

## CDP 2009 Information Request

Respondent: Ashland Inc.

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### General introduction

Ashland produces specialty chemicals for use in many different industrial applications and also operates an extensive chemical and plastics distribution business. In addition, it manufactures and markets engine oil, lubricating fluids, and other car care products. Ashland has developed an energy use inventory for our businesses and has estimated our contribution to global emissions of greenhouse gases (GHG) based on available data. Although we are an extremely minor contributor, we are pleased to provide this response to the Carbon Disclosure Project.

### Risk and Opportunities

#### 1. Regulatory Risks: (CDP6 1(a)(i))

1.1 Is your company exposed to regulatory risks related to climate change?

We consider our company to be exposed to regulatory risks.

The main commercial risks to our company involve additional regulatory controls such as cap and trade and emission reporting regulations that would negatively impact Ashland as they would all of industry. While these regulatory burdens are not expected to impact many of Ashland's facilities directly due to their low GHG emission rates, we could be indirectly impacted by the effect on our suppliers and customers. Please see Item 3 for a discussion of those impacts.

#### Further information

#### 2. Physical Risks: (CDP6 1(a)(ii))

2.1 Is your company exposed to physical risks from climate change?

We consider our company to be exposed to physical risks.

Physical risks have the potential to affect Ashland sites in areas prone to sea level rise or extreme weather events much as they do the general public and other businesses. However, we anticipate only minor damage to our sites, and most are expected to be able to return to operation after the restoration of utilities. Resource shortages resulting from these physical risks are also expected to have a similar effect on Ashland as they will other businesses.

#### Further information

#### 3. Other Risks: (CDP6 1(a)(iii))

3.1 Is your company exposed to other risks as a result of climate change?

We consider our company to be exposed to other risks.

Ashland believes that our businesses will be impacted by general risks as a result of climate change, such as increased costs for goods and services, reduced availability of certain raw materials and packaging, and increased energy costs.

#### Further information

#### 4. Regulatory Opportunities: (CDP6 1(b)(i))

4.1 Do regulatory requirements on climate change present opportunities for your company?

We don't know the answer to this question.

Ashland does not anticipate opportunities to develop from the regulatory requirements on climate change other than those identified in Item 6.

#### Further information

#### 5. Physical Opportunities: (CDP6 1(b)(ii))

5.1 Do physical changes resulting from climate change present opportunities for your company?

We don't know the answer to this question.

Ashland does not anticipate opportunities to develop from the physical changes from climate change other than those identified in Item 6.

Further information

## 6. Other Opportunities: (CDP6 1(b)(iii))

### 6.1 Does climate change present other opportunities for your company?

Climate change presents other opportunities for my company.

Ashland participates in several markets that have developed as a result of climate change. Ashland products have been used for years to create lightweight composites for the automotive industry, which improves fuel efficiency, and for the production of wind-turbine blades. Other Ashland products have been used to develop composite bridge materials, which can replace traditional concrete and steel construction, provide longer bridge life, and reduce maintenance requirements. Ashland also has been producing products made from bio-renewable resources for several years, and continues to increase those capabilities. In conjunction with the completed acquisition of Hercules Incorporated in November 2009, Ashland now generates, on a pro forma basis, approximately one-third of its annual EBITDA from bio-based or renewable chemistries.

In addition to currently manufactured products, Ashland has identified several adjacent market opportunities that are beginning to develop as alternative energy technologies expand and evolve. The details of these opportunities are confidential at this time.

Further information

## Greenhouse Gas (GHG) Emissions Accounting, Emissions Intensity, Energy and Trading

### 7. Reporting Year (CDP6 Q2(a)(ii))

Information about how to respond to this section may be found in "The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)" developed by the World Resources Institute and the World Business Council for Sustainable Development ("the GHG Protocol"), see <http://www.ghgprotocol.org/>. ISO 14064-1 is compatible with the GHG Protocol as are a number of regional/national programme protocols. For more information see <http://www.ghgprotocol.org/> and use the guidance button above.

Please provide CDP with responses to questions 7, 8, 9, 10.1, 10.2, 11.1 and 11.2 for the three years prior to the current reporting year if you have not done so before or if this is the first time you have answered a CDP information request. Please work backwards from the current reporting year, so that you enter data for your oldest reporting period last.

Questions 10.1, 10.2, 11.1, and 11.2 are on subsequent webpages and the dates that you give in answer to question 7 will be carried forwards to automatically populate those webpages.

7.1. Please state the start date and end date of the year for which you are reporting GHG emissions.

Start date: 01 January 2008

End date: 31 December 2008

Other: Ashland reports calendar-year values to the American Chemistry Council and wants to maintain a consistent reporting period whenever this information is provided. Therefore, Ashland has presented emissions based on the 2008 calendar year, from January 1, 2008 through December 31, 2008.

### 8. Reporting Boundary: (CDP6 Q2(a)(i))

8.1. Please indicate the category that describes the company, entities, or group for which Scope 1 and Scope 2 GHG emissions are reported.

Other

Ashland's responses are based on global facilities whose physical assets are owned above 50 percent.

8.2. Please state whether any parts of your business or sources of GHG emissions are excluded from your reporting boundary.

Ashland has excluded several emission source types from our reporting boundary because they are considered to contribute negligible amounts of GHG emissions, including, but not limited to, Scope 3 activities, forklift propane use, and GHGs other than carbon dioxide released from natural gas combustion.

### 9. Methodology: (CDP6 Q2(a)(iii))

9.1. Please describe the process used by your company to calculate Scope 1 and Scope 2 GHG emissions including the name of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 GHG emissions.

Please provide your answer in the text box. In addition to this description, if relevant, select a methodology from the list of published methodologies. This will aid automated analysis of the data.

Ashland bases GHG emission calculations on the GHG Protocol, but has developed tools internally to gather energy use data and calculate emissions. Emission factors used are from a variety of sources, including those from the World Resources Institute, industry associations and others.

Select methodologies:

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

Please also provide:

9.2 Details of any assumptions made.

See [Items 8 and 9.1](#).

9.3 The names of and links to any calculation tools used.

See [Item 9.1](#).

Select calculation tools:

[GHG Protocol - CO2 emissions from fuel use in facilities 3.0 March 2008](#)

[GHG Protocol - GHG emissions from stationary combustion 3.1 March 2008](#)

[GHG Protocol - Indirect CO2 emissions from purchased electricity 3.0 March 2008](#)

[GHG Protocol - Indirect CO2 emissions from Purchased Electricity, Heat, or Steam 2.0 March 2008](#)

9.4 The global warming potentials you have applied and their origin.

The main GHG emitted from Ashland facilities is carbon dioxide, which has a global warming potential of 1.0.

9.5 The emission factors you have applied and their origin.

The emission factors used by Ashland have come from the World Resource Institute ([www.ghgprotocol.org/calculation-tools/all-tools](http://www.ghgprotocol.org/calculation-tools/all-tools)), American Chemistry Council, and other recognized, international groups.

Further information

## 10. Scope 1 Direct GHG Emissions: (CDP6 Q2(b)(i))

Instructions for question 10 and question 11 (following page)

When providing answers to questions 10 and 11, please do not deduct offset credits, Renewable Energy Certificates etc, or net off any estimated avoided emissions from the export of renewable energy, carbon sequestration (including enhanced oil recovery) or from the use of goods and services. Opportunities to provide details of activities that reduce or avoid emissions are provided elsewhere in the information request.

Carbon dioxide emissions from biologically sequestered carbon e.g. carbon dioxide from burning biomass/biofuels should be reported separately from emissions Scopes 1, 2 and 3. If relevant, please report these emissions in question 15. However, please do include any nitrous oxide or methane emissions from biomass/biofuel combustion in your emissions under the three scopes.

Please answer the following questions using Table 1.

Please provide:

10.1. Total gross global Scope 1 GHG emissions in metric tonnes of CO<sub>2</sub>-e

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

10.2. Country or region

Please provide CDP with responses to questions 10.1 and 10.2 for the three years prior to the current reporting year if you have not done so before or if this is the first time you have answered a CDP information request. Please work backwards from the current reporting year, so that you enter data for your oldest reporting period last. Table 1 (below) and table 5 (Q11.1 and 11.2) will be automatically populated with the dates that you give in answer to 7.1.

Electric utilities should report emissions by country/region using the table in question EU3.

Table 1 - Please use whole numbers only. Use the "Other" option in the drop down menu to enter the name of a region.

Reporting year Q7.1 Start date	01/01/2008
Reporting year Q7.1 End date	31/12/2008
10.1 Total gross global Scope 1 GHG emissions in metric tonnes CO <sub>2</sub> -e	158000
10.2 Gross Scope 1 emissions in metric tonnes CO <sub>2</sub> -e by country or region	
USA	131000
Rest of World	27100

Your answer to question 10.1 will be automatically carried forward to tables 2 and 3 below if you add a country or region in answer to 10.2 or press "Save" at the end of the page.

Please tick the box if your total gross global Scope 1 figure (Q10.1) includes emissions that you have transferred outside your reporting boundary (as given in answer to 8.1). Please report these transfers under 13.5.

Where it will facilitate a better understanding of your business, please also break down your total global Scope 1 emissions by:

- 10.3. Business division
- and/or
- 10.4. Facility

10.3. Business division (only data for the current reporting year requested)

Table 2 - Please use whole numbers only.

Business Divisions - Enter names below	Scope 1 Metric tonnes CO <sub>2</sub> -e
<b>Total gross global Scope 1 GHG emissions in metric tonnes CO<sub>2</sub>-e - answer to question Q10.1</b>	158000

10.4. Facility (only data for the current reporting year requested)

Table 3 - Please use whole numbers only.

Facilities - Enter names below	Scope 1 Metric tonnes CO <sub>2</sub> -e
<b>Total gross global Scope 1 GHG emissions in metric tonnes CO<sub>2</sub>-e - answer to question Q10.1</b>	158000

10.5. Please break down your total global Scope 1 GHG emissions in metric tonnes of the gas and metric tonnes of CO<sub>2</sub>-e by GHG type. (Only data for the current reporting year requested.)

Table 4 - Please use whole numbers only.

Scope 1 GHG Type	Unit	Quantity
CO <sub>2</sub>	Metric tonnes	158000
CH <sub>4</sub>	Metric tonnes	
CH <sub>4</sub>	Metric tonnes CO <sub>2</sub> -e	
N <sub>2</sub> O	Metric tonnes	
N <sub>2</sub> O	Metric tonnes CO <sub>2</sub> -e	
HFCs	Metric tonnes	
HFCs	Metric tonnes CO <sub>2</sub> -e	
PFCs	Metric tonnes	
PFCs	Metric tonnes CO <sub>2</sub> -e	
SF <sub>6</sub>	Metric tonnes	
SF <sub>6</sub>	Metric tonnes CO <sub>2</sub> -e	

10.6. If you have not provided any information about Scope 1 emissions in response to the questions above, please explain your reasons and describe any plans you have for collecting Scope 1 GHG emissions information in future.

Further information

## 11. Scope 2 Indirect GHG Emissions: (CDP6 Q2(b)(i))

Important note about emission factors where zero or low carbon electricity is purchased:

The emissions factor you should use for calculating Scope 2 emissions depends upon whether the electricity you purchase is counted in calculating the grid average emissions factor or not – see below. You can find this out from your supplier.

Electricity that IS counted in calculating the grid average emissions factor:

Where electricity is sourced from the grid and that electricity has been counted in calculating the grid average emissions factor, Scope 2 emissions must be calculated using the grid average emissions factor, even if your company purchases electricity under a zero or low carbon electricity tariff.

Electricity that is NOT counted in calculating the grid average emissions factor:

Where zero or low carbon electricity is sourced from the grid or otherwise transmitted to the company and that electricity is not counted in calculating the grid average, the emissions factor specific to that method of generation can be used, provided that any certificates quantifying GHG-related environmental benefits claimed for the electricity are not sold or passed on separately from the electricity purchased.

[Click here](#) to see the instructions from the previous page on answering question 11.

Please answer the following questions using Table 5.

Please provide:

11.1. Total gross global Scope 2 GHG emissions in metric tonnes of CO<sub>2</sub>-e.

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

11.2. Country or region

Please provide CDP with responses to questions 11.1 and 11.2 for the three years prior to the current reporting year if you have not done so before or if this is the first time you have answered a CDP information request. Please work backwards from the current reporting year, so that you enter data for your oldest reporting period last. Table 5 will be automatically populated with the dates that you gave in answer to 7.1.

Table 5 - Please use whole numbers only. Use the "Other" option in the drop down menu to enter the name of a region.

Reporting year Q7.1 Start date	01/01/2008
Reporting year Q7.1 End date	31/12/2008
11.1 Total gross global Scope 2 GHG emissions in metric tonnes CO <sub>2</sub> -e	75700
11.2 Gross Scope 2 emissions in metric tonnes CO <sub>2</sub> -e by country or region	
USA	47300
Rest of World	28400

Your answer to 11.1 will be automatically carried forward to tables 6 and 7 below if you add a country or region in answer to 11.2 or press "Save" at the end of the page.

Where it will facilitate a better understanding of your business, please also break down your total global Scope 2 emissions by:

11.3. Business division

and/or

11.4. Facility

11.3. Business division (only data for the current reporting year requested)

Table 6 - Please use whole numbers only.

Business Divisions - Enter names below	Scope 2 Metric tonnes CO <sub>2</sub> -e
Total gross global Scope 2 GHG emissions in metric tonnes CO <sub>2</sub> -e - answer to question Q11.1	75700

11.4. Facility (only data for the current reporting year requested)

Table 7 - Please use whole numbers only.

Facilities - Enter names below	Scope 2 Metric tonnes CO <sub>2</sub> -e
Total gross global Scope 2 GHG emissions in metric tonnes CO <sub>2</sub> -e - answer to question Q11.1	75700

11.5. If you have not provided any information about Scope 2 emissions in response to the questions above, please explain your reasons and describe any plans you have for collecting Scope 2 GHG emissions information in future.

Further information

## 12. Contractual Arrangements Supporting Particular Types of Electricity Generation: (CDP6 Q2(b)(i)- Guidance)

12.1. If you consider that the grid average factor used to report Scope 2 emissions in question 11 does not reflect the contractual arrangements you have with electricity suppliers, (for example, because you purchase electricity using a zero or low carbon electricity tariff), you may calculate and report a contractual Scope 2 figure in response to this question, showing the origin of the alternative emission factor and information about the tariff.

Not Available.

12.2. If you retire any certificates (eg: Renewable Energy Certificates) associated with zero or low carbon electricity, please provide details.

Not Available.

Further information

## 13. Scope 3 Other Indirect GHG Emissions: (CDP6 Q2(c))

For each of the following categories, please:

- Describe the main sources of emissions,
- Report emissions in metric tonnes of CO<sub>2</sub>-e,
- state the methodology, assumptions, calculation tools, databases, emission factors (including sources) and global warming potentials (including sources) you have used for calculating emissions.

Notes about question 13

When providing answers to question 13, please do not deduct offset credits, Renewable Energy Certificates etc, or net off any estimated avoided emissions from the export of renewable energy, carbon sequestration (including enhanced oil recovery) or from the use of goods and services. Opportunities to provide details of activities that reduce or avoid emissions are provided elsewhere in the information request.

Carbon dioxide emissions from biologically sequestered carbon e.g. carbon dioxide from burning biomass/biofuels should be reported separately from emissions Scopes 1, 2 and 3. If relevant, please report these emissions in question 15. However, please do include any nitrous oxide or methane emissions from biomass/biofuel combustion in your emissions under the three scopes.

13.1 Employee business travel

Describe the main sources of emissions

Not Identified.

Emissions in metric tonnes CO<sub>2</sub>-e.

Not Identified.

State the methodology, assumptions, calculation tools, databases, emission factors (including sources) and global warming potentials (including sources) you have used for calculating emissions.

Not Identified.

13.2. External distribution/logistics

Describe the main sources of emissions

Not Identified.

Emissions in metric tonnes CO<sub>2</sub>-e.

Not Identified.

State the methodology, assumptions, calculation tools, databases, emission factors (including sources) and global warming potentials (including sources) you have used for calculating emissions.

Not Identified.

13.3 Use/disposal of company's products and services

For auto manufacture and auto component companies – please refer to the additional questions for these sectors before completing question 13.3.

Describe the main sources of emissions

Not Identified.

Emissions in metric tonnes CO<sub>2</sub>-e.

Not Identified.

State the methodology, assumptions, calculation tools, databases, emission factors (including sources) and global warming potentials (including sources) you have used for calculating emissions.

Not Identified.

#### 13.4 Company supply chain

Describe the main sources of emissions

Not Identified.

Emissions in metric tonnes CO<sub>2</sub>-e.

Not Identified.

State the methodology, assumptions, calculation tools, databases, emission factors (including sources) and global warming potentials (including sources) you have used for calculating emissions.

Not Identified.

#### 13.5 Other

If you are reporting emissions that do not fall into the categories above, please categorise them into transferred emissions and non-transferred emissions (please see guidance for an explanation of these terms).

Please report transfers in the first three input fields and non-transfers in the last three input fields.

##### Transfers

Describe the main sources of emissions

Not Identified.

##### Transfers

Report emissions in metric tonnes of CO<sub>2</sub>-e.

Not Identified.

##### Transfers

State the methodology, assumptions, calculation tools, databases, emission factors (including sources) and global warming potentials (including sources) you have used for calculating emissions.

Not Identified.

##### Non-transfers

Describe the main sources of emissions

Not Identified.

##### Non-transfers

Report emissions in metric tonnes of CO<sub>2</sub>-e.

Not Identified.

##### Non-transfers

State the methodology, assumptions, calculation tools, databases, emission factors (including sources) and global warming potentials (including sources) you have used for calculating emissions.

Not Identified.

13.6 If you have not provided information about one or more of the categories of Scope 3 GHG emissions in response to the questions above, please explain your

reasons and describe any plans you have for collecting Scope 3 indirect emissions information in future.

Ashland has not identified GHG emissions from Scope 3 activities. In the past we have attempted to estimate the GHG emissions from our external distribution/logistics sources and supply chain, but at this time we do not have an accurate data set from which to work. Ashland has been implementing a comprehensive Enterprise Resource Planning (ERP) system. Once this system is fully implemented, we expect to provide this data.

Further information

#### 14. Emissions Avoided Through Use Of Goods And Services (New for CDP 2009)

14.1. If your goods and/or services enable GHG emissions to be avoided by a third party, please provide details including the estimated avoided emissions, the anticipated timescale over which the emissions are avoided and the methodology, assumptions, emission factors (including sources), and global warming potentials (including sources) used for your estimations.

Not Available.

Further information

#### 15. Carbon Dioxide Emissions from Biologically Sequestered Carbon: (New for CDP 2009)

An example would be carbon dioxide from burning biomass/biofuels.

15.1. Please provide the total global carbon dioxide emissions in metric tonnes CO<sub>2</sub> from biologically sequestered carbon.

Emissions in metric tonnes CO<sub>2</sub> - Please use whole numbers only

Further information

Not Available.

#### 16. Emissions Intensity: (CDP6 Q3(b))

16.1. Please supply a financial emissions intensity measurement for the reporting year for your combined Scope 1 and 2 emissions.

Please describe the measurement.

The most appropriate measurement of emissions intensity for Ashland will be based on production volumes. Ashland has not yet revised GHG emission calculations to routinely incorporate production.

16.1.1. Give the units. For example, the units could be metric tonnes of CO<sub>2</sub>-e per million Yen of turnover, metric tonnes of CO<sub>2</sub>-e per US\$ of profit, metric tonnes of CO<sub>2</sub>-e per thousand Euros of turnover.

Not Available.

16.1.2. The resulting figure.

Use a decimal point if necessary. Please use a "." rather than a ",", i.e. please write 15.6 rather than 15,6

16.2. Please supply an activity related intensity measurement for the reporting year for your combined Scope 1 and 2 emissions.

Please describe the measurement.

Not Available.

16.2.1. Give the units e.g. metric tonnes of CO<sub>2</sub>-e per metric tonne of output or for service sector businesses per unit of service provided.

16.2.2. The resulting figure.

Use a decimal point if necessary. Please use a "." rather than a ",", i.e. please write 15.6 rather than 15,6

Further information

#### 17. Emissions History: (CDP6 Q2(f))

17.1. Do emissions for the reporting year vary significantly compared to previous years?

Yes

Most CDP7 emissions changed due to normal causes such as production volumes. However, U.S. Scope 2 emissions changed dramatically because emissions in previous reports were not calculated from grid average emission factors.

If the answer to 17.1 is Yes:

17.1.1. Estimate the percentage by which emissions vary compared with the previous reporting year.

This box will accept numerical answers containing a decimal point. Please use "." not "," i.e. write 10.6, not 10,6.

70 %

Have the emissions increased or decreased?

Increased

Further information

#### 18. External Verification/Assurance: (CDP6 Q2(d))

18.1. Has any of the information reported in response to questions 10 – 15 been externally verified/assured in whole or in part?

No information has been provided in response to questions 10-15. Please go to question 19.

It would aid automated analysis of responses if you could select responses from the tick boxes below. However, please use the text box provided if the tick boxes menu options are not appropriate.

18.2. State the scope/boundary of emissions included within the verification/assurance exercise.

Please use the text box below to describe the scope/boundary of emissions included within the verification/assurance exercise if the tick box menu options above are not applicable.

18.3. State what level of assurance (eg: reasonable or limited) has been given.

18.4. Provide a copy of the verification/assurance statement.

Please attach a copy/copies.

18.5. Specify the standard against which the information has been verified/assured.

18.6. If none of the information provided in response to questions 10-15 has been verified in whole or in part, please state whether you have plans for GHG emissions accounting information to be externally verified/assured in future.

Further information

19. Data Accuracy: (CDP6 Q2(e) – New wording for CDP 2009)

19.1. What are the main sources of uncertainty in your data gathering, handling and calculations e.g.: data gaps, assumptions, extrapolation, metering/measurement inaccuracies etc?

If you do not gather emissions data, please select emissions data is NOT gathered and proceed to question 20.

Emission data is gathered.

Ashland anticipates that typical uncertainties may potentially occur within our data collection systems, calculations, and internal reporting systems, including, but not limited to, utility bill inconsistencies, data entry errors, and uncertainty in emission factors and conversion factors. However, Ashland does not yet have a systematic process in place to routinely review these data for accuracy.

19.2. How do these uncertainties affect the accuracy of the reported data in percentage terms or an estimated standard deviation?

Ashland has not yet determined the accuracy of these potential uncertainties in terms of percentage or standard deviation.

19.3. Does your company report GHG emissions under any mandatory or voluntary scheme (other than CDP) that requires an accuracy assessment?

No (Please go to question 20.)

19.3.1 Please provide the name of the scheme.

19.3.2. Please provide the accuracy assessment for GHG emissions reported under that scheme for the last report delivered.

Further information

20. Energy and Fuel Requirements and Costs: (New for CDP 2009)

Please provide the following information for the reporting year:

Cost of purchased energy

20.1. The total cost of electricity, heat, steam and cooling purchased by your company.

Select currency

20.1.1. Please break down the costs by individual energy type.

Table 8 - The "Cost" column will not accept text. Please use whole numbers only.

Energy type	Cost	Currency
Electricity		
Heat		
Steam		
Cooling		

Cost of purchased fuel

20.2. The total cost of fuel purchased by your company for mobile and stationary combustion.

Select currency

20.2.1. Please breakdown the costs by individual fuel type.

Table 9 - The cost column will not accept text. Please use whole numbers only.

Mobile combustion fuels	Cost	Currency
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Stationary combustion fuels	Cost	Currency
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#### Energy and fuel inputs

The following questions are designed to establish your company's requirements for energy and fuel (inputs). Please note that MWh is our preferred unit for answers as this helps with comparability and analysis. Although it is usually associated with electricity, it can equally be used to represent the energy content of fuels (see CDP 2009 Reporting Guidance for further information on conversions to MWh).

#### Purchased energy input

20.3 Your company's total consumption of purchased energy in MWh.

Please use whole numbers only.

287000 MWh

#### Purchased and self produced fuel input

20.4. Your company's total consumption in MWh of fuels for stationary combustion only. This includes purchased fuels, as well as biomass and self-produced fuels where relevant.

Please use whole numbers only.

680000 MWh

In answering this question and the one below, you will have used either Higher Heating Values (also known as Gross Calorific Values) or Lower Heating Values (also known as Net Calorific Values).

Please state which you have used in calculating your answers.

These data are based on Lower Heating Values (LHV) for fuels.

20.4.1. Please break down the total consumption of fuels reported in answer to question 20.4 by individual fuel type in MWh.

Table 10 - Please use whole numbers only

Stationary combustion fuels	MWh
Natural gas	639000
LPG	14800
Distillate fuel oil No.2	25800
Other coal-based fuels	403

#### Energy output

In this question we ask for information about the energy in MWh generated by your company from the fuel that it uses. Comparing the energy contained in the fuel before combustion (question 20.4) with the energy available for use after combustion will give an indication of the efficiency of your combustion processes, taking your industry sector into account.

20.5. What is the total amount of energy generated in MWh from the fuels reported in question 20.4?

Please use whole numbers only.

20.6. What is the total amount in MWh of renewable energy, excluding biomass, that is self-generated by your company?

Please use whole numbers only.

0 MWh

#### Energy exports

This question is for companies that export energy that is surplus to their requirements. For example, a company may use electricity from a combined heat and power plant but export the heat to another organisation.

20.7. What percentage of the energy reported in response to question 20.5 is exported/sold by your company to the grid or to third parties?

Please use whole numbers only.

0 %

20.8. What percentage of the renewable energy reported in response to question 20.6 is exported/sold by your company to the grid or to third parties?

Please use whole numbers only.

0 %

Further information

Ashland has not yet determined the global cost of all energy sources purchased by its facilities (Question 20.1), nor the energy output from the fuel used at its facilities (Question 20.5).

## 21. EU Emissions Trading Scheme: (CDP6 Q2(g)(i) – New wording for CDP 2009)

Electric utilities should report allowances and emissions using the table in question EU5.

21.1. Does your company operate or have ownership of facilities covered by the EU Emissions Trading Scheme (EU ETS)?

No (Please go to question 22.)

Please give details of:

21.2. The allowances allocated for free for each year of Phase II for facilities which you operate or own. (Even if you do not wholly own facilities, please give the full number of allowances).

Table 11 - Please use whole numbers only.

	2008	2009	2010	2011	2012
<b>Free allowances metric tonnes CO2</b>					

21.3. The total allowances purchased through national auctioning processes for the period 1 January 2008 to 31 December 2008 for facilities that you operate or own. (Even if you do not wholly own facilities, please give the total allowances purchased through auctions by the facilities for this period).

Total allowances purchased through auction

21.4. The total CO<sub>2</sub> emissions for 1 January 2008 to 31 December 2008 for facilities which you operate or own. (Even if you do not wholly own facilities, please give the total emissions for this period.)

Total emissions in metric tonnes

Further information

## 22. Emissions Trading: (CDP6 Q2(g)(ii) - New wording for CDP 2009)

Electric utilities should read EU6 before answering these questions.

22.1. Please provide details of any emissions trading schemes, other than the EU ETS, in which your company already participates or is likely to participate within the next two years.

We do not participate or anticipate participating in any trading schemes within the next two years. (Please go to question 22.3)

22.2. What is your overall strategy for complying with any schemes in which you are required or have elected to participate, including the EU ETS?

Further information

## 22. Carbon credits

22.3. Have you purchased any project-based carbon credits?

No. (Please go to question 22.5)

Please indicate whether the credits are to meet one or more of the following commitments:

Please also:

22.4 Provide details including the type of unit, volume and vintage purchased and the standard/scheme against which the credits have been verified, issued and retired (where applicable).

22.5. Have you been involved in the origination of project-based carbon credits?

No. (Please go to question 22.7)

22.6. Please provide details including:

- Your role in the project(s),
- The locations and technologies involved,
- The standard/scheme under which the projects are being/have been developed,
- Whether emissions reductions have been validated or verified,
- The annual volumes of generated/projected carbon credits,
- Retirement method if used for own compliance or offsetting.

22.7. Are you involved in the trading of allowances under the EU ETS and/or project-based carbon credits as a separate business activity, or in direct support of a business activity such as investment fund management or the provision of offsetting services?

No. (Please go to question 23)

22.8. Please provide details of the role performed.

Further information

Performance

23. Reduction plans & goals: (CDP6 Q3(a))

23.1. Does your company have a GHG emissions and/or energy reduction plan in place?

No. (Please answer the following question and then continue with 23.3)

23.2. Please explain why.

It would aid automated analysis of responses if you could select a response from the options below as well as using the text box. However, please just use the text box provided if the options are not appropriate.

In process of being defined

If the menu options above are not appropriate, please answer the question using the text box below:

Ashland has drafted a GHG policy and strategy, but has not yet formally developed an emission reduction program or proposed an emission reduction target. At this time we plan on continuing to gather energy use and GHG emissions data, and will consider an emission reduction target in the future. Our GHG policy will help drive higher fuel efficiency and energy use reductions through the normal process of replacing equipment. We also have invested in Six Sigma\* techniques, which have already resulted in some energy use reductions. We expect more Six Sigma\* projects to address energy efficiency in the future.

\* - Six Sigma is a registered trademark and service mark of Motorola, Inc.

Goal setting

23.3. Do you have an emissions and/or energy reduction target(s)?

No. (Please go to question 23.8)

23.4 What is the baseline year for the target(s)?

23.5. What is the emissions and/or energy reduction target(s)?

23.6. What are the sources or activities to which the target(s) applies?

23.7. Over what period/timescale does the target(s) extend?

Further information

### 23. GHG emissions and energy reduction activities

23.8. What activities are you undertaking or planning to undertake to reduce your emissions/energy use?

[See Item 23.1.](#)

Further information

### 23. Goal evaluation

23.9. What benchmarks or key performance indicators do you use to assess progress against the emissions/energy reduction goals you have set?

[See Item 23.1.](#)

Further information

### 23. Goal achievement

23.10. What emissions reductions, energy savings and associated cost savings have been achieved to date as a result of the plan and/or the activities described above? Please state the methodology and data sources you have used for calculating these reductions and savings.

[See Item 23.1.](#)

23.11. What investment has been required to achieve the emissions reductions and energy savings targets or to carry out the activities listed in response to question 23.8 and over what period was that investment made?

Table 13 - The "Investment number" column will not accept text. Please use whole numbers only.

Emission reduction target/energy saving target or activity	Investment number	Investment currency	Timescale
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Further information

[See Item 23.1.](#)

### 23. Goal planning & investment

Electric utilities should read the table in question EU3 for giving details of forecasted emissions.

23.12. What investment will be required to achieve the future targets set out in your reduction plan or to carry out the activities listed in response to question 23.8 above and over what period do you expect payback of that investment?

Table 14 - The "Number" column will not accept text. Please use whole numbers only.

Plan or action	Investment number	Investment currency	Payback
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23.13. Please estimate your company's future Scope 1 and Scope 2 emissions for the next five years for each of the main territories or regions in which you operate or provide a qualitative explanation for expected changes that could impact future GHG emissions.

If possible, please use table 15 below to structure your answer to the question or alternatively use the text box below.

[See Item 23.1.](#)

Scope 1 forecasted emissions in Table 15 below are in the following units.

Scope 2 forecasted emissions in Table 15 below are in the following units.

Table 15 - The "Scope" columns will not accept text. Please use whole numbers only.

Type in the name of the territory or region for which you are giving data and then press "Add Territory/Region". If giving a global figure instead of separate figures for regions or territories, please write "global" in the box labelled "Enter name of territory or region".

[Click here to see a sample table.](#)

<b>Future reporting years:</b>											
<b>End date for year end DD/MM/YYYY</b>											
<b>Emission forecasts</b>	<b>Scope 1</b>	<b>Scope 2</b>	<b>Scope 1</b>	<b>Scope 2</b>	<b>Scope 1</b>	<b>Scope 2</b>	<b>Scope 1</b>	<b>Scope 2</b>	<b>Scope 1</b>	<b>Scope 2</b>	

23.14. Please estimate your company's future energy use for the next five years for each of the main territories or regions in which you operate or provide a qualitative explanation for expected changes that could impact future GHG emissions.

If possible, please use table 16 below to structure your answer to the question or alternatively use the text box below.

[See Item 23.1.](#)

Table 16 - Please use whole numbers only.

Type in the name of the territory or region for which you are giving data and a description of the data you are giving e.g. electricity consumption. Then press "Add Row". If giving a global figure instead of separate figures for regions or territories, please use the word "global". This table will also accept different types of units e.g. units of volume or mass.

[Click here to see a sample table.](#)

<b>Future reporting years:</b>											
<b>End date for year end DD/MM/YYYY</b>											
<b>Energy use estimates for territory/region</b>	<b>Number</b>	<b>Units</b>	<b>Number</b>	<b>Units</b>	<b>Number</b>	<b>Units</b>	<b>Number</b>	<b>Units</b>	<b>Number</b>	<b>Units</b>	

23.15. Please explain the methodology used for your estimations and any assumptions made.

[See Item 23.1.](#)

Further information

24. Planning: (CDP6 Q3(c))

24.1. How do you factor the cost of future emissions into capital expenditures and what impact have those estimated costs had on your investment decisions?

[Ashland does not yet forecast future energy use or GHG emissions.](#)

Further information

Governance

25. Responsibility: (CDP6 Q4(a))

25.1. Does a Board Committee or other executive body have overall responsibility for climate change?

[Yes. \(Please answer question 25.3 and 25.4\)](#)

25.2 Please state how overall responsibility for climate change is managed and indicate the highest level within your company with responsibility for climate change.

25.3. Which Board Committee or executive body has overall responsibility for climate change?

We have an active Environmental, Health and Safety (EHS) Committee of the Board. Our vice president of EHS participates on this committee, and is also responsible for managing our climate change strategies.

25.4. What is the mechanism by which the Board or other executive body reviews the company's progress and status regarding climate change?

The EHS Department estimates our global GHG emissions, and communicates those emissions to the Board. We determine our contribution by business segment and are working with our businesses on setting GHG reduction targets.

Further information

26. Individual Performance: (CDP6 Q4(b))

26.1. Do you provide incentives for individual management of climate change issues including attainment of GHG targets?

No. (Please go to question 27.1)

26.2. Are those incentives linked to monetary rewards?

26.3. Who is entitled to benefit from those incentives?

Further information

27. Communications: (CDP6 Q4(c))

27.1. Do you publish information about the risks and opportunities presented to your company by climate change, details of your emissions and plans to reduce emissions?

We communicate our energy use and GHG emissions publicly through the American Chemistry Council's annual metrics reporting. In 2009 we also published GHG data and energy use and improvement activities in a sustainability overview report, using Global Resource Institute metrics. Energy use and GHG emissions are also included in the determination of an internal responsibility index.

If so, please indicate which of the following apply and provide details and/or a link to the documents or a copy of the relevant excerpt:

27.2. The company's Annual Report or other mainstream filings.

Yes

To date, we have not communicated our energy use and GHG emissions publicly in our annual report, but rather have only publicly addressed those aspects in general terms of risks to the company and market opportunities.

27.3. Voluntary communications (other than to CDP) such as Corporate Social Responsibility reporting.

Yes

We have communicated our energy use and GHG emissions in a sustainability overview report, which can be found at [http://www.ashland.com/commitments/responsible\\_care.asp](http://www.ashland.com/commitments/responsible_care.asp).

Further information

28. Public Policy: (CDP6 Q4(d))

28.1. Do you engage with policymakers on possible responses to climate change including taxation, regulation and carbon trading?

Yes

We do not often directly engage with policymakers, but our interests are expressed through various industry associations such as the American Chemistry Council.

Further information

## Supplier Module

### SM 1 Ability to Split Scope 1 and 2 Emissions by Business Category

The aim of these questions is to help your customers estimate the extent to which your Scope 1 and Scope 2 emissions are linked with their purchases of services or goods from you.

Please note that we use the term "product" to cover both goods and services.

SM 1.1 Are you able to break down your total Scope 1 and Scope 2 emissions by the following categories:

- Business division
- Business unit
- Factory
- Product group
- Other

Please give details in each case.

Business division?

Business unit?

Factory?

Product group?

Other

Unable to breakdown by category?

Further information

### SM 1.2 Splitting Scope 1 and Scope 2 Emissions by Category

SM 1.2. Using your preferred method (question SM 1.1) for splitting emissions, please consider what are the five biggest emitting categories (e.g. business units or product groups) for your company? For each of the five biggest emitting categories, plus any other categories specified by your customer(s), please complete the table SM1.2.

[Click here to see a sample of a completed table.](#)

Please complete this table. Use the figure given in answer to question 11.1. as the basis for your Scope 2 emissions.

	Category e.g. business division, business unit, factory, product group.	Total emissions (number)	Total emissions Units of measure e.g. metric tonnes CO2-e	Do these represent emissions from Scope 1 only, Scope 2 only, or both?	Output	Units	Major emission Sources
Group 1							
Group 2							
Group 3							
Group 4							
Group 5							
Total							

Further information

### SM 1.3 Methodology

SM 1.3. Please explain how you have identified the GHG sources listed in the previous question, including major limitations to this process and assumptions made.

Describe your system for allocating emissions to the groups in the table.

Where published information has been used, please provide a reference(s).

Give the degree of confidence that you have in the figures expressed as a percentage, e.g. you estimate that they are accurate to +/- 15%.

If the allocation of emissions to different categories has been externally verified, please give details.

Further information

### SM 1.4 Challenges and Developments

What are the challenges in allocating emissions to different business categories and what would help you to overcome these challenges? Please describe whether and how you plan to develop your capabilities to allocate your emissions in the future.

Further information

## SM 2. Your engagement with your suppliers

Your customers want to engage with you to learn more about the emissions from their immediate suppliers. The purpose of this section is to find out what you in turn are doing to engage with your own suppliers.

SM 2.1 Do you have a strategy for engaging with your suppliers on their GHG emissions and the impacts of climate change on their business? If so, please provide details of this strategy. To give a sense of the scale of this engagement, please include the number of suppliers with whom you are engaging and the proportion of your total spending that they represent.

If you do not have a strategy, please explain any plans you have to develop one in the future.

Further information

### SM 2.2 Use of data

If you have data on your suppliers' GHG emissions and climate change strategies, please explain how you make use of that data (for example: identifying major GHG sources to prioritise emissions reduction actions, identifying physical risks in the supply chain, stimulating innovation, etc).

Further information

## SM 3. Emissions over the lifecycle of goods and services

SM 3.1. Please list any major successes and/or planned activities to reduce GHG emissions in the lifecycle of groups of products or individual products, including an estimate of the possible reductions for each initiative.

SM 3.2 Do you offer customers information or steps they can take to reduce the GHG emissions associated with use of your products, and - in the case of goods - with their disposal? Please give examples.

Further information

### SM 3.3 and 3.4 Individual Request Questions

Some suppliers may have customers who request that they provide estimates of GHG emissions over a particular product's lifecycle. Others may have estimated this information for their own purposes and wish to publicise it. If you fall into either group, please answer the following question and then complete the table SM 3.4.

SM 3.3 Please give details of the method that you have used to estimate lifecycle emissions. State if you have followed a published procedure (e.g. ISO 14040 & 14044 or PAS 2050) or one that you have developed yourself.

Clearly define the good or service for which data is being given and the boundary of your assessment. Please make it clear which GHGs and GHG sources are included in your assessment. If relevant GHGs and GHG sources are excluded, please describe them and give reasons for omissions.

Give references to data sources used.

If you are giving life cycle assessment (LCA) information for more than one product, please use this text box to describe your methodologies, each time making it clear to which product you are referring.

SM 3.4. Emissions over the lifecycle of goods and services

An example of the lifecycle stages of a service might be - in the case of a hotel stay - check in, use of room, check out, cleaning.

Further information