

Carbon Disclosure Project

CDP 2010 CDP Supply Chain 2010 Information Request

NVIDIA Corporation

Module: Introduction - CDP Supply Chain 2010

Page: Introduction Supply Chain

0.1

Introduction

Please give a general description and introduction to your organization, if you have not already done so. If you would like to give a separate introduction to the information you are providing to the supplier module, you can also enter it here.

NVIDIA awakened the world to the power of computer graphics when it invented the GPU in 1999. Since then, it has consistently set new standards in visual computing with breathtaking, interactive graphics available on devices ranging from tablets and portable media players to notebooks and workstations. NVIDIA's expertise in programmable GPUs has led to breakthroughs in parallel processing which make supercomputing inexpensive and widely accessible. The company holds more than 1,100 U.S. patents, including ones covering designs and insights fundamental to modern computing. With demand for GPUs continuing to grow strongly, NVIDIA has developed five product brands to meet the needs of specific market segments: Tegra revolutionizes mobile computing. A complex system-on-a-chip with eight specialized processors, it consumes 50 times less power than the average PC notebook chip. It fuels the new generation of tablets, smartphones, portable media players and in-car driver safety/assist/infotainment systems. ION supercharges a netbook. It delivers rich HD media in games, movies, and Web-based video, as well as provides full support for Windows Home Premium. ION is complemented by NVIDIA Optimus technology, described below. GeForce accelerates consumer desktop PCs and notebooks. Our best-known product line, it delivers crisp performance for those who play games, watch movies, or use the PC for other forms of digital entertainment. Quadro is the driving force behind powerful workstations. It's used by animators, broadcasters, visual effects artists and industrial designers to help create and visualize their largest, most complex projects. The majority of the world's cars and planes, as well as an array of consumer products, are designed using Quadro professional graphics solutions. Tesla is transforming the world of supercomputing. By using the GPU's parallel processing capabilities, it delivers massive performance for scientists and researchers needing the power of a supercomputer, but at a fraction of its cost and power consumption. NVIDIA has also introduced a number of important technologies: 3D Vision incorporates specialized shutter-glasses and software that enable immersive 3D visualization for games, video, photos, and Blu-ray 3D. SLI harnesses the power of multiple GPUs on a single motherboard to deliver a high-resolution gaming experience. Optimus allows notebook power-savings by seamlessly routing the graphics workload to either an NVIDIA discrete GPU or integrated graphics, resulting in improved battery life and performance. PhysX is a graphics engine which replicates in real-time the dynamic that the forces of nature – such as gravity and motion – has on physical objects. It is available on all gaming platforms including the PC, game consoles, and the iPhone. We are particularly proud of CUDA, our parallel computing architecture, which enables GPUs to work with numerical data, as well as the geometry and pixels of an image. CUDA is increasingly being used in a wide range of non-visual contexts, from life sciences and medicine to energy discovery and quantum chemistry. There are now over 60,000 active CUDA developers around the world. It is taught by more than 300 universities in 40 countries. Based in Santa Clara, Calif., NVIDIA was founded in 1993, by Jen-Hsun Huang, who had previously served at LSI Logic and AMD, and Chris Malachowsky and Curtis Priem, who came from Sun Microsystems. The company went public in 1999 and is listed on NASDAQ, where its shares trade under the symbol NVDA. It has some 5,700 employees in more than 20 countries

0.2

Reporting Year

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

Enter Periods that will be disclosed

Thu 01 Jan 2009 - Thu 31 Dec 2009

0.3

Are you participating in the Walmart Sustainability Assessment?

No

0.4

Country list configuration

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

Select country

United States of America

0.5

Please select if you wish to complete a shorter information request.

Further Information

Module: Governance

Page: Governance

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

Board committee or other executive body

1.1a

Please specify who is responsible.

Other: Our Executive management staff is responsible for climate change at NVIDIA.

1.2 What is the mechanism by which the board committee or other executive body reviews the company's progress and status regarding climate change?

The executive team meets yearly with representatives across our business to discuss our environmental goals and initiatives. Executives are involved throughout the year as it relates to their business area (an IT purchase, or customer request in engineering).

1.4 Do you provide incentives for the management of climate change issues, including the attainment of greenhouse gas (GHG) targets?

No

Further Information

We do not provide incentives

Module: Risks and Opportunities**Page: Risks & Opportunities Identification Process****2.1 Describe your company's process for identifying significant risks and/or opportunities from climate change and assessing the degree to which they could affect your business, including the financial implications.**

NVIDIA has assessed its risks as part of our ISO14000 review of aspect and impacts, and has integrated the management of these issues into our overall Environmental Management System which is reviewed annually. Our approach to Carbon Management is managed by a cross functional team of professionals with experience in Facilities, Environment, Health and Safety, IT and Supply chain issues. To address climate change we have developed internal procedures to design, develop, manage and report on our company emissions within our boundaries. At this time our boundary is limited to North America as we have a reliable data set. The intended end user of the information we collect is both for internal metrics/goals as well as for external users which may include stakeholders such as customers, suppliers, investors and the community.

Beginning in 2006, NVIDIA has initiated a variety of programs and projects in order to be well positioned to manage any risks to our business related to climate change and to realize associated opportunities.

Some of these projects include:

- Formation of an Environmental Committee, comprising employees from major functional groups to lead and develop our approach
- Opening a LEED Platinum data center to improve the efficiency of the compute farm used for product design
- Installing virtualization software to reduce the energy consumption in our data centers
- Installing electric car chargers in our parking garage
- Changing lighting fixtures as part of facility upgrades

Further Information

Certain statements and responses in this information request including, but not limited to, statements as to our beliefs, plans and goals related to our business and the impact of climate related matters are forward-looking statements that are subject to risks and uncertainties that could cause results to be materially different than expectations. These statements involve known and unknown risks, uncertainties and other factors, which may cause our actual results, performance, time frames or achievements to be materially different from any future results, performance, time frames or achievements expressed or implied by the forward-looking statements. We discuss many of these risk, uncertainties and other factors from time to time in the reports NVIDIA files with the Securities and Exchange Commission, or SEC, including our Form 10-Q for the quarterly period ended May 2, 2010. Copies of reports filed with the SEC are posted on NVIDIA's website and are available from NVIDIA without charge. Given these risks, uncertainties and other factors, you should not place undue reliance on these forward-looking statements. Also, these forward-looking statements represent our estimates and assumptions only as of the date of this response. Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future.

Page: Regulatory Risks**3.1 Do current and/or anticipated regulatory requirements related to climate change present significant risks to your company?**

No

3.7 Please explain why you do not consider your company to be exposed to significant regulatory risks - current and/or anticipated.

As disclosed in our Form 10-Q for the quarterly period ended May 2, 2010, the risks of climate change may present significant risk to our company.

Further Information

Certain statements and responses in this information request including, but not limited to, statements as to our beliefs, plans and goals related to our business and the impact of climate related matters are forward-looking statements that are subject to risks and uncertainties that could cause results to be materially different than expectations. These statements involve known and unknown risks, uncertainties and other factors, which may cause our actual results, performance, time frames or achievements to be materially different from any future results, performance, time frames or achievements expressed or implied by the forward-looking statements. We discuss many of these risk, uncertainties and other factors from time to time in the reports NVIDIA files with the Securities and Exchange Commission, or SEC, including our Form 10-Q for the quarterly period ended May 2, 2010. Copies of reports filed with the SEC are posted on NVIDIA's website and are available from NVIDIA without charge. Given these risks, uncertainties and other factors, you should not place undue reliance on these forward-looking statements. Also, these forward-looking statements represent our estimates and assumptions only as of the date of this response. Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future.

Page: Physical Risks**4.1 Do current and/or anticipated physical impacts of climate change present significant risks to your company?**

Yes

Do you want to answer using:

A text box

4.2B

What are the current and/or anticipated significant physical risks, and their associated countries/regions and timescales?

NVIDIA acknowledges there is a potential for physical impacts as a result of climate change, and is in the process of investigating strategies to mitigate these scenarios, not only within our US corporate operations, but also at our global office locations. We are dependent on independent subcontractors and manufacturers for assembly, testing and packaging of our products. Conditions, including natural disasters, power and water shortages and other conditions created by climate change, in areas where our independent subcontractors and manufacturers are located may impact their business operations and thereby adversely interrupt our manufacturing and sales processes and could have a severe negative impact on our operating capabilities.

4.3

Describe the ways in which the identified risks affect or could affect your business and your value chain.

Operations Potential issues may include business disruptions due to NVIDIA operations or that of its strategic partners of NVIDIA's independent subcontractors and manufacturers as discussed in 4.2B above.

4.4 Are there financial implications associated with the identified risks?

Yes

4.5 Please describe them.

Operations Potential issues may include business disruptions due to NVIDIA operations or that of its strategic partners of NVIDIA's independent subcontractors and manufacturers as discussed in 4.2B above.

NVIDIA acknowledges there is a potential for physical impacts as a result of climate change, and is in the process of investigating strategies to mitigate these scenarios, not only within our US corporate operations, but also at our global office locations. We are dependent on independent subcontractors and manufacturers for assembly, testing and packaging of our products. Conditions, including natural disasters, power and water shortages and other conditions created by climate change, in areas where our independent subcontractors and manufacturers are located may impact their business operations and thereby adversely interrupt our manufacturing and sales processes and could have a severe negative impact on our operating capabilities.

4.6 Describe any actions the company has taken or plans to take to manage or adapt to the risks that have been identified, including the cost of those actions.

North America

- Evaluating use of renewable energy at our corporate headquarters;
- Evaluating purchase of carbon offsets;
- Evaluating incorporating LEED principles into our new facilities;
- Emergency planning, safety, and preparedness programs related to increased adverse weather events; and
- Increased awareness among employees of steps they can take to reduce carbon footprint at home and in the office

Asia

- Evaluating use of renewable energy at our offices;
- Evaluating of purchase of carbon offsets;
- Evaluating incorporating LEED principles into our new facilities;
- Emergency planning, safety, and preparedness programs related to increased adverse weather events; and
- Increased awareness among employees of steps they can take to reduce carbon footprint at home and in the office

We prefer to not disclose costs.

Further Information

[Page: Other risks](#)

5.1

Does climate change present other significant risks - current and/or anticipated - for your company?

No

5.7

Explain why you do not consider your company to be exposed to other significant risks - current and/or anticipated.

NVIDIA acknowledges there is a potential for impacts as a result of climate change, and is in the process of investigating strategies to mitigate these scenarios, not only within our US corporate operations, but also at our global office locations. We are dependent on independent subcontractors and manufacturers for assembly, testing and packaging of our products. Conditions, including natural disasters, power and water shortages and other conditions created by climate change, in areas where our independent subcontractors and manufacturers are located may impact their business operations and thereby adversely interrupt our manufacturing and sales processes and could have a severe negative impact on our operating capabilities.

We need to be consistent with what is reported publicly in our 10-Q report

Further Information

[Page: Regulatory Opportunities](#)

6.1

Do current and/or anticipated regulatory requirements related to climate change present significant opportunities for your company?

Yes

Do you want to answer using:

The table below

6.2A

What are the current and/or anticipated significant regulatory opportunities and their associated countries/regions and timescales?

Opportunities	Region/Country	Timescale in Years	Comment
International agreements	Other: Asia	0 -- 5	Increased regulations, trade tariffs etc in several countries in which we operate as well as countries where we partner with strategic suppliers will have the potential to impact us both directly and indirectly. Several countries/municipalities are also offering financial and other incentives to adopt more energy efficient practices.
Product efficiency regulations and standards	United States of America	0 -- 5	Increased regulations in several countries in which we operate as well as countries where we partner with strategic suppliers will have the potential to impact us both directly and indirectly. Several countries/municipalities are also offering financial incentives to adopt more energy efficient practices.
Voluntary agreements	United States of America	0 -- 5	EPA Climate Leaders; EICC Carbon Reporting Tools ;Carbon Disclosure Project; Customer agreements
Product labeling regulations and standard	Other: Europe	0 -- 5	As Product Carbon Footprinting methodologies are developed we will evaluate its impacts on our product offerings
Indirect exposure through suppliers and clients	Other: Asia,		Increased taxes, tariffs on energy, water usage in Asia

6.3

Describe the ways in which the identified opportunities affect or could affect your business and your value chain.

- Asia - Increased fuel costs, tariffs and requirements for companies to report on their carbon footprint has encouraged suppliers to become more energy efficient. This will impact operations costs for suppliers. As companies find more opportunities to benchmark and reduce operational costs, this will provide some opportunity to examine other productivity and efficiency gains.
- North America. The SEC recently issued guidance on climate change related disclosures by SEC reporting companies. As an SEC reporting company, we will comply with these disclosure rules as required.
- Europe - Has some of the highest environmental requirements and we are being asked by several customers to report on the energy efficiency of our products. We expect this to shape our future design efforts.

6.4 Are there financial implications associated with the identified opportunities?

Yes

6.5

Please describe them.

It's possible there will be other business /financial opportunities as a result of regulatory requirements, but it will take us a few years of tracking and evaluation before we can say definitively what those opportunities are.

6.6

Describe any actions the company has taken or plans to take to exploit the opportunities that have been identified, including the investment needed to take those actions.

Regulatory requirements may require our customers and NVIDIA to re-evaluate its product design and manufacturing processes. This could require us to become more competitive within the market place as we innovate to improve these processes. However, regulatory pressures and other constraints on power providers could significantly increase the cost of energy used by our operations as well as those of our suppliers and customers. In order to help suppliers start tracking we have asked our suppliers to participate in the Electronics Industry Citizenship Coalition's (EICC) Carbon Reporting Tool to begin tracking their scope 1, 2 and 3 emissions and to begin to analyze opportunities for improvement.

We will continue to participate in the EPA Climate Leaders Program;the Carbon Disclosure Project as well as increase our employee and supplier awareness program to ensure that we strive for continuous improvement in our activities.

Further Information

[Page: Physical Opportunities](#)

7.1 Do current and/or anticipated physical impacts of climate change present significant opportunities for your company?

Yes

Do you want to answer using:

A text box

7.2B

What are the current and/or anticipated significant physical opportunities and their associated countries/regions and timescales?

NVIDIA acknowledges there is a potential for physical impacts as a result of climate change, and is in the process of investigating strategies to mitigate these scenarios, not only within our US corporate operations, but also at our global office locations. We are dependent on independent subcontractors and manufacturers for assembly, testing and packaging of our products. Conditions, including natural disasters, power and water shortages and other conditions created by climate change, in areas where our independent subcontractors and manufacturers are located may impact their business operations and thereby adversely interrupt our manufacturing and sales processes and could have a severe negative impact on our operating capabilities.

7.3 Describe the ways in which the identified opportunities affect or could affect your business and your value chain.

Some opportunities may include

North America

- Evaluating use of renewable energy at our corporate headquarters;
- Evaluating purchase of carbon offsets;
- Evaluating incorporating LEED principles into our new facilities;
- Emergency planning, safety, and preparedness programs related to increased adverse weather events; and
- Increased awareness among employees of steps they can take to reduce carbon footprint at home and in the office

Asia

- Evaluating use of renewable energy at our offices;
 - Evaluating the purchase of carbon offsets;
 - Evaluating incorporating LEED principles into our new facilities;
 - Emergency planning, safety, and preparedness programs related to increased adverse weather events; and
 - Increased awareness among employees of steps they can take to reduce carbon footprint at home and in the office
- Increased awareness among suppliers on energy efficiency and water resources concerns.

7.4**Are there financial implications associated with the identified opportunities?**

Yes

7.5**Please describe them.**

It's possible there will be other business /financial opportunities but it will take us a few years of tracking and evaluation before we can say definitively what these are

7.6**Describe any actions the company has taken or plans to take to exploit the opportunities that have been identified, including the investment needed to take those actions.**

Some opportunities may include

North America

- Evaluating use of renewable energy at our corporate headquarters;
- Evaluating purchase of carbon offsets;
- Evaluating incorporating LEED principles into our new facilities;
- Emergency planning, safety, and preparedness programs related to increased adverse weather events; and
- Increasing awareness among employees of steps they can take to reduce carbon footprint at home and in the office

Asia

- Evaluating use of renewable energy at our offices;
- Evaluating the purchase of carbon offsets;
- Evaluating incorporating LEED principles into our new facilities;
- Emergency planning, safety, and preparedness programs related to increased adverse weather events; and
- Increasing awareness among employees of steps they can take to reduce carbon footprint at home and in the office
- Encouraging use of best practices and industry approaches among manufacturing partners to improve tracking, monitoring and reporting of data.

We prefer to not disclose investments at this time

Further Information

[Page: Other Opportunities](#)

8.1 Does climate change present other significant opportunities - current and/or anticipated - for your company?

Yes

Do you want to answer using:

A text box

8.2B**What are the current and/or anticipated other significant opportunities and their associated countries/regions and timescales?**

We believe that NVIDIA's core product portfolio combined with the maturing arrival of the 'digital revolution' presents significant commercial opportunities for NVIDIA. With products centred around the confluence of computer technology, consumer applications, and the visual and graphic experience, NVIDIA's positions its products, strategic partners, future investments and operations as a mechanism for positive environmental and social change while delivering increased shareholder value

8.3**Describe the ways in which the identified opportunities affect or could affect your business and your value chain.**

Products

As the only standalone GPU company in the world, we have a responsibility and a unique opportunity to drive product innovation in a way that improves energy performance. We are incorporating requirements for more energy efficient components into our product along with a reduction in the use of hazardous chemicals. Some of our new products provide increased efficiency (NVIDIA Tegra uses minimal energy in mobile devices, and NVIDIA Optimus shuts off the GPU in notebook computers when the GPU is not being used), and this may be financially beneficial to us as companies and consumers select more energy- and technology-efficient products.

NVIDIA intends to design its products for maximum power efficiency and uses a performance per watt metric. Using industry best practices for Thermal Design Parameters (180W), we reduced our chip energy consumption to 110W and integrated features that shut off the system during idle periods to conserve energy. We are researching several product-related initiatives that include the Electronic Product Environmental Assessment Tool (EPEAT) and Waste Electrical and Electronic Equipment (WEEE) Directive that will help us design products with a reduced impact on the environment.

Operations

Through NVIDIA's proactive approach towards managing energy consumption in our US-based operations, we have invested in a variety of technologies and programs to reduce our energy use, which can result in cost savings.

- We have integrated the use of software that optimizes server energy consumption at our data warehouses in Santa Clara.
- We have implemented the use of Watt saver devices in cubicles to save on the energy use from idling laptops and computers.

We anticipate further savings as we continue to focus on energy efficiency. This is particularly important in regions like California, where energy demand and costs are high.

8.4 Are there financial implications associated with the identified opportunities?

Yes

8.5

Please describe them.

We anticipate further savings as we continue to focus on energy efficiency. It's possible there will be other business /financial implications but it will take us a few years of tracking and evaluation before we can say definitively what those are

8.6 Describe any actions the company has taken or plans to take to exploit the opportunities that have been identified, including the investment needed to take those actions.

We prefer to not disclose these at this time

Further Information

[Module: Strategy](#)

[Page: Strategy](#)

9.1

Please describe how your overall group business strategy links with actions taken on risks and opportunities (identified in questions 3 to 8), including any emissions reduction targets or achievements, public policy engagement and external communications.

Our operations team evaluates climate change risks as part of the ISO14000 process on identification of aspects and impacts. We have opted to participate in several volunteer disclosure initiatives which include the following:

Operations

- Environmental Protection Agency (EPA) Climate Leaders Program – we have established targets for our operations and for our data centers as a result of this engagement. Our participation impacts our business operations and allows us to identify reduction projects which will also provide cost savings to the company
- Carbon Disclosure Project
- EICC Carbon Reporting System-a standardized tool that allows customers and suppliers to report on their carbon footprint at a facility level

As part the Climate Leaders Program, NVIDIA pledges to reduce U.S. greenhouse gas (GHG) emissions by 9 percent per square foot of non-data center space and 9 percent in Power Usage Effectiveness (PUE) for data centers from 2007 to 2012 (Power usage effectiveness (PUE) is a metric used to determine the energy efficiency of a data center, determined by dividing the amount of power entering a data center by the power used to run the computer infrastructure within it).

Our goal is to target real reduction opportunities (versus purchasing carbon offsets or renewable energy certificates) and for 2009 our focus was on improving energy efficiency within NVIDIA's US computer labs. We also continue to track increased efficiencies in our data centers as we upgrade our servers and move existing servers to a new LEED Platinum data center, which was designed to highest level of efficiency per the US Green Building Council's standards.

Supply Chain

- We are members of the Electronics Industry Citizenship Coalition's Carbon Reporting System both as a customer and also as a supplier
- We requested data from our critical suppliers on their carbon footprint(critical suppliers are those that are key to manufacturing process for NVIDIA products)
- We have established a goal to increase awareness on carbon reporting throughout our supply chain
- We have also incorporated an environmental score into supplier evaluations as part of the Quarterly Business Review

Public Policy and External Engagement

- NVIDIA is planning to release our first Sustainability report in Fall 2010 and it will provide the baseline for us to continue to report on our performance among our stakeholders.
- We are collaborating with the EICC on the improvement of the Carbon Reporting System as we strongly believe that only by providing suppliers with the tools and education to become more efficient will we all be able to reduce the carbon footprint of the electronics industry.
- As we respond to more and more shareholder and investor requests we are becoming more effective at describing the steps we are taking to become a more efficient company.

Further Information

[Page: Strategy - Targets](#)

9.2

Do you have a current emissions reduction target?

Yes

9.6

Please complete the table. (If you have a current emissions reduction target or have a recently completed target)

Target Type	Value of Target	Unit	Base year	Emissions in base year (metric tonnes CO2-e)	Target Year	GHGs and GHG sources to which the target applies	Target met?	Comment
Other: Operations	9.00	% reduction from base year	2007	19478	2012	Scope 2	Target ongoing	Stationary Combustion, Non Data Center Electricity Indirect Emissions, Refrigerant Usage, Airplane Miles, and Lab Chemical Use in all US operations
Other: Datacenter	9.00	Other: improvement in PUE	2007		2012	Scope 2	Target ongoing	Electricity usage in datacenters This is not an emission based goal. It is a PUE target goal

Further Information

[Page: Strategy - Emission Reduction Activities](#)

¿ Is question 9.7 relevant for your company?

Yes

9.7
Please use the table below to describe your company's actions to reduce its GHG emissions.

1. Actions - please describe	2. Annual energy saving	3. Annual energy savings - number	4. Annual energy saving - units	5. Annual emission reduction in metric tonnes CO2-e	6. Reduction - achieved or anticipated	7. Investment - number	8. Investment - currency	9. Monetary savings - number	10. Monetary savings - currency	11. Monetary savings	12. Timescale of actions & associated investments (if relevant)
We have integrated the use of software that optimizes server energy consumption at our data warehouses in Santa Clara	Anticipated		kWh (kilowatt-hour)		Anticipated		USD(\$)		USD(\$)	Anticipated	2008-2012
Our facility management team lowered the temperature by 2 degrees to save electricity consumption	Anticipated				Anticipated		USD(\$)			Anticipated	2008-2012
We have implemented the use of Watt saver devices in Santa Clara in cubicles to save on the energy use from idling laptops and computers.	Anticipated		kWh (kilowatt-hour)		Anticipated		USD(\$)		USD(\$)	Anticipated	2008-2012
Use of Platinum certified LEED Data center	Anticipated		kWh (kilowatt-hour)		Anticipated		USD(\$)		USD(\$)	Anticipated	2008-2012

9.9
Please provide any other information you consider necessary to describe your emission reduction activities.

As part of NVIDIA's commitment to the Environmental Protection Agency's Climate Leaders Program, we pledge to reduce U.S. greenhouse gas (GHG) emissions by 9 percent per square foot of non-data center space and 9 percent in Power Usage Effectiveness (PUE) for data centers from 2007 to 2012 (Power usage effectiveness (PUE) is a metric used to determine the energy efficiency of a data center, determined by dividing the amount of power entering a data center by the power used to run the computer infrastructure within it)

Our goal is to target real reduction opportunities and to focus on improving energy efficiency within NVIDIA's US operations.

9.10
Do you engage with policy makers on possible responses to climate change including taxation, regulation and carbon trading?

Yes

9.11

Please describe.

At this time, we are not directly participating with governmental agencies/ policy makers on possible responses to climate change including taxation, regulation and carbon trading. However we are collaborating within our industry through the Electronics Industry Citizenship Coalition to begin standardizing tools for the tracking of energy and water.

Further Information

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Page: Emissions Boundary - (1 Jan 2009 - 31 Dec 2009)

10.1

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 financial control is exercised per consolidated audited financial statements

10.2

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

Yes

10.3

Please complete the following table.

Source	Scope	Explain why the source is excluded
Global office locations	Scope 1 and 2	• Our offices located in other countries are not included in the Scope 1 and 2 as we do not have a reliable data set to use at this time

Further Information

Page: Methodology - (1 Jan 2009 - 31 Dec 2009)

11.1a

Please give the name of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions and/or describe the procedure you have used (in the text box in 11.1b below).

Please select the published methodologies that you use.

US EPA Climate Leaders: Direct Emissions from Stationary Combustion
 US EPA Climate Leaders: Indirect Emissions from Purchases/ Sales of Electricity and Steam
 The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
 ISO 14064-1

11.1b

Please describe the procedure that you use.

We have used the EPA Climate Leaders Tracking tools based on the 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").

• We use the Environmental Protection Agency's Climate Leaders Tracking Tool (and excel spreadsheet available on the Climate Leaders Reporting page: <http://www.epa.gov/stateply/reporting/index.html>).

Internally we have developed our internal procedures to ensure alignment with our overall Environmental Management System

11.2

Please also provide the names of and links to any calculation tools used.

Please select the calculation tools used.

GHG Protocol - GHG emissions from purchased electricity, heat of steam 2.1 June 2009
 GHG Protocol - Indirect CO2 emissions from purchased electricity 3.0 March 2008
 US EPA Climate Leaders: Indirect Emissions from Purchase of Electricity
 US EPA Climate Leaders: Optional Emissions from Business Travel
 US EPA Climate Leaders: Direct Emissions from Stationary Combustion Sources - Traditional Sources

11.3

Please give the global warming potentials you have applied and their origin.

Gas	Reference	GWP
Carbon dioxide	IPCC Second Assessment Report (SAR - 100 year)	1
Methane	IPCC Second Assessment Report (SAR - 100 year)	21
Nitrous oxide	IPCC Second Assessment Report (SAR - 100 year)	310
Sulphur hexafluoride	IPCC Second Assessment Report (SAR - 100 year)	23900
HFC-23	IPCC Second Assessment Report (SAR - 100 year)	11700
HFC-32	IPCC Second Assessment Report (SAR - 100 year)	650
HFC-125	IPCC Second Assessment Report (SAR - 100 year)	2800

HFC-134a	IPCC Second Assessment Report (SAR - 100 year)	1300
HFC-143a	IPCC Second Assessment Report (SAR - 100 year)	3800
HFC-152a	IPCC Second Assessment Report (SAR - 100 year)	140
HFC-227ea	IPCC Second Assessment Report (SAR - 100 year)	2900
HFC-236ea	IPCC Second Assessment Report (SAR - 100 year)	6300
HFC-43-10mee	IPCC Second Assessment Report (SAR - 100 year)	1300
PFC-14	IPCC Second Assessment Report (SAR - 100 year)	6500
PFC-116	IPCC Second Assessment Report (SAR - 100 year)	9200
PFC-3-1-10	IPCC Second Assessment Report (SAR - 100 year)	7000
PFC-5-1-14	IPCC Second Assessment Report (SAR - 100 year)	7400

11.4

Please give the emission factors you have applied and their origin.

Fuel/Material	Emission Factor	Unit	Reference
Liquefied Natural Gas (LNG)	52.79	Other: Kg CO2/MMBTU	EPA Climate Leaders GHG Protocol, Stationary Combustion Sources, October 2004
Distillate fuel oil No 1	72.42	Other: Kg CO2/MMBTU	EPA Climate Leaders GHG Protocol, Stationary Combustion Sources, October 2004
Distillate fuel oil No 2	72.42	Other: Kg CO2/MMBTU	EPA Climate Leaders GHG Protocol, Stationary Combustion Sources, October 2004
Distillate fuel oil No 4	72.42	Other: Kg CO2/MMBTU	EPA Climate Leaders GHG Protocol, Stationary Combustion Sources, October 2004
Other: Electricity /WSCC California	804.54	Other: lbs/MWh	EPA Climate Leaders GHG Protocol, Indirect Emissions from Purchases/Sales of Electricity and Steam, October 2004
Other: Electricity /NPCC New England	897.11	Other: lbs/MWh	EPA Climate Leaders /GHG Protocol
Other: Electricity /SERC Virginia/Carolina	1164.19	Other: lbs/MWh	EPA Climate Leaders /GHG Protocol
Other: Electricity / WSCC Pacific NorthWest	671.04	Other: lbs/MWh	EPA Climate Leaders /GHG Protocol
Other: Electricity / WSCC Rockies	1872.51	Other: lbs/MWh	EPA Climate Leaders /GHG Protocol
Other: Electricity / WSCC Great Basin	852.31	Other: lbs/MWh	EPA Climate Leaders /GHG Protocol
Other: Electricity / MAIN South	1237.29	Other: lbs/MWh	EPA Climate Leaders /GHG Protocol
Other: Electricity / ERCOT ALL	1408.27	Other: lbs/MWh	EPA Climate Leaders /GHG Protocol
Jet gasoline	0.18	Other: Kg/km CO2-eq	CO2 Emissions from Business Travel. Version 2.0. June 2006. Developed by World Resources Institute (WRI) and copyrighted. Available at www.ghgprotocol.org.
Jet gasoline	0.12	Other: Kg/km CO2-eq	CO2 Emissions from Business Travel. Version 2.0. June 2006. Developed by World Resources Institute (WRI) and copyrighted. Available at www.ghgprotocol.org.
Jet gasoline	0.11	Other: Kg/km CO2-eq	CO2 Emissions from Business Travel. Version 2.0. June 2006. Developed by World Resources Institute (WRI) and copyrighted. Available at www.ghgprotocol.org.

Further Information

[Page: Emissions Scope 1 - \(1 Jan 2009 - 31 Dec 2009\)](#)

12.1

Please give your total gross global Scope 1 GHG emissions in metric tonnes of CO2-e.

1761

¿

Is question 12.2 relevant to your company?

Yes

12.2

Please break down your total gross global Scope 1 emissions in metric tonnes CO2-e by country/region.

Country	Scope 1 Metric tonnes CO2-e
United States of America	1761

12.4

Where it will facilitate a better understanding of your business, please also break down your total gross global Scope 1 emissions by business division. (Only data for the current reporting year requested.)

Business Division	Scope 1 Metric tonnes CO2-e
not available	0

12.5

Where it will facilitate a better understanding of your business, please also break down your total gross global Scope 1 emissions by facility. (Only data for the current reporting year requested.)

Facilities	Scope 1 Metric tonnes CO2-e
not available	0

¿
Is question 12.6 relevant to your company?

Yes

12.6
Please break down your total gross global Scope 1 emissions by GHG type. (Only data for the current reporting year requested.)

GHG Type	Scope 1 Emissions (Metric tonnes)	Scope 1 Emissions (Metric tonnes CO2-e)
CO2	1720.00	1720
N2O	0.00	1
CH4	0.15	3
HFCs	0.00	16
HFCs	0.01	21

¿
Is question 12.8 relevant to your company?

Yes

12.8
Please give the total amount of fuel in MWh that your organization has consumed during the reporting year.

9538

¿
Is question 12.10 relevant to your company?

Yes

12.10
Please complete the table by breaking down the total figure by fuel type.

Fuels	MWh
Distillate fuel oil No 1	19.00
Liquefied Natural Gas (LNG)	9519.00

12.12
Please estimate the level of uncertainty of the total gross global Scope 1 figure that you have supplied in answer to question 12.1 and specify the sources of uncertainty in your data gathering, handling, and calculations.

Uncertainty Range	Main sources of uncertainty	Please expand on the uncertainty in your data
More than 5% but less than or equal to 10%	Other: Human error	All data came from direct billings/ only errors might occur due to manual data entry error.

Further Information

[Page: Emissions Scope 2 - \(1 Jan 2009 - 31 Dec 2009\)](#)

13.1
Please give your total gross global Scope 2 GHG emissions in metric tonnes of CO2-e.

27493

¿
Is question 13.2 relevant to your company?

Yes

13.2
Please break down your total gross global Scope 2 emissions in metric tonnes of CO2-e by country/region.

Country	Metric tonnes CO2-e
United States of America	27493

13.4
Where it will facilitate a better understanding of your business, please also break down your total gross global Scope 2 emissions by business division. (Only data for the current reporting year requested.)

Business division name	Metric tonnes CO2-e
Data unavailable	0

13.5
Where it will facilitate a better understanding of your business, please also break down your total gross global Scope 2 emissions by facility. (Only data for the current reporting year requested.)

Facility name	Metric tonnes CO2-e

Data unavailable | 0

Is question 13.6 relevant to your company?

Yes

13.6
How much electricity, heat, steam, and cooling in MWh has your organization purchased for its own consumption during the reporting year?

Please supply data for these energy types.	MWh
Electricity	72311

13.8
Please estimate the level of uncertainty of the total gross global Scope 2 figure that you have supplied in answer to question 13.1 and specify the sources of uncertainty in your data gathering, handling, and calculations.

Uncertainty range	Main sources of uncertainty in your data	Please expand on the uncertainty in your data.
More than 5% but less than or equal to 10%	Other: Human error	Human error on manual data entry into spreadsheets

Further Information

[Page: Emissions Scope 2 Contractual](#)

14.1
Do you consider that the grid average factors used to report Scope 2 emissions in question 13 reflect the contractual arrangements you have with electricity suppliers?

Yes

14.4
Has your organization retired any certificates, e.g. Renewable Energy Certificates, associated with zero or low carbon electricity within the reporting year or has this been done on your behalf?

No

Further Information

[Page: Emissions Scope 3](#)

Is question 15.1 relevant to your company?

Yes

15.1
Please provide data on sources of Scope 3 emissions that are relevant to your organization.

Sources of Scope 3 emissions	Metric tonnes of CO2-e	Methodology	If you cannot provide a figure for a relevant source of Scope 3 emissions, please describe the emissions.
Business travel	2889	WRI GHG Accounting Protocol	Data collected for Business travel for US based employees

Further Information

[Page: Emissions 7](#)

16.1
Does the use of your goods and/or services enable GHG emissions to be avoided by a third party?

Yes

16.2
Please provide details including the anticipated timescale over which the emissions are avoided, in which sector of the economy they might help to avoid emissions and their potential to avoid emissions.

Yes. Tesla 20-series GPU computing processors deliver data center performance (compared to equivalent CPU processors) at 1/20th the power consumption and 1/10th the cost.
NVIDIA's Optimus technology will shut off the NVIDIA GPU inside of a notebook computer when the GPU is not being used, for example, if a consumer is doing a task (such as reading email), that does not require the use of a GPU.

Timescale:

Tesla – time varies depending upon the business process being run on our Tesla processors
Optimus – time varies depending upon the programs used by a consumer that has Optimus in their notebook computer.

Sector:

Tesla – business (examples: finance, oil and gas, medical)
Optimus – consumer, small business

We have not calculated the overall positive carbon impact of Optimus technology over time, but are collecting data of consumer habits. We have tentatively confirmed to show this data in our global citizenship report in fall 2010.

For Tesla, calculations are done by our customers and vary depending upon the business process being used and how much computing power is needed. An example of Tesla product use in the financial industry for bond pricing (for Bloomberg):

- 48 Tesla server was used compared to 1,000 CPU-based servers
- Only 70kWatt of power was used with Tesla compared to 600kWatt for traditional
- The Tesla system cost \$576K compared to traditional server installation of \$4M
- The total power and cooling used for the process with Tesla was \$124K, compared to \$1.1M worth of energy used for traditional server solution

¿
Is question 17.1 relevant to your company?

No

17.2
Please explain why not.

We do not use /combust biofuels in our operations activities

Further Information

[Page: Emissions 8](#)

18.1a
Please describe a financial intensity measurement for the reporting year for your gross combined Scope 1 and Scope 2 emissions.

If you do not consider a financial intensity measurement to be relevant to your company, select "Not relevant" in column 5 and explain why in column 6.

Figure for Scope 1 and Scope 2 emissions	GHG units	Multiple of currency unit	Currency unit	Financial intensity metrics	Please explain if not relevant. Alternatively provide any contextual details that you consider relevant to understand the units or figures you have provided.
8.86	Metric tonnes CO2-e	Million	USD(\$)	Revenue	We are not using the carbon intensity metric as a driver to improve our operations efficiency. 3.3billion reported revenue 29254 Total scope 1 and 2

18.1b
Please describe an activity-related intensity measurement for the reporting year for your gross combined Scope 1 and Scope 2 emissions.

Oil and gas sector companies are also asked to report activity-related intensity metrics in answer to table O&G1.3.

If you do not consider an activity-related intensity measurement to be relevant to your company, select "Not relevant" in column 3 and explain why in column 4.

Figure for Scope 1 and Scope 2 emissions	GHG units	Activity-related metrics	Please explain if not relevant. Alternatively provide any contextual details that you consider relevant to understand the units or figures you have provided.
8.86	Metric tonnes CO2-e	per full-time equivalent employee	3300 employees in North America 29254 Total scope 1 and 2

19.1
Do the absolute emissions (Scope 1 and Scope 2 combined) for the reporting year vary significantly compared to the previous year?

Yes

19.2
Please explain why they have varied and why the variation is significant.

We expanded into new buildings on our campus

20.1A
Please complete the following table indicating the percentage of reported emissions that have been verified/assured and attach the relevant statement.

Scope 1 (Q12.1)	Scope 2 (Q13.1)	Scope 3 (Q15.1)
Not verified	Not verified	Not verified

20.1B
I have attached an external verification statement that covers the following scopes:

Further Information

[Page: Emissions 9 Trading](#)

21.1
Do you participate in any emission trading schemes?

No, we don't participate nor do we currently anticipate participating in any emissions trading scheme within the next two years.

21.4
Has your company originated any project-based carbon credits or purchased any within the reporting period?

No

Further Information

[Module: Climate Change Communications](#)

[Page: Communications 1](#)

22.1
Have you published information about your company's response to climate change/GHG emissions in other places than in your CDP response?

Yes

22.2
In your Annual Reports or other mainstream filing? (If so, please attach your latest publication(s).)

No

22.3
Through voluntary communications such as CSR reports? (If so, please attach your latest publication(s).)

Yes

Further Information

EPA Climate Leaders Program Electronics Industry Citizenship Coalition Reporting Tool

[Module: 2010-Supplier](#)

[Page: 2010-Supplier-Allocation](#)

SM
1.2
Please explain how you have identified the GHG sources listed above (column 4), including major limitations to this process and assumptions made.

THE GHG sources were identified through a review of our operations activity using the WRI GHG Accounting Protocol and using the EPA ClimateLeaders tracking tool.

We only have data for our North America offices at this time to track our Scope 1 and Scope 2 emissions

SM
1.3
Describe your system for allocating emissions to your customers. Where published information has been used, please provide a reference(s).

We are currently not allocating emissions to individual customers.

SM
1.4
What are the challenges in allocating emissions to different customers 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.

We are currently reporting our total footprint only for our US offices.

We are hoping to have a system to track these emissions in place with the EICC.

Further Information

[Page: 2010-Supplier-Engagement](#)

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?

Yes

SM
2.2
If so, please provide details of this strategy.

We are using the Electronics Industry Citizenship Coalition (EICC) Carbon Reporting Tool. It is a standard template that all of our suppliers can report their data for their company and covers scope 1 and 2 emissions. Suppliers report on an annual basis their data in a SIMPLIFIED format focusing on the quantitative values that can enable energy efficiency opportunities to be identified at a factory level.

SM**2.3**

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.

Number of suppliers	Proportion of your total spending (%)
100	80.0%

SM**2.5**

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 prioritize emissions reduction actions, identifying physical risks in the supply chain, stimulating innovation, etc).

This data is used in our Quarterly Business reviews with Suppliers to encourage suppliers to begin tracking this information. This data is also used in the Electronics Industry Citizenship Coalition Report released in June 2010.

Further Information

[Page: 2010-Supplier-Product-LCA](#)

SM3.1

Please list measures (completed or planned) to reduce GHG emissions in the lifecycle of groups of products or individual products, including an estimate of the possible reductions for each initiative.

We are currently exploring different design options to enhance efficiency
Our Tesla 20-series GPU computing processors deliver data center performance (compared to equivalent CPU processors) at 1/20th the power consumption and 1/10th the cost. NVIDIA's Optimus technology is designed to shut off the NVIDIA GPU inside of a notebook computer when the GPU is not being used, for example, if a consumer is doing a task (such as reading email), that does not require the use of a GPU.

SM3.2

For how many products do you wish to provide lifecycle data?

Further Information

Carbon Disclosure Project