

CDP 2009 Information Request

Respondent: The Hershey Company

Risk and Opportunities

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

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

We do not consider our company to be exposed to regulatory risks.

The Hershey Company is not impacted by regulations related to climate change at this time. In order to characterize and proactively address any potential future risks, we are closely monitoring the development of proposed federal, state and local greenhouse gas regulations governing areas where we have facilities.

If regulations on greenhouse gas emissions are put in place at the federal or state level, and these apply to our facilities, The Hershey Company will work to ensure compliance. If regulations on greenhouse gas emissions are put in place at the federal level or in states where we operate, we may be exposed to potential utility cost increases associated with regulatory costs borne by our utility and fuel suppliers, and passed on to us through higher energy costs.

We would be exposed to any such regulations to the same degree as industry peers. Our company is in a relatively low emitting industry, operates a longstanding energy conservation program, actively manages our greenhouse gas emissions and is committed to continuous improvement in these areas, so we would expect the impact of potential regulations on our business to be minimal.

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.

The Hershey Company relies on a number of agricultural commodities to produce its products, chiefly cocoa, nuts and sweeteners. As such, the geographical areas where these crops grow would be most material. Climate change research indicates that agricultural/climate zones and rainfall patterns may shift, representing a long-term physical risk to commodity supplies. Timing and intensity of these effects remain uncertain, so it is difficult to speculate on the degree of risk in this area. We would bear the same impact as other chocolate, confectionery and food industry peers.

We are currently engaged in activities that will help us address such risks proactively. The Hershey Company is a member of the World Cocoa Foundation (WCF), which unites industry, farmers, governments and civil society in advancing social, environmental and economic sustainability across the cocoa sector.

Through the World Cocoa Foundation (WCF), we provide financial support for Farmer Field Schools and the Sustainable Tree Crops Program, which educate farmers on best practices in farm management, productivity and environmental stewardship (e.g., maintaining surrounding forest and Integrated Pest Management, which reduces the use of petroleum-based agricultural chemicals), among other areas. As such, these programs are positioned to help cocoa producers adapt to changing environmental conditions and mitigate the impact of cocoa farming on climate change. The Hershey Company is a major funder for a five-year, \$40 million project with the Gates Foundation, the WCF and industry peers, entitled "Sustainable Cocoa Livelihoods." The program will help farmers improve quality, productivity, crop diversification and business skills; enhance farmer organizations; and improve farmers' access to agricultural inputs, improved-quality seedlings and market information. Together, these activities will help farmers realize better incomes to help them preserve surrounding forests and maintain healthy trees and soil to enhance carbon sequestration.

The Hershey Company has established cocoa sustainability principles, which include a commitment to building farmer incomes and environmental stewardship in cocoa farming. We will continue to identify ways to partner with suppliers, organizations and industry peers to act on these principles, in turn addressing climate change through efforts that promote and expand environmentally sound cocoa farming.

Scientists have reported that climate change may result in rising sea levels and more severe weather, such as hurricanes. This has the potential to impact the shipping industry and thus the cost of imported raw materials, such as cocoa. As above, the timing and intensity of this impact are unknown, but would affect our sector as a whole to the same degree. We are engaging with industry peers in the Grocery Manufacturers Association, as well as directly with suppliers, to monitor and address logistics issues, and climate change in general.

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 do not consider our company to be exposed to other risks.

Key customers and a growing number of consumers and investors show awareness and concern around global climate change and expect companies like Hershey to do our part to reduce emissions. We would be exposed to risk in this area if we were not managing our emissions and communicating our efforts externally. However, we have initiated a greenhouse gas emissions measurement and reduction program, have communicated closely with key customers and investors to understand their concerns and share our progress, and are undertaking consumer insights research to understand and respond to consumer needs through our products, practices and communications.

Further information

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

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

Regulatory requirements present opportunities for my company.

The Hershey Company has long supported energy efficiency and emissions reduction measures as part of our efforts to reduce our environmental footprint and control operating costs. Pending regulation provides an opportunity for us to reduce energy usage so we are positioned to comply with any such regulations and reduce energy costs from utility and fuel providers who may incorporate regulatory costs into higher energy costs.

At some of our facilities, The Hershey Company also burns methane resulting from sludge that is digested in the wastewater treatment process and used in our boilers. We also use macadamia nut shells for biomass fuel at our Hilo, Hawaii facility. The avoided emissions from these processes could potentially be sold through offset markets, pending cap and trade regulations that would build demand, representing a revenue opportunity.

Further information

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

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

Physical changes present opportunities for my company.

As noted earlier, via the efforts we fund through the WCF and the West Africa Livelihoods program, we are positioned to assist cocoa producers in adapting to the impacts of climate change (e.g., water management practices, selecting varieties suited to changing weather and climate conditions), minimize the carbon footprint of cocoa farming (e.g., preserve adjacent forest) and implement practices that sequester emissions (e.g., soil building/retention, reforestation). As such, The Hershey Company has the opportunity to benefit producer communities, safeguard cocoa supplies and promote stable commodity pricing in the face of future climate change impacts.

In addition, in applying our cocoa sustainability principles to our business programs and partnerships, we will continue to identify ways to partner with suppliers, organizations and industry peers to support sourcing programs and farming methods that address climate change in a positive way.

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.

Climate change offers an opportunity to inform customers, consumers and other stakeholders how our primary ingredient, cocoa, stands to help address climate change, and thus help consumers associate their chocolate purchase with a beneficial impact in this area. Cocoa is a perennial tree crop, which inherently sequesters carbon and holds soil in place, which has its own, additional carbon sequestration potential. Additionally, so long as farmers have a strong market for crops they currently farm, like cocoa, they will be able to retain surrounding forests and the carbon sequestration benefits they hold. By educating consumers about our efforts to advance sustainable cocoa farming, and thus maximize cocoa farmers' potential to use cocoa as a way to address climate change, we can likewise maximize this opportunity.

As stakeholder awareness and concerns around climate change increase, we also have a growing opportunity to communicate that we're working to reduce greenhouse gas emissions and energy use across our business, including manufacturing and packaging improvements. This helps to maintain a positive reputation that may drive additional purchasing, growing our business sustainably. It also offers an opportunity to communicate our approach and progress around climate change to shareholders and maintain an active two-way dialogue to address their questions and concerns, ensuring we align with shareholder expectations in this area and thus maintain and expand our investment base.

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

Financial accounting year: 01 January 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.

Companies over which operational control is exercised.

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

Non-manufacturing facilities are not included

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.

To set our boundaries and gather our data, we used the California Climate Action Registry General Reporting Protocol (GRP) as our guidance. The GRP is based on the "Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard" developed by the World Business Council for Sustainable Development (WBCSD) and the World Resources Institute (WRI).

As for process, monthly utility bills from service providers at all manufacturing locations are assembled to quantify volume of utility usage for manufacturing locations. All fuels and electricity used on site are captured.

To calculate our emissions, data for fuel usages were entered into California Registry's standardized on-line reporting mechanism, the Climate Action Registry Reporting Online Tool, or CARROT. The Hershey Company is a member of the California Climate Action Registry, and has reported GHG emissions voluntarily in California for manufacturing operations located there for the previous three years.

Select methodologies:

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
California Climate Action Registry General Reporting Protocol (GRP). The GRP is based on the "Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard" developed by the World Business Council for Sustainable Development (WBCSD) and the World Resources Institute (WRI).

Please also provide:

9.2 Details of any assumptions made.

There are no assumptions made in our calculation of electricity and fuels consumed. All utilities utilized at each manufacturing location are aggregated by fuel type and calculated and/or reported via CARROT for each location. At our Hilo, Hawaii manufacturing location, where we burn macadamia nut shells and fuel oil in our utilities boilers, the plant weighs tonnages produced and utilized for several purposes. We do this because it is required by our air emission permit and to produce a suitable fuel mix for use in our boilers, as well as to facilitate GHG reporting and management/reduction activities.

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

The Hershey Company utilizes the California Climate Action Registry's CARROT reporting tool. <https://www.climateregistry.org/CARROT/login.aspx>

Select calculation tools:

California Climate Action Registry's CARROT reporting tool. <https://www.climateregistry.org/CARROT/login.aspx>

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

Global warming potentials were drawn from the California Climate Action Registry General Reporting Protocol (GRP), as listed below. We did not capture data for emissions sources releasing emissions beyond CO2, so we did not need to apply these factors.

Greenhouse Gas GWP (SAR, 1996) GWP (TAR, 2001)
CO2 1 1
CH4 21 23
N2O 310 296
HFC-23 11,700 12,000
HFC-32 650 550
HFC-125 2,800 3,400
HFC-134a 1,300 1,300

HFC-143a 3,800 4,300
 HFC-152a 140 120
 HFC-227ea 2,900 3,500
 HFC-236fa 6,300 9,400
 HFC-4310mee 1,300 1,500
 CF4 6,500 5,700
 C2F6 9,200 11,900
 C3F8 7,000 8,600
 C4F10 7,000 8,600
 C6F14 7,400 9,000
 SF6 23,900 22,000

9.5 The emission factors you have applied and their origin.

Emission factors were drawn from CARROT. Per the California Climate Action Registry, the calculations and emission factors therein were selected based on technical advice provided to the California Registry by the State of California. Specific emission factors are assigned based on location or address of the facility, which is mapped to its utility and the energy mix/emissions for that utility in CARROT. Each manufacturing location was entered into CARROT by physical site address.

Further information

We are not reporting data prior to 2008, as we do not have complete historical data. We plan to use 2008 as our base year moving forward.

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 CO₂-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 CO₂-e	126991
10.2 Gross Scope 1 emissions in metric tonnes CO₂-e by country or region	
North America	126991

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 CO2-e
Total gross global Scope 1 GHG emissions in metric tonnes CO ₂ -e - answer to question Q10.1	126991

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 CO2-e
Total gross global Scope 1 GHG emissions in metric tonnes CO ₂ -e - answer to question Q10.1	126991

10.5. Please break down your total global Scope 1 GHG emissions in metric tonnes of the gas and metric tonnes of CO₂-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 ₂	Metric tonnes	126991
CH4	Metric tonnes	
CH4	Metric tonnes CO ₂ -e	
N2O	Metric tonnes	
N2O	Metric tonnes CO ₂ -e	
HFCs	Metric tonnes	
HFCs	Metric tonnes CO ₂ -e	
PFCs	Metric tonnes	
PFCs	Metric tonnes CO ₂ -e	
SF6	Metric tonnes	
SF6	Metric tonnes CO ₂ -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.

Future plans are under development and thus proprietary at this time.

Notes for this section:

10.3 Not relevant, as multiple brands for multiple markets/business divisions are produced in each facility and such a breakout is not feasible.

10.4

This information is proprietary, as it would offer confidential insights into our operations.

10.5

The Hershey Company currently reports only CO₂ emissions from use of electricity and fuels burned on-site in plants. We do not tabulate or report emissions other than actual CO₂. This is because we do not capture data for emissions sources releasing emissions beyond CO₂ (such as wastewater treatment process/WWTP methane or refrigerants), so we did not need to apply these factors.

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 CO₂-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 CO₂-e	239856
11.2 Gross Scope 2 emissions in metric tonnes CO₂-e by country or region	
North America	239856

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 ₂ -e
Total gross global Scope 2 GHG emissions in metric tonnes CO₂-e - answer to question Q11.1	239856

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 ₂ -e
Total gross global Scope 2 GHG emissions in metric tonnes CO₂-e - answer to question Q11.1	239856

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.

[Future plans are under development and thus proprietary at this time.](#)

Notes for this section:

11.3. Business division and/or

Not relevant, as multiple brands for multiple markets/business divisions are produced in each facility and such a breakout is not feasible.

11.4. Facility

This information is proprietary, as it would offer confidential insights into our operations.

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.

This is not applicable, as the calculation tool we use (CARROT) utilized USEPA eGRID factors, based on the zip code of our operating facility and the utility provider.

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

Our DAGOBA division purchases renewable energy certificates for 100% of the electricity and natural gas used at its facility.

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 CO₂-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

We are not currently measuring Scope 3 emissions.

Emissions in metric tonnes CO₂-e.

We are not currently measuring Scope 3 emissions.

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

We are not currently measuring Scope 3 emissions.

13.2. External distribution/logistics

Describe the main sources of emissions

We are not currently measuring Scope 3 emissions.

Emissions in metric tonnes CO₂-e.

We are not currently measuring Scope 3 emissions.

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

We are not currently measuring Scope 3 emissions.

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

We are not currently measuring Scope 3 emissions.

Emissions in metric tonnes CO₂-e.

We are not currently measuring Scope 3 emissions.

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

We are not currently measuring Scope 3 emissions.

13.4 Company supply chain

Describe the main sources of emissions

We are not currently measuring Scope 3 emissions.

Emissions in metric tonnes CO₂-e.

We are not currently measuring Scope 3 emissions.

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

We are not currently measuring Scope 3 emissions.

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

We are not currently measuring Scope 3 emissions.

Transfers

Report emissions in metric tonnes of CO₂-e.

We are not currently measuring Scope 3 emissions.

Transfers

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

We are not currently measuring Scope 3 emissions.

Non-transfers

Describe the main sources of emissions

We are not currently measuring Scope 3 emissions.

Non-transfers

Report emissions in metric tonnes of CO₂-e.

We are not currently measuring Scope 3 emissions.

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.

We are not currently measuring Scope 3 emissions.

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.

We are not currently measuring Scope 3 emissions.

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.

This question is not directly relevant to our business, in terms of the impact of our products at the customer/consumer level. However, as noted, we fund efforts that help improve environmental stewardship and incomes on cocoa farms, chiefly Farmer Field Schools, the Sustainable Tree Crops Program and the Sustainable Cocoa Livelihoods project. These efforts benefit the environment and climate change mitigation through programs that:

- help increase farmer incomes (via productivity improvements, collective selling, marketing information, etc.) so farmers do not need to harvest surrounding rainforest
- train farmers how to manage working timber stands sustainably
- train farmers on Integrated Pest management to reduce the use of petroleum-based agricultural chemicals
- help farmers maintain healthy cocoa and shade trees and build soil, improvements that stand to increase carbon sequestration potential on cocoa farms

In addition, our primary ingredient, cocoa, stands to help address climate change, and thus help consumers associate their chocolate purchase with a beneficial impact in this area. Cocoa is a perennial tree crop, which inherently sequesters carbon and holds soil in place, which has its own, additional carbon sequestration potential.

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 CO₂ from biologically sequestered carbon.

Emissions in metric tonnes CO₂ - Please use whole numbers only

Further information

We utilize macadamia nut shells for fuel in our Hilo, Hawaii facility only. GHG emissions from this activity are considered proprietary, as this information could be used to determine our total poundage of macadamia nuts, and thus offer confidential insights into our operations.

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.

Above reported emissions (266,847 tonnes) per net sales in 2008 10-k (5,132,768)

16.1.1. Give the units. For example, the units could be metric tonnes of CO₂-e per million Yen of turnover, metric tonnes of CO₂-e per US\$ of profit, metric tonnes of CO₂-e per thousand Euros of turnover.

Above reported emissions (266,847 tonnes) per net sales in 2008 10-k (5,132,768)

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

0.071

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.

This information is proprietary, as it would offer competitive insights into our operations relative to production quantities.

16.2.1. Give the units e.g. metric tonnes of CO₂-e per metric tonne of output or for service sector businesses per unit of service provided.

This information is proprietary, as it would offer competitive insights into our operations relative to production quantities.

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

Yes. During 2007, the company conducted a realignment of manufacturing operations which resulted in a consolidation and closure of four manufacturing plants. This realignment resulted in a reduction of emissions compared to years prior to 2008.

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.

20 %

Have the emissions increased or decreased?

Decreased

Further information

As we do not have complete data for 2007 or preceding years, we are unable to calculate the exact reduction amount. Based on available data, we estimate that total emissions have been reduced by 20% as a result of the realignment.

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?

Yes, it has been externally verified/assured in whole or in part. (Please continue with questions 18.2 to 18.5)

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.

Emissions generated from our California manufacturing operations are verified under the California Climate Action Registry's verification program.

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

Reasonable

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.

The verification standard is set forth by the California Climate Action Registry.

Answer to 18.4: Proof of verification has been documented with the California Climate Action Registry and can be found at <https://www.climateregistry.org>. Hershey was named a Climate Action Leader by the California Climate Action Registry in 2006 and 2007 for our voluntary reporting efforts for manufacturing facilities in California. As verification is required for reporting into the California Climate Action Registry, this recognition signifies that our California manufacturing emissions data have been verified.

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.

Future plans are to be determined.

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.

As noted earlier, we did not capture data for non-manufacturing facilities or manufacturing emissions for sources other than electricity and fuels burned on-site (e.g., refrigerants and WWTP methane).

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

As noted earlier, we did not capture data for non-manufacturing facilities or manufacturing emissions for sources other than electricity and fuels burned on-site (e.g., refrigerants and WWTP methane).

We are unable to provide a reasonable estimation at this time. However, based on broad knowledge of operations across our facilities, we believe our non-manufacturing emissions are small compared to our manufacturing emissions. We also do not feel manufacturing emissions for sources other than electricity and fuels burned on-site will increase total manufacturing emissions significantly.

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

Yes (Please answer the following questions - 19.3.1, 19.3.2).

19.3.1 Please provide the name of the scheme.

Other

We report to the California Climate Action Registry for our California manufacturing operations

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

Reasonable. As noted above, emissions generated from our California manufacturing operations are verified under the California Climate Action Registry's verification program. Verification and information on the verification process can be found at <https://www.climateregistry.org>.

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
-------------------------	------	----------

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.

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.

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.

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

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.

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

Questions 20.1 through 20.6 are proprietary, as this information would offer confidential insights into our operations.

Questions 20.7 and 20.8 are not relevant, as we do not participate in these activities.

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
Free allowances metric tonnes CO2					

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 CO₂ 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.

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

We did not select either option. We do not participate in other emissions trading programs, but future plans are to be determined, so we cannot say if we will or will not do so in the next 2 years.

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?

Yes. (Please go to question 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.

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

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)?

2008 is the base year.

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

Energy and emissions reduction targets are under development in 2009.

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

Manufacturing facilities

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

3-5 years

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?

Energy conservation surveys have been completed in some facilities and are currently under way in others. Projects such as lighting efficiency improvements, biogas recovery and usage, boiler flue gas economizer, compressed air efficiency upgrades, etc., have been identified as key projects to support emissions/energy reductions. A number of projects have already been initiated and several have been completed. As a result, Hershey has made investments of \$3.8 MM in capital and savings of \$1.6 MM in 2008, and has begun implementing a planned 2009 program investment of \$7.1 MM in capital and \$2.4 MM in savings for 2009.

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?

We will evaluate energy usage and associated GHG emissions against baseline year data.

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.

We have not calculated emissions reductions for all associated projects.

Regarding cost savings, Hershey has made investments of \$3.8 MM in capital and savings of \$1.6 MM in 2008, and has begun implementing a planned 2009 program investment of \$7.1 MM in capital and \$2.4 MM in savings for 2009.

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
Hershey has made investments of \$3.8 MM in capital and savings of \$1.6 MM in 2008 and has begun implementing a planned 2009 program investment of \$7.1 MM in capital and \$2.4 MM in savings for 2009.		United States dollar	

Further information

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
Investment values are undefined at this time as we continue to assess the opportunity to reduce energy consumption. The hurdle rate used for go/no-go investment is a four year return on investment.			

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.

We have not yet estimated total emissions for this time frame.

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.](#)

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

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.

We have not yet estimated energy use for this time frame.

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.](#)

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

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

Not applicable, as we are not engaged in this activity yet.

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?

At this time, as emissions are not regulated and bear no direct or indirect costs, their effective cost impact is zero. As such, energy usage reduction or avoidance is the primary driver in project investment decisions at this time. However, we are aware of impending regulation and are monitoring this closely to understand and account for the added costs it would bring.

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?

The Hershey Company has a cross-functional CSR/Sustainability Leadership Team that has overall responsibility for all CSR/Sustainability issues, including emissions reduction and energy conservation. This team is composed primarily of VPs and Directors across the company, who directly manage functions that implement CSR/Sustainability efforts across the company, and has two executive sponsors from the Hershey Executive Team. This team guides corporate strategy and objectives, assesses progress, and drives cross-functional alignment and implementation, among other roles.

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 CSR/Sustainability Leadership Team meets monthly to discuss the company's CSR/Sustainability efforts, including progress toward current objectives such as emissions reduction and energy conservation. Members of this team include individuals who are directly responsible for managing greenhouse gas emissions, energy conservation and transportation/logistics.

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?

Yes. (Please go to question 26.2)

26.2. Are those incentives linked to monetary rewards?

The individuals who directly manage our company's emissions and energy reduction efforts have specific objectives in these areas. These include employees in Environmental Affairs and Engineering at the corporate level. Their performance reviews take into account progress on these objectives and impacts their annual bonus

and merit increase.

26.3. Who is entitled to benefit from those incentives?

The individuals who directly manage our company's emissions and energy reduction efforts - employees in Environmental Affairs and Engineering.

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 do not currently publish detailed information on climate change as it relates to business. However, we provided an overview of our CSR/Sustainability programs in our 2008 Annual Report, available at http://library.corporate-ir.net/library/11/115/115590/items/328854/D45A89C2-B130-4B31-A2B0-2AEB3BF43CBA_hsy_10K.pdf

We also redesigned our CSR website in 2008 to expand our communications around our environmental efforts, share our commitment to addressing our greenhouse gas emissions and highlight key efforts related to energy conservation. We plan to expand this section of our website with more details around our goals and progress, as appropriate. Our CSR Website can be accessed at: <http://www.thehersheycompany.com/social-responsibility/environmental-stewardship/resource-conservation.asp>

Our participation in the CDP is intended to serve as another step in our commitment to open communication around social and environmental issues that are important to our business and stakeholders.

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

http://library.corporate-ir.net/library/11/115/115590/items/328854/D45A89C2-B130-4B31-A2B0-2AEB3BF43CBA_hsy_10K.pdf

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

Yes

We redesigned our CSR website in 2008 to expand our communications around our environmental efforts, share our commitment to addressing our greenhouse gas emissions and highlight key efforts related to energy conservation. We plan to expand this section of our website with more details around our goals and progress, as appropriate. Our CSR Website can be accessed at: <http://www.thehersheycompany.com/social-responsibility/environmental-stewardship/resource-conservation.asp>

Our participation in the CDP is intended to serve as another step in our commitment to open communication around social and environmental issues that are important to our business and stakeholders.

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

Our Government Relations Department monitors proposed state and federal regulations related to greenhouse gas emissions, including reporting, cap and trade, renewable energy portfolio standards, biofuels production and the like. This department keeps related functions across the company updated about developments that could potentially impact our business so that we are able to develop and implement appropriate public policy positions. As with any proposed legislative or regulatory changes, we engage with policy makers on those issues that have critical implications for our business.

Through trade associations such as the Grocery Manufacturers Association, the National Association of Manufacturers, and state Chambers of Commerce, we engage with policy makers on proposed legislation around greenhouse gas emissions and energy use that would have a direct impact on our business.

Further information