Port Elizabeth	10449
East London	1937
Johannesburg	709

Facility	Scope 1 metric tonnes CO2e
Durban	15

9.2c

Please break down your total gross global Scope 1 emissions by GHG type

GHG type	Scope 1 metric tonnes CO2e
----------	----------------------------

9.2d

Please break down your total gross global Scope 1 emissions by activity

Activity	Scope 1 metric tonnes CO2e
----------	----------------------------

Further Information

The above emissions (Scope 1) are from the following:

- Stationary and mobile combustion
- Standby generators,
- Boilers
- HFCs (refridgerants)

Company vehicles and trucks for respective facilities

The figures include Durban which is a corporate office not a facility.

Our environmental protocol is in the process of being rolled out in Brazil, Mexico, Venezuela, Germany, Tanzania, Kenya, Australia, Mauritius and Dubai.

10.1

Do you have Scope 2 emissions sources in more than one country or region (if covered by emissions regulation at a regional level)?

No

10.1a

Please complete the table below

Country	Scope 2 metric tonnes CO2e
---------	----------------------------

10.2

Please indicate which other Scope 2 emissions breakdowns you are able to provide (tick all that apply)

By facility

10.2a

Please break down your total gross global Scope 2 emissions by business division

Business division	Scope 2 metric tonnes CO2e
-------------------	----------------------------

10.2b

Please break down your total gross global Scope 2 emissions by facility

Facility	Scope 2 metric tonnes CO2e
Port Elizabeth	33018
East London	1074
Johannesburg	842

Facility	Scope 2 metric tonnes CO2e
Durban	0.05

10.2c

Please break down your total gross global Scope 2 emissions by activity

Activity	Scope 2 metric tonnes CO2e
----------	----------------------------

Further Information

The Port Elizabeth and Johannesburg facilities included steam quantities to the purchased electricity.

The figures include Durban which is a corporate office not a facility.

Our environmental protocol is in the process of being rolled out in Brazil, Mexico, Venezuela, Germany, Tanzania, Kenya, Australia, Mauritius and Dubai.

Page: 11. Emissions Scope 2 Contractual

11.1

Do you consider that the grid average factors used to report Scope 2 emissions in Question 8.3 reflect the contractual arrangements you have with electricity suppliers?

Yes

11.1a

You may report a total contractual Scope 2 figure in response to this question. Please provide your total global contractual Scope 2 GHG emissions figure in metric tonnes CO2e

11.1b

Explain the basis of the alternative figure (see guidance)

11.2

Has your organization retired any certificates, e.g. Renewable Energy Certificates, associated with zero or low carbon electricity within the reporting year or has this been done on your behalf?

No

11.2a

Please provide details including the number and type of certificates

Type of certificate	Number of certificates	Comments
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Further Information

No further information.

Page: 12. Energy

12.1

What percentage of your total operational spend in the reporting year was on energy?

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

12.2

Please state how much fuel, electricity, heat, steam, and cooling in MWh your organization has consumed during the reporting year

Energy type	MWh
Fuel	2253.92
Electricity	556083.9
Heat	0
Steam	9210.68
Cooling	0

12.3

Please complete the table by breaking down the total "Fuel" figure entered above by fuel type

Fuels	MWh
Diesel/Gas oil	376.44
Motor gasoline	148.94
Kerosene	1728.55

Further Information

Fuel figures were originally in Litres converting to MWh - this was converted to Giga grams using the default calorific values (heating values) provided in Appendix C Table 1 of the CDP Guidelines. The resultant figure was converted to MWh using conversion tools.

The formula for converting Steam to MWh used is as follows:

Available power from 1tonne/hr = $2031 \times 1000/3600$ kJ/sec =564kJ/sec =564kW

Therefore 1 tonne steam =564kWh

The final figure was divided by 1000 to convert to MWh.

The figures include Durban which is a corporate office not a facility. Data excludes Fine Chemical Corporation and Woodmead divisions.

Attachments

[https://www.cdproject.net/Sites/2011/69/1069/Investor CDP 2011/Shared Documents/Attachments/InvestorCDP2011/12.Energy/WRI_Transport_Tool.xls](https://www.cdproject.net/Sites/2011/69/1069/Investor%20CDP%202011/Shared%20Documents/Attachments/InvestorCDP2011/12.Energy/WRI_Transport_Tool.xls)

Page: 13. Emissions Performance

13.1

How do your absolute emissions (Scope 1 and 2 combined) for the reporting year compare to the previous year?

Increased

13.1a

Please complete the table

Reason	Emissions value (percentage)	Direction of change	Comment
Change in methodology	2	Increase	We included our Scope 1 emissions and our Durban offices which were not included in our previous CDP report. We used emission factors provided by the Greenhouse Protocol found on www.ghgprotocol.com .

13.2

Please describe your gross combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO₂e per unit currency total revenue

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Explanation
	metric tonnes CO ₂ e	unit total revenue	0	N/A	Not calculated exclusively for the facilities reported.

13.3

Please describe your gross combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per full time equivalent (FTE) employee

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Explanation
23	metric tonnes CO2e	FTE Employee	0	N/A	This was achieved by taking the sum of scope 1 and 2 emissions (48 083) and then divided that number divide that number by the total no of FTE employees (2074) = tonnes CO2 per FTE employee

13.4

Please provide an additional intensity (normalized) metric that is appropriate to your business operations

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Explanation
	metric tonnes CO2e		0	No change	Not calculated exclusively for the facilities reported.

Further Information

No further information.

Page: 14. Emissions Trading

14.1

Do you participate in any emission trading schemes?

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

14.1a

Please complete the following table for each of the emission trading schemes in which you participate

Scheme name	Period for which data is supplied	Allowances allocated	Allowances purchased	Verified emissions in metric tonnes CO2e	Details of ownership
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14.1b

What is your strategy for complying with the schemes in which you participate or anticipate participating?

14.2

Has your company originated any project-based carbon credits or purchased any within the reporting period?

No

14.2a

Please complete the following table

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes of CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits retired	Purpose e.g. compliance
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Further Information

No further information. The company currently does not envisage any carbon trading schemes.

15.1

Please provide data on sources of Scope 3 emissions that are relevant to your organization

Sources of Scope 3 emissions	metric tonnes CO2e	Methodology	If you cannot provide a figure for emissions, please describe them
Waste generated in operations			Included here is a list of potential scope 3 emissions. Aspen has not calculated Scope 3 emissions. An estimated scale of these emissions is approximately equal to scope 1 emissions. But this will be determined in the near future as Aspen is looking to develop a central carbon data management database which will allow continuous and systematic monitoring of GHG/carbon data.
Business travel			
Employee commuting			
Transportation and distribution of sold products			
Purchased goods and services			

15.2

Please indicate the verification/assurance status that applies to your Scope 3 emissions

No emissions data provided

15.2a

Please indicate the proportion of your Scope 3 emissions that are verified/assured

15.2b

Please provide further details of the verification/assurance undertaken, and attach the relevant statements

Type of verification or assurance	Relevant standard	Relevant statement attached
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15.3

How do your absolute Scope 3 emissions for the reporting year compare to the previous year?

We don't have any emissions data

15.3a

Please complete the table

Reason	Emissions value (percentage)	Direction of Change	Comment
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Further Information

No further information at this stage in terms of Scope 3.

Module: Sign Off

Page: Sign Off

Please enter the name of the individual that has signed off (approved) the response and their job title

Dr Morne Geysler - Head of South African Operations

Carbon Disclosure Project