# **CDP**

# CDP 2014 Investor CDP 2014 Information Request Cisco Systems, Inc.

**Module: Introduction** 

Page: Introduction

CC0.1

#### 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

CC0.2

## **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 29 Jul 2012 - Mon 29 Jul 2013

## CC0.3

# **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

#### CC0.4

## **Currency selection**

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

USD(\$)

# CC0.6

#### 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, companies in the information technology and telecommunications sectors and companies in the food, beverage and tobacco 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@cdp.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.cdp.net/en-US/Programmes/Pages/More-questionnaires.aspx.

#### Further Information

Q0.2: Reporting period is Cisco FY2013 (our last completed fiscal year). FY2013 runs from 29 July 2012 to 27 July 2013 inclusive. Slightly different end date was entered to past ORS validation criteria.

**Module: Management** 

Page: CC1. Governance

#### CC1.1

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

Senior Manager/Officer

#### CC1.1a

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

The Sustainability Executive Team (SET) is the organization responsible for Cisco's strategy, initiatives and performance for all environmental issues, including climate change. (Greenhouse gas emissions/energy is Cisco's most material environmental issue and therefore receives the most attention and funding.)

Cisco's corporate board is informed annually of the risks of climate change to Cisco's business through our Enterprise Risk Management organization's risk assessment and feedback is reported to the SET executive sponsor. SET coordinates risk assessment input to our board.

It is very popular to think the solution to corporate action is ever higher (board) responsibility. There is definitely the need for executive support and sponsorship,

such as what we have established with SET, but Cisco's successful model is understanding and communicating the business relevance of sustainability to each business function, and then driving responsibility for the environment, including climate change, down in the organization by incorporating sustainability into every business function.

The executive sponsor of SET is Randy Pond, Executive VP, Process and Systems. Our GHG and energy intensity reduction goals were reviewed and approved by Gary Moore, President & Chief Operating Officer reporting to Chair and CEO John Chambers, our CEO. Rob Lloyd, President, Development and Sales, reporting to John Chambers also supported our new goals. All business functions other than the CFO report to either Gary or Rob.

To drive sustainability into the business functions, both Gary and Rob have sustainability-related goals in our performance management computer system. This visibility of sustainability and especially GHG emissions and energy use is significant because Gary and Rob respectively only have eight and six goals total for the entire scope of their responsibilities. All downstream executive, management or individual goals are driven off higher level goals.

#### CC1.2

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

Yes

## CC1.2a

# Please provide further details on the incentives provided for the management of climate change issues

| Who is entitled to benefit from these incentives? | The type of incentives | Incentivized performance indicator   |
|---|------------------------|--|
| Chief Operating Officer (COO)                     | Monetary<br>reward     | Cisco's two Presidentsreporting to John Chambershave implemented high-level sustainability goals (energy and emissions reductions to achieve our targets) 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. |
| Environment/Sustainability                        | Monetary               | Employee bonus is tied to continuous improvement efforts, including in energy efficiency and/or carbon emissions   |

| Who is entitled to benefit from these incentives? | The type of incentives | Incentivized performance indicator  |
|---|------------------------|---|
| managers  | reward                 | reductions. Additional indicators include: 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). |

# **Further Information**

Page: CC2. Strategy

# CC2.1

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

# CC2.1a

Please provide further details on your risk management procedures with regard to climate change risks and opportunities

| Frequency<br>of<br>monitoring | To whom are results reported  | Geographical areas considered   | How far into the future are risks considered? | Comment |
|-------------------------------|---|---|---|---------|
| Annually                      | Individual/Sub-set of the<br>Board or committee<br>appointed by the Board | All geographies worldwide. Because Cisco is a global organization with sales in every country except where restricted by U.S. or other law/regulation with design, manufacturing, and support similarly distributed, all geographies are considered in our annual, corporate risk assessment report to the company board. | 3 to 6 years                                  |         |

#### CC2.1b

## Please describe how your risk and opportunity identification processes are applied at both company and asset level

At the company level:

All material risks and opportunities are addressed by the organization whose function is impacted (sales, 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.

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.
- o A business continuity plan is maintained by supply management
- o A regulatory and standards team part of Corporate Compliance specifically addresses regulatory risks.
- o Market risk--such as from unmet customer environmental requirements--is assessed directly by the Quality organization through an outsourced and ongoing customer survey system part of the sales and service process.

#### At the asset level

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.

#### CC2.1c

# How do you prioritize the risks and opportunities identified?

The Sustainable Business Practices (SBP) team is responsible for prioritizing risks and opportunities and highlighting them to the appropriate business function. SBP uses materiality assessments, customer surveys, benchmarking, information from the hundreds of stakeholder inquiries we receive each year, and formal, worldwide stakeholder feedback through annual, third-party-facilitated Cisco TelePresence sessions are used to build a knowledge base for strategy development.

Cisco prioritizes risks and opportunities based on our market strategy to establish a coherent approach that is understood by each business function.

- (1) All environmental risks and opportunities (including those associated with climate change) that are unfavorable (for risks) or favorable (for opportunities) to our operations and our extended operations (supply chain) must be addressed. Cisco believes our own company must demonstrate world-class environmental performance (including with respect to climate change--GHG emissions and energy consumption) and highlight sustainability best practices for use by our peers and customers.
- (2) The performance of our products (energy efficiency) is next addressed.
- (3) Opportunities for Cisco solutions to improve our own environmental performance (especially with respect to GHG emissions and energy consumption) are next in our strategic progression.
- (4) Finally, opportunities to help Cisco customers improve their own sustainability (especially with respect to GHG emissions and energy consumption) can be addressed, building on credibility and reputation built on Items 1, 2 and 3.

#### CC2.1d

Please explain why you do not have a process in place for assessing and managing risks and opportunities from climate change, and whether you plan to introduce such a process in future

Main reason for not having a process

Do you plan to introduce a process?

Comment

#### CC2.2

Is climate change integrated into your business strategy?

Yes

#### CC2.2a

# Please describe the process of how climate change is integrated into your business strategy and any outcomes of this process

- 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 shorter term sustainability strategy (executed over the past 0-5 years) is dominated by the need to reduce our GHG emissions, to minimize risk to the business, and to build credibility/reputation in the marketplace. This shorter term sustainability strategy focused on climate change with a continuum of actions to attack this broad-based problem. 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 the capability to reduce GHG emissions if we did not use the solutions/products ourselves where 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.

Our long-term sustainability strategy is designed around reducing GHG emissions and energy consumption within Cisco and then for all of our customers. (Building a Circular Economy in network products and services is also critical!) Driving customer adoption is a long-term endeavor (next 0-10 years). There has been a perceptible shift in the last year of customers approaching Cisco through our account teams (not through sustainability channels) for help in reducing GHG emissions, improving energy efficiency and addressing energy consumption. Our long-term strategy has been to build Cisco reputation and the business case for reduced energy consumption and GHG emissions, both of which was expected to drive customer adoption. With increasing customer interest, we see this strategy had merit and is bearing fruit.

We have organized our products and solutions into four categories that can help reduce energy consumption:

- 1. energy management (e.g., EnergyWise/Joulex and the modernized grid)
- 2. remote collaboration (e.g., Cisco TelePresence, WebEx, unified communications, Jabber)
- 3. teleworking and mobility (e.g., Cisco Virtual Office, OfficeExtend, Cisco Connected Workplace)
- 4. cloud and data center (ASR, Nexus, XaaS)

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.

| CC2.2l | 0                                       |  |   |   |
|--------|---|--|---|---|
|        | Please explain why climate cha          | nge is not integrated into your busines                    | ss strategy                                     |   |
|        |   |  |   |   |
|        |   |  |   |   |
|        |   |  |   |   |
| CC2.3  |   |  |   |   |
|        | Do you engage in activities that apply) | could either directly or indirectly influ                  | ence public policy on climate cha               | ange through any of the following? (tick all that               |
|        | Other                                   |  |   |   |
|        |   |  |   |   |
| CC2.3a |   |  |   |   |
| GG2.3  | 1                                       |  |   |   |
|        | On what issues have you been of         | engaging directly with policy makers?                      |   |   |
|        | Focus of legislation Corporate Position |  | Details of engagement                           | Proposed legislative solution                                   |
|        |   |  |   |   |
| 000 01 |   |  |   |   |
| CC2.3I | 0                                       |  |   |   |
|        | Are you on the Board of any trace       | de associations or provide funding bey                     | ond membership?                                 |   |
|        |   |  |   |   |
| CC2.30 |   |  |   |   |
| 002.30 | •                                       |  |   |   |
|        | Please enter the details of those       | trade associations that are likely to ta                   | ke a position on climate change                 | legislation   |
|        | Trade association                       | Is your position on climate change consistent with theirs? | Please explain the trade association's position | How have you, or are you attempting to, influence the position? |
|        |   |  |   |   |

#### CC2.3d

Do you publically disclose a list of all the research organizations that you fund?

#### CC2.3e

Do you fund any research organizations to produce or disseminate public work on climate change?

#### CC2.3f

Please describe the work and how it aligns with your own strategy on climate change

# CC2.3g

## 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.

#### CC2.3h

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 (SBP). 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 theaters (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.

CC2.3i

Please explain why you do not engage with policy makers

#### **Further Information**

# Page: CC3. Targets and Initiatives

# CC3.1

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

Absolute target

CC3.1a

# Please provide details of your absolute target

| ID   | Scope                          | % of<br>emissions in<br>scope | %<br>reduction<br>from base<br>year | Base<br>year | Base year<br>emissions<br>(metric<br>tonnes<br>CO2e) | Target<br>year | Comment   |
|------|--------------------------------|-------------------------------|-------------------------------------|--------------|--|----------------|---|
| Abs1 | Scope 1+2                      | 100%                          | 40%                                 | 2007         | 436489   | 2017           | Our current target was announced in February 2013 to reduce all Scope 1, 2, and business-air-travel Scope 3 GHG emissions worldwide by 40 percent absolute by FY2017 based on a FY2007 baseline. (http://blogs.cisco.com/csr/cisco-announces-new-greenhouse-gas-reduction-goals/) |
| Abs2 | Scope 3:<br>Business<br>travel | 100%                          | 40%                                 | 2007         | 205796   | 2017           | Our current target was announced in February 2013 to reduce all Scope 1, 2, and business-air-travel Scope 3 GHG emissions worldwide by 40 percent absolute by FY2017 based on a FY2007 baseline. (http://blogs.cisco.com/csr/cisco-announces-new-greenhouse-gas-reduction-goals/) |

CC3.1b

Please provide details of your intensity target

| ID | Scope | % of emissions in scope | % reduction from base year | Metric | Base year | Normalized base year emissions | Target year | Comment |
|----|-------|-------------------------|----------------------------|--------|-----------|--------------------------------|-------------|---------|
|    |       |                         |                            |        |           |                                |             |         |

# CC3.1c

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

| ID | Direction of change anticipated in absolute Scope 1+2 emissions at target completion? | % change anticipated in absolute Scope 1+2 emissions | Direction of change anticipated in absolute Scope 3 emissions at target completion? | % change anticipated in absolute Scope 3 emissions | Comment |
|----|---|--|---|--|---------|
|    |   |  |   |  |         |

# CC3.1d

For all of your targets, please provide details on the progress made in the reporting year

| ID   | % complete<br>(time) | % complete<br>(emissions) | Comment   |
|------|----------------------|---------------------------|---|
| Abs1 | 20%                  | 70%                       |   |
| Abs2 | 20%                  | 0%                        | Emissions from air travel have increased over the last fiscal year but still meet our first, five-year FY2012 reduction goal of 25%. We are studying the business drivers behind the increased air travel. We will be implementing new air-travel reduction initiatives in the current calendar year. |

# CC3.1e

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

#### CC3.2

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

Yes

#### CC3.2a

Please provide details of how the use of your goods and/or services directly enable GHG emissions to be avoided by a third party

i. Whether avoided emissions represent the third party's Scope 1 emissions, Scope 2 emissions, or both;

The use of Cisco products can reduce Scope 1 (purchased fuel), Scope 2 (purchased electricity) and Scope 3 (transportation / business travel) emissions (although Scope 3 has been taken out of question scope for 2014).

ii. How emissions avoided:

Products such as Cisco EnergyWise can reduce electricity use and GHG emissions through improved monitoring and control of electricity-powered, network-enabled equipment. Equipment can be shut down or changed to a lower-power state over the network using EnergyWise protocols

Another example is cloud services and data center equipment that enables the cloud. In general, the "cloud" benefits the environment by increasing IT equipment utilization, resulting in less wasted energy from equipment in idle or low-work states.

iii. An estimate of the amount of emissions that are/were avoided over time

A typical use of Cisco EnergyWise is to power down IP phones outside of business hours. Even though IP phones consume relatively little power, they are installed in high volume and the total energy consumption is high. When EnergyWise is used to put Cisco IP phones into deep sleep, energy consumption drops by around 95%. Over a 5-day business week where offices are in use 12 hrs/day, energy consumption is reduced by about 65%.

In a large, very well designed and provisioned data center installation, equipment utilization can be 75-85%. As applications are migrated to the cloud or the consolidated data center, previous equipment often operating below 25% utilization is decommissioned. Comparing similar network, server and storage functionality before and after consolidation, a two-thirds savings is seen. (In practice, large data center consolidations can take a year or more, and in that time, network traffic, server and storage load all increase, but the new installation will continue to be three times more efficient than if the increased load were serviced in an old-style implementation.

## iv. Methodology, assumptions, EFs and GWP

There is a draft supplement to the GHG Protocol Scope 3 and Product standards for ICT equipment. This supplement addresses "Scope 3" emissions from the perspective of an IT OEM or solution provider, but these Scope 3 emissions are customer Scope 2 (and 1) emissions, so would be in scope of this question.

- v. 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 CO2 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).

#### CC3.3

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

Yes

#### CC3.3a

Please identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings

| Stage of development | Number of projects | Total estimated annual CO2e savings in metric tonnes<br>CO2e (only for rows marked *) |
|----------------------|--------------------|---|
| Under investigation  | 133                | 0   |

| Stage of development      | Number of projects | Total estimated annual CO2e savings in metric tonnes<br>CO2e (only for rows marked *) |
|---------------------------|--------------------|---|
| To be implemented*        | 60                 | 4896  |
| Implementation commenced* | 14                 | 1549  |
| Implemented*              | 106                | 444203  |
| Not to be implemented     | 5                  | 0   |

CC3.3b

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

| Activity<br>type                              | Description of activity  | Estimated<br>annual<br>CO2e<br>savings<br>(metric<br>tonnes<br>CO2e) | Annual<br>monetary<br>savings<br>(unit<br>currency<br>- as<br>specified<br>in CC0.4) | Investment<br>required<br>(unit<br>currency -<br>as<br>specified<br>in CC0.4) | Payback<br>period | Estimated<br>lifetime of the<br>initiative, years  | Comment  |
|---|--|--|--|---|-------------------|--|--|
| Energy<br>efficiency:<br>Building<br>services | 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 | 33500  | 8300000  | 13700000  | 1-3<br>years      | The lifetime of the various projects implemented within this initiative vary from two to over ten years. | 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 |

| Activity<br>type | Description of activity  | Estimated<br>annual<br>CO2e<br>savings<br>(metric<br>tonnes<br>CO2e) | Annual<br>monetary<br>savings<br>(unit<br>currency<br>- as<br>specified<br>in CC0.4) | Investment<br>required<br>(unit<br>currency -<br>as<br>specified<br>in CC0.4) | Payback<br>period | Estimated<br>lifetime of the<br>initiative, years | Comment  |
|------------------|--|--|--|---|-------------------|---|--|
|                  | FY2013, the following types of projects were implemented through this global energy management team: - implementing retro-commissioning projects, - performing building and lab-specific energy audits, - installing variable frequency drives (VFDs), - improving lighting efficiency through lamp replacements, - 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 2-10 years depending on the measure. In FY2013, Cisco estimates that it conserved approximately 76.5 million kWh of energy and avoided 33,500 metric tonnes of CO2e emissions. It is important to note that through Cisco's multi-year investment in |  |  |   |                   |   | FY2013, the following types of projects were implemented through this global energy management team: - implementing retro-commissioning projects, - performing building and lab-specific energy audits, - installing variable frequency drives (VFDs), - improving lighting efficiency through lamp replacements, - 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 2-10 years depending on the measure. |

| Activity<br>type                   | Description of activity  | Estimated<br>annual<br>CO2e<br>savings<br>(metric<br>tonnes<br>CO2e) | Annual<br>monetary<br>savings<br>(unit<br>currency<br>- as<br>specified<br>in CC0.4) | Investment<br>required<br>(unit<br>currency -<br>as<br>specified<br>in CC0.4) | Payback<br>period | Estimated<br>lifetime of the<br>initiative, years          | Comment  |
|------------------------------------|--|--|--|---|-------------------|--|--|
|                                    | energy conservation projects since FY2009, Cisco estimates it is now saving approximately 177 million kWh of energy and avoiding 72,800 metric tonne CO2e each year. This is expected to continue to rise each year as Cisco continues to invest in energy conservation projects year over year.   |  |  |   |                   |  |  |
| Energy<br>efficiency:<br>Processes | 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 520 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 child care center. | 520  | 224000   | 1100000   | 4-10<br>years     | The lifetime of this initiative is approximately 10 years. | 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 520 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 child care center. |
| Low carbon energy                  | To reduce scope 2 emissions,<br>Cisco has increased its voluntary  | 410000   | 0  | 354000  | >25<br>years      | The lifetime of this initiative is                         | To reduce scope 2 emissions,<br>Cisco has increased its voluntary  |

| Activity<br>type | Description of activity   | Estimated<br>annual<br>CO2e<br>savings<br>(metric<br>tonnes<br>CO2e) | Annual<br>monetary<br>savings<br>(unit<br>currency<br>- as<br>specified<br>in CC0.4) | Investment<br>required<br>(unit<br>currency -<br>as<br>specified<br>in CC0.4) | Payback<br>period | Estimated<br>lifetime of the<br>initiative, years | Comment  |
|------------------|---|--|--|---|-------------------|---|--|
| purchase         | 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 FY2013, Cisco purchased 523,000 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 ninth 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. |  |  |   |                   | approximately 1 year.                             | 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 FY2013, Cisco purchased 523,000 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 ninth 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. |

| Activity<br>type                     | Description of activity  | Estimated<br>annual<br>CO2e<br>savings<br>(metric<br>tonnes<br>CO2e) | Annual<br>monetary<br>savings<br>(unit<br>currency<br>- as<br>specified<br>in CC0.4) | Investment<br>required<br>(unit<br>currency -<br>as<br>specified<br>in CC0.4) | Payback<br>period | Estimated<br>lifetime of the<br>initiative, years          | Comment  |
|--------------------------------------|--|--|--|---|-------------------|--|--|
| Low carbon<br>energy<br>installation | 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 FY2013 GHG emissions by approximately 200 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 has already installed additional solar PV systems in FY14 and is planning more onsite power systems in FY15 and beyond. | 170  | 16000  | 1000000   | 4-10<br>years     | The lifetime of this initiative is approximately 25 years. | 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 FY2013 GHG emissions by approximately 200 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 has already installed additional solar PV systems in FY14 and is planning more onsite power systems in FY15 and beyond. |

# CC3.3c

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

| Method   | Comment  |
|--|--|
| Lower return on investment (ROI) specification | Cisco has an average 4.9 year average 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. All projects collectively funded to achieve Cisco's 40 percent GHG reduction goal from FY13 through FY17 must collectively average a 4.9 year simple payback so higher payback projects (e.g. purchasing renewable energy or installing solar) must be offset with lower payback projects (e.g. lighting and HVAC upgrades). |
| 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.  |

# CC3.3d

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

# **Further Information**

Page: CC4. Communication

# CC4.1

Have you published information about your organization'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 |
|-------------|------------------------|---------------------|
|             |                        |                     |

| Publication                            | Page/Section reference   | Attach the document  |
|--|--|--|
| In voluntary communications (complete) | p. F4 - F5 and p. F17 - F41 (2013<br>CSR Report Environment Chapter) | https://www.cdp.net/sites/2014/29/3329/Investor CDP 2014/Shared Documents/Attachments/CC4.1/20131118 Cisco CSR Report 2013 (Environment).pdf |

#### **Further Information**

Q4.1: Cisco's annual CSR report is published as a set together with our financial report at our annual shareholder meeting (early November 2013; next meeting is in November 2014). It is issued formally as a companion to the financial report but they are separate files. Additionally Cisco publishes information regarding our Sustainability efforts on our CSR blog at the following URL http://blogs.cisco.com/csr/

**Module: Risks and Opportunities** 

Page: CC5. Climate Change Risks

CC5.1

Have you identified any climate change risks 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

## CC5.1a

Please describe your risks driven by changes in regulation

| Risk driver                             | Description   | Potential<br>impact        | Timeframe    | Direct/<br>Indirect | Likelihood             | Magnitude<br>of impact | Estimated<br>financial<br>implications   | Management<br>method   | Cost of management   |
|---|---|----------------------------|--------------|---------------------|------------------------|------------------------|--|--|--|
| Fuel/energy<br>taxes and<br>regulations | 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 | Increased operational cost | 1 to 3 years | Direct              | About as likely as not | Low                    | 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. | - 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 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. Our base case scenario for growth in electricity usage, based on lab and data center facilities projections, assumes a single digit percentage increase. This increase represents a cost risk of about \$3M/yr. | 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. |

| Risk driver | Description  | Potential<br>impact | Timeframe | Direct/<br>Indirect | Likelihood | Magnitude<br>of impact | Estimated<br>financial<br>implications | Management<br>method | Cost of management |
|-------------|--|---------------------|-----------|---------------------|------------|------------------------|--|----------------------|--------------------|
|             | 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 this risk 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 |                     |           |                     |            |                        |  |                      |                    |

| Risk driver | Description   | Potential<br>impact | Timeframe | Direct/<br>Indirect | Likelihood | Magnitude<br>of impact | Estimated<br>financial<br>implications | Management<br>method | Cost of management |
|-------------|---|---------------------|-----------|---------------------|------------|------------------------|--|----------------------|--------------------|
|             | also impact product requirements and sales (if product requirements were not met). In the 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 |                     |           |                     |            |                        |  |                      |                    |

| Risk driver  | Description   | Potential<br>impact                     | Timeframe       | Direct/<br>Indirect | Likelihood           | Magnitude<br>of impact | Estimated<br>financial<br>implications   | Management<br>method  | Cost of management   |
|--|---|---|-----------------|---------------------|----------------------|------------------------|--|---|--|
|  | widespread<br>regulatory action<br>(and risk)   |   |                 |                     |                      |                        |  |   |  |
| Product<br>efficiency<br>regulations<br>and<br>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 realworld product power consumption) information continue to increase. Long term, the demand for improved | Reduced<br>demand for<br>goods/services | 1 to 3<br>years | Direct              | Virtually<br>certain | Medium                 | - 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 or customer requirements, or a viable market differentiation established. Impact on sales could be 5% based on customer | - Cisco has purchased compliance software to track product energy efficiency-related and product labeling regulations and standards 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 | - 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. |

| Risk driver  | Description  | Potential<br>impact                     | Timeframe       | Direct/<br>Indirect | Likelihood             | Magnitude<br>of impact | Estimated<br>financial<br>implications   | Management<br>method  | Cost of management   |
|--|--|---|-----------------|---------------------|------------------------|------------------------|--|---|--|
|  | 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 primary regions affected by product efficiency regulations and customer requirements that have the greatest potential to impact Cisco. |   |                 |                     |                        |                        | surveys of lost<br>sales, but<br>evidence is<br>anecdotal and<br>estimate is an<br>extrapolation.  | 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 that we've identified all key actions to address risk from product energy efficiency requirements and there will be no measurable impact on revenue from new product EE requirements. |  |
| Product<br>labeling<br>regulations<br>and<br>standards | There are numerous efforts underway (e.g., ETSI, IEC, iNemi, ITU, GHGP-WRI/WBCSD) looking at carbon accounting or product life cycle emissions (and  | Reduced<br>demand for<br>goods/services | 1 to 3<br>years | Direct              | About as likely as not | Medium                 | - Cisco considers the long-term risk from product carbon labeling (or footprinting) as relatively low (essentially zero for a ~\$50B company). | - 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 Cisco proposed and drove   | - Initial costs, including labor and LCA software are estimated to be less than USD 500K/yr to follow and participate in carbon footprinting |

| Risk driver | Description  | Potential<br>impact | Timeframe | Direct/<br>Indirect | Likelihood | Magnitude<br>of impact | Estimated<br>financial<br>implications  | Management<br>method   | Cost of management   |
|-------------|--|---------------------|-----------|---------------------|------------|------------------------|---|--|--|
|             | 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 |                     |           |                     |            |                        | Customer surveys show eco-labeling has lost favor, we suspect for more cost-effective, targeted product performance requirements. | the initiation of the GHG Protocol Scope 3 ICT Sector Supplement To quantify carbon footprints of our products, Cisco annually renews licenses for several lifecycle assessment software packages The most significant part of most network equipment carbon footprint is the use phase. Understanding and managing usephase 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 We believe that we have initiated prudent steps to address product carbon labeling/footprinting. However, none of these actions will impact the cost of | regulatory and standards activities - ATIS TEER testing requires specialized equipment and development team test time. Cumulative impact is estimated between \$1-5M/yr. |

| Risk driver | Description   | Potential<br>impact | Timeframe | Direct/<br>Indirect | Likelihood | Magnitude<br>of impact | Estimated<br>financial<br>implications | Management<br>method  | Cost of management |
|-------------|---|---------------------|-----------|---------------------|------------|------------------------|--|---|--------------------|
|             | 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 reduction efforts, ICT solutions adoption, and changing consumer behavior. |                     |           |                     |            |                        |  | 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. |                    |

| Risk<br>driver                                | Description  | Potential<br>impact              | Timeframe | Direct/<br>Indirect           | Likelihood | Magnitude<br>of impact | Estimated<br>financial<br>implications  | Management<br>method  | Cost of<br>management   |
|---|--|----------------------------------|-----------|-------------------------------|------------|------------------------|---|---|---|
| Induced<br>changes<br>in natural<br>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 | Increased<br>operational<br>cost | >6 years  | Indirect<br>(Supply<br>chain) | Unlikely   | Low                    | - 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 ~\$5b product cost and any potential CHANGE in material cost would be less than 1% of product cost Cisco currently does not identify water availability in our supply chain as a material risk in our financial reporting (<<1 cent/share earnings). | Water availability for the mining, oil extraction and semiconductor industries is a current and known issue. The impact on affected, supplychain companies is potentially material to their core business. These companies are typically have sophisticated risk management functions of their own. Cisco will continue to monitor water availability for its own operations, and has implemented measures to encourage water reporting by our partners (as we do for carbon). We have built our life cycle assessment capability to incorporate all inputs (including water). We | Labor and LCA software costs 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 to assess water risk is negligible (less than \$25,000). Most LCA costs accrue from our efforts to understand carbon footprinting, which is a more significant/material impact for Cisco. Unlike for carbon, Cisco is not being asked to provide a product life cycle analysis for water use. |

| Risk<br>driver | Description   | Potential<br>impact | Timeframe | Direct/<br>Indirect | Likelihood | Magnitude<br>of impact | Estimated<br>financial<br>implications | Management<br>method  | Cost of management |
|----------------|---|---------------------|-----------|---------------------|------------|------------------------|--|---|--------------------|
|                | availability could increase materials and manufacturing costs. Timeframe selected is ">6 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). |                     |           |                     |            |                        |  | believe this level of attention is adequate to monitor this longer term risk. Any impact on Cisco can be ameliorated through conservation, recycling and other alternatives already being implemented or under consideration. We actively encourage all 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. These reporting activities will help flush out unforeseen problems in the |                    |

| Risk<br>driver | Description | Potential<br>impact | Timeframe | Direct/<br>Indirect | Likelihood | Magnitude<br>of impact | Estimated<br>financial<br>implications | Management<br>method  | Cost of management |
|----------------|-------------|---------------------|-----------|---------------------|------------|------------------------|--|---|--------------------|
|                |             |                     |           |                     |            |                        |  | water supply chain. Physical risk to Cisco's subcontract manufacturing base, logistics and component suppliers is bounded by existing continuity of business planning scenarios and sound supply management practices. 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 cent/share earnings). |                    |

| Risk<br>driver | Description   | Potential<br>impact                     | Timeframe    | Direct/<br>Indirect | Likelihood | Magnitude<br>of impact | Estimated<br>Financial<br>Implications  | Management<br>method   | Cost of management   |
|----------------|---|---|--------------|---------------------|------------|------------------------|---|--|--|
| 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 enduse devices and | Reduced<br>demand for<br>goods/services | 1 to 3 years | Direct              | Unlikely   | Low-medium             | 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). | 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 - 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 - Cisco is continuously | - >\$230M/yr for Cisco-on-Cisco implementation over past sever years, split aborequally betwee CapEx and OpEx. These costs are offset completely by reduced operating expenses costs associate with CSR governance an reporting \$2.5M/yr recurring OpEx |

| Risk<br>driver | Description   | Potential<br>impact | Timeframe | Direct/<br>Indirect | Likelihood | Magnitude<br>of impact | Estimated<br>Financial<br>Implications | Management<br>method   | Cost of management |
|----------------|---|---------------------|-----------|---------------------|------------|------------------------|--|--|--------------------|
|                | 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 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 fiveyear goals. These goals present an ongoing risk from |                     |           |                     |            |                        |  | improving our sustainability information software to better track and manage our data, design our initiatives, and report to our stakeholders We have instituted consistent governance for all CSR, including all GRI environmental indicators 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 - Cisco proposed and drove the creation of the GHG Protocol Scope 3 ICT Sector Supplement |                    |

| Risk<br>driver    | Description  | Potential<br>impact | Timeframe       | Direct/<br>Indirect | Likelihood       | Magnitude<br>of impact | Estimated<br>Financial<br>Implications | Management<br>method  | Cost of management         |
|-------------------|--|---------------------|-----------------|---------------------|------------------|------------------------|--|---|----------------------------|
|                   | 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 o |                     |                 |                     |                  |                        |  | initiative 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. |                            |
| Changing consumer | Even without regulation,   | Reduced demand for  | Up to 1<br>year | Direct              | Very<br>unlikely | Medium-<br>high        | Cisco considers the long-term risk     | - Cisco tracks, via various forms of  | - Relevant consumer/market |

| Risk<br>driver | Description   | Potential<br>impact | Timeframe | Direct/<br>Indirect | Likelihood | Magnitude<br>of impact | Estimated<br>Financial<br>Implications  | Management<br>method  | Cost of management   |
|----------------|---|---------------------|-----------|---------------------|------------|------------------------|---|---|--|
| behaviour      | requests from customers for product energy efficiency, product power consumption, and "carbon footprint" continue to increase. Carbon footprint is essentially the same as realworld 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 | goods/services      |           |                     |            |                        | 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. | 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 on-going, externally hosted corporate customersatisfaction 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 | 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. |

| Risk<br>driver | Description  | Potential<br>impact | Timeframe | Direct/<br>Indirect | Likelihood | Magnitude<br>of impact | Estimated<br>Financial<br>Implications | Management<br>method  | Cost of management |
|----------------|--|---------------------|-----------|---------------------|------------|------------------------|--|---|--------------------|
|                | customer preference actual purchasing decisionis 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 |                     |           |                     |            |                        |  | (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 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 carbonpositive 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 |                    |

| Risk<br>driver | Description  | Potential<br>impact | Timeframe | Direct/<br>Indirect | Likelihood | Magnitude<br>of impact | Estimated<br>Financial<br>Implications | Management<br>method  | Cost of management |
|----------------|--|---------------------|-----------|---------------------|------------|------------------------|--|---|--------------------|
|                | product breadth, it is in fact likely that Cisco can better 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 |                     |           |                     |            |                        |  | assess product energy efficiency, product carbon footprint, and the carbon impact of Cisco solutions at actual Cisco customers It is believed this risk can be essentially eliminated within 3-4 years as solutions adoption continues and metrics improve. |                    |

| Risk<br>driver | Description  | Potential<br>impact | Timeframe | Direct/<br>Indirect | Likelihood | Magnitude<br>of impact | Estimated<br>Financial<br>Implications | Management<br>method | Cost of management |
|----------------|--|---------------------|-----------|---------------------|------------|------------------------|--|----------------------|--------------------|
|                | 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. |                     |           |                     |            |                        |  |                      |                    |

CC5.1d

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

#### CC5.1e

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

#### CC5.1f

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

#### **Further Information**

**Page: CC6. Climate Change Opportunities** 

#### CC6.1

Have you identified any climate change opportunities 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

CC6.1a

Please describe your opportunities that are driven by changes in regulation

| Opportunit<br>y driver            | Description  | Potential impact                | Timefram<br>e   | Direct/Indirec<br>t  | Likelihoo<br>d | Magnitud<br>e of<br>impact | Estimated<br>financial<br>implications  | Management<br>method  | Cost of managemen t  |
|-----------------------------------|--|---------------------------------|-----------------|----------------------|----------------|----------------------------|---|---|--|
| Renewable<br>energy<br>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 A modernized grid infrastructure helps utility companies | New products/busines s services | Up to 1<br>year | Indirect<br>(Client) | Very likely    | Medium                     | Cisco opportunity could exceed \$1B. A report from Newton- Evans estimates the market at \$7- 12B over the next 5 years for communication s infrastructure related to grid and energy management. Cisco plans 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 | - Cisco and 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 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) | Cisco has invested >>\$10M/yr OpEx in our Connected Energy Network BU since 2009 and will continue to invest in and build this business. We foresee this business unit to continue indefinitely to meet the challenges of revamping the world's electricity grids. Cisco's clean technology solutions are centered in our Emerging Technologies Business Group (ETBG). |

| Opportunit<br>y driver | Description   | Potential impact | Timefram<br>e | Direct/Indirec<br>t | Likelihoo<br>d | Magnitud<br>e of<br>impact | Estimated<br>financial<br>implications  | Management<br>method  | Cost of managemen t   |
|------------------------|---|------------------|---------------|---------------------|----------------|----------------------------|---|---|---|
|                        | 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 dispersed or intermittent renewable generation (supply) and adding hybrid/electric vehicles to the utility grid (demand) 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 |                  |               |                     |                |                            | PHEV and all electric vehicles (and associated government provided incentives). | and bringing intelligence to routers so that the network can manage itself 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- | etage is responsible for cultivating new businesses that can drive \$1B of revenue in 5-7 years and take Cisco into new adjacent markets. |

| Opportunit<br>y driver | Description   | Potential impact | Timefram<br>e | Direct/Indirec<br>t | Likelihoo<br>d | Magnitud<br>e of<br>impact | Estimated<br>financial<br>implications | Management<br>method   | Cost of managemen t |
|------------------------|---|------------------|---------------|---------------------|----------------|----------------------------|--|--|---------------------|
|                        | time to permit use of lower-carbon sources of electricity 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 goal Cisco's role in |                  |               |                     |                |                            |  | 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 Cisco is an active participant in all modernized-grid-related standards development activities. 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. |                     |

| Opportunit<br>y driver | Description  | Potential impact | Timefram<br>e | Direct/Indirec<br>t | Likelihoo<br>d | Magnitud<br>e of<br>impact | Estimated financial implications | Management<br>method | Cost of<br>managemen<br>t |
|------------------------|--|------------------|---------------|---------------------|----------------|----------------------------|----------------------------------|----------------------|---------------------------|
|                        | the modernized grid market is designing and implementing the secure communication s fabric that will reach every device and that is required for grid monitoring and control to function. This communication s 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: - University of Oxford review indicated modernized grid-enabled metering can provide a 5-15% reduction due to end-user awareness - A |                  |               |                     |                |                            |                                  |                      |                           |

| Opportunit<br>y driver | Description   | Potential impact | Timefram<br>e | Direct/Indirec<br>t | Likelihoo<br>d | Magnitud<br>e of<br>impact | Estimated financial implications | Management<br>method | Cost of managemen t |
|------------------------|---|------------------|---------------|---------------------|----------------|----------------------------|----------------------------------|----------------------|---------------------|
|                        | 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. |                  |               |                     |                |                            |                                  |                      |                     |

# CC6.1b Please describe the opportunities that are driven by changes in physical climate parameters

| Opportuni<br>ty driver                | Description  | Potential<br>impact  | Timefra<br>me | Direct<br>/<br>Indire<br>ct | Likeliho<br>od             | Magnitu<br>de of<br>impact | Estimated<br>financial<br>implications  | Management method   | Cost of management   |
|---------------------------------------|--|--|---------------|-----------------------------|----------------------------|----------------------------|---|---|--|
| Other physical climate opportuniti es | Cisco sells products<br>and solutions that<br>provide or improve: -<br>emergency response<br>- promote security -<br>allow remote working<br>or collaboration. | Increased<br>demand for<br>existing<br>products/servi<br>ces | >6 years      | Indirec<br>t<br>(Client     | More<br>likely<br>than not | Medium                     | The internet-<br>enabled<br>security,<br>surveillance<br>and<br>emergency<br>communicatio | Cisco develops and sells products that provide or improve: 1. emergency response 2. promote security 3. allow remote working or collaboration The following product | Cisco has<br>invested ><br>\$10B, mostly in<br>OpEx, in the<br>products listed<br>over the last 5<br>years. This |

| Opportuni<br>ty driver | Description  | Potential<br>impact | Timefra<br>me | Direct<br>/<br>Indire<br>ct | Likeliho<br>od | Magnitu<br>de of<br>impact | Estimated<br>financial<br>implications  | Management method   | Cost of management   |
|------------------------|--|---------------------|---------------|-----------------------------|----------------|----------------------------|---|---|--|
|                        | Severe weather eventssuch as Tropical Storm Sandyrequire 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: - Changes in temperature extremes - Changes in precipitation extremes and |                     |               |                             |                |                            | ns market is more than \$10B/yr and growing. Cisco product revenue from Security was ~\$1.3B (see Investor Relations website). Remote collaboration along with desktop conferencing and teleworking, are each ~\$2B opportunities. Teleworking has a potential market >25M workers. Per worker spend can be \$200-500. These technologies increase ISP traffic driving demand for Cisco products. | 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) Cisco IPICS Dispatch Console Cisco IPICS Mobile Client 2. Security or access control products Cisco Physical Access Gateway Cisco Video Surveillance 2000/2500/2600/2900/4000/5000 Series IP Cameras Cisco Video Surveillance Manager Cisco Physical Security Operations Manager Cisco Video Analytics 3. Remote working or collaboration Cisco Virtual Office: end use device and infrastructure Cisco WebEx/MeetingPlace: client software and supporting infrastructure Cisco Tandberg: end use | includes the WebEx and Tandberg acquisitions, CapEx/investme nts 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. We continue to invest >>\$50M/yr (OpEx) for development and support of the products listed in the Methods used to manage risks/opportunities. |

| Opportuni<br>ty driver | Description  | Potential<br>impact | Timefra<br>me | Direct<br>/<br>Indire<br>ct | Likeliho<br>od | Magnitu<br>de of<br>impact | Estimated<br>financial<br>implications | Management method   | Cost of management |
|------------------------|--|---------------------|---------------|-----------------------------|----------------|----------------------------|--|---|--------------------|
|                        | droughts - Snow and ice. Over a longer time scale, changes to precipitation/tempera ture 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: - Changes in mean (average) temperature - Change in mean |                     |               |                             |                |                            |  | devices and infrastructure Cisco TelePresence: end use devices and infrastructure |                    |

| Opportuni<br>ty driver | Description   | Potential<br>impact | Timefra<br>me | Direct<br>/<br>Indire<br>ct | Likeliho<br>od | Magnitu<br>de of<br>impact | Estimated<br>financial<br>implications | Management method | Cost of management |
|------------------------|---|---------------------|---------------|-----------------------------|----------------|----------------------------|--|-------------------|--------------------|
|                        | (average) precipitation - 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. |                     |               |                             |                |                            |  |                   |                    |

| Opportuni<br>ty driver | Description  | Potential<br>impact | Timefra<br>me | Direct<br>/<br>Indire<br>ct | Likeliho<br>od | Magnitu<br>de of<br>impact | Estimated<br>financial<br>implications | Management method | Cost of management |
|------------------------|--|---------------------|---------------|-----------------------------|----------------|----------------------------|--|-------------------|--------------------|
|                        | 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. Worldwide weather has been atypical this year, and correlation with "climate change" is being raised credibly as a potential cause. |                     |               |                             |                |                            |  |                   |                    |

CC6.1c

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

| Opportunity<br>driver       | Description  | Potential impact   | Timeframe       | Direct/<br>Indirect  | Likelihood        | Magnitude<br>of impact | Estimated financial implications  | Management<br>method   | Cost of management   |
|-----------------------------|--|--|-----------------|----------------------|-------------------|------------------------|---|--|--|
| Changing consumer behaviour | There is tremendous opportunity to reduce GHG emissions if (a big if) consumer and customer behavior | Increased<br>demand for<br>existing<br>products/services | Up to 1<br>year | Indirect<br>(Client) | Virtually certain | Medium                 | Remote<br>collaboration<br>along with<br>desktop<br>conferencing<br>and<br>teleworking, | Cisco has<br>established BUs<br>(with profit/loss<br>responsibility) to<br>develop products<br>that address ever<br>widening scopes of | Cisco has<br>invested more<br>than \$10B in<br>the products<br>listed over the<br>last 5 years, at<br>least 60% in |

| Opportunity driver | Description   | Potential impact | Timeframe | Direct/<br>Indirect | Likelihood | Magnitude<br>of impact | Estimated financial implications   | Management<br>method  | Cost of management  |
|--------------------|---|------------------|-----------|---------------------|------------|------------------------|--|---|---|
|                    | 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 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 |                  |           |                     |            |                        | are each ~\$2B opportunities. Teleworking has a potential market >25M workers. Per worker spend can be \$200-500. These technologies increase ISP traffic driving demand for Cisco products. | personal interactions. The goal is to reach a critical level of functionality that effectively substitutes for physical travel and commuting. To speed time to market, Cisco includes technology and product acquisitions in its business portfolio. 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. Cisco has developed calculators for the following products: Connected Buildings, | 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. |

| Opportunity<br>driver | Description   | Potential impact | Timeframe | Direct/<br>Indirect | Likelihood | Magnitude<br>of impact | Estimated financial implications | Management<br>method  | Cost of management |
|-----------------------|---|------------------|-----------|---------------------|------------|------------------------|----------------------------------|---|--------------------|
|                       | references two main sources when reviewing the sources of energy-related GHG emissions:  1. U.S. Energy Information Agency (EIA) 2. International Energy Agency (IEA) 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 |                  |           |                     |            |                        |                                  | Connected Workplace, Remote Collaboration (TelePresence and WebEx) and Cisco Virtual Office/Teleworking. An additional, stand-alone, web- based calculator for TelePresence is also released for mobile phones and web browsers. 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. For example, Cisco proposed and drove the initiation of the GHG Protocol Scope 3 ICT Sector Supplement, which |                    |

| Opportunity driver | Description   | Potential impact | Timeframe | Direct/<br>Indirect | Likelihood | Magnitude<br>of impact | Estimated financial implications | Management<br>method   | Cost of management |
|--------------------|---|------------------|-----------|---------------------|------------|------------------------|----------------------------------|--|--------------------|
|                    | emissions from power generation, which is a different slice of this same data, represents about 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: - Buildings (energy management): Cisco EnergyWise, Smart+Connected buildings, modernized grid/Connected Energy Networks - Buildings (cloud, data center): host collaboration solutions (HCS), Cisco server and data center network products - Transportation (remote collaboration): |                  |           |                     |            |                        |                                  | will codify in an international standard the best known practices for the carbon impact from ICT products. |                    |

| Opportunity driver | Description   | Potential impact | Timeframe | Direct/<br>Indirect | Likelihood | Magnitude<br>of impact | Estimated financial implications | Management<br>method | Cost of management |
|--------------------|---|------------------|-----------|---------------------|------------|------------------------|----------------------------------|----------------------|--------------------|
|                    | Cisco TelePresence, Cisco WebEx, Unified Communications - Transportation (teleworking): Cisco Virtual Office, OfficeExtend, Cisco Connected Workplace, Unified Communications 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 power infrastructure, these opportunities are |                  |           |                     |            |                        |                                  |                      |                    |

| Opportunity<br>driver | Description  | Potential impact | Timeframe | Direct/<br>Indirect | Likelihood | Magnitude<br>of impact | Estimated financial implications | Management<br>method | Cost of management |
|-----------------------|--|------------------|-----------|---------------------|------------|------------------------|----------------------------------|----------------------|--------------------|
|                       | abundant,<br>available now, and<br>will grow for<br>decades. |                  |           |                     |            |                        |                                  |                      |                    |

#### CC6.1d

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

#### CC6.1e

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

#### CC6.1f

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

#### **Further Information**

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

**Page: CC7. Emissions Methodology** 

#### CC7.1

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

| Base year                            | Scope 1 Base year<br>emissions (metric tonnes<br>CO2e) | Scope 2 Base<br>year emissions (metric<br>tonnes CO2e) |
|--------------------------------------|--|--|
| Tue 01 Aug 2006 - Tue 31<br>Jul 2007 | 50578  | 451647   |

#### CC7.2

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)

## CC7.2a

If you have selected "Other" in CC7.2 please provide details of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

## CC7.3

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) |

## CC7.4

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

| Fuel/Material/Energy | Emission<br>Factor | Unit      | Reference   |
|----------------------|--------------------|-----------|---|
| Natural gas          | 14.47              | Other: kg | http://www.epa.gov/climateleadership/documents/resources/stationarycombustionguidance.pdf |

| Fuel/Material/Energy          | Emission<br>Factor | Unit                    | Reference   |
|-------------------------------|--------------------|-------------------------|---|
|                               |                    | C/MMBTU                 |   |
| Distillate fuel oil No 2      | 19.95              | Other: kg<br>C/MMBTU    | http://www.epa.gov/climateleadership/documents/resources/stationarycombustionguidance.pdf |
| Propane                       | 17.20              | Other: kg<br>C/MMBTU    | http://www.epa.gov/climateleadership/documents/resources/stationarycombustionguidance.pdf |
| Other: Unleaded Gasoline Fuel | 8.81               | Other: kg<br>CO2/gallon | http://www.epa.gov/climateleadership/documents/resources/mobilesource_guidance.pdf        |
| Diesel/Gas oil                | 10.15              | Other: kg<br>CO2/gallon | http://www.epa.gov/climateleadership/documents/resources/mobilesource_guidance.pdf        |

#### **Further Information**

Cisco's response to scope 2 emissions listed 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 385,911 tCO2e. Also, the attached document is a list of electricity emission factors utilized by Cisco to complete its GHG inventory. The references for these factors are the International Energy Agency, EPA eGrid and the Energy Information Administration: IEA: http://www.iea.org/publications/freepublications/publication/name,32870,en.html eGRID: http://www.epa.gov/cleanenergy/energy-resources/egrid/index.html EIA (for international CH4 and N2O country factors): http://www.eia.gov/survey/form/eia\_1605/emission\_factors.html

#### **Attachments**

https://www.cdp.net/sites/2014/29/3329/Investor CDP 2014/Shared

Documents/Attachments/InvestorCDP2014/CC7.EmissionsMethodology/eGRID2007V1\_1\_year05\_SummaryTables.pdf

https://www.cdp.net/sites/2014/29/3329/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC7.EmissionsMethodology/IEA CO2highlights 140618.xls

https://www.cdp.net/sites/2014/29/3329/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC7.EmissionsMethodology/electricity\_factors\_99-02country.xls

Page: CC8. Emissions Data - (29 Jul 2012 - 29 Jul 2013)

|       | Please select the boundary you are using for your Scope 1 and 2 greenhouse gas inventory   |  |
|-------|--|--|
|       | Operational control  |  |
| CC8.2 | 2  |  |
|       | Please provide your gross global Scope 1 emissions figures in metric tonnes CO2e   |  |
|       | 55811  |  |
| CC8.3 | 3  |  |
|       | Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e   |  |
|       | 666393   |  |
| CC8.4 |  |  |
|       | Are there are any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure? |  |
|       | No   |  |
| CC8.4 | ła   |  |
|       | Please provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure  |  |

| Source | Relevance of Scope 1 emissions from this source | Relevance of Scope 2 emissions excluded from this source | Explain why the source is excluded |
|--------|---|--|------------------------------------|
|--------|---|--|------------------------------------|

# CC8.5

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<br>emissions:<br>Uncertainty<br>range | Scope 1<br>emissions:<br>Main sources<br>of uncertainty  | Scope 1 emissions: Please expand on the uncertainty in your data   | Scope 2<br>emissions:<br>Uncertainty<br>range | Scope 2<br>emissions:<br>Main sources<br>of uncertainty  | Scope 2 emissions: Please expand on the uncertainty in your data   |
|---|--|--|---|--|--|
| More than 2% but less than or equal to 5%     | Extrapolation<br>Metering/<br>Measurement<br>Constraints | Cisco has very complete real estate records of all Cisco offices and facilities and was able to collect energy and GHG emissions data for approximately 94% of its Scope 1 emissions in FY2013. 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 6% of its Scope 1 GHG emissions and as a result, strongly believes our uncertainty range is well under 5%. | Less than or equal to 2%                      | Extrapolation<br>Metering/<br>Measurement<br>Constraints | Cisco has very complete real estate records of all Cisco offices and facilities and is able to collect electricity data for approximately 96% of its Scope 2 emissions in FY2013. 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 4% of its Scope 2 GHG emissions and as a result, strongly believes our uncertainty range is well under 2%. |

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

Third party verification or assurance complete

#### CC8.6a

Please provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements

| Type of verification or assurance | Attach the statement  | Page/section<br>reference | Relevant<br>standard | Proportion of<br>reported Scope 1<br>emissions verified<br>(%) |
|-----------------------------------|---|---------------------------|----------------------|--|
| Limited assurance                 | https://www.cdp.net/sites/2014/29/3329/Investor CDP 2014/Shared Documents/Attachments/CC8.6a/Cisco 2013 Inventory Assurance Review Letter (Scope 1 2) FINAL.pdf | Page 1                    | ISO14064-3           | 100  |

#### CC8.6b

Please provide further details of the regulatory regime to which you are complying that specifies the use of Continuous Emissions Monitoring Systems (CEMS)

| Regulation | % of emissions covered by the system | Compliance period | Evidence of submission |
|------------|--------------------------------------|-------------------|------------------------|
|            |                                      |                   |                        |

#### CC8.7

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

# CC8.7a

Please provide further details of the verification/assurance undertaken for your Scope 2 emissions, and attach the relevant statements

| Type of verification or assurance | Attach the statement  | Page/Section reference | Relevant<br>standard | Proportion of<br>Scope 2<br>emissions verified<br>(%) |
|-----------------------------------|---|------------------------|----------------------|---|
| Limited assurance                 | https://www.cdp.net/sites/2014/29/3329/Investor CDP 2014/Shared Documents/Attachments/CC8.7a/Cisco 2013 Inventory Assurance Review Letter (Scope 1 2) FINAL.pdf | Page 1                 | ISO14064-3           | 100   |

## CC8.8

Please identify if any data points other than emissions figures have been verified as part of the third party verification work undertaken

| Additional data points verified   | Comment  |
|---|--|
| Other: All energy consumption data, some material utility bills, emission factors, emission calculations and methodology. | All energy consumption data, some material utility bills, emission factors, emission calculations and methodology. |

|       | Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?  |
|-------|---|
|       | No  |
| CC8.9 | da  |
|       | Please provide the emissions from biologically sequestered carbon relevant to your organization in metric tonnes CO2  |
|       |   |
| Furth | er 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 gower contracts and renewable energy certificates (RECs). Considering these purchases, Cisco's contractual scope 2 emissions in this reporting cycle is significantly lower at 256,714 tCO2e. |
| Attac | hments  |
|       | https://www.cdp.net/sites/2014/29/3329/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC8.EmissionsData(29Jul2012-29Jul2013 2013 Inventory Assurance Review Letter (Scope 1 2) FINAL.pdf  |
| Page  | : CC9. Scope 1 Emissions Breakdown - (29 Jul 2012 - 29 Jul 2013)  |
| CC9.  |   |
|       | Do you have Scope 1 emissions sources in more than one country?   |
|       | Yes   |
|       |   |
| CC9.1 | a a   |

## Please break down your total gross global Scope 1 emissions by country/region

| Country/Region           | Scope 1 metric tonnes CO2e |
|--------------------------|----------------------------|
| United States of America | 17887                      |
| Rest of world            | 37924                      |

#### CC9.2

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

#### CC9.2a

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

| Business division | Scope 1 emissions (metric tonnes CO2e) |
|-------------------|--|
|                   |  |

#### CC9.2b

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

| Facility | Scope 1 emissions (metric tonnes CO2e) | Latitude | Longitude |
|----------|--|----------|-----------|
|          |  |          |           |

## CC9.2c

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

| GHG type | Scope 1 emissions (metric tonnes CO2e) |
|----------|--|
|          |  |
|          |  |

## CC9.2d

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

| Activity | Scope 1 emissions (metric tonnes CO2e) |
|----------|--|
|          |  |

## CC9.2e

Please break down your total gross global Scope 1 emissions by legal structure

| Legal structure | Scope 1 emissions (metric tonnes CO2e) |
|-----------------|--|

| _  |      |     |      |         |
|----|------|-----|------|---------|
| _, | irti | nor | Into | rmation |
|    |      |     |      |         |

Page: CC10. Scope 2 Emissions Breakdown - (29 Jul 2012 - 29 Jul 2013)

## CC10.1

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

Yes

#### CC10.1a

Please break down your total gross global Scope 2 emissions and energy consumption by country/region

| 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 accounted for CC8.3 (MWh) |
|--------------------------|----------------------------|--|---|
| United States of America | 410893                     | 1054098  | 424912  |
| Rest of world            | 255500                     | 467043   | 97886   |

#### CC10.2

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

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

| Business division | Scope 2 emissions (metric tonnes CO2e) |
|-------------------|--|
|                   |  |

## CC10.2b

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

| Facility | Scope 2 emissions (metric tonnes CO2e) |
|----------|--|
|          |  |
|          |  |

#### CC10.2c

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

| Activity | Scope 2 emissions (metric tonnes CO2e) |
|----------|--|
|          |  |
|          |  |

#### CC10.2d

Please break down your total gross global Scope 2 emissions by legal structure

| - 1 | $\sim$ |   | al | 0 | 40 |   | 0 | 41 |   | pe. | _ |
|-----|--------|---|----|---|----|---|---|----|---|-----|---|
| -   | U      | У | aı | 2 | u  | u | U | u  | и | L   | C |

Scope 2 emissions (metric tonnes CO2e)

#### **Further Information**

Page: CC11. Energy

#### CC11.1

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

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

## CC11.2

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        | 241395  |
| Electricity | 1521141 |
| Heat        | 0       |
| Steam       | 0       |
| Cooling     | 0       |

#### CC11.3

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

| Fuels                        | MWh    |
|------------------------------|--------|
| Natural gas                  | 110958 |
| Diesel/Gas oil               | 53634  |
| Other: Mobile Diesel/Gas oil | 76639  |
| Propane                      | 164    |

# CC11.4

Please provide details of the electricity, heat, steam or cooling amounts that were accounted at a low carbon emission factor in the Scope 2 figure reported in CC8.3

| Basis for applying a low carbon emission factor   | MWh associated<br>with low carbon<br>electricity, heat,<br>steam or cooling | Comment  |
|---|---|--|
| Tracking instruments, RECS (USA)  | 423916  | 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  | 966   | Cisco participates in 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 programs 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  | 97866   | 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: CC12. Emissions Performance

## CC12.1

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

Increased

#### CC12.1a

Please identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined) and for each of them specify how your emissions compare to the previous year

| Reason                         | Emissions<br>value<br>(percentage) | Direction<br>of<br>change | Comment  |
|--------------------------------|------------------------------------|---------------------------|--|
| Emissions reduction activities | 13.5                               | Decrease                  | Due to the various emission reduction activities listed in Question 3.3b that Cisco implemented in FY2013, Cisco reduced its combined scope 1 and 2 emissions in FY2013 by approximately 34,000 tCO2e, which represents 13.5% of the emissions reported in FY2012. It is important to note that Cisco is including emission reductions achieved by purchasing low-carbon energy when comparing its FY2012 scope 1-2 emissions total (251,672 tCO2e) to the emission changes due to this activity (-34,000 tCO2e). In addition, since Cisco purchases a large amount of low-carbon energy each year, even small changes in emissions from these types of activities will result in high percentage changes as reported in this question.  |
| Divestment                     |                                    |                           |  |
| Acquisitions                   |                                    |                           |  |
| Mergers                        |                                    |                           |  |
| Change in output               | 24.7                               | Increase                  | Due to natural growth from FY2012 to FY2013 in Cisco's real estate portfolio, headcount, lab and data center space and testing equipment used in Cisco's labs and data centers, Cisco increased its scope 1 and 2 emissions in FY2013 by approximately 62,208 tCO2e, which represents 24.7% of the emissions reported in FY2012. It is important to note that Cisco is including emission reductions achieved by purchasing low-carbon energy when comparing its FY2012 scope 1-2 emissions total (251,672 tCO2e) to the emissions changes due to this activity (+62,208 tCO2e). In addition, since Cisco purchases a large amount of low carbon energy each year, even small changes in emissions from these types of activities will result in high percentage changes as reported in this question. |
| Change in methodology          |                                    |                           |  |
| Change in boundary             |                                    |                           |  |

| Reason                                  | Emissions<br>value<br>(percentage) | Direction<br>of<br>change | Comment  |
|---|------------------------------------|---------------------------|--|
| Change in physical operating conditions |                                    |                           |  |
| Unidentified                            |                                    |                           |  |
| Other                                   | 13.0                               | Increase                  | Other: Purchasing Low-Carbon Energy. In FY2013, Cisco did not purchase as much low-carbon energy compared to FY2012, which caused a 13.0% increase in emissions or 32,645 tCO2e in FY2013 compared to FY2012. It is important to note that Cisco is including emission reductions achieved by purchasing low-carbon energy when comparing its FY2012 scope 1-2 emissions total (251,672 tCO2e) to the emission changes due to this activity (+32,645 tCO2e). In addition, since Cisco purchases a large amount of low-carbon energy each year, even small changes in emissions from these types of activities will result in high percentage changes as reported in this question. |

# CC12.2 Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per unit currency total revenue

| Intensity<br>figure | Metric<br>numerator      | Metric<br>denominator | %<br>change<br>from<br>previous<br>year | Direction<br>of change<br>from<br>previous<br>year | Reason for change   |
|---------------------|--------------------------|-----------------------|---|--|---|
| 0.0000149           | metric<br>tonnes<br>CO2e | unit total<br>revenue | 1.3                                     | Decrease   | The intensity metric reported in this question does not include emission reductions from Cisco's purchase of low-carbon energy in FY2013 and FY2012. Instead, we have reported this same intensity metric inclusive of Cisco's low-carbon energy purchases in our response to Q12.4 below. When comparing this intensity metric from FY2012 to FY2013, Cisco estimates that the change in emissions intensity per revenue is due to the following primary factors: (1) increasing of Cisco's revenue, (2) implementing the various emission reduction activities in FY2013 listed in Question 3.3b and (3) incorporating local emission factors as an evaluation factor in site selection criteria. As stated in Q3.3b, the |

| Intensity<br>figure | Metric<br>numerator | Metric<br>denominator | %<br>change<br>from<br>previous<br>year | Direction<br>of change<br>from<br>previous<br>year | Reason for change   |
|---------------------|---------------------|-----------------------|---|--|---|
|                     |                     |                       |   |  | various emission reduction activities implemented in FY2013 included: - implementing retro-commissioning projects, - performing building and lab-specific energy audits, - installing variable frequency drives (VFDs), - improving lighting efficiency through lamp replacements, - 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. |

# CC12.3

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

| Intensity<br>figure | Metric<br>numerator      | Metric<br>denominator | %<br>change<br>from<br>previous<br>year | Direction<br>of change<br>from<br>previous<br>year | Reason for change   |
|---------------------|--------------------------|-----------------------|---|--|---|
| 9.16                | metric<br>tonnes<br>CO2e | FTE<br>employee       | 0.8                                     | Increase   | The intensity metric reported in this question does not include emission reductions from Cisco's purchase of low-carbon energy in FY2013 and FY2012. Instead, we have reported this same intensity metric inclusive of Cisco's low-carbon energy purchases in our response to Q12.4 below. When comparing this intensity metric from FY2012 to FY2013, Cisco estimates that the change in emissions intensity per full time equivalent (FTE) is due to the following primary factors: (1) general increase in regional electric grid emissions factors provided by IEA in FY2013 compared to FY2012, (2) natural growth from FY2012 to FY2013 in Cisco's real estate portfolio, lab and data center space and testing equipment |

| Intensity<br>figure | Metric<br>numerator | Metric<br>denominator | %<br>change<br>from<br>previous<br>year | Direction<br>of change<br>from<br>previous<br>year | Reason for change  |
|---------------------|---------------------|-----------------------|---|--|--|
|                     |                     |                       |   |  | used in Cisco's labs and data centers, which caused an increase in emissions that was slightly greater than the increase in Cisco's headcount and (3) and implementation of various emission reduction activities in FY2013 listed in Question 3.3b, which helped offset some of this increase in Cisco's emissions from FY2012 to FY2013. |

# CC12.4 Please provide an additional intensity (normalized) metric that is appropriate to your business operations

| Intensity<br>figure | Metric<br>numerator      | Metric<br>denominator | %<br>change<br>from<br>previous<br>year | Direction<br>of change<br>from<br>previous<br>year | Reason for change   |
|---------------------|--------------------------|-----------------------|---|--|---|
| 0.0343343           | metric<br>tonnes<br>CO2e | square foot           | 0.00                                    | No change  | The intensity metric reported in this question does not include emission reductions from Cisco's purchase of low-carbon energy in FY2013 and FY2012. When comparing this intensity metric from FY2012 to FY2013, Cisco estimates that its emissions intensity per square foot of occupied real estate space is due to the following primary factors: (1) general increase in regional electric grid emissions factors provided by IEA and the Government of India (Ministry of Power) in FY2013 compared to FY2012, (2) natural growth from FY2012 to FY2013 in Cisco's real estate portfolio, headcount, lab and data center space and testing equipment used in Cisco's labs and data centers and (3) implementing the various emission reduction activities in FY2013 listed in Question 3.3b. |
| 0.4381              |                          | megawatt hour (MWh)   | 2.2                                     | Increase   | The intensity metric reported in this question does not include emission reductions from Cisco's purchase of low-carbon energy in FY2013 and FY2012. We have reported this same intensity metric inclusive of Cisco's low-carbon energy purchases in our response   |

| Intensity<br>figure | Metric<br>numerator | Metric<br>denominator           | %<br>change<br>from<br>previous<br>year | Direction<br>of change<br>from<br>previous<br>year | Reason for change  |
|---------------------|---------------------|---------------------------------|---|--|--|
|                     |                     |                                 |   |  | directly below. 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 92 percent of our total scope 1+2 emissions in FY2013. 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 FY2012 to FY2013, Cisco estimates that the increase in scope 2 emissions intensity per Megawatt hour (exclusive of Cisco's low-carbon energy purchases) is due to the following primary factors: (1) general increase in regional electric grid emissions factors provided by IEA and the Government of India (Ministry of Power) in FY2013 compared to FY2012.  |
| 0.1688              |                     | megawatt hour<br>(MWh)          | 33.1                                    | Increase   | The intensity metric reported in this question does include emission reductions from Cisco's purchase of low-carbon energy in FY2013 and FY2012. We have reported this same intensity metric exclusive of Cisco's low-carbon energy purchases in our response directly above. 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 92 percent of our total scope 1+2 emissions in FY2013. 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 FY2012 to FY2013, Cisco estimates that the increase in scope 2 emissions intensity per Megawatt hour (inclusive of Cisco's low-carbon energy purchases) is due to the following primary factors: (1) decrease in Cisco's purchase of low-carbon energy in FY2013 compared to FY2012 and (2) general increase in regional electric grid emissions factors provided by IEA and the Government of India (Ministry of Power) in FY2013 compared to FY2012. |
| 0.0000064           |                     | Other: unit total revenue (USD) | 16.4                                    | Increase   | The intensity metric reported in this question does include emission reductions from Cisco's purchase of low-carbon energy in FY2013 and FY2012. We have reported this same intensity metric exclusive of Cisco's low-carbon energy purchases in our response to Q12.2 above. When comparing this intensity metric from FY2012 to FY2013, Cisco estimates that the change in emissions intensity per revenue is due to the following primary factors: (1) decrease in Cisco's purchase of low-carbon energy in   |

| Intensity<br>figure | Metric<br>numerator | Metric<br>denominator | %<br>change<br>from<br>previous<br>year | Direction<br>of change<br>from<br>previous<br>year | Reason for change  |
|---------------------|---------------------|-----------------------|---|--|--|
|                     |                     |                       |   |  | FY2013 compared to FY2012, (2) general increase in regional electric grid emissions factors provided by IEA and the Government of India (Ministry of Power) in FY2013 compared to FY2012, (3) natural growth from FY2012 to FY2013 in Cisco's real estate porftolio, headcount, lab and data center space and testing equipment used in Cisco's labs and data centers, and (4) implementation of various emission reduction activities in FY2013 listed in Question 3.3b, which helped offset some of this increase in Cisco's emissions from FY2012 to FY2013.  |
| 3.96                |                     | Other: FTE employee   | 20.0                                    | Increase   | The intensity metric reported in this question does include emission reductions from Cisco's purchase of low-carbon energy in FY2013 and FY2012. We have reported this same intensity metric exclusive of Cisco's low-carbon energy purchases in our response to Q12.3 above. When comparing this intensity metric from FY2012 to FY2013, Cisco estimates that the change in emissions intensity per full time equivalent (FTE) is due to the following primary factors: (1) decrease in Cisco's purchase of low-carbon energy in FY2013 compared to FY2012, (2) general increase in regional electric grid emissions factors provided by IEA and the Government of India (Ministry of Power) in FY2013 compared to FY2012, (3) natural growth from FY2012 to FY2013 in Cisco's real estate portfolio, lab and data center space and testing equipment used in Cisco's labs and data centers, and (3) natural growth from FY2012 to FY2013 in Cisco's real estate porftolio, headcount, lab and data center space and testing equipment used in Cisco's labs and data centers. |

## **Further Information**

**Page: CC13. Emissions Trading** 

CC13.1

Do you participate in any emissions trading schemes?

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

## CC13.1a

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

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

## CC13.1b

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

## CC13.2

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

No

## CC13.2a

Please provide details on the project-based carbon credits originated or purchased by your organization in the reporting period

| Credit origination Project or credit type purchase | Project<br>identification | Verified to which standard | Number of<br>credits (metric<br>tonnes of<br>CO2e) | Number of credits<br>(metric tonnes<br>CO2e): Risk adjusted<br>volume | Credits cancelled | Purpose, e.g.<br>compliance |
|--|---------------------------|----------------------------|--|---|-------------------|-----------------------------|
|--|---------------------------|----------------------------|--|---|-------------------|-----------------------------|

## **Further Information**

Page: CC14. Scope 3 Emissions

## CC14.1

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

| Sources of<br>Scope 3<br>emissions | Evaluatio<br>n status | metric<br>tonnes<br>CO2e | Emissions calculation methodology  | Percentag e of emissions calculated using primary data | Explanation |
|------------------------------------|-----------------------|--------------------------|--|--|-------------|
| Purchased<br>goods and<br>services | Relevant, calculated  | 1789692                  | Collected suppliers' scope 1 and 2 emissions (allocated to Cisco via financial allocation) from the CDP supply chain program (SC Q1.1), intensity data from the CDP investor survey (CC 12.2), or from an internal survey provided to the suppliers, and data is sorted by % spend. Suppliers include contract manufacturers, ODM/OEM manufacturers, and component suppliers. If a supplier did not provide data to Cisco via these means, then we calculated average emissions intensities (MT CO2e/\$ USD) by detailed supplier category types from suppliers who did provide data and then applied the intensities to the suppliers of the same category types who did not provide data. An overall average intensity was used for suppliers who did not fit into any specific category. Note that this data does not provide suppliers' scope 3 data, as the data is inconsistent in selected categories in scope 3. | 73.00%   |             |
| Capital<br>goods                   | Relevant, calculated  | 51731                    | Using guidance from the GHG Protocol, Scope 3 Standard, GHG emission data was estimated from fixed-asset reports for FY13. Fixed assets were categorized to align with categories listed in the economic input output LCA model (http://www.sustainabilityconsortium.org/open-io/use-the-model/). This model utilizes categories based on the North American Industrial Classification System and within each category, multiple sources of environmental data is joined with  | 0.00%  |             |

| Sources of<br>Scope 3<br>emissions   | Evaluatio<br>n status          | metric<br>tonnes<br>CO2e | Emissions calculation methodology  | Percentag e of emissions calculated using primary data | Explanation |
|--|--------------------------------|--------------------------|--|--|-------------|
|  |                                |                          | 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 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 FY13 that are still in use. More information on the open-IO model, methodology and sources is available at http://www.sustainabilityconsortium.org/open-io/resources/   |  |             |
| Fuel-and-<br>energy-<br>related<br>activities (not<br>included in<br>Scope 1 or 2) | Not<br>relevant,<br>calculated | 42536                    | The Energy Information Administration (EIA) estimates that approximately 6 percent of total electricity input in the US is lost to transmission and distribution (US Energy Information Administration, http://205.254.135.7/tools/faqs/faq.cfm?id=105&t=3). Cisco used this figure to estimate emissions associated with energy-related activities that are not included in Scope 2 emissions reported in FY2013.   | 100.00%  |             |
| Upstream<br>transportatio<br>n and<br>distribution                                 | Relevant, calculated           | 176725                   | 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. | 97.00%   |             |
| Waste generated in operations  | Not relevant, calculated       | 1368                     | Cisco used default GHG emission factors published in the EPA Waste Reduction Model version 12 (WARM - http://epa.gov/epawaste/conserve/tools/warm/Warm_Form.htm l) for different types of waste and recycled materials in order to   | 100.00%  |             |

| Sources of<br>Scope 3<br>emissions | Evaluatio<br>n status | metric<br>tonnes<br>CO2e | Emissions calculation methodology  | Percentag e of emissions calculated using primary data | Explanation   |
|------------------------------------|-----------------------|--------------------------|--|--|---|
|                                    |                       |                          | calculate scope 3 emissions from waste generated in our operations. These emission factors were then applied to Cisco's waste and and recycling amounts for both FY2012 and FY2013 to calculate a response for this question. The emission factors used include (1) -2.83 metric tonne CO2e/short ton of mixed recycling material that is recycled and (2) 0.53 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 fair with approximately 52% of all sites measured on a per square foot basis reporting their waste and recycling data in FY2013. 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.  |  |   |
| Business<br>travel                 | Relevant, calculated  | 153658                   | 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 FY2013, air travel information has been reported for 132 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 http://www.ghgprotocol.org/calculation-tools/all-tools. (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 improved EFs. Cisco maintains | 98.00%   | 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 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. |

| Sources of<br>Scope 3<br>emissions                   | Evaluatio<br>n status                        | metric<br>tonnes<br>CO2e | Emissions calculation methodology  | Percentag e of emissions calculated using primary data | Explanation   |
|--|--|--------------------------|--|--|---|
|  |  |                          | complete records of all flight segments and can update emissions calculations from the FY2007 base year forward should it be warranted.  |  |   |
| Employee commuting                                   | Relevant, calculated                         | 95124                    | Cisco completed an employee commuting survey in FY2013, which sampled a statistically significant portion of Cisco's employee base and asked commuting specific questions (e.g. how often do you commute to the office, etc.) in order to estimate Cisco's total employee commuting scope 3 emissions.   | 100.00%  |   |
| Upstream<br>leased<br>assets                         | Not<br>relevant,<br>explanatio<br>n provided |                          |  |  | Any upstream leased assets are included in the boundary of our Scope 1+2 emissions.   |
| Downstream<br>transportatio<br>n and<br>distribution | Relevant, calculated                         | 412359                   | 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. | 97.00%   |   |
| Processing of sold products                          | Not<br>relevant,<br>explanatio<br>n provided |                          |  |  | 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 products                                 | Relevant, calculated                         | 3339786<br>2             | 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  | 50.00%   |   |

| Sources of<br>Scope 3<br>emissions           | Evaluatio<br>n status                        | metric<br>tonnes<br>CO2e | Emissions calculation methodology   | Percentag e of emissions calculated using primary data | Explanation   |
|--|--|--------------------------|---|--|---|
|  |  |                          | product families. on yearly consumption of products sold and scaled to FY13 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<br>treatment of<br>sold products | Relevant, calculated                         | 82205                    | Utilized the CDP reports of 2 waste management (e-recycling) companies to develop average emissions intensity from question CC12.2 of their response. Applied the average intensity (in MT CO2e/USD) to Cisco's recycling spend data. Note that this does not include credits from recycling. | 50.00%   |   |
| Downstream<br>leased<br>assets               | Not<br>relevant,<br>explanatio<br>n provided |                          |   |  | Any downstream leased assets are included in the boundary of our Scope 1+2 emissions  |
| Franchises                                   | Not<br>relevant,<br>explanatio<br>n provided |                          |   |  | This category is not applicable to Cisco because we don't own or sell franchises  |
| Investments                                  | Not relevant, explanatio n provided          |                          |   |  | According to the GHG protocol, this category is applicable only to financial institutions and therefore does not apply to Cisco (http://www.ghgprotocol.org/feature/scope -3-calculation-guidance). |
| Other (upstream)                             | Not evaluated                                |                          |   |  | <u>-</u>  |
| Other (downstream )                          | Not evaluated                                |                          |   |  |   |

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

Third party verification or assurance underway for the reporting year but not yet complete - last year's statement attached

## CC14.2a

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

| Type of verification or assurance | Attach the statement   | Page/Section<br>reference | Relevant<br>standard | Proportion of<br>Scope 3 emissions<br>verified (%) |
|-----------------------------------|--|---------------------------|----------------------|--|
| Limited assurance                 | https://www.cdp.net/sites/2014/29/3329/Investor CDP 2014/Shared Documents/Attachments/CC14.2a/Cisco 2012 Inventory Assurance Review Letter FINAL.pdf | Page 1                    | ISO14064-3           | 5  |

## CC14.3

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

Yes

## CC14.3a

Please identify the reasons for any change in your Scope 3 emissions and for each of them specify how your emissions compare to the previous year

| Sources of<br>Scope 3<br>emissions  | Reason for<br>change                 | Emissions<br>value<br>(percentage) | Direction<br>of<br>change | Comment   |
|---|--------------------------------------|------------------------------------|---------------------------|---|
| Purchased goods<br>& services   | Change in methodology                | 74                                 | Increase                  | Major contribution to increase is due to a methodology change. The new methodology relies on supplier CDP reporting and utilization of Q12.2 and SM1.1 to help calculate our supplier's emissions in this category.   |
| Capital goods   | Change in output                     | 14                                 | Increase                  | Increase in purchases of capital equipment from last year.  |
| Fuel- and energy-<br>related activities<br>(not included in<br>Scopes 1 or 2) | Change in methodology                | 10                                 | Decrease                  | The Energy Information Administration (EIA) estimates that approximately 6 percent of total electricity input in the US is lost to transmission and distribution (US Energy Information Administration, http://205.254.135.7/tools/faqs/faq.cfm?id=105&t=3). Cisco used this figure to estimate emissions associated with energy-related activities that are not included in Scope 2 emissions reported in FY2013. In FY2012, the EIA estimated that 7 percent of total electricity input in the US was lost to transmission and distribution. As a result, this is a change in methodology by the EIA from FY2012 to FY2013.   |
| Upstream transportation & distribution  | Change in output                     | 6                                  | Increase                  | Increase in shipping activities contributed to the increase in activities.  |
| Waste generated in operations   | Emissions<br>reduction<br>activities | 47.8                               | Decrease                  | 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 FY2013, Cisco recycled approximately 75% of all the waste that it generated at its facilities and decreased its total waste sent to landfill in FY2013 compared to FY2012. 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 in FY2013 compared to FY2012. 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 0.53 tCO2e per short ton of waste generated. The EPA WARM model is available at: http://epa.gov/epawaste/conserve/tools/warm/Warm_Form.html 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 (-22,528 tCO2e) in FY2013. |

| Sources of<br>Scope 3<br>emissions         | Reason for<br>change  | Emissions<br>value<br>(percentage) | Direction<br>of<br>change | Comment   |
|--|-----------------------|------------------------------------|---------------------------|---|
| Business travel                            | Change in output      | 10.5                               | Increase                  | Increases in employee headcount, the move further into high-touch services, and the introduction of new products and complex solutions and delivery partners has caused travel to increase.   |
| Employee commuting                         | Change in output      | 3.3                                | Increase                  | Cisco completed an employee commuting survey in FY13 in order to estimate this figure. Employee commuting emissions is highly dependent on total employee population and since Cisco's employee population increased by 3% in FY2013 compared to FY2012, this figure has increased proportionately as well. Lastly, it is important to note that due to Cisco's flexible remote work policy, it is estimated that Cisco avoided over 70,500 tCO2e in incremental commuting emissions in FY2013. |
| Downstream transportation and distribution | Change in output      | 6                                  | Increase                  | Increase in shipping activities contributed to the increase in activities.  |
| Use of sold products                       | Change in output      | 6                                  | Increase                  | Increase in sales led to more products in use.  |
| End-of-life treatment of sold products     | Change in methodology | 9                                  | Decrease                  | Introduced new methodology as we bring more of our recyclers on board to reporting to CDP.  |

## CC14.4

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

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

#### Methods of engagement

SUPPLIERS: We work primarily with our suppliers through CDP's Supply Chain program. We initiate contact directly with our suppliers each year via a letter from our procurement executive. The sustainability function follows up after CDP sends its Supply Chain initiative invitations with assistance, particularly with first responder. We also follow up with outreach by our supplier relationship managers and through the EICC and CDP to provide support via shared best practices in measurement and reduction opportunities. Actual methods of engagement are CDP's standard webinars, and Cisco meetings via Cisco WebEx and Cisco TelePresence.

CUSTOMERS: Engagement with our customers on sustainability in general, and energy/GHG emissions in particular, has increased significantly in the last year. We meet with customers via WebEx or in more detail in one of our Executive Briefing Centers located around the world. Our EBCs are all equipment with Cisco TelePresence so Cisco experts anywhere in the world can present to Customers located anywhere in the world Customers are approaching Cisco through our account teams for presentation on Cisco's environmental strategy and products/solutions that can help customers be more sustainable by reducing GHG emissions or improving energy efficiency.,

PARTNERS: Our partners approach us similar to our customers. The motivation of our partners is to develop their own go-to-market strategies based on sustainability in general, and energy/GHG emissions in particular.

#### Strategy for prioritizing engagements

We respond to all requests for engagement by our SUPPLIERS, CUSTOMERS, and PARTNERS. Every supplier, customer and partner is important and every company's participation in the process is needed to address climate change.

Particularly for PARTNERS and CUSTOMERS: even though interest and engagement continues to increase, attacking energy consumption and GHG emissions is not yet a well-bounded problem. We think the best approach to moving the needle is a lot of "at bats" (to use a U.S. baseball analogy). It is also important to realize the details of engagement leading to action can vary by customer type, geography, company culture, and industry vertical. We have not yet reached saturation on the engagement learning curve and likely won't for at least five years. Big problems have big learning curves.

Our manufacturing organization has functions dedicated to managing our business relationships with the various categories of SUPPLIERS. We prioritize our deeper engagement based on supplier spend and preferred status (which is related to spend and often technology). Although we communicate with all suppliers, our influence to effect large changes in behavior is related to our spend and quality of business relationship. Using this criteria, we prioritized component suppliers, EMS providers, and transport companies in our initial engagement.

Our account teams (and PARTNERS) are responsible for managing the CUSTOMER interface and engagement. We are, of course, aware of CUSTOMER spend in our engagements, but we've found significant benefits to engaging and sharing perspectives with any customer interested in improving their sustainability practices. Prioritization is FIFO and we welcome engagement across our CUSTOMER and PARTNER base.

#### Measures of success

SUPPLIERS: Our primary measure of success is "percent of spend reporting to CDP." We have been reporting this metric for various tiers of suppliers in a standard table in our CSR Report. We are extending the metric from just an "AQ" status to also measure the quality of the submittal. We want our suppliers to report, report publicly, have third party review, have a reduction goal [absolute preferred], and ask all their own suppliers to report to CDP (and similarly report metrics in their own CSR Report). We also have identified other key questions for detailed review, such as reporting boundary and methodology.

To manage our SUPPLIER greenhouse gas emissions, we work with our suppliers to set expectations, build capabilities, track progress, complete scorecards and

business reviews and provide feedback, and reward on performance. 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 excels, and our criteria for this score heavily weights performance on energy/GHG emissions because that is Cisco's most material environmental issue.

PARTNERS/CUSTOMERS: Currently, we track number of engagements as a measure of market awareness and penetration. We also use formal survey techniques to measure partner and customer awareness of Cisco sustainability performance, products and solutions.

#### CC14.4b

## 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  |
|---------------------|------------------|--|
| 500                 | 80%              | We touch about 500 suppliers via the CDP supply chain program. More detailed engagement is with a smaller subset representing preferred suppliers. We report % of total spend separately for each tier of supplier in our CSR Report (Table 14 in 2013 report). 100% of our manufacturing suppliers, more than 80% of our component suppliers, and more than 90% of our transport suppliers reported to CDP in 2013. |

#### CC14.4c

## 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                          | To manage our SUPPLIER greenhouse gas emissions, we work with our suppliers to set expectations, build capabilities, track progress, complete SCORECARDS and business reviews and provide feedback, and reward on performance. 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 excels, and our criteria for this score heavily weights performance on energy/GHG emissions (taken from survey results), because energy/GHG is Cisco's most material environmental issue. |
| Identifying GHG sources to prioritize for reduction | We use information on reduction goals to drive engagement to help suppliers reduce energy consumptions. Typically, suppliers need permission or active process re-design assistance from customers to make changes to their manufacturing or components.   |

| How you make use of the data | Please give details  |
|------------------------------|--|
| actions                      |  |
| Other                        | Inform life-cycle assessment (LCA) analyses. A key parameter of life-cycle assessments is the emissions associated with a given component, subassembly or process. The LCA industry and associated software develops lookup tables based on component characteristics such as composition and weight. Some supplier data can be used to benchmark these lookup tables, especially for key contributors to overall emissions. Because of varying business scopes, not every supplier's data can be used in this way, but the approach is very valuable to confirm the prioritization that is the LCA's primary purpose. |

#### CC14.4d

Please explain why you do not engage with any elements of your value chain on GHG emissions and climate change strategies, and any plans you have to develop an engagement strategy in the future

#### **Further Information**

Third party verification or assurance for Scope 3 business air travel will be complete in early July and the updated documentation sent to CDP for replacement in this response. We have attached last year's assurance statement, which includes Scope 3 business air travel. Also attached is this year's assurance statement, which includes scope 1-2 emissions but will be modified once the assurance for Scope 3 business air travel is complete in early July. Cisco's environmental policy is to obtain third-party assurance only for publicly announced goals. External assurance in the absence of a goal is not viewed as cost effective; we are confident in our internal assurance and audit processes to guide internal goals. We completed our first five-year goals covering total, Cisco, Scope 1 and 2, and business-air-travel Scope 3 GHG emissions worldwide by 25% absolute by FY2012 (FY07 baseline). We have announced our FY2017 goals for the same emissions categories, and continue to obtain third-party assurance.

#### **Attachments**

https://www.cdp.net/sites/2014/29/3329/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC14.Scope3Emissions/Cisco 2013 Inventory Assurance Review Letter (Scope 1 2) FINAL.pdf

Module: Sign Off

Page: CC15. Sign Off

## CC15.1

Please provide the following information for the person that has signed off (approved) your CDP climate change response

| Name            | Job title                      | Corresponding job category         |
|-----------------|--------------------------------|------------------------------------|
| Darrel Stickler | Sustainable Business Practices | Environment/Sustainability manager |

## **Further Information**

**Module: 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

ICT1.1

Please provide a description of the parts of your business that fall under "data centers"

## ICT1.2

Please provide your absolute Scope 1 and 2 emissions and electricity consumption for the data centers component of your business

| Business activity | Scope 1 emissions (metric tonnes CO2e) | Scope 2 emissions (metric tonnes CO2e) | Annual electricity consumption (MWh) | Electricity data collection method |
|-------------------|--|--|--------------------------------------|------------------------------------|
|                   |  |  |                                      |                                    |

## ICT1.3

What percentage of your ICT population sits in data centers where Power Usage Effectiveness (PUE) is measured on a regular basis?

| Percentage | Comment |
|------------|---------|
|            |         |

#### ICT1.4

Please provide a Power Usage Effectiveness (PUE) value for your data center(s). You can provide this information as (a) an average, (b) a range or (c) by individual data center - please tick the data you wish to provide (tick all that apply)

#### ICT1.4a

Please provide your average PUE across your data centers

| Number of data centers | Average PUE | % change from previous year | Direction of change | Comment |
|------------------------|-------------|-----------------------------|---------------------|---------|
|                        |             |                             |                     |         |

#### ICT1.4b

Please provide the range of PUE values across your data centers

| Number of data centers | PUE Minimum<br>Value | % change of PUE<br>Minimum Value from<br>previous year | PUE Maximum<br>Value | % change of PUE<br>Maximum Value from<br>previous year | Direction of change | Comment |
|------------------------|----------------------|--|----------------------|--|---------------------|---------|
|------------------------|----------------------|--|----------------------|--|---------------------|---------|

Please provide your PUE values of all your data centers

| Data center reference | PUE value | % change from previous year | Direction of change | Comment |
|-----------------------|-----------|-----------------------------|---------------------|---------|
|                       |           |                             |                     |         |

#### ICT1.5

Please provide details of how you have calculated your PUE value

#### ICT1.6

Do you use any alternative intensity metrics to assess the energy or emissions performance of your data center(s)?

#### ICT1.6a

Please provide details on the alternative intensity metrics you use to assess the energy or the emissions performance of your data center(s)

## ICT1.7

Please identify the measures you are planning or have undertaken in the reporting year to increase the energy efficiency of your data center(s)

| Status in reporting year | Energy efficiency measure | Comment |
|--------------------------|---------------------------|---------|
|                          |                           |         |

## ICT1.8

Do you participate in any other data center efficiency schemes or have buildings that are sustainably certified or rated?

## ICT1.8a

Please provide details on the data center efficiency schemes you participate in or the buildings that are sustainably certified or rated

| Sc | heme name | Level/certification (or equivalent) achieved in the reporting year | Percentage of your overall facilities to which the scheme applies |
|----|-----------|--|---|
|    |           |  |   |

#### ICT1.9

Do you measure the utilization rate of your data center(s)?

## ICT1.9a

What methodology do you use to calculate the utilization rate of your data center(s)?

#### ICT1.10

Do you provide carbon emissions data to your clients regarding the data center services they procure?

#### ICT1.10a

How do you provide carbon emissions data to your clients regarding the data center services they procure?

#### ICT1.11

Please describe any efforts you have made to incorporate renewable energy into the electricity supply to your data center(s) or to re-use waste heat

#### **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

ICT2.1

Please provide a description of the parts of your business that fall under "provision of network/connectivity services"

#### ICT2.2

Please provide your absolute Scope 1 and 2 emissions and electricity consumption for the provision of network/connectivity services component of your business

| Business activity | Scope 1 emissions (metric tonnes CO2e) | Scope 2 emissions (metric tonnes CO2e) | Annual electricity consumption (MWh) | Electricity data collection method |
|-------------------|--|--|--------------------------------------|------------------------------------|
|                   |  |  |                                      |                                    |

Please describe your gross combined Scope 1 and 2 emissions or electricity use for the provision of network/connectivity services component of your business as an intensity metric

|        | Intensity figure          | Metric numerator             | Metric denominator           | % change from previous year | Direction of change from previous year | Reason for change |
|--------|---------------------------|------------------------------|------------------------------|-----------------------------|--|-------------------|
| CT2.4  |                           |                              |                              |                             |  |                   |
|        | Please explain how you ca | alculated the intensity figu | res given in response to Qu  | estion ICT2.3               |  |                   |
|        |                           |                              |                              |                             |  |                   |
| T2.5   |                           | nissions data to your clien  | ts regarding the network/co  | nnectivity services t       | hev procure?                           |                   |
| ,      |                           | noolono data to your onon    | to regulating the network oc |                             | noy produic.                           |                   |
| CT2.5a | 1                         |                              |                              |                             |  |                   |
|        | How do you provide carbo  | on emissions data to your    | clients regarding the netwo  | rk/connectivity servi       | ces they procure?                      |                   |
| Furthe | r Information             |                              |                              |                             |  |                   |
|        |                           | ssembly of hardware/co       | amnanants                    |                             |  |                   |

## ICT0.1c

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

No

## ICT3.1

Please provide a description of the parts of your business that fall under "manufacture or assembly of hardware/components"

#### ICT3.2

Please provide your absolute Scope 1 and 2 emissions and electricity consumption for the manufacture or assembly of hardware/components part of your business

| Business activity | Scope 1 emissions (metric tonnes CO2e) | Scope 2 emissions (metric tonnes CO2e) | Annual electricity consumption (MWh) | Electricity data collection method |
|-------------------|--|--|--------------------------------------|------------------------------------|
|                   |  |  |                                      |                                    |

#### ICT3.3

Please identify the percentage of your products meeting recognized energy efficiency standards/specifications by sales weighted volume (full product range)

| Product<br>type | Standard<br>(sleep mode) | Percentage of products meeting the standard by sales volume (sleep mode) | Standard<br>(standby mode) | Percentage of products meeting the standard by sales volume (standby mode) | Standard (in use mode) | Percentage of products meeting the standard by sales volume (in use mode) | Comment |
|-----------------|--------------------------|--|----------------------------|--|------------------------|---|---------|
|-----------------|--------------------------|--|----------------------------|--|------------------------|---|---------|

#### ICT3.4

Of the new products released in the reporting year, please identify the percentage (as a percentage of all new products in that product type category) that meet recognized energy efficiency standards/specifications

| Product<br>type | Standard (sleep mode) | Percentage of new products meeting the standard (sleep mode) | Standard<br>(standby mode) | Percentage of new products meeting the standard (standby mode) | Standard (in use mode) | Percentage of new<br>products meeting<br>the standard (in use<br>mode) | Comment |
|-----------------|-----------------------|--|----------------------------|--|------------------------|--|---------|
|-----------------|-----------------------|--|----------------------------|--|------------------------|--|---------|

**ICT3.5** 

Please describe the efforts your organization has made to improve the energy efficiency of your products

ICT3.6

Please describe the GHG emissions abatement measures you have employed specifically in your ICT manufacturing operations

ICT3.7

Do you provide carbon emissions data to your clients regarding the hardware/component products they procure?

ICT3.7a

How do you provide carbon emissions data to your clients regarding the hardware/component products they procure?

#### **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

## ICT4.1

Please provide a description of the parts of your business that fall under "manufacture of software"

#### ICT4.2

Please provide your absolute Scope 1 and 2 emissions and electricity consumption for the software manufacture component of your business

| Business activity | Scope 1 emissions<br>(metric tonnes CO2e) | Scope 2 emissions (metric tonnes CO2e) | Annual electricity consumption (MWh) | Electricity data collection method |
|-------------------|---|--|--------------------------------------|------------------------------------|
|-------------------|---|--|--------------------------------------|------------------------------------|

## ICT4.3

Please describe your gross combined Scope 1 and 2 emissions for the software manufacture component of your business in metric tonnes CO2e per unit of production

| Intensity figure | Metric numerator | Metric denominator | % change from previous year | Direction of change from previous year | Reason for change |
|------------------|------------------|--------------------|-----------------------------|--|-------------------|
|------------------|------------------|--------------------|-----------------------------|--|-------------------|

#### ICT4.4

What percentage of your software sales (by volume) is in an electronic format?

#### ICT4.5

Do you provide carbon emissions data to your clients regarding the software products they procure?

## ICT4.5a

How do you provide carbon emissions data to your clients regarding the software products they procure?

#### **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 21 million square feet of real estate space in over 500 locations worldwide 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 activity                           | Scope 1<br>emissions (metric<br>tonnes CO2e) | Scope 2<br>emissions (metric<br>tonnes CO2e) | Annual electricity consumption (MWh) | Electricity data collection method |
|---|--|--|--------------------------------------|------------------------------------|
| Business services (office based activities) | 55811  | 666393                                       | 1521141                              | 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<br>previous year | Direction of change from previous year | Reason for change |
|------------------|--------------------|--------------------|--------------------------------|--|-------------------|
| 0.3696           | metric tonnes CO2e | Square meter       | 0.00                           | No change                              | no change         |

## 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<br>figure | Metric<br>numerator | Metric<br>denominator | % change from previous year | Direction of change from previous year | Reason for change   |
|---------------------|---------------------|-----------------------|-----------------------------|--|---|
| 0.7784              | MWh                 | Square meter          | 0.24                        | Decrease                               | Energy reduction initiatives allowed energy use to only increase slightly in the face of a larger increase in our real estate portfolio (square footage). |

## **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

Please provide a description of the parts of your business that fall under "other"

#### ICT6.2

Please provide your absolute Scope 1 and 2 emissions and electricity consumption for the identified other activity component of your business

| Activity | Scope 1 emissions (metric tonnes CO2e) | Scope 2 emissions (metric tonnes CO2e) | Annual electricity consumption (MWh) | Electricity data collection method |
|----------|--|--|--------------------------------------|------------------------------------|
|          |  |  |                                      |                                    |

#### ICT6.3

Please describe your gross combined Scope 1 and 2 emissions for your defined additional activity using an appropriate activity based intensity metric

| Activity | Intensity figure | Metric numerator | Metric denominator | _ | Direction of change from previous year | Reason for change |
|----------|------------------|------------------|--------------------|---|--|-------------------|
|----------|------------------|------------------|--------------------|---|--|-------------------|

#### ICT6.4

If appropriate, please describe your electricity use for your defined additional activity using an appropriate activity based intensity metric

| Activity | Intensity figure | Metric numerator | Metric denominator | % change from previous year | Direction of change from previous year | Reason for change |
|----------|------------------|------------------|--------------------|-----------------------------|--|-------------------|
|----------|------------------|------------------|--------------------|-----------------------------|--|-------------------|

#### **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.

CDP 2014 Investor CDP 2014 Information Request