

## Module: Introduction

### Page: Introduction

#### 0.1

##### Introduction

##### Please give a general description and introduction to your organization

Cisco is the worldwide leader in networking that transforms how people connect, communicate, and collaborate. Our technology is changing the nature of work and the way we live. Founded in 1984, Cisco pioneered the development of Internet Protocol (IP)-based networking technologies. This tradition continues with the development of routing, switching, and other technologies such as application networking services, home networking, security, storage area networking, TelePresence systems, unified communications, video systems, and wireless. As an innovator in the communications and information technology industry, Cisco and its valued partners sell Cisco hardware, software, and services to businesses of all sizes, governments, service providers, and consumers. An integral part of Cisco's business strategy is strong corporate citizenship. Responsible business practices help ensure accountability, business sustainability, and commitment to environmentally conscious operations and products. Social investments built upon public-private partnerships positively impact recipient communities around the world. As an expression of our company's values and beliefs, these activities are designed to build trust in our company and empower our employees. For more information, <http://newsroom.cisco.com/overview;jsessionid=34D3AE85E41E0A05BD4F85118D45333C>

#### 0.2

##### Reporting Year

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

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

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

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

##### Enter Periods that will be disclosed

Sun 31 Jul 2011 - Mon 30 Jul 2012

#### 0.3

##### Country list configuration

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

##### Select country

United States of America

Rest of world

#### 0.4

##### Currency selection

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

USD(\$)

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0.6

#### Modules

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

If you are in these sectors (according to the Global Industry Classification Standard (GICS)), the corresponding sector modules will not appear below but will automatically appear in the navigation bar when you save this page. If you want to query your classification, please email [respond@cdproject.net](mailto:respond@cdproject.net). If you have not been presented with a sector module that you consider would be appropriate for your company to answer, please select the module below. If you wish to view the questions first, please see <https://www.cdproject.net/en-US/Programmes/Pages/More-questionnaires.aspx>.

#### Further Information

Q0.2: Reporting period is Cisco FY2012 (our last completed fiscal year). FY2012 runs from 31 July 2011 to 28 July 2012 inclusive. Slightly different end date was entered to pass ORS validation criteria

### Module: Management [Investor]

#### Page: 1. Governance

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1.1

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

Senior Manager/Officer

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1.1a

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

There is no longer an officially named committee responsible for climate change. Cisco has succeeded in moving responsibility for climate change into the core business functions. The management team that approved our new five-year goals consists of: o Gary Moore, President & Chief Operating Officer o Randy Pond, Executive VP, Process and Systems o Tae Yoo, Senior VP, Corporate Affairs; and Dave Wagner, VP, Worldwide Workplace Resources Gary Moore reports directly to John Chambers, Chairman and CEO and has operational responsibility for all Cisco functions worldwide. Tae Yoo is VP responsible for corporate social responsibility (including environmental sustainability). Dave Wagner is VP responsible for all facilities worldwide. The Sustainable Business Practices (SBP) group reports to Tae Yoo, Senior VP, Corporate Affairs. The SBP group now has responsibility for strategy, stakeholder engagement, and reporting for all corporate social responsibility at Cisco, including environmental issues and including climate change. Cisco has finished transitioning responsibility for environmental initiatives from the exception-based, single-purpose governance body we used in our "startup phase" to core business functions as those business function incorporate sustainability into their respective business functions.

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1.2

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

Yes

1.2a

Please complete the table

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator
Environment/Sustainability managers	Monetary reward	1. Communicate climate change issues and initiatives internally and externally; 2. Be an effective proxy representing external stakeholders views when setting priorities with internal business functions; 3. Effectively report Cisco performance to external stakeholders in our CSR Report; in surveys for CDP, Greenpeace, DJSI, Vigeo and many customers; media inquiries; and analyst meetings 4. Set and meet GHG reduction goals (air travel)
Energy managers	Monetary reward	1. Meet emissions reduction targets (Scope 1 and 2, global average emissions factor, renewables portfolio) 2. Utilize budgeted funds for energy efficiency improvement and greenhouse gas reduction initiatives
All employees	Monetary reward	Cisco hosted its first Innovation Day in March 2013. An Innovation Day serves as an umbrella event to highlight innovation activities across the company. Cisco EnergyWise, an energy management innovation, has been a topic at predecessor events. In the past year, Dave Ward and Neil Harris have taken an active role in the development of the Circular Economy concept with the Ellen MacArthur Foundation. CTOs in product sectors that intersect Cisco's environment-related objectives include Dave Ward (networking), Kip Compton (video), Allison Ruge (Collaboration), and Paul Peres (Data Center). In the coming fiscal year, Cisco's two Presidents--reporting to John Chambers--are implementing high-level sustainability goals in our HR performance system. (One of the Presidents is our Chief Operating Officer/COO; both Presidents are the most senior members of our Corporate executive team.) Cisco's MBO system requires all goals at the individual or organizational level to be built from a higher level goals. All goals are scored and monetary rewards are based on these scores. These President-level sustainability goals will systematically cascade down to 100% of Cisco's employees and the lineage of all sustainability goals will be completely traceable. Energy and GHG emissions are Cisco's most material environmental issues, so we are very excited by the now-pervasive opportunity to promote further innovation by all employees in our operations, extended operations (supply chain), products and solutions, and at our customers.

#### Further Information

none

## Page: 2. Strategy

2.1

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

Integrated into multi-disciplinary company wide risk management processes

2.1a

Please provide further details

i. the scope of the process, i.e. the type of risks and opportunities considered by the process such as regulatory, customer behavior changes, reputational and weather-related; All material risks and opportunities are addressed by the organization whose function is impacted. The environmental risks and opportunities address product, operations and supply chain and are of the following types o Regulatory (statutory, regulatory and national/international standards), o Market-based (customer behavior as seen through product features and functionality), o Cisco reputation and brand value, o Continuity of supply, and o Physical/geopolitical security. ii. how risks/opportunities are assessed at a company level (e.g. reputational risk can impact on the full corporation); The corporate sustainability function identifies risk and opportunity topics, from the categories outlined in Part i, for the corporate Enterprise Risk Management (ERM) organization to research using input from the identified business function. There are several processes used within Cisco to identify significant risks: o Cisco's enterprise risk management (ERM) process is conducted by Cisco's internal audit organization (part of Finance). The risk assessment process establishes the internal audit plan for the coming period and is presented to and approved by the CFO and the Audit Committee of the Board of Directors. Key executives and process owners across Cisco, including sustainable business practices/corporate social responsibility and manufacturing, are interviewed to identify the top potential risks for the company based on likelihood, severity, and present ability to manage the potential risk. The Sustainable Business Practices group is responsible for Cisco reporting, stakeholder management and initiative prioritization for all environmental activities, including climate change. o A business continuity plan is maintained by supply management and particularly addresses physical/geopolitical risks, including climate change. Climate change was added to the preferred supplier scorecard in FY2011 (scope of CDP 2012) and is operational. o A regulatory and standards team part of Corporate Compliance, also mentioned in the response to Q1.2, specifically addresses regulatory risks. o Market risk--such as from unmet environmental requirements--is assessed directly by the Quality organization through an outsourced and ongoing customer survey system part of the sales and service process. Opportunities associated with climate change are identified as part of existing market assessment processes of our core business. Cisco has a well-developed categorization of market segments and, as part of plans for continued revenue growth, has established key market adjacencies--billion dollar opportunities--to support that growth. "Green" is one of these market adjacencies. Data center, cloud, physical security, video and collaboration, mobility, and the modernized grid are adjacencies that address green. iii. how risks/opportunities are assessed at an asset level (e.g. physical impacts can affect individual facilities). Asset level is defined as anything below company level such as individual sites and subsidiaries; Our facilities organization (called Workplace Resources-WPR) looks at risk for individual Cisco facilities. Our Safety and Security organization, which reports up to the same VP, assists in this work. Our manufacturing organization looks at possible physical impacts at individual manufacturing facilities at our suppliers. In general, climate change-related risk in our supply chain is bounded by existing risks addressed in business continuity plans. For example, the volume, quality and pricing needs for dual sourcing or theater-level supply significantly overlap physical or societal-level risks from climate change. iv. the frequency of monitoring in terms of weeks/months/years; The enterprise-level risk assessment is conducted annually by the corporate ERM function; the process begins at the beginning of FQ3; results are integrated into the planning for the next fiscal year. Operational assessments are quarterly. Risk mitigation and opportunity development continues on an ongoing basis. v. criteria for determining materiality/priorities; and Cisco uses commonly accepted accounting principles concerning materiality for any financial reporting. Cisco depends on a network of external stakeholders to provide specific input on CSR-related risk assessment and materiality. The corporate Sustainable Business Practices group works with consultants to complete a materiality assessment in advance of each year's CSR report cycle using GRI performance indicators. Climate change is the most material environmental risk. Cisco solutions are identified as the most material opportunity with respect to climate change. Our corporate marketing organization determines total available market for new products, and for existing products that can be applied to reducing customer GHG emissions. vi. to whom are the results reported. The annual risk and opportunity assessment by the corporate ERM process are reported to the audit committee of the company Board. The business continuity plan is reported to the executive management team. Regulatory risks are reported to the Legal and Compliance management teams. The Quality organization's customer survey results are reported to the executive management team. Asset level risk assessment are reported the Processes and Systems EVP.

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## 2.2

### Is climate change integrated into your business strategy?

Yes

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## 2.2a

### Please describe the process and outcomes

i. Cisco has separate, documented Corporate Social Responsibility (CSR) and Stakeholder Inquiry business processes. Our overarching mission is to build CSR--and because of materiality, especially climate change--into each business function. There is a steady flow of information from our external stakeholders and customers

through the Stakeholder Inquiry process to the internal business functions. The major purpose of these processes is to permit scaling as the quantity of feedback increases (which it is) as well as to speed business function response to changing customer expectations (which is improving). The most important part of our CSR Business Process is identifying customer requirements and making those requirements visible to the internal business functions for prioritization and response. ii. The largest drivers of our climate change strategy are the business/revenue opportunities. We are very fortunate to have a broad suite of products and solutions that can make a large difference in GHG emissions from the building and transportation sectors, which are responsible for about 75% of global, energy-related GHG emissions. Excellence in our operations and extended operations/supply chain (including energy productivity and GHG emissions reduction targets), and industry leading product energy efficiency are core building blocks for effective go-to-market. iii. Cisco's current, shorter term actions are primarily focused on reducing our GHG emissions, minimizing risk, and building our reputation. (There's only one strategy with a continuum of actions from the current year to about 5 years from now.) We set climate change-related energy and GHG emissions reduction goals for our operations and extended operations (supply chain) to (1) drive internal adoption of Cisco's products and solutions so that (2) we build credible case studies for use by our sales account teams so that (3) our customers adopt these (Cisco) solutions and business practices and reduce their own GHG emissions. It would not be credible for Cisco to sell capability to reduce GHG emissions if we did not use the solutions/products ourselves (when applicable). Our prior 25% absolute reduction goal focused our efforts and reinforces our commitment to leverage our products to drive revenue and to reduce our own emissions. iv. Cisco's vision is "changing the way we work, live, play and learn." There is strong congruence between what is needed to address climate change and our corporate vision, because reducing emissions means adjusting business processes, management practices and company culture. Driving customer adoption then is a long-term endeavor. Currently, customers do not buy our products and solution just to reduce GHG emissions. So our long-term strategy is to build the case for increased business value and reduced energy consumption to drive customer adoption, and reduce customer GHG emissions and thereby directly address the climate change related opportunities and risks we have identified for our business. We have organized our products and solutions into four categories that can help reduce energy consumption: 1. energy management (EnergyWise/JouleX and the modernized grid) 2. remote collaboration (Cisco TelePresence, WebEx, unified communications, Jabber) 3. teleworking, Cisco Connected Workplace 4. cloud and data center We are socializing these categories and accompanying Cisco products and solutions both internally and to our customers. These solutions are complex because they intersect business processes, a wider understanding of our solutions and their positive impact on energy consumption and GHG emissions is helping us to build a road-map for further development. As part of this wider discussion, we have added Circular Economy precepts to our go-to-market strategy since we believe new business models may be needed to improve the cost/benefit ratio of ICT use. v. Cisco believes our use of our products at scale and our core, cultural value of collaboration across our customers, business partners and the industry provide a strategic advantage in the marketplace. We believe we can make a real, measurable difference in our own business and those of our customers. Because of the scope of the climate change problem, a culture that values partnerships across regions and nations is needed for the many actions needed for success. Cisco is the largest network product/solutions OEM in the world and has the broadest product portfolio. We believe we are best positioned to provide the large-scale, vetted solutions society needs to address such a large problem as climate change. vi. Cisco established our new GHG emission reduction targets and created a \$50M+ investment plan to meet these targets. As stated in Part iv, customers don't yet buy products only to reduce GHG emissions, so it would be overstating matters to say all useful business decisions were driven by climate change. We make decisions to improve the functionality of the four product categories listed in Part iv. We then identify how to maximize the energy efficiency and GHG reduction benefit from this improved functionality and introduce those benefits to our customers. For example, because we saw significant opportunity in the marketplace for energy management services (EnergyWise protocols built into our routers, switches and endpoints), we made plans to acquire JouleX, a partner with whom we developed the EnergyWise user interface. Because video has a real benefit in reducing the need for business travel (and employee commuting), all business decisions that improve interoperability, adoption and use benefit the environment. So now products from our Tandberg acquisition are fully integrated with the original Cisco TelePresence, and both support international standards for interoperability. We also introduced a free video service (like Skype but open, secure and interoperable) so more people can use high definition video with much lower barriers to adoption. Cisco also decided to build a hosted cloud solutions partnership with major service providers, which both improve adoption of the latest products and solutions, but improve back-end energy efficiency.

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## 2.3

**Do you engage in activities that could either directly or indirectly influence policy on climate change through any of the following? (tick all that apply)**

Other

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## 2.3g

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**Please provide details of the other engagement activities that you undertake**

Example #1 Method of engagement: Directly engaged as an individual company with European Commission (DG Connect) and EC consultancies on carbon accounting of life cycle of IT products and solutions. Topic was also addressed in membership with DigitalEurope industry group. Topic of engagement: EC was considering legislation to implement by law ICT sector commitments in Digital Agenda (section 2.7, ICT-enabled benefits for EU society). Nature of engagement: Cisco participated in the EC pilot with an important service provider customer in an extensive half-year program to pilot GHG Protocol, IEC, ETSI and ITU carbon accounting methodologies. The engagement included physical meeting attendance, meetings over Cisco TelePresence and WebEx, and the creation and submittal of technical study reports/LCAs to EC consultancies for each studied methodology. Cisco is co-founder of GHG Protocol ICT Sector Supplement and is editor of the Transport Substitution chapter of this supplement. Actions advocating: Cisco does not believe legislation requiring life-cycle assessments for products (or carbon labeling) is the right technical action to address climate change. The study technical consensus, also supported by the EC consultants after detailed analysis, is that the LCA tools are not appropriate for the purposes of informing customer selection among competing products. LCA is meant to identify "hot spots" and prioritize reduction initiatives within an industry sector, and provide context among activities between industry sectors. Example #2 Method of engagement: Directly engaged as an individual company and as a member of industry groups to address product energy efficiency standards. Topic of engagement: Cisco has been actively working with the EPA to define ENERGY STAR standards, including for set top boxes, servers, small network equipment (SNE), and large network equipment (LNE). We also led construction of IEEE energy-efficient ethernet standard (IEEE 802.3az). Nature of engagement: Cisco provided the initial framework about four years ago. Since then, Cisco has actively worked with Lawrence Berkeley National Labs, the EPA technical arm, on measurement methodologies and metrics. Cisco routinely provides feedback to these organizations on best practices, draft standards, and actual power measurement procedures for relevant products. Cisco developed and was co-editor of the ATIS TEER standard for network routing and switching power measurement, on which most ongoing energy efficiency standardization efforts are based. Actions advocating: Cisco supports competent open standards defining product energy efficiency features and energy measurement methodologies.

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**2.3h****What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?**

All Cisco sustainability activities are managed from a single corporate function, Sustainable Business Practices. This group is responsible for all corporate social responsibility(CSR): environment, social and corporate governance, assuring consistency across an even wider scope of related subject matter. The SBP is chartered specifically to interface with all business functions worldwide to manage external reporting, stakeholder engagement (including public policy/law, regulations and standards) to maintain consistency and to be sure the CSR-related views of all business functions are fully represented. These business functions include Legal/General Counsel, executive management, Sales, Manufacturing, Supply Chain, Communications, Finance, Product Development, Marketing, Services, HR, and IT, plus each geographic theatres (Europe/Middle East, LatAm, North America and Asia/Pacific). The SBP group is funded by the Office of the Chairman and CEO (OCC) to assure long-term continuity and stability.

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**Further Information**

none

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**Page: 3. Targets and Initiatives**

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

Absolute target

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**3.1a****Please provide details of your absolute target**

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions (metric tonnes CO2e)	Target year	Comment
1	Scope 1+2	100%	25%	2007	429411	2012	Original target was announced June 2008. EPA Climate Leaders commitment to reduce all Scope 1, 2, and business-air-travel Scope 3 GHG emissions worldwide by 25 percent absolute by CY2012 (CY2007 baseline). Base year and target year emissions for the target were originally for calendar year (CY) 2007 and CY2012, respectively, but we are now reporting based on fiscal year (FY) 2007 and FY2012. This conversion was done because the EPA Climate Leaders program, which required CY based goals and reporting, was discontinued. Converting to FY simplifies our reporting processes across all reporting venues and presents a single set of numbers in the public domain, reducing possible stakeholder confusion. We are no longer reporting GHG emissions by calendar year. As a result of the conversion from CY to FY, we effectively pulled in our target completion date by six months from the end of CY2012 to the end July 2012 (the end of our fiscal year).
2	Scope 3: Business travel	100%	25%	2007	205796	2012	Target announced June 2008. EPA Climate Leaders commitment to reduce all Scope 1, 2, and business-air travel Scope 3 GHG emissions worldwide by 25 percent absolute by CY2012 (CY2007 baseline). Target met in CY2009, but the ongoing challenge was to sustain these reduced emissions through CY2012 in the face of a recovering global economy and projected revenue growth. Longer-term targets are more difficult to meet for a growing company because emissions reductions must be sustained as revenue increases, the customer base becomes larger, and additional employees are hired (with rising pressure on air travel). Base year and target year emissions for the target were originally for calendar year (CY) 2007 and CY2012, respectively, but we are now reporting based on fiscal year (FY) 2007 and FY2012. This conversion was done because the EPA Climate

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions (metric tonnes CO2e)	Target year	Comment
							Leaders program, which required CY based goals and reporting, was discontinued. Converting to FY simplifies our reporting processes across all reporting venues and presents a single set of numbers in the public domain, reducing possible stakeholder confusion. We are no longer reporting GHG emissions by calendar year. As a result of the conversion from CY to FY, we effectively pulled in our target completion date by six months from the end of CY2012 to the end July 2012 (the end of our fiscal year).

### 3.1d

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

ID	% complete (time)	% complete (emissions)	Comment
1	100%	100%	This target was met in interim years as well as in the target year of FY2012, when Cisco achieved a net reduction of 41 percent in scope 1+2 emissions in FY2012 compared to FY2007. Longer-term and more aggressive targets through 2017 have now been publicly announced by Cisco. The challenge moving forward will be to sustain and increase emissions reductions in the face of rising revenues, more customers, and likely more employees.
2	100%	100%	this target was met each year from FY2009 through the goal year of FY2012. Calculated air travel emissions for 100% of Cisco's business air travel dropped from 205,796 metric tonne CO2e in FY2007 to 139,431 metric tonne CO2e in our target year of FY2012. We expect upward pressure on air travel to continue as the global economy recovers and Cisco releases new products, enters new markets, and adds new Customers. Rising competitive pressures in the many markets in which we currently compete also drive increased Customer interaction (and business air travel). Internally, we have deployed substantial numbers of desktop video endpoints--formerly Tandberg end devices (both hardware and software/client based)--which more easily interoperate among all H.264/SIP-addressable video endpoints deployed at companies worldwide. We saw the impact of Metcalfe's Law when we deployed immersive Cisco TelePresence, and are interested in the timeline for a similar effect for pervasive desktop video among organizations.

### 3.2

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

Yes

### 3.2a

Please provide details (see guidance)



i. How emissions avoided; Emissions reductions at our customers are both from reduced air travel and reduced employee commuting. Air travel reduction is described in more detail in the following points. Mapping our solutions against GHG emissions from transportation: o Transportation (remote collaboration to reduce business air travel): Cisco TelePresence, Cisco WebEx, Unified Communications o Transportation (teleworking to reduce employee commuting): Cisco Virtual Office, OfficeExtend, Cisco Connected Workplace, Unified Communications ii. An estimate of the amount of emissions that are/were avoided over time Cisco has reduced its air travel by about a third in absolute terms over five years even with growth in Cisco's business. This reduction has occurred even though use of video--either immersive or desktop/personal--is in its infancy. We believe a reasonable objective for any business is an absolute 25% reduction in business air travel. Air travel is about 2% of global emissions. Business air travel is about 30% of all air travel. So if all businesses adopted remote collaboration technologies to cut travel 25%, about 50M metric tonne CO<sub>2</sub>e would be saved each year worldwide (absolute reduction). Cisco believes our current customers are seeing a change in GHG emissions from air travel of about 10%. More work is needed to confirm that adoption best practices are in place at all customers. As an example, a credible estimate of Cisco's "avoided emissions" can be provided from three years of "before" data, with which we extrapolate what might have happened if we had not implemented Cisco TelePresence, WebEx, and Tandberg technologies starting in 2007. Avoided CO<sub>2</sub> emissions per year from business air travel FY2007: ~44K to 51K metric tonne CO<sub>2</sub>e FY2008: ~95K to 129K FY2009: ~141K to 238K FY2010: ~193K to 261K FY2011: ~198K to 236K FY2012: ~213K to 291K total ~884 to 1,206 over six years iii. Methodology, assumptions, EFs and GWP Absolute reductions are not the same as avoided emissions. Avoided emissions are what would have occurred without remote collaboration ICT technology implementation. A measure of total "savings" would be the absolute reductions plus the avoided emissions. The GHG Protocol standards were used for these calculations. DEFRA air travel EFs and GWPs were used. Pew Center on Global Climate Change estimates of total global air travel emissions were used to estimate potential worldwide absolute reduction. The ranges shown above for FY2007 to FY2012 are based on revenue and head count modeling of projected emissions if remote collaboration technologies had not been implemented. Head count modeling gives the upper figure in the range; revenue modeling the lower. We generally believe that head count is a more logical/scalable modeling parameter, but implementing standardized reporting across our customer base is needed for further validation. iv. CERs or ERUs within CDM or JI (UNFCCC). -- Cisco is not pursuing "certified emission reductions" (CERs) as part of Clean Development Mechanism (CDM) emission-reduction projects in developing countries to generate for use by Cisco. -- Cisco is not considering to claim credit under Joint Implementation (JI) for emission reductions that arise from investment in other industrialized countries, which result in a transfer of equivalent "emission reduction units" (ERUs) between the countries. In general, Cisco does not consider "offsets" to be credible applied to a global challenge such as climate change. Cisco is committed to absolute reductions in GHG emissions for ourselves and our customers, which is the obvious solution to elevated CO<sub>2</sub> concentrations in the atmosphere. We expect all our customers to include the actual GHG reductions from ICT implementation in their own reporting (vs. selling credits).

### 3.3

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

Yes

#### 3.3a

**Please identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO<sub>2</sub>e savings**

Stage of development	Number of projects	Total estimated annual CO <sub>2</sub> e savings in metric tonnes CO <sub>2</sub> e (only for rows marked *)
Under investigation	37	
To be implemented*	60	22500
Implementation commenced*	20	7500
Implemented*	27	73700
Not to be implemented	3	

#### 3.3b

**For those initiatives implemented in the reporting year, please provide details in the table below**

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Annual monetary savings (unit currency - as specified in Q0.4)	Investment required (unit currency - as specified in Q0.4)	Payback period
Transportation: use	<p>To reduce Scope 3 business-air-travel emissions, Cisco has voluntarily implemented Cisco remote collaboration technologies--including TelePresence, Jabber, and WebEx--to replace physical travel. These technologies allow Cisco employees to remotely collaborate with their global colleagues from their local Cisco office or home without the need to travel to have a face-to-face meeting with those colleagues.</p> <p>o Total CTS TelePresence units (general use + private/Executive Briefing Center) installed at Cisco: FY2006: 0 FY2007: 72+26 = 98 FY2008: 179+53 = 232 FY2009: 369+179 = 548 FY2010: 534+334 = 868 FY2011: 601+433 = 1,034 FY2012: 956+453 = 1,409</p> <p>There are also thousands of what formerly were Tandberg hardware-and software-client-based personal video-conferencing units deployed throughout the company on desktops and in small conference rooms.</p> <p>o Total WebEx and MeetingPlace usage: FY2007: 4.7 millions of people-hours of web conferencing FY2008: 7.6 FY2009: 13.3 FY2010: 19.3 FY2011: 23.0 FY2012: 23.4</p> <p>We consider this project "implemented" although rollout of additional videoconferencing units will continue. WebEx is available to all Cisco employees. Cisco is seeing ongoing, annual GHG reductions (compared to baseline) and intends to continue this initiative indefinitely to offset growth in business and employee count.</p>	66400	150000000	300000000	1-3 years
Energy efficiency: Building services	<p>To reduce scope 1 and 2 emissions, Cisco has voluntarily incorporated energy efficiency requirements as part of its facility management contracts. These new contracts were first implemented in FY2010 and for each year of the five year contract, our FM partners are required to identify and implement various energy efficiency projects at Cisco facilities. In FY2012, the following types of projects were implemented through this global energy management team: - implementing retro-commissioning</p>	7300	1600000	1200000	<1 year

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Annual monetary savings (unit currency - as specified in Q0.4)	Investment required (unit currency - as specified in Q0.4)	Payback period
	<p>projects, - performing building and lab-specific energy audits, - installing variable frequency drives (VFDs), - improving lighting efficiency through lamp replacements, - De-lamping all vending machines globally, - replacing HVAC equipment such as chillers, motors and boilers, - improving lab air distribution with blanking panels and diffusers, - installing smart power distribution units (PDUs) and management software for lab equipment, and - engaging Cisco's lab employees to turn off equipment when not needed throughout the year, with a strong focus during Cisco's mandatory year-end shutdown period. These voluntary energy efficiency projects are expected to have a system life ranging from 1-10 years depending on the measure. In FY2012, Cisco estimates that it conserved approximately 15.6 million kWh of energy and avoided 7,300 metric tonnes of CO2e emissions. It is important to note that through Cisco's multi-year investment in energy conservation projects since FY2009, Cisco estimates it is now saving approximately 94.3 million kWh of energy and avoiding 41,900 metric tonne CO2e each year. This is expected to rise each year as Cisco continues to invest in energy conservation projects year over year.</p>				
Energy efficiency: Processes	<p>To reduce scope 2 emissions, Cisco voluntarily installed a 425 kW cogeneration system on its campus in Bedfont Lakes, U.K. in FY2012. This system became operational in early FY2013 and has an expected lifetime of 10 years. It supplies both normal and emergency power to a critical lab facility on the campus as well as providing significant cooling through an absorption chiller. By operating the waste-heat recovery capabilities, the system is expected to reduce GHG emissions by more than 700 metric tonne CO2e per year. In addition, the team is now evaluating using the residual heat remaining after the chiller cycle for under-floor heating in a planned</p>	700	243000	1100000	4-10 years

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Annual monetary savings (unit currency - as specified in Q0.4)	Investment required (unit currency - as specified in Q0.4)	Payback period
	child care center.				
Low carbon energy purchase	<p>To reduce scope 2 emissions, Cisco has increased its voluntary renewable energy purchases since FY 2005 by buying Renewable Energy Certificates (RECs) and entering into green power contracts with various electricity suppliers in the United States to reduce GHG emissions from Cisco operations. In FY2012, Cisco purchased 552,697 MWh of RECs and green power through various suppliers in the United States and Europe. Purchased RECs are certified by Green-e, an independent auditor of renewable energy products, and are generated from wind power throughout the United States. Cisco also purchases renewable energy through various European green power suppliers. We follow the guidelines from the United Kingdom's Department for Environmental and Rural Affairs (DEFRA) and use a grid average rate when calculating emissions associated with this power. Cisco is ranked tenth in the U.S EPA's Green Power Partnership Fortune 500 Partners List. Purchasing renewable energy and green power has a 1-yr life and the contract has to be renewed every year.</p>	442000	0	420000	>25 years
Low carbon energy installation	<p>To reduce scope 2 emissions, Cisco voluntarily installed two 100 kW solar photovoltaic (PV) systems at two of its data center locations in FY2010. Both of these systems have an expected life of 25+ years and will save Cisco money and reduce emissions each year of their life with no additional investment. These two systems reduced Cisco's FY2012 GHG emissions by approximately 170 tCO2e and will continue doing so every year until the system end of life. These are the first two solar PV systems in Cisco's building portfolio and Cisco is currently evaluating increasing the number of solar PV systems and other onsite power generation systems (e.g. cogeneration, wind power, etc.) installed in its portfolio.</p>	170	16000	0	4-10 years

### 3.3c

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

Method	Comment
Lower return on investment (ROI) specification	Cisco has a two-year simple payback or ROI specification for any energy efficiency or emission reduction activity to get funded. For projects that have more visibility and qualitative benefits, this payback threshold can be increased on a project by project basis.
Marginal abatement cost curve	Cisco is also utilizing a marginal abatement cost curve to evaluate all potential GHG reduction projects according to the financial and carbon reduction impacts. This methodology allows us to view these projects from both an environmental and financial perspective whereas the simple ROI methodology listed provides only a financial perspective.

#### Further Information

## Page: 4. Communication

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

Publication	Page/Section reference	Attach the document
In voluntary communications (complete)	p. F4 - F5 and p. F13 - F37	<a href="https://www.cdproject.net/sites/2013/29/3329/Investor%20CDP%202013/Shared%20Documents/Attachments/Investor-4.1-C3-IdentifyAttachment/Cisco_CSR_Report_2012_Environment_REV052013.pdf">https://www.cdproject.net/sites/2013/29/3329/Investor CDP 2013/Shared Documents/Attachments/Investor-4.1-C3-IdentifyAttachment/Cisco_CSR_Report_2012_Environment_REV052013.pdf</a>

#### Further Information

2012 CSR Report (Environment Chapter) Cisco's annual CSR report is published as a set together with our financial report at our annual shareholder meeting (early November 2012; next meeting is in November 2013). It is issued formally as a companion to the financial report but they are separate files.

## Module: Risks and Opportunities [Investor]

## Page: 5. Climate Change Risks

### 5.1

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

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

#### 5.1a

Please describe your risks driven by changes in regulation

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
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ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
1FUEL	Fuel/energy taxes and regulations	<p>There are several risk drivers, including carbon taxes, cap and trade, and fuel/energy taxes and regulations, that manifest themselves in increased electricity costs, Cisco's main energy source as measured by GHG emissions. We have consolidated discussion under this driver. Carbon taxes and cap-and-trade do not directly impact Cisco since we are not a regulated utility or heavy GHG emission emitter (as most regulator schemes define). However, any carbon-related costs will be passed down from the utility to Cisco and would have a similar impact as a fuel/energy tax or regulation (on the end user). Changes in energy pricing impact every part of the economy, specifically Cisco's supply chain, our operations and our customers. The most significant impact from Risk 1FUEL is to Cisco customers that have network-intensive (as opposed to server/storage-intensive) ICT infrastructure (e.g., service providers). Fuel/energy taxes that impact our customers that are large consumers of electricity could also impact product requirements and sales (if product requirements were not met). In the</p>	Increased operational cost	1-5 years	Direct	About as likely as not	Low

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		U.K., the CRC reporting scheme impacts Cisco's U.K. facilities. Currently, the immediate impact is limited on a geographical basis as only a few jurisdictions have renewable generation goals or reporting/fee drivers that impact electricity pricing. Weakness in many economies and ongoing budget deficits worldwide place a premium on economic growth to improve tax receipts, which lessens the likelihood of widespread regulatory action (and risk)					
2PEFF	Product efficiency regulations and standards	Japan, EU, U.S. regulations have been issued or are in process that will affect the design and/or operation of network products and related end-use devices. Even without actual regulation, requests from customers for product energy efficiency, product power consumption and "carbon footprint" (essentially the same as real-world product power consumption) continue to increase. Long term, the demand for improved product energy efficiency (and reduced waste) is the most important risk driver for Cisco as it impacts our product portfolio and our core business. Currently, the EU, U.S., and Japan are the	Reduced demand for goods/services	Current	Direct	Virtually certain	Medium

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		primary regions affected by product efficiency regulations that have the greatest potential to impact Cisco.					
3CLAB	Product labeling regulations and standards	<p>There are numerous efforts underway (e.g., ETSI, IEC, iNemi, ITU, GHGP-WRI/WBCSD) looking at carbon accounting or product life cycle emissions (and Scope 3 emissions in general). These efforts have substantial political momentum, and because of the substantial efforts that seemingly overlap, are introducing confusion in the regulatory space and the market. For Cisco, the immediate and ongoing concern, which has accelerated in the past year, is requests from customers for product "carbon footprint," which is essentially the same as a product labeling regulation or standard (without a physical sticker on the product). Currently, the EC (DG Environment) is the primary region affected by product labeling regulations and standards that have the greatest potential to impact Cisco. Sadly, potential regulatory misuse of LCA for product comparability or sector carbon scorecards diverts attention from prioritized GHG</p>	Reduced demand for goods/services	1-5 years	Direct	About as likely as not	Medium



ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		reduction efforts, ICT solutions adoption, and changing consumer behavior.					

### 5.1b

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

o ID: 1FUEL i. financial implications o Assuming a worldwide 10% increase in electricity prices from taxes or GHG regulation, the negative financial impact on operating expense would be about \$15M/yr based on Cisco's \$150M/yr electricity spend. However, fuel taxes are not expected to be implemented evenly worldwide, so impact is estimated to be no more than 20% of \$15M/yr, or \$3M/yr. ii. methods o We monitor internal electricity usage in our labs and data centers, performance against our voluntary GHG reduction goals, and the market premium for green energy in order to justify the investment to improve operational efficiency. o We reduced our GHG emissions by 25% absolute from FY2007-2012, and have committed an additional 15% reduction by FY2017. Our planned investments in operational efficiency have a projected breakeven of about five years. Due to business growth, total electricity consumption can't be reduced so cost risk is \$3M/yr. iii. costs o Cost is estimated between \$10-12M/yr in CapEx and OpEx for reduction initiatives over 5 years. investment will be recouped through ongoing reductions in operating expense and is expected to break even in the 5th or 6th year.

o ID: 2PEFF i. financial implications o Product categories potentially affected are a majority of our \$49B sales, and include: Routers and Switches, SMB and SOHO Routers and Switches, Set Top Boxes, Servers and Data Centers. It is unlikely our products will not meet proposed or reasonably foreseeable regulations. o We continue to see year-year increases in 'green sentiment' by our Customers although 'green' features/product energy efficiency has not been a market differentiator or had a measurable impact on revenue. o There is no strategic disadvantage for Cisco relative to our competitors, so any change in revenue due to product energy efficiency would be short-lived. ii. methods: o Cisco has purchased compliance software to track product energy efficiency-related and product labeling regulations and standards. o Cisco tracks, via various forms of outreach, Cisco customer 'green sentiment,' such as (1) subscription to surveys of global consumer sentiment with customized analyses and consultation, (2) focus groups with IT professionals that are likely Cisco customers, (3) Green procurement surveys as part of Cisco's ongoing, externally hosted corporate customer-satisfaction surveys, and (4) and stakeholder advisory groups as part of our CSR practices. The purpose of this outreach is to understand through primary data how, why and when procurement decisions will change due to green criteria (especially energy and GHG emissions). o We believe that we've identified all key actions to address risk from product energy efficiency requirements and there will be no measureable impact on revenue from new product EE requirements. iii. costs o Costs to track product energy efficiency regulations, test for and monitor product energy efficiency, and implement energy efficiency measures are estimated to be less than \$10M/yr. o ID: 3CLAB i. potential financial implications o Cisco consider the long-term risk from product carbon labeling (or footprinting) as significant if required across all products. Completing and reporting life cycle assessments on all of our products would be a significant effort depending on required granularity and assurance (>\$10M/yr), but would not be material relative to Cisco's financial reporting. o Cisco is a \$49B company whose products all use electricity and are part of the ICT sector whose electricity consumption, per McKinsey projections reported in the SMART 2020 report, is projected to increase substantially from the reported 2007 baseline. Because of the projected growth of ICT products and services worldwide, political, consumer and customer attention can only be expected to increase. ii. method o Cisco has and will continue to be actively engaged in writing product carbon accounting standards that will enable quality analysis and calculation of product related emissions and footprint. o Cisco proposed and drove the initiation of the GHG Protocol Scope 3 ICT Sector Supplement. o To quantify carbon footprints of our products, Cisco annually renews licenses for several lifecycle assessment software packages. o The most significant part of most network equipment carbon footprint is the use phase. Understanding and managing use-phase carbon emissions depends on realistic and repeatable power measurement. Cisco co-authored the ATIS TEER standard defining the protocol for characterizing the energy consumption of ICT equipment. o We believe that we have initiated prudent steps to address product carbon labeling/footprinting. However, none of these actions will impact the cost of compliance if product carbon labeling is implemented. Current efforts are (1) intended to educate regulators to prevent carbon labeling from being instituted, and (2) install internal processes for any future required compliance. iii. costs o Initial costs, including labor and LCA software are estimated to be less than USD 500K/yr to follow and participate in carbon footprinting regulatory and standards activities o ATIS TEER testing requires specialized equipment and development team test time. Cumulative impact is estimated between \$1-5M/yr.

### 5.1c

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

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
1RSRC	Induced changes in natural resources	The most likely source of physical risk is weather-related changes to water availability. In our supply chain, mining (metals) operations and oil extraction and processing (plastics) require substantial amounts of water, although geopolitical/non-climate-related issues overshadow risk for rare-earth metals and the use of metals in general in our products is relatively small compared to other industrial sectors. However, innovation, such as the large increase in fossil fuel extraction in the U.S. from hydraulic fracturing has greatly reduced the size of this prior risk (related to oil/plastics availability). Water availability could increase materials and manufacturing costs. Timeframe selected is ">10 years" as climate change is viewed as a long-term risk; water scarcity from other causes is a current issue in some locations but has not affected operations or extended operations (supply chain).	Increased operational cost	>10 years	Indirect (Supply chain)	Unlikely	Low

#### 5.1d

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

o ID 1RSRC i. potential financial implications o There may be impact on the local cost of energy and water, but these are not thought to be significant because these lower-tier material or manufacturing costs are less than 10% of our product cost and any potential CHANGE in material cost would be less than 1% of product cost. As opposed to sudden weather events, long-term changes to climate will afford opportunity for our supply chain partners to improve water use efficiency (e.g., zero discharge design) or relocate production if water shortages become acute and irreversible. o Cisco currently does not identify water availability in our supply chain as a material risk in our financial reporting (<<1 cent/share earnings). ii. methods o Water availability for the mining, oil extraction and semiconductor industries is a current and known issue. The potential impact on affected, supply-chain companies is potentially material to their core business. These companies are typically large, global organizations with sophisticated risk management functions of their own. Cisco will continue to monitor water availability for its own operations, and is implementing measures to encourage water reporting by our business

partners (as we do for carbon). o We also are building our lifecycle assessment capability across all inputs (including water), which further builds our expertise in this area. We believe this level of attention is adequate to monitor this longer term risk. o Any impact on Cisco can be ameliorated through conservation, recycling and other alternatives already being implemented or under consideration. o As part of larger corporate social responsibility initiatives, we are encouraging all our suppliers to issue annual CSR reports that address all Global Reporting Initiative (GRI) performance indicators. The strategy behind this effort is the same as our request for suppliers to report to CDP. This overall reporting activity will be effective at flushing out unforeseen problems in the water supply chain. o Physical risk to Cisco's subcontract manufacturing base and logistics and component suppliers is bounded by existing continuity of business planning scenarios and sound supply management practices. Climate change is a relatively slow phenomenon and is enveloped by existing multi-sourcing strategies and normal and expected transitions in the supply base for other business reasons. o We believe these continued activities over the next ten years will reduce any impact from natural resource availability to a negligible effect on cost of goods (<<1 center/share earnings). iii. costs o Cost including labor and LCA software for regulatory risk have been estimated to be less than USD 500K/yr to follow and participate in carbon footprinting regulatory and standards activities. The incremental cost of LCA software libraries and use to assess water risk is negligible (less than \$25,000). We consider LCA cost to accrue mostly to our efforts to understand carbon footprinting, which is a more significant/material impact for Cisco and its products and solutions. o To date, unlike for carbon, Cisco is not being asked to provide a product life-cycle analysis for water use.

## 5.1e

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

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
1REPU	Reputation	With respect to the ICT sector, there are currently mixed messages among stakeholders (press, government, advocacy and analysts (stakeholders). There is concern about (1) the increasing electricity consumption of the ICT sector, especially by large content providers and their data centers, and (2) the siting and consequent carbon content of the electricity used to run these data centers (i.e., the "cloud"). There is also sector-directed concern about the increasing numbers of end-use devices and associated chargers and wasted energy consumption when the device is on but idle. Conversely, the "enabling effect" promise of the ICT sector from the SMART 2020 report is generally accepted	Reduced demand for goods/services	1-5 years	Direct	Very unlikely	Low-medium

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		<p>as valid though that promise must be realized in practice and at scale, and be verifiable. In FY2012, we completed an aggressive 25% absolute GHG reduction goal that included Scope 1 and 2 as well as Scope 3 business air travel emissions, and in Feb 2013 we released a new set of five-year goals. These goals present an ongoing risk from non-performance. We have also noted that setting new goals is equally important to stakeholders as meeting the previous goals. Another aspect of reputation risk concerns the ultimate effectiveness of ICT/Cisco products and solutions, the "enabling effect," to reduce GHG emissions on a global scale. Because these solutions literally change the way individuals and organizations accomplish work (e.g., virtual presence vs. physical travel), social engineering is as much a part of implementation as the installation of the actual products. Although Cisco may be able to effectively reduce business air travel because of unique motivation or culture, similar reductions may be more difficult, or take longer, for other organizations. As for all climate change related risks, the EU (25% of sales) leads</p>					

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		consideration in this area followed by the U.S. (59%) and Asia/Pacific/Japan (16%). All percentages through FY2013, FQ3.					
2CBEH	Changing consumer behaviour	<p>Even without regulation, requests from customers for product energy efficiency, product power consumption, and "carbon footprint" continue to increase. Carbon footprint is essentially the same as real-world product power consumption for most Cisco products, because the use phase is the dominant contributor to emissions. (Note that Cisco sells in the business-to-business space, so we interpreted "consumer" as "customer".) In spite of this interest in energy consumption and GHG emissions, impact on customer preference--actual purchasing decision--is not significant ("in the noise"). Long term, the demand for improved product energy efficiency is the most important risk driver for Cisco as it impacts our product portfolio and its operation. However, we don't believe competition has a strategic advantage to improve energy efficiency more than Cisco. That is, if Cisco customers place a higher value on energy efficiency, Cisco can respond at least as well as other IT companies. Because of our product breadth, it is in fact likely that Cisco can better</p>	Reduced demand for goods/services	Current	Direct	Very unlikely	Medium-high

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		optimize the design of broad network solutions to consume less overall energy. We also don't believe demand for network products will decrease overall because substantial parts of economic growth in both emerging and developed markets are now tied to the Internet -- either new Internet-based companies or older, established companies adopting network-based business models. Special measures to monitor consumer intent are discussed in 5.1f. As measured by (1) the number of general inquiries from our customers, (2) requirements in RFQs, (3) surveyed impact on current and future purchasing decisions, and (4) terms in POs/contracts, energy efficiency/carbon labeling requirements are continuing to increase, although we haven't found a significant customer base that is changing actual purchasing behavior.					

#### 5.1f

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

o ID 1REPU i. potential financial implications: o Financial impact from changes to reputation is thought to not be material, which we define as less than 1 cent/share in earnings. Cisco brand value is on the order of \$20B (rough number; depends on the analyst and methodology). Given our current position and upward trajectory in sustainability, it is unlikely a measurable change in reputation would occur due to a climate-change-related issue and have a financially material impact (e.g., product energy consumption, missed GHG reduction target). By way of a benchmark, other Cisco-specific social corporate responsibility metrics--human rights, privacy, labor--have been evaluated as having more potential impact on reputation and finances than climate-change--probably by more than an order of magnitude. There are many examples of other company equity being significantly impacted by such social or governance issues. Climate change and GHG emissions are likely too complex a consumer topic to "stick" to even a poorly performing company. We market and sell our low-carbon products and

services based on business benefits--cost reduction, productivity, faster decision-making, more effective use of resources--along with their positive green impacts, so there is much more opportunity than risk in this regard. We've included reputation as a risk because a solid reputation is required to take advantage of market opportunities to help our customers reduce their GHG emissions. Cisco currently does not identify significant financial impacts from reputational/brand risk associated with climate change; i.e. an estimate of potential financial implications would be <<1 cent/share earnings. ii. methods Cisco is addressing any reputational/brand risk by focusing on product development and testing, company carbon performance and stakeholder education. (1) Product Development and Testing o To maintain and increase market momentum, Cisco has made significant acquisitions (Tandberg) and introduced new or updated products (WebEx, TelePresence, EnergyWise and the modernized grid). These investments exceed \$1B, and address potential billion-dollar markets. (2) Company Carbon Performance o Cisco is continuously improving our sustainability information software to better track and manage our data, design our initiatives, and report to our stakeholders. o We have instituted consistent governance for all CSR, including all GRI environmental indicators. o We invest in the use of our own products and solutions to reduce our GHG emissions--'Cisco-on-Cisco'--to build credible, at-scale, use cases of the efficacy of ICT to reduce GHG emissions. (3) Stakeholder Education o Cisco proposed and drove the creation of the GHG Protocol Scope 3 ICT Sector Supplement initiative. o As part of the umbrella task to quantify the impact of ICT technologies on GHG emissions, Cisco is engaging our customer base, for example for Cisco WebEx and TelePresence products, to build additional use cases upon extensive, actual company data. o We believe this three-pronged approach is an effective strategy to manage reputational risk. Because environmental/climate change performance expectations are increasing (the 'rising bar'), we don't think reputational risk can be reduced from its current level. We believe Cisco has many opportunities to further improve our standing in the marketplace--which qualitatively should reduce risk--but we believe the current [minimum] level risk persists due to the potential for global disruption and market discontinuities. iii. costs o >\$200M/yr for Cisco-on-Cisco implementation over past six years, split about equally between CapEx and OpEx. These costs are offset completely by reduced operating expenses. o costs associated with CSR governance and reporting \$2.5M/yr recurring OpEx. o ID: 2CBEH i. potential financial implications o Cisco considers the long-term risk from changes in customer sentiment requiring improved energy efficiency and/or product carbon labeling/footprinting to be manageable. The risk to sales from unmet energy efficiency or product carbon performance is essentially zero (<\$1M). We haven't seen confirmed examples of lost sales due to energy efficiency to warrant a more pessimistic estimate. We don't believe another company has a strategic advantage with respect to energy efficiency. o We continue to see year-over-year increases in 'green sentiment' among customers. There is no reason to expect this increase in sentiment not to continue upward among customers that are green thought leaders, and the sentiment to expand to the currently disengaged customer base. However, in spite of this rising sentiment, which has been in place for 4-5 years, we haven't seen the disruptive market force that is changing purchasing decisions. Because the Internet is driving economic growth, non-environmental factor dominate the procurement process. ii. methods o Cisco tracks, via various forms of outreach, Cisco customer 'green sentiment,' such as (1) subscription to surveys of global consumer sentiment with customized analyses and consultation, (2) focus groups with IT professionals that are likely Cisco customers, (3) Green procurement surveys as part of Cisco's ongoing, externally hosted corporate customer-satisfaction surveys, and (4) and stakeholder advisory groups as part of our CSR practices. The purpose of this outreach is to understand through primary data how, why and when procurement decisions will change due to green criteria (especially energy and GHG emissions). We believe we are gathering sufficient primary data to maintain a current assessment of risk from changing consumer behavior/customer requirements. o Cisco continues to improve its sustainability processes, progressing from its own operations to those of our suppliers, and then to the energy consumption of our products, and then carbon-positive solutions offered to our customers. We believe the risk from changing customer behavior is decreasing as we build on a solid base of measurement and reporting to more systematically assess product energy efficiency, product carbon footprint, and the carbon impact of Cisco solutions at actual Cisco customers. o It is believed this risk can be essentially eliminated within 3-4 years as solutions adoption continues and metrics improve. iii. costs o Relevant consumer/market research operating costs estimated to be \$500K/yr. Programs to improve product energy efficiency metrics and to build sustainability studies with our customers are estimated to cost between \$1-2M over the next 4 years.

## Further Information

## Page: 6. Climate Change Opportunities

### 6.1

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

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

## 6.1a

Please describe your opportunities that are driven by changes in regulation

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
1GRID	Renewable energy regulation	A modernized grid is a more efficient, resilient, and capable version of the current grid, and is a needed to integrating renewable energy sources at scale. The modernized grid opportunity is large, and is trending upward with the growth in renewables and electrified transportation. (Tesla is showing the potential.) Grid modernization is especially strong in the E.U. and U.S. o A modernized grid infrastructure helps utility companies optimize power supply and demand by routing power more efficiently, and allows demand-side management and real-time data exchange with customers. This information is critical for implementing	New products/business services	Current	Indirect (Client)	Very likely	Medium



ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
		<p>dispersed or intermittent renewable generation (supply) and adding hybrid/electric vehicles to the utility grid (demand). o Combined with smart meters, a modernized grid also allow customers to see how power is being used in order to influence behavior to reduce energy consumption or shift demand in time to permit use of lower-carbon sources of electricity. o European utilities see a modernized grid as an opportunity to differentiate themselves from the competition, and to meet the European Commission's 20/20/20 target—a commitment to cut greenhouse gas emissions by 20 percent, increase efficiency by 20 percent, and generate 20 percent of electrical power from renewable sources, by the year 2020. California has 33% by 2020 renewable portfolio standards</p>					

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
		<p>goal. o Cisco's role in the modernized grid market is designing and implementing the secure communications fabric that will reach every device and that is required for grid monitoring and control to function. This communications network will also be used to implement sensor technologies needed for life extension and care for the existing, aging infrastructure. The benefits of a modernized grid :</p> <p>o University of Oxford review indicated modernized grid-enabled metering can provide a 5-15% reduction due to end-user awareness o A modernized grid could decrease annual electric energy use and utility sector carbon emissions at least 12 percent by 2030, according to the Department of Energy's Pacific Northwest National Laboratory.</p>					

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

o ID 1GRID i. potential financial implications Between traditional IT and the evolving modernized grid components, nearly \$25 billion will likely be spent each year by the world's electric utilities. Nearly one-third of recent, annual information technology investments within electric utilities will be related to modernizing grids. Cisco opportunity could exceed \$1B. Utility investment will increase in future years. A publicly available report from Newton-Evans estimates the market at \$7-12B over the next 5 years for communications infrastructure related to grid and energy management. Cisco is planning to leverage our IP/network expertise to be a leader in the electric utility networking market. Utility spending is somewhat dependent on renewable mandates that are driving that market, as well as the development of PHEV and all electric vehicles (and associated government provided incentives). ii. methods o Cisco's Business Unit for utility grid sales is approaching its five-year anniversary, indicating the opportunity is being harvested. (The modernized grid (originally known as smart grid) grew from the initial winners of Cisco's innovation program called iPrize.) o As the industry bellwether, the actions outlined below demonstrate the feasibility and business value of a modernized grid and have increased the likelihood and magnitude of the opportunity. o Over 200 utility customers globally since first CGR/CGS product shipments in August 2010. Over 100 modernized-grid channel partners in more than 30 countries. o Cisco, with our ecosystem of partners, has implemented a business to plan, build, and run modernized grid solutions for transmission and distribution automation, security, business and home energy management, as well as smart meter communications. Cisco Connected Energy Networks include: \* Business architecture and strategy analysis \* Technical requirements development \* Utility compliance assessment and design \* Solution architecture, design and deployment \* grid network optimization Cisco Grid Security Services include \* Deliver integrated network and physical security solutions across the supply chain: \* Identity management and access control \* Physical safety and security \* Threat defense \* Data Center security \* Utility compliance \* Security monitoring and management o A modernized grid will require adding IP technology to sensors that already are installed in the utility's substations (the part of the grid that distributes power to homes and businesses) and bringing intelligence to routers so that the network can manage itself. o Cisco is part of several modernized grid pilots in the United States. The biggest is the \$200-million Energy Smart Miami project by Florida Power & Light. It aims to equip every home and most businesses in Florida's Miami-Dade County with smart meters. Cisco, working with the utility and partners, will design the network and security architectures, provide routing and switching products for the transmission and distribution, and pilot home energy-management solutions. Cisco has partnered with General Electric, Florida Power & Light, and Silver Spring Networks on Energy Smart Miami, a pilot to build the most comprehensive modernized grid deployment in the nation. o Cisco is an active participant in all modernized-grid-related standards activities. These standards are the very technical specification of communication, security and interoperability protocols for wireline and wireless grids at the utility, at the meter and in the home. The issues needing expert guidance are exactly the same as for the internet. Cisco's participation is critical to the successful implementation of a modernized grid worldwide. iii. costs o Cisco can disclose we are investing >>\$10M/yr OpEx in our Connected Energy Network BU since 2009 and will continue to build this business through mostly operating and select capital investments. Investment is increasing as the customer base grows larger. We foresee this utility-based business unit to continue indefinitely to meet the challenges of revamping the world's utility electricity grids. o Terms of most acquisitions have not been disclosed publicly but are significant. o Cisco's clean technology solutions are centered in our Emerging Technologies Business Group, led by Marthin De Beer, who reports to the COO. The Emerging Technologies Business Group (ETBG) is responsible for cultivating a steady stream of new businesses that can drive 1 billion dollars worth of revenue in 5-7 years and take Cisco into new adjacent markets. ETBG includes the Cisco TelePresence group, Connected Buildings, Digital Media, and the modernized grid. Investment in these organizations is tens of millions of dollars. Cisco doesn't break such investment in current public financial reporting. Regulation FD doesn't permit the release of financial information to selected audiences.

**6.1c**

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

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
10TH R	Other physical climate opportunities	Cisco sells products and solutions that provide or improve: o emergency response o promote security o allow remote working or collaboration. Severe weather	Increased demand for existing products/services	6-10 years	Indirect (Client)	More likely than not	Medium

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
		<p>events--such as Tropical Storm Sandy--require significant emergency response. Large, regional weather events require substantial coordinated emergency response to be effective, which requires coordination by national, state/provincial and local governments. We have specifically seen that such events drive demand for integrated communication systems that provide for broad interoperability and remote distribution of information to emergency teams. Shorter term drivers that encompass "severe weather" include:</p> <ul style="list-style-type: none"> <li>o Changes in temperature extremes</li> <li>o Changes in precipitation extremes and droughts</li> <li>o Snow and ice. Over a longer time scale, changes to precipitation/temperature and induced changes in natural resources (power, water, food), have been projected to create societal stress and potentially increase the need for security (and Cisco security products) for the general population or at specific locations or facilities. Energy-related facilities may also require increased surveillance and security as energy sourcing becomes an increasingly polarizing issue. Opportunity drivers listed that encompass longer term changes in weather include:</li> <li>o Changes in mean (average) temperature</li> <li>o Change in mean (average) precipitation</li> </ul>					

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
		<p>o Change in precipitation pattern. Where weather is more severe (or social unrest makes local travel unpredictable), interruption to business can be reduced through remote working and collaboration products and services. For example, when the northeast of the U.S. was shut down because of a storm last year, Cisco employees and Cisco customers could continue to work normally using Cisco Virtual Office (hardware) and VPN (software) remote working products. This circumstance was notable because there was significant press highlighting the effectiveness of using ICT to continue business as usual. An intermediate timeframe was selected, although the above product drivers are seen today, but it is not clear if "climate change" is the event initiator.</p> <p>Worldwide weather has been atypical this year, and correlation with "climate change" is being raised credibly as a potential cause.</p>					

#### 6.1d

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

o ID 10THR i. potential financial implications o The market for internet-enabled IP security, surveillance and emergency communications is more than \$10B/yr. Market growth could approach 10%/yr. Identifying incremental revenues due just to climate change would be speculative, but the market is clearly substantial and growing. In our public reporting available on our Investor Relations website, product revenue from Security was ~\$1.3B. o With respect to remote collaboration products, the video endpoint and infrastructure market, along with desktop conferencing and teleworking, are each around a \$2B opportunity. Audio and desktop conferencing is of similar size. Audio (only) conferencing is still the majority of the market, which reinforces the opportunity for more robust and video/graphics rich conferencing environments. o Remote teleworking, the true extension of full voice, data and video access at home (vs. the much less capable VPN couple with mobile phones), is in its infancy, with a potential market exceeding 25M workers. Per worker spend can be \$200-500 depending on services selected and infrastructure. Teleworking, especially if video enabled, can also increase ISP traffic outside the enterprise

firewall, driving demand for core networking aggregation and core routing. ii. methods Cisco develops and sells products that provide or improve: 1. emergency response 2. promote security 3. allow remote working or collaboration The following product spaces are very robust and are expected to grow substantially. Cisco has maximized this opportunity by creating and growing dedicated business units, each with \$1B+ in sales. This level of market engagement provides critical mass for continued innovation and growth. 1. Emergency response products are shown below Cisco IP Interoperability and Collaboration System (IPICS) o Comprehensive IP-based dispatch and incidence response solution o Ideal for public safety personnel who need to communicate with incompatible devices o Enhanced dispatch console, UHF/VHF radio interoperability, emergency first responder notification Cisco IPICS Dispatch Console o End-to-end radio dispatching solution for mission-critical radio communications o Ideal for organizations who need to respond rapidly to incidents, emergencies, and facility events o Removes communication barriers between land mobile radio systems and devices Cisco IPICS Mobile Client o Smartphone application allows responders to interact with other participants o Ideal for physical security providers and emergency first responders o Complements conventional radios when situations require real-time video, pictures, and responder status 2. Security or access control products Cisco Physical Access Gateway o Connect door hardware, locks, and readers to the IP o Provide security personnel with building-access monitoring capabilities o Scale from one to thousands of doors, at a fixed cost per door Cisco Video Surveillance 2000/2500/2600/2900/4000/5000 Series IP Cameras o Provide high-definition video at 1080p and H.264 compression o Offer a high-quality choice for organizations with stringent video needs o Support next-generation video analytics applications in a highly flexible computing platform Cisco Video Surveillance Manager o Support the transmission, monitoring, recording, and management of surveillance video o Designed for surveillance and security personnel o Flexible, standards-based solutions support a broad range of devices Cisco Physical Security Operations Manager o Unify video surveillance, access control, and incident response with a command and control console o Get complete view of facilities, sensors, and alarms in a map-enabled GUI o Comprehensive management system with powerful workflow and business logic engine Cisco Video Analytics o Embedded software on video endpoints enables innovative video analysis o Classify objects, detect tampering, trigger alerts, and count people and vehicles o Analyze surveillance video in real time and improve incident response Cisco makes other security/surveillance products for small/medium businesses. 3. Remote working or collaboration o Cisco Virtual Office: end use device and infrastructure o Cisco WebEx/MeetingPlace: client software and supporting infrastructure o Cisco Tandberg: end use devices and infrastructure o Cisco TelePresence: end use devices and infrastructure iii. costs o Cisco has invested more than \$10B, mostly in OpEx, in the products listed over the last 5 years. Included in this figure are WebEx and Tandberg acquisitions, CapEx/investments of \$3.3B and \$3.2B, respectively, in the year of acquisition. We continue to improve integration and interoperability in new generations of these products to bring voice, data and video from any device/product to any screen, so investment will continue as the market matures. o We continue to invest >>\$50M/yr (OpEx) for development and support of the products listed in Section ii

## 6.1e

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

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
1CCB	Changing consumer behaviour	There is tremendous opportunity to reduce GHG emissions if (a big if) consumer and customer behavior can be modified. A report (3% Solution) released in June 2013 by CDP/WWF with analysis by McKinsey captures the challenge perfectly. Immediate action and sizable progress is no longer a matter of technology or availability, but of	Increased demand for existing products/services	Current	Indirect (Client)	Virtually certain	Medium

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		<p>adoption. Change consumer behavior and the market for ICT products that enable the reduction of energy use could increase significantly. Cisco organizes its climate change-related opportunities based on the source of the GHG emissions (industry, buildings, transportation or utility). Cisco references two main sources when reviewing the sources of energy-related GHG emissions:</p> <ol style="list-style-type: none"> <li>1. U.S. Energy Information Agency (EIA)</li> <li>2. International Energy Agency (IEA)</li> </ol> <p>Both sets of data indicate that about 75% of energy-related emissions come from transportation (personal and goods) and buildings (commercial and residential). These emissions represent a form of "total available carbon market" for Cisco products that substitute for travel, make travel more energy efficient, or improve monitoring and increase energy efficiency in buildings. (GHG emissions from power generation, which is a different slice of this same data, represents about</p>					

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		<p>40% of all energy-related emissions and is yet another opportunity for Cisco's modernized grid products, discussed under 6.1a.) Mapping our solutions against GHG sources:</p> <ul style="list-style-type: none"> <li>o Buildings (energy management): Cisco EnergyWise, Smart+Connected buildings, modernized grid/Connected Energy Networks</li> <li>o Buildings (cloud, data center): host collaboration solutions (HCS), Cisco server and data center network products</li> <li>o Transportation (remote collaboration): Cisco TelePresence, Cisco WebEx, Unified Communications</li> <li>o Transportation (teleworking): Cisco Virtual Office, OfficeExtend, Cisco Connected Workplace, Unified Communications</li> </ul> <p>These opportunities are distributed worldwide and impact developed countries as the retrofit existing infrastructure as well as developing countries as they build out infrastructure using the latest technologies. Because of the complexity of altering basic transportation, building and</p>					



ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		power infrastructure, these opportunities are abundant, available now, and will grow for decades.					

## 6.1f

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

o ID 1CCB i. potential financial implications With respect to remote collaboration products, the video endpoint and infrastructure market, along with desktop conferencing and teleworking, continue to each be about a \$2B opportunity. Audio and desktop conferencing is of similar size. Audio (only) conferencing is still the majority of the market, which reinforces the opportunity for more robust and video/graphics rich conferencing environments, environments that can substitute for physical business travel or employee commuting. Remote teleworking, the true extension of full voice, data and video access at home (vs. the much less capable VPN couple with mobile phones), is in its infancy, with a potential market exceeding 25M workers (and growing). Per worker spend can be \$200-500 depending on services selected and infrastructure. Teleworking, especially if video enabled, can also increase ISP traffic outside the enterprise firewall, driving demand for core networking aggregation and core routing. According to published reports, Europe leads teleworking, followed by the U.S. ii. methods Cisco has established Business Units (with profit/loss responsibility) to develop products that address ever widening scopes of personal interactions. The goal is to reach a critical level of functionality that effectively substitutes for physical travel and commuting. It is thought Metcalfe's Law applies and a minimum number of nodes is needed to initiate especially rapid expansion. To speed time to market, Cisco includes technology and product acquisitions in its business portfolio. For example, in 2013 Cisco bought Joulex to complement our EnergyWise products (used to monitor and control energy consumption by ICT and other equipment). o In addition to the network products themselves, Cisco is very active in testing the efficacy of these solutions at scale and quantifying the results. We have developed calculators to quantify both the business and environmental benefits from each product or solution. The remainder of this section is organized by Cisco solution with a succinct focus on 'calculation'. (implementation). o Cisco developed calculators for Connected Buildings, Connected Workplace, Remote Collaboration (TelePresence and WebEx) and Cisco Virtual Office/Teleworking. o An additional, stand-alone, web-based calculator for TelePresence is also released for mobile phones and web browsers. o To promote market formation, we have initiated a number of steps to move our experience and modeling into a global standard. Because the business case is strong but complex for these technologies, any barriers to market formation must be addressed through standards. Such standards inform several categories of stakeholders that collectively contribute to consensus on the effectiveness of the low-carbon solution to reduce GHG emissions, and help build the market (policymakers, analysts, advocacy and customers). o Cisco proposed and drove the initiation of the GHG Protocol Scope 3 ICT Sector Supplement, which will codify in an international standard the best known practices for the carbon impact from ICT products. iii. costs Cisco has invested more than \$10B in the products listed over the last 5 years, at least 60% in acquisition costs (CapEx). We continue to invest >>\$100M/yr (OpEx) in developing and supporting such products. The Joulex acquisition cost \$107M (CapEx). We continue to improve integration and interoperability in new generations of these products to drive further adoption and market growth.

## Further Information

none

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

### Page: 7. Emissions Methodology

## 7.1

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

Base year	Scope 1 Base year emissions (metric tonnes CO2e)	Scope 2 Base year emissions (metric tonnes CO2e)
Tue 01 Aug 2006 - Tue 31 Jul 2007	50462	444684

## 7.2

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

Please select the published methodologies that you use
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

## 7.2a

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

## 7.3

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

Gas	Reference
CH4	IPCC Second Assessment Report (SAR - 100 year)
N2O	IPCC Second Assessment Report (SAR - 100 year)
HFCs	IPCC Second Assessment Report (SAR - 100 year)
CO2	IPCC Second Assessment Report (SAR - 100 year)

## 7.4

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

Fuel/Material/Energy	Emission Factor	Unit	Reference
Natural gas	14.47	Other: kg C/mmB TU	<a href="http://www.epa.gov/climateleadership/documents/resources/stationarycombustionguidance.pdf">http://www.epa.gov/climateleadership/documents/resources/stationarycombustionguidance.pdf</a>
Distillate fuel oil No 2	19.95	Other: kg C/mmB TU	<a href="http://www.epa.gov/climateleadership/documents/resources/stationarycombustionguidance.pdf">http://www.epa.gov/climateleadership/documents/resources/stationarycombustionguidance.pdf</a>
Propane	17.20	Other: kg C/mmB TU	<a href="http://www.epa.gov/climateleadership/documents/resources/stationarycombustionguidance.pdf">http://www.epa.gov/climateleadership/documents/resources/stationarycombustionguidance.pdf</a>
Other: Unleaded Gasoline	8.81	Other: kg CO2/gallon	<a href="http://www.epa.gov/climateleadership/documents/resources/mobilesource_guidance.pdf">http://www.epa.gov/climateleadership/documents/resources/mobilesource_guidance.pdf</a>
Diesel/Gas oil	10.15	Other: kg CO2/gallon	<a href="http://www.epa.gov/climateleadership/documents/resources/mobilesource_guidance.pdf">http://www.epa.gov/climateleadership/documents/resources/mobilesource_guidance.pdf</a>

## Further Information

Cisco's response to scope 2 emissions listed in Q7.1 above is its FY2007 gross emissions, which does not include its renewable energy purchases. Factoring in Cisco's renewable energy purchase for FY2007, Cisco's scope 2 emissions is 378,948 tCO<sub>2</sub>e. Also, the attached documents list the electricity emission factors utilized by Cisco to complete its GHG inventory. The references for these factors are eGRID and International Energy Agency: IEA: <http://www.iea.org/publications/freepublications/publication/name,32870,en.html> eGRID: <http://www.epa.gov/cleanenergy/energy-resources/egrid/index.html>

## Attachments

[https://www.cdproject.net/sites/2013/29/3329/Investor CDP 2013/Shared Documents/Attachments/InvestorCDP2013/7.EmissionsMethodology/CO2Highlights2012.xls](https://www.cdproject.net/sites/2013/29/3329/Investor%20CDP%202013/Shared%20Documents/Attachments/InvestorCDP2013/7.EmissionsMethodology/CO2Highlights2012.xls)  
[https://www.cdproject.net/sites/2013/29/3329/Investor CDP 2013/Shared Documents/Attachments/InvestorCDP2013/7.EmissionsMethodology/eGRID2012V1\\_0\\_year09\\_GHGOutputrates .pdf](https://www.cdproject.net/sites/2013/29/3329/Investor%20CDP%202013/Shared%20Documents/Attachments/InvestorCDP2013/7.EmissionsMethodology/eGRID2012V1_0_year09_GHGOutputrates.pdf)

## Page: 8. Emissions Data - (31 Jul 2011 - 30 Jul 2012)

### 8.1

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

Operational control

### 8.2

Please provide your gross global Scope 1 emissions figures in metric tonnes CO<sub>2</sub>e

65832

### 8.3

Please provide your gross global Scope 2 emissions figures in metric tonnes CO<sub>2</sub>e

628164

### 8.4

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

No

### 8.5

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

Scope 1 emissions: Uncertainty range	Scope 1 emissions: Main sources of uncertainty	Scope 1 emissions: Please expand on the uncertainty in your data	Scope 2 emissions: Uncertainty range	Scope 2 emissions: Main sources of uncertainty	Scope 2 emissions: Please expand on the uncertainty in your data
More than 2% but less than or equal to 5%	Extrapolation Metering/ Measurement Constraints	Cisco has very complete real estate records of all Cisco offices and facilities and is able to collect	Less than or equal to 2%	Extrapolation Metering/ Measurement Constraints	Cisco has very complete real estate records of all Cisco offices and facilities and is able to collect

Scope 1 emissions: Uncertainty range	Scope 1 emissions: Main sources of uncertainty	Scope 1 emissions: Please expand on the uncertainty in your data	Scope 2 emissions: Uncertainty range	Scope 2 emissions: Main sources of uncertainty	Scope 2 emissions: Please expand on the uncertainty in your data
		energy and GHG emissions data for approximately 84% of its Scope 1 emissions in FY2012. However, we are not able to obtain utility bills for 100% of our facilities, particularly small, satellite, leased office space. In these instances, we estimate the energy consumption and GHG emissions for these facilities by assuming energy consumption based on square footage and housed employee count for similar facilities. Using this methodology, Cisco is currently estimating approximately 16% of its Scope 1 GHG emissions.			electricity data for approximately 98% of its Scope 2 emissions in FY2012. However, we are not able to obtain utility bills for 100% of our facilities, particularly small, satellite, leased office space. In these instances, we estimate the electricity consumption and GHG emissions for these facilities by assuming electricity consumption based on square footage and housed employee count for similar facilities. Using this methodology, Cisco is currently estimating less than 2% of its Scope 2 GHG emissions.

## 8.6

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

Third party verification or assurance complete

### 8.6a

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

More than 90% but less than or equal to 100%

### 8.6b

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

Type of verification or assurance	Relevant standard	Attach the document
Limited assurance	ISO14064-3	<a href="https://www.cdproject.net/sites/2013/29/3329/Investor%20CDP%202013/Shared%20Documents/Attachments/Investor-8.6b-C3-RelevantStatement/Cisco%202012%20Inventory%20Assurance%20Review%20Letter.pdf">https://www.cdproject.net/sites/2013/29/3329/Investor CDP 2013/Shared Documents/Attachments/Investor-8.6b-C3-RelevantStatement/Cisco 2012 Inventory Assurance Review Letter.pdf</a>

## 8.7

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

Third party verification or assurance complete

#### 8.7a

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

More than 90% but less than or equal to 100%

#### 8.7b

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

Type of verification or assurance	Relevant standard	Attach the document
Limited assurance	ISO14064-3	<a href="https://www.cdproject.net/sites/2013/29/3329/Investor%20CDP%202013/Shared%20Documents/Attachments/Investor-8.7b-C3-RelevantStatement/Cisco%202012%20Inventory%20Assurance%20Review%20Letter.pdf">https://www.cdproject.net/sites/2013/29/3329/Investor CDP 2013/Shared Documents/Attachments/Investor-8.7b-C3-RelevantStatement/Cisco 2012 Inventory Assurance Review Letter.pdf</a>

#### 8.8

Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?

No

#### Further Information

In response to Question 8.3, Cisco is reporting its gross scope 2 emissions, which does not account for its low-carbon energy purchases from both utility green power contracts and renewable energy certificates (RECs). Considering these purchases, Cisco's contractual scope 2 emissions in this reporting cycle is significantly lower at 185,840 tCO<sub>2</sub>e.

### Page: 9. Scope 1 Emissions Breakdown - (31 Jul 2011 - 30 Jul 2012)

#### 9.1

Do you have Scope 1 emissions sources in more than one country?

Yes

#### 9.1a

Please complete the table below

Country/Region	Scope 1 metric tonnes CO <sub>2</sub> e
United States of America	22641
Rest of world	43191

#### 9.2

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

#### Further Information

## 10.1

Do you have Scope 2 emissions sources in more than one country?

Yes

### 10.1a

Please complete the table below

Country/Region	Scope 2 metric tonnes CO2e	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling (MWh)
United States of America	396126	1052771	459006
Rest of world	232038	412596	93691

## 10.2

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

Further Information

## 11.1

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

More than 0% but less than or equal to 5%

## 11.2

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

Energy type	MWh
Fuel	284718
Electricity	1465368
Heat	0
Steam	0
Cooling	0

## 11.3

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

Fuels	MWh
Natural gas	143835
Diesel/Gas oil	58258
Other: Mobile Diesel/Gas Oil	82497

Fuels	MWh
Propane	133

#### 11.4

Please provide details of the electricity, heat, steam or cooling amounts that were accounted at a low carbon emission factor

Basis for applying a low carbon emission factor	MWh associated with low carbon electricity, heat, steam or cooling	Comments
Tracking instruments, RECS (USA)	457250	Our operations in USA have purchased REC's to cover part of the electricity consumption during the period. All REC's are Green-e certified.
Supplier specific, backed by instruments	1484	Cisco participates in a couple of utility green power programs in the US. Through these programs, the utility provides Cisco renewable energy that has been produced within the utility's electric grid region. All renewable energy through these program's are Green-e certified.
Non-grid connected low carbon electricity generation owned by company, no instruments created	272	Two of our operations in the USA have installed onsite solar photovoltaic systems (100 kW each). All of the electricity produced by these systems are used by the buildings that they are installed on and no electricity is sold back to the electric utility.
Tracking instruments, Guarantees of Origin	93691	Our operations throughout Europe have engaged local utilities and purchased renewable guarantees of origin to cover part of our electricity consumption. The Guarantees of Origin are from a variety of eligible renewable energy sources.

#### Further Information

### Page: 12. Emissions Performance

#### 12.1

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

Decreased

#### 12.1a

Please complete the table

Reason	Emissions value (percentage)	Direction of change	Comment
Emissions reduction activities	45.8	Decrease	By implementing the various emission reduction activities listed in Question 3.3 and 11.4, Cisco has reduced its combined scope 1 and 2 emissions in FY 2012 by approximately 45.8 percent. This decrease does account for Cisco's increased use of low-carbon energy purchases in FY2012 compared to FY2011, which is detailed in both questions 3.3 and 11.4. The decrease is also attributed to Cisco implementing a number energy efficiency projects, such as: - implementing retro-

Reason	Emissions value (percentage)	Direction of change	Comment
			commissioning projects, - performing building and lab-specific energy audits, - installing variable frequency drives (VFDs), - improving lighting efficiency through lamp replacements, - De-lamping all vending machines globally, - replacing HVAC equipment such as chillers, motors and boilers, - improving lab air distribution with blanking panels and diffusers, - installing smart power distribution units (PDUs) and management software for lab equipment, and - engaging Cisco's lab employees to turn off equipment when not needed throughout the year, with a strong focus during Cisco's mandatory year-end shutdown period.
Divestment		Decrease	
Acquisitions			
Mergers			
Change in output	6.2	Increase	Increase is due to natural growth from FY2011 to FY2012 in Cisco's headcount, lab and data center space and testing equipment used in Cisco's labs and data centers. If no emission reduction activities had been implemented, Cisco would have experience an increase in scope 1+2 GHG emissions by over 6 percent in FY2012 compared to FY2011.
Change in methodology			
Change in boundary			
Change in physical operating conditions			
Unidentified			
Other			

## 12.2

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

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
0.0000055	metric tonnes CO2e	unit total revenue	42.7	Decrease	When comparing this intensity metric from FY2011 to FY2012, Cisco estimates that the decrease in emissions intensity per revenue figure is due to the following primary factors: (1) increasing of Cisco's revenue, (2) implementing the various emission reduction activities in FY2012 listed in Question 3.3, which does include Cisco's low-carbon energy purchases, (3) incorporating local emission factors as an evaluation factor in site selection criteria and (4) ongoing decreases in regional grid emission factors.

## 12.3

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



Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
3.3	metric tonnes CO2e	FTE employee	40.0	Decrease	When comparing this intensity metric from FY2011 to FY2012, Cisco estimates that this decrease in emissions intensity per FTE is due to the following primary factors (1) increasing of Cisco's headcount, (2) implementing the various emission reduction activities in FY2012 listed in Question 3.3, which does include Cisco's low-carbon energy purchases, (3) incorporating local emission factors as an evaluation factor in site selection criteria and (4) ongoing decreases in regional grid emission factors.

#### 12.4

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

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
0.1268	metric tonnes CO2e	megawatt hour (MWh)	51.8	Decrease	This intensity metric is very important to track for the IT industry because scope 2 emissions are typically much higher than scope 1 emissions in the industry. Scope 2 emissions for Cisco, which is 100 percent from purchased electricity, represented 91 percent of our total scope 1+2 emissions in FY2012. As a result, a big focus for Cisco is to track, report and implement strategies to reduce the carbon intensity of Cisco's electricity purchases as this effort will have a major impact on Cisco's overall scope 1+2 emissions. When comparing this intensity metric from FY2011 to FY2012, Cisco estimates that the decrease in scope 2 emissions intensity per Megawatt hour is due to the following primary factors (1) implementing the various emission reduction activities in FY2012 listed in Question 3.3, which does include Cisco's low-carbon energy purchases, (2) incorporating local emission factors as an evaluation factor in site selection criteria and (3) ongoing decreases in regional grid emission factors.

#### Further Information

#### 13.1

### Do you participate in any emissions trading schemes?

No, and we do not currently anticipate doing so in the next 2 years

### 13.2

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

No

### Further Information

## Page: 14. Scope 3 Emissions

### 14.1

### Please account for your organization's Scope 3 emissions, disclosing and explaining any exclusions

Source s of Scope 3 emissi ons	Evalu ation status	metri c tonn es CO2 e	Methodology	Perce ntage of emissi ons calcul ated using primar y data	Explanation
Purcha sed goods and service s	Relev ant, calcul ated	1028 166	1. Surveyed all contract manufacturing sites for FY12 emissions allocated to Cisco (direct information for dedicated sites was used and financial allocation was set for shared sites). For both types of allocations, the supplier used energy bills and local emission factors provided by IEA. All contract-manufacturing companies are scored in our suppliers scorecard for providing us this data and other environmental factors. Based on many internal life cycle analyses, an average split was determined between manufacturing services and materials. Using the LCA breakdown for manufacturing services (25%) and material (75%), we then were able to scale the manufacturing services result to include materials.	25%	not provided (optional)
Capital goods	Relev ant, calcul ated	4539 7	2. Using guidance from the GHG Protocol, Scope 3 Standard, GHG emission data was estimated from fixed-asset reports for FY12. Fixed assets were categorized to align with categories listed in the economic input output LCA model ( <a href="http://www.sustainabilityconsortium.org/open-io/use-the-model/">http://www.sustainabilityconsortium.org/open-io/use-the-model/</a> ). This model utilizes categories based on the North American Industrial Classification System and within each category, multiple sources of environmental data is joined with yearly spend data by sector from the Bureau of Economy Analysis (BEA). The aggregated financial values in each category were multiplied by the appropriate emissions factors (emissions per \$ spent) and summed to calculate a total	50%	not provided (optional)

Source s of Scope 3 emissi ons	Evalu ation status	metri c tonnes CO2 e	Methodology	Perce ntage of emissi ons calcul ated using primar y data	Explanation
			GHG emission figure. The calculated emissions include assets that were purchased and decommissioned within the given time frame, and does not include assets that may have been purchased before FY12 that are still in use. More information on the open-IO model, methodology and sources is available at <a href="http://www.sustainabilityconsortium.org/wp-content/themes/sustainability/assets/pdf/OpenIO_ModelDocumentation_June2011.pdf">http://www.sustainabilityconsortium.org/wp-content/themes/sustainability/assets/pdf/OpenIO_ModelDocumentation_June2011.pdf</a>		
Fuel- and- energy- related activitie s (not include d in Scope 1 or 2)	Not releva nt, calcul ated	4728 1	3. The Energy Information Administration (EIA) estimates that approximately 7 percent of total electricity input in the US is lost to transmission and distribution (US Energy Information Administration, <a href="http://205.254.135.7/tools/faqs/faq.cfm?id=105&amp;t=3">http://205.254.135.7/tools/faqs/faq.cfm?id=105&amp;t=3</a> ). Cisco used this assumption and multiplied it by its total scope 2 emissions to estimate emissions associated with energy-related activities that are not included in Scope 2 emissions reported in FY2012. The data reported is very accurate as Cisco is able to collect primary data for approximately 98% of its electricity consumption globally.	100%	not provided (optional)
Upstrea m transpo rtation and distribut ion	Relev ant, calcul ated	1658 62	4. Surveyed all transport and logistics providers for Cisco's share of emissions in FY2012 and then took the total amount and split based on LCA % factors for upstream and downstream transport based on various analyses performed internally. Some logistics providers manage their own fleet emission factors and use the GHG protocol's approach to calculate emissions from fuel use. Other smaller providers use the GHG protocol's weight-distance approach to calculating emissions and utilize the emission factors provided in the tools that the GHG protocol provides for calculation. All logistics companies are scored in our suppliers' business scorecard for providing us this data and other environmental factors.	100%	not provided (optional)
Waste generat ed in operati ons	Not releva nt, calcul ated	2618	5. Cisco used default GHG emission factors published in the EPA Waste Reduction Model version 12 (WARM - <a href="http://epa.gov/epawaste/conservation/tools/warm/Warm_Form.html">http://epa.gov/epawaste/conservation/tools/warm/Warm_Form.html</a> ) for mixed municipal solid waste (MSW) in order to calculate scope 3 emissions from waste generated in our operations. These emission factors were then applied to Cisco's waste generation amounts for both FY2011 and FY2012 to calculate a response for this question. The emission factor for mixed MSW waste is 0.98 metric tonne CO2e/short ton of mixed municipal solid waste (MSW) sent to a landfill. The data quality of Cisco's waste and recycling metrics is good but does have room for improvement, with approximately 58% of all sites measured on a per	100%	not provided (optional)

Source s of Scope 3 emissi ons	Evalu ation status	metri c tonn es CO2 e	Methodology	Perce ntage of emissi ons calcul ated using primar y data	Explanation
			square foot basis reporting their waste and recycling data in FY2012. Average waste and recycling rates were calculated from the facilities that submitted actual data in order to estimate total waste and recycling generation for 100% of Cisco's facilities.		
Busine ss travel	Relev ant, calcul ated	1394 31	6. The methodology uses individual flight segment information from the travel provider that services Cisco's online, internal Cisco Travel Network (CTN). As of the end of FY2012, air travel information is reported from 128 travel-provider locations covering flights to/from at least 190 countries, regions or territories. Cisco has physical offices in more than 90 countries. Utilizing flight distance for each segment, CO2 emissions are calculated using the UK DEFRA-based emissions factors. No additional forcing factor is included (such as the often cited 2.7 FF). Air travel definitions and emissions factors are from the GHG Protocol "CO2 emissions from business travel, v1.2, Aug 2005" listed at <a href="http://www.ghgprotocol.org/calculation-tools/all-tools">http://www.ghgprotocol.org/calculation-tools/all-tools</a> . (0.15, 0.12 and 0.11 kg CO2/passenger km for short, medium and long haul flight segments). The emissions factors listed therein for short and long haul flights are originally from UK DEFRA. These emissions factors have been updated by DEFRA, but we are reporting using "old" EFs because we want any change in reported emissions to be the result of actual changes in travel behavior, and not assumed EFs. Cisco maintains complete records of all flight segments and can update emissions calculations should it be warranted. Cisco uses a custom report written for AmEx's AXIS@work application to gather air travel records for a custom analysis written using a standard, SQL-based database program. We also use a custom report written against Cisco's financial system to calculate the percent of air travel covered by the AmEx data. Since employees must complete expense reports for travel in order to be reimbursed, it is highly likely expense account data contains essentially all business air travel. By comparing various accounts for air travel, we can determine the completeness of the AmEx air travel records. Air travel emissions are adjusted based on this degree of completeness to determine 100% of Cisco's GHG emissions from business air travel.	99%	not provided (optional)
Employ ee commu ting	Relev ant, calcul ated	9209 5	7. Cisco completed an employee commuting survey in FY2013 and used the results of this survey, factoring in changes in employee headcount between FY2013 and FY2012 in order to estimate Cisco's FY2012 employee commuting GHG emissions. Cisco used the results of its commuting survey along with guidance from the	100%	not provided (optional)

Source s of Scope 3 emissi ons	Evalu ation status	metri c tonn es CO2 e	Methodology	Perce ntage of emissi ons calcul ated using primar y data	Explanation
			EPA Climate Leaders GHG Inventory Protocol (Core Module Guidance, Optional Emissions from Commuting, Business Travel and Product Transport) to estimate annual GHG emissions resulting from Cisco's employees commuting to and from work. In addition, Cisco was able to determine the net GHG emissions avoided as a result of its employees teleworking (e.g. working at home).		
Upstream leased assets	Not releva nt, expla nation provid ed		8. not applicable		Any upstream leased assets are included in the boundary of our Scope 1+2 emissions.
Investm ents	Not releva nt, expla nation provid ed		9. not applicable		According to the GHG protocol, this category is applicable only to financial institutions and therefore does not apply to Cisco ( <a href="http://www.ghgprotocol.org/feature/scope-3-calculation-guidance">http://www.ghgprotocol.org/feature/scope-3-calculation-guidance</a> ).
Downst ream transpo rtation and distribut ion	Relev ant, calcul ated	3870 11	10. Surveyed all transport and logistics providers for Cisco's share of emissions in FY2012 and then took the total amount and split based on LCA % factors for upstream and downstream transport based on various analyses performed internally. Some logistics providers manage their own fleet emission factors and use the GHG protocol's approach to calculate emissions from fuel use. Other smaller providers use the GHG protocol's weight-distance approach to calculating emissions and utilize the emission factors provided in the tools that the GHG protocol provides for calculation. All logistics companies are scored in our suppliers' business scorecard for providing us this data and other environmental factors.	100%	not provided (optional)
Proces sing of sold product s	Not releva nt, expla nation provid ed		11. not applicable		Our products are in the final form when it is sold to the customer. It may be packaged up as a total solution with other equipment, but the product is not processed in a manner that changes the final good.
Use of sold product s	Relev ant, calcul ated	3153 8333	12. Utilized a power graph that was generated on an analysis performed internally in 2006. The data relied on average power consumption by product family and sales volume in 2006 of product families. on yearly consumption of	50%	not provided (optional)

Source s of Scope 3 emissi ons	Evalu ation status	metri c tonn es CO2 e	Methodology	Perce ntage of emissi ons calcul ated using primar y data	Explanation
			products sold and scaled to FY12 revenue. Then expanded the CO2 to five years as an assume life (despite the fact that lifetime values can be more or less)		
End of life treatme nt of sold product s	Relev ant, calcul ated	9011 0	13. Used the LCA split for EOL activities (approximately 0.29%) for a general ICT product and multiplied it to the use of products sold over the 5-year period. The LCA split was an average of the results of internal LCAs performed on various Cisco products.'	0%	not provided (optional)
Downst ream leased assets	Not releva nt, explan ation provid ed		14. not applicable		Any downstream leased assets are included in the boundary of our Scope 1+2 emissions
Franchi ses	Not releva nt, explan ation provid ed		15. not applicable		This category is not applicable to Cisco because we don't own or sell franchises
Other (upstre am)	Not evalua ted		16. not applicable		not applicable
Other (downst ream)	Not evalua ted		17. not applicable		not applicable

## 14.2

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

Third party verification or assurance complete

## 14.2a

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

More than 0% but less than or equal to 20%

## 14.2b

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

Type of verification or assurance	Relevant standard	Attach the document
Limited assurance	ISO14064-3	<a href="https://www.cdproject.net/sites/2013/29/3329/Investor%20CDP%202013/Shared%20Documents/Attachments/Investor-14.2b-C3-RelevantStatementAttached/Cisco2012InventoryAssuranceReviewLetter.pdf">https://www.cdproject.net/sites/2013/29/3329/Investor CDP 2013/Shared Documents/Attachments/Investor-14.2b-C3-RelevantStatementAttached/Cisco2012InventoryAssuranceReviewLetter.pdf</a>

#### 14.3

**Are you able to compare your Scope 3 emissions for the reporting year with those for the previous year for any sources?**

Yes

#### 14.3a

**Please complete the table**

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Fuel- and energy-related activities (not included in Scopes 1 or 2)	Change in output	2.8	Increase	3. Increase in these emissions is primarily from an increase in gross scope 2 emissions. As stated in Question 12.1, this increase was due to real estate portfolio space and equipment related to office, labs and data centers.
Waste generated in operations	Emissions reduction activities	4.6	Decrease	5. Cisco's Waste Reduction and Recycling Program is a key component of Cisco ISO 14001 certification and our global environmental policy. We routinely collect and recycle waste streams, including batteries, CDs and diskettes, beverage containers, trash, wood and pallets, cardboard, mixed paper, confidential waste, packaging materials, toner cartridges, compost, polyurethane foam, landscape waste, mobile phones, food waste, and construction waste. In FY2012, Cisco recycled approximately 69% of all the waste that it generated at its facilities and decreased its total waste sent to landfill in FY2012 compared to FY2011. This reduction in waste generation, which we consider to be an emission reduction activity, is the primary reason why Cisco's GHG emissions from waste generation in our operations decreased by 4.6 percent in FY2012 compared to FY2011. Cisco used emission factors published by the EPA Waste Reduction Model (WARM) to convert waste to landfill metrics to GHG emissions. For mixed municipal solid waste (MSW), this factor is 0.98 tCO <sub>2</sub> e per short ton of waste generated. The EPA WARM model is available at: <a href="http://epa.gov/epawaste/conserve/tools/warm/Warm_Form.html">http://epa.gov/epawaste/conserve/tools/warm/Warm_Form.html</a> It is also important to note that using the EPA's WARM model, Cisco was also able to calculate the GHG emissions avoided through Cisco's recycling programs. Factoring in this conversion, Cisco's net GHG reductions through its waste and recycling operations is actually negative (-14,038 tCO <sub>2</sub> e) in FY2012.
Employee commuting	Change in output	0.6	Increase	7. Cisco completed an employee commuting survey in FY2013 and used the results of this survey, factoring in changes in employee headcount between FY2013 and FY2012 in order to estimate Cisco's FY2012 employee commuting GHG emissions. Since Cisco's employee headcount increased by approximately 0.6 percent from

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
				FY2011 to FY2012, its employee commuting emissions increased at the same rate. Cisco is planning on improving its calculation methodology and estimate employee commuting emissions on an annual basis. This is expected to be in place by FY2013.
Purchased goods & services	Change in output	3.5	Decrease	1. Two factors affect this change: 1) Site consolidation and 2) Energy efficiency projects at our supply chain partners
Capital goods	Change in boundary	55.9	Decrease	2. Previous calculations included the purchase of capital equipment spanning the last 5 years. As per the guidance of only considering the capital equipment purchased in FY12, the calculation was changed to correctly reflect the standard.
Upstream transportation & distribution	Change in output	5.4	Increase	4. Increase in logistics moves, changes in paths due to site consolidation
Business travel	Change in output	9.5	Increase	6. Cisco air travel was suppressed due to the economic downturn and slow recovery. At the lowest point, our air travel--restricted by executive order and budget cuts--was almost half of our baseline year emissions. As the economy has recovered, we have seen an increase in air travel. In spite of the increase, we exceeded our five-year target by almost 30%. As the global economy continues to recover, new initiatives will be needed to prevent air travel from continuing to increase, which would impact our ability to meet our recently published next five-year goals (announced after this CDP reporting year was completed).
Downstream transportation and distribution	Change in output	5.4	Increase	10. Increase in logistics moves, changes in paths due to site consolidation
Use of sold products	Change in output	2.3	Increase	12. Increase in sales of our products coupled with release of more energy efficient products
End-of-life treatment of sold products	Change in output	2.3	Increase	13. Increase in sales of our products coupled with a small increase in take back patterns

#### 14.4

**Do you engage with any of the elements of your value chain on GHG emissions and climate change strategies? (Tick all that apply)**

Yes, our suppliers  
Yes, our customers  
Yes, other partners in the value chain

#### 14.4a

**Please give details of methods of engagement, your strategy for prioritizing engagements and measures of success**

**SUPPLIERS:** We work with our suppliers through outreach via our business partners, through the EICC and CDP to provide support via shared best practices in measurement and reduction opportunities. To manage our supply chain greenhouse gas emissions, we work with our suppliers to set expectations, build capabilities, track progress, score and provide feedback, and reward on performance. For suppliers who are new in measuring greenhouse gas emissions, is important for us to be able to educate them on what certain expectations we have



and what that means to them. So, we work with suppliers to clarify expectations, and help them mature their GHG programs. In addition, we also need to collaborate with other suppliers as they know their business better than we do. We also encourage collaboration amongst the suppliers to help support each other and help bring other suppliers up to speed and have detailed discussions on GHG emission allocation techniques. For suppliers that are performing well, a high score in the supplier scorecard could mean more business in the future. In addition, we have a "Sustainability Award" at our yearly Supplier Appreciation Event, which honors one supplier who stands above the rest in environmental sustainability. Supply chain (cradle to gate) GHG emissions are addressed using supplier surveys and LCA % breakdowns in other categories. For a more comprehensive treatment of supplier emissions, Cisco created and is pursuing the following metrics to track supplier engagement on climate change issues. In 2011 Cisco has requested all of its Tier 1 (contract manufacturing), Tier 2 (approved vendor list (AVL) component suppliers), OEM/ODM suppliers, new product logistics (to depot/customer) and logistics in service/repair loop to report to CDP and make their submittal publicly available. We believe this is the most credible way to actually impact GHG emissions across our products and supply chain. We confirm their participation using CDP Reporter Services. CUSTOMERS We meet regularly with a half-dozen of the world's largest service providers to understand their energy and climate change concerns and how Cisco can help improve their performance. Our go-to-market strategy is organized around sustainability cases documenting the carbon benefits of our own use of our technologies, and offering a similar benefit to our customer. PARTNERS We have been approached by our largest channel sales partner to co-market Cisco sustainability solutions to the partner's customers. Our approach is similar as with our direct customers. We build a foundation of successful case studies, which we use to support new implementations at other customers o Your strategy for prioritizing engagements and measures of success We prioritize our supply chain engagements based on spend. This is why we initially focused on our contract manufacturing partners, component vendors, and transport companies. These categories of suppliers are also most closely identified with the supply of our products. We have initially measured success based on the percent of our suppliers, measured by spend, that report to CDP: Contract Manufacturer (Tier 1) 2008 63% of planned spend 2009 82% 2010 100% 2011 100% 2012 100% Goal: 100% (met) Approved vendor list (AVL) Component Suppliers (Tier 2) 2008 54% of planned spend 2009 59% 2010 69% 2011 69% 2012 80% Goal: 80% o Transport Providers (Tier 1) 2008 not available 2009 not available 2010 50% of supplier count 2011 50% 2012 93% Goal: 90%

#### 14.4b

**To give a sense of scale of this engagement, please give the number of suppliers with whom you are engaging and the proportion of your total spend that they represent**

Number of suppliers	% of total spend	Comment
250	90%	About 250. We contact on the order of 1500 suppliers and ask them to report to CDP, but most of these suppliers have little spend with us.

#### 14.4c

**If you have data on your suppliers' GHG emissions and climate change strategies, please explain how you make use of that data**

How you make use of the data	Please give details
Use in supplier scorecards	We use data to determine hotspots, and work with suppliers to act on issues. In addition, we exchange energy reduction strategies to share best practice. In addition we have used this information to highlight areas of innovations, such as development of embedded testing technologies of our optical modules and efficient means of run-in/burn-in of large complex products.
Identifying GHG sources to prioritize for reduction actions	We use data to determine hotspots, and work with suppliers to act on issues. In addition, we exchange energy reduction strategies to share best practice. In addition we have used this information to highlight areas of innovations, such as development of embedded testing technologies of our optical modules and efficient means of run-in/burn-in of large complex products.
Stimulating innovation of new products	We use data to determine hotspots, and work with suppliers to act on issues. In addition, we exchange energy reduction strategies to share best practice. In addition we have used this information to highlight areas of innovations, such as development of embedded testing technologies of our optical modules and efficient means of run-in/burn-in of large complex products.

#### Further Information

## Module: Investor-ICT

### Page: ICT1. Data center activities

#### ICT0.1a

Please identify whether "data centers" comprise a significant component of your business within your reporting boundary

No

#### Further Information

Cisco operates our data centers primarily for internal use. Because every company today has data centers for internal use, we interpret this question as applying to ICT Sector companies that host applications primarily for external users.

### Page: ICT2. Provision of network/connectivity services

#### ICT0.1b

Please identify whether "provision of network/connectivity services" comprises a significant component of your business within your reporting boundary

No

#### Further Information

### Page: ICT3. Manufacture or assembly of hardware/components

#### ICT0.1c

Please identify whether "manufacture or assembly of hardware/components" comprise a significant part of your business within your reporting boundary

No

#### Further Information

Manufacturing is not in scope per direction from CDP received in the 2012 survey cycle.

### Page: ICT4. Manufacture of software

#### ICT0.1d

Please identify whether "manufacture of software" comprises a significant component of your business within your reporting boundary

No

#### Further Information

**Page: ICT5. Business services (office based activities)**

**ICT0.1e**

Please identify whether "business services (office based activities)" comprise a significant component of your business within your reporting boundary

Yes

**ICT5.1**

Please provide a description of the parts of your business that fall under "business services (office based activities)"

Cisco has over 20 million square feet of real estate space in over 500 global locations that are used primarily as office space for its employees.

**ICT5.2**

Please provide your absolute Scope 1 and 2 emissions and electricity consumption for the business services (office based activities) component of your business

Business services	Scope 1 emissions (metric tonnes CO2e)	Scope 2 emissions (metric tonnes CO2e)	Annual electricity consumption (MWh)	Electricity data collection method
Business services (office based activities)	65832	628164	1465368	Meter or submeter reading

**ICT5.3**

Please describe your gross combined Scope 1 and 2 emissions for the business services (office based activities) component of your business in metric tonnes per square meter

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
0.3696	metric tonnes CO2e	Square meter	5.6	Increase	Increase is due to natural growth from FY2011 to FY2012 in Cisco's headcount, lab and data center space and testing equipment used in Cisco's labs and data centers. In addition, Cisco reduced its total real estate space in FY2012 compared to FY2011, which reduces the denominator in the equation of this intensity figure. If no emission reduction activities had been implemented and if Cisco had not decommissioned some of its real estate space in FY2012, Cisco would have experienced a higher percentage increase in FY2012 compared to FY2011.

**ICT5.4**

Please describe your electricity use for the provision of business services (office based activities) component of your business in MWh per square meter

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
0.7803	MWh	Square meter	8.8	Increase	Increase is due to natural growth from FY2011 to FY2012 in Cisco's headcount, lab and data center space and testing equipment used in Cisco's labs and data centers. In addition, Cisco reduced its total real estate space in FY2012 compared to FY2011, which reduces the denominator in the equation of this intensity figure. If no emission reduction activities had been implemented and if Cisco had not decommissioned some of its real estate space in FY2012, Cisco would have experienced a higher percentage increase in FY2012 compared to FY2011.

#### Further Information

#### Page: ICT6. Other activities

#### ICT0.1f

Please identify whether "other activities" comprise a significant component of your business within your reporting boundary

No

#### Further Information

The three main contributors to Cisco Scope 1 and 2 emissions (office space, engineering labs and data centers) are combined in our Scope 1 and 2 reporting. Many of our buildings are mixed use and not separately metered. We addressed all contributors to emissions in our response to Q5.

#### Module: Sign Off

#### Page: Sign Off

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

Darrel Stickler  
Sustainable Business Practices -- Environment  
CDP