

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, visit <http://newsroom.cisco.com/overview>

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
Sat 01 Aug 2015 - Sun 31 Jul 2016

CC0.3

Country list configuration

Please select the countries for which you will be supplying data. If you are responding to the Electric Utilities module, this selection will be carried forward to assist you in completing your response.

Select country
United States of America
Rest of world

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, companies in the electric utility sector, companies in the automobile and auto component manufacturing sector, companies in the oil and gas sector, companies in the information and communications technology sector (ICT) and companies in the food, beverage and tobacco sector (FBT) should complete supplementary questions in addition to the core questionnaire.

If you are in these sector groupings, the corresponding sector modules will not appear among the options of question CC0.6 but will automatically appear in the ORS 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 in CC0.6.

Further Information

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

Rebecca Jacoby, Senior Vice President, Chief of Operations and a Cisco Executive Officer, is the executive sponsor of Cisco's Sustainability Executive Team (SET) and is the official conduit to the Executive Leadership Team (ELT), our CEO, and the board. Cisco continues to strengthen the connections between our sustainability efforts, relevant corporate functions, and the executive officers responsible for these functions. This includes the sales function as well as the finance-controlled investor relations and enterprise risk management functions.

- o Chris Dedicoat, Executive Vice President, Worldwide Sales, and a Cisco Executive Officer reports to the CEO and sponsors two of Cisco's major sustainability initiatives, Circular Economy and Connected Conservation.

- o Kelly Kramer, Executive Vice President, Chief Financial Officer and a Cisco Executive Officer is responsible for Cisco's annual enterprise risk management assessment—which includes sustainability, environmental, and climate change considerations, reported to the board.

- o Rebecca Jacoby, as COO, is also responsible for Cisco's Scope 1 and 2 GHG reduction goals for our operations and Scope 3 reduction goals for our supply chain. Cisco's success is achieved by 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 Sustainable Business Practices group (SBP), is the corporate sustainability function which controls Cisco's environmental strategy and initiatives. SBP is responsible for coordinating all Corporate Social Responsibility at Cisco and provides analysis, strategy, and project support to the SET chair and track co-sponsors.

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	Comment
Chief Operating Officer (COO)	Monetary reward	Emissions reduction target Energy reduction target	Energy / GHG emissions is Cisco's most material environmental issue. Cisco's COO is the executive sponsor responsible for the Sustainability Executive Team (SET) which governs our major environmental and climate change initiatives and goals. The performance of these initiatives and the achievement of our energy and emission reduction targets impacts bonuses awarded.
Environment/Sustainability managers	Monetary reward	Emissions reduction target Energy reduction target	Bonuses for environment/sustainability managers are tied to continuous improvement efforts, including in energy efficiency and/or carbon emissions 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, DJSI, Global 100 and many customers; media inquiries; and analyst meetings 4. Set and meet GHG reduction goals (air travel).
All employees	Monetary reward	Emissions reduction target Energy reduction target	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 Joulex, 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

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
		Efficiency project	with the Ellen MacArthur Foundation. Chief Technology Officers 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). All employees are encouraged to participate in the Innovation Day events to highlight innovation activities that are or have the potential to reduce Cisco's environmental impacts and win monetary rewards for these activities.
All employees	Other non-monetary reward	Emissions reduction target Energy reduction target	Cisco has annual competitions among its buildings participating in the annual shutdown. Employees that show the greatest energy savings in their building are eligible to receive a paid catered event for their energy and emissions reduction efforts and recognition through a plaque that highlights their savings, installed prominently in the building.
Energy managers	Monetary reward	Emissions reduction target Energy reduction target	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

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 of monitoring	To whom are results reported?	Geographical areas considered	How far into the future are risks considered?	Comment
Annually	Board or individual/sub-set of the Board or committee 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.	> 6 years	We have identified the risks (and opportunities) associated with climate change to be long term issues that require an ongoing approach to evaluating and addressing them. We fundamentally believe that the impact of CO2 concentrations, as documented 55+ years of data from Mt. Aloa, are and will continue to be significant for our business and the planet going forward. The timing of the impact is less certain, but it is definitely assumed to reach beyond 6 years. All of our planning and work within our own operations, our suppliers and the markets in which we operate is driven by this long term approach to addressing these risk. We continually evaluate potential risks related to climate change as far into the future as we are able.

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 led by the Executive ERM Committee, which has oversight of the identification, prioritization, aggregation, mitigation and ownership of significant risks across the organization. The Committee is led by Cisco's CFO, COO and General Counsel. It is supported by the ERM Operating Committee, which includes senior leaders from key business functions and provides oversight of the ERM risk assessment process and participates in on-

going discussions on risk ratings and mitigation plans.

- 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 (Workplace Resources - WPR) looks at risks and opportunities 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 and opportunities at individual manufacturing facilities at our suppliers. In general, climate change-related risk (and opportunity) in our supply chain is bounded by our existing business continuity plans and processes.

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 annual environmental 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 and following the hierarchy below, 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
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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 developed and documented two distinct internal processes that collect information that directly influences our business and climate change strategies. These are our Corporate Social Responsibility (CSR) and Stakeholder Inquiry business processes. Our overarching mission is to build CSR--especially climate change--into each business function. We collect a steady flow of information about climate change and sustainability from our external stakeholders and customers through the Stakeholder Inquiry process. This information is passed on directly to the internal business functions to effect business decisions and CSR reporting. The major purpose of these processes is to speed business function response to changing customer expectations. 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 long term goals we have set to reduce our GHG emissions are an example of how the business strategy has been directly influenced by climate change. Our current targets include:

1. Reduce total, Cisco, Scope 1 and 2, GHG emissions worldwide by 40% absolute by FY2017 (FY2007 baseline).
2. Reduce total, Cisco, business-air-travel, Scope 3 emissions worldwide by 40% absolute by FY2017 (FY2007 baseline).
3. Reduce total, Cisco, operational energy use per unit of revenue worldwide by 15% by FY2017 (FY2007 baseline).
4. Reduce Cisco's FY2017, net, consumption-weighted, electricity emission factor to half of the latest International Energy Agency (IEA) world average emission factor publicly available before the end of FY2017.
5. Use electricity generated from renewable sources for at least 25% of our electricity every year through FY2017.

iii. The aspects of climate change that have most significantly influenced our strategy are the business/revenue opportunities and growing customer requirements (described in i above) related to climate change. Customers increasingly want energy efficient technology and remote working solutions to reduce their own GHG emissions.

iv. Cisco's short term strategy (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 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.

v. Our long-term (0-10 years) strategy is designed around reducing GHG emissions and energy consumption within Cisco and for all of our customers, (building a 100% product return, reuse, and recycle business model, i.e. Circular Economy in network products and services is also critical). Driving customer adoption is a long-term endeavor. 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., Joulex, IoT and the modernized grid)
2. remote collaboration (e.g., Cisco TelePresence, WebEx, unified communications, Jabber, Spark)
3. teleworking and mobility (e.g., Cisco Virtual Office, OfficeExtend, Cisco Connected Workplace)
4. cloud and data center (ASR, Nexus, XaaS, IaaS)

As part of this wider discussion, we have added Circular Economy precepts, and even a pilot, to our go-to-market strategy since we believe new business models may be needed to improve the cost/benefit ratio of ICT use.

vi. Cisco believes that through the use of our products at scale combined with our core cultural value of collaboration (across our customers, business partners and the industry) we achieve 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.

vii. Cisco's most substantial business decisions made during 2016 include:

1. Operations: Continued progress and investment in energy efficiency projects to achieve our 40% GHG reduction goal.
2. Supply Chain: Announced our first long-term Scope 3 supply chain GHG emissions goal to avoid one million cumulative metric tonne CO₂e between FY12 and FY20 through strategies and projects implemented with our manufacturing partners, logistics service providers, and component suppliers. Cisco continued investment in an Internet of Things (IoT) pilot. Cisco installed thousands of sensors in a manufacturing partners plant in Malaysia to monitor and reduce energy consumption.
3. Products: Continue progress on our product energy efficiency road map. Cisco products will require an architecture that has "energy scalability"—meaning it can provide energy-efficient service for variable traffic types, traffic demands, customer usage, and installs. Our 2016 CSR report can provide more details about this approach.
4. Solutions: Cisco's investment in LoRa WAN technology. LoRa enables the broader application of IoT through a scale-able low power low cost WAN that can be applied to a wide range of IoT devices.

viii. Cisco's environmental strategy and the establishment of our most recent goals are based on internal best practice and expert opinion, including recommendations from the IPCC, the U.S. Environmental Protection Agency (EPA), and The 3% Solution report that articulates the level of GHG reductions required

to stabilize the threat of climate change.

CC2.2b

Please explain why climate change is not integrated into your business strategy

CC2.2c

Does your company use an internal price on carbon?

No, and we currently don't anticipate doing so in the next 2 years

CC2.2d

Please provide details and examples of how your company uses an internal price on carbon

CC2.3

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

Trade associations

Other

CC2.3a

On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
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CC2.3b

Are you on the Board of any trade associations or provide funding beyond membership?

Yes

CC2.3c

Please enter the details of those trade associations that are likely to take 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?
EICC	Consistent	The Electronic Industry Citizenship Coalition (EICC) is a nonprofit coalition of leading electronics companies dedicated to supply chain responsibility. In 2015 EICC partnered with CDP to help expand greenhouse gas (GHG) reporting and reductions in the electronics supply chain. The EICC is collaborating with CDP to encourage electronics companies to disclose through CDP's supply chain program.	In 2016 Kathleen A. Shaver, Director of Supply Chain Value Protection for Cisco was the EICC Board Chair. Cisco has been asking its supply chain partners to participate in the CDP supply chain initiative for the last several years.

CC2.3d

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

CC2.3e

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 for 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 initial framework guidance and ongoing comment and support for the development of the standard mentioned above. Cisco has also 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.

CC2.3f

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, Workplace Resources, HR, and IT, plus each geographic theaters (Europe/Middle East, LatAm, North America and Asia/Pacific).

CC2.3g

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 or renewable energy consumption or production target that was active (ongoing or reached completion) in the reporting year?

Absolute target

Renewable energy consumption and/or production target

CC3.1a

Please provide details of your absolute target

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions covered by target (metric tonnes CO2e)	Target year	Is this a science-based target?	Comment
Abs1	Scope 1+2 (market-based)	100%	40%	2007	450733	2017	Yes, but this target has not been approved as science-based by the Science Based	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/) The company has

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions covered by target (metric tonnes CO2e)	Target year	Is this a science-based target?	Comment
							Targets initiative	evaluated its target against the criteria in the Technical Note on Science Based Targets and affirms that the target is science-based. As this five year goal comes to a close, we are working to determine our next emissions reduction target. Our current plan as of April 2017 is to set goals that align with industry and world best practices by setting a short term goal with an end date of 2022 and a longer term goal ending in 2030. Post 2020, we plan on setting science-based targets every five years (e.g. 2025, 2030, etc.) while maintaining a longer-term, science-based target (e.g. 2035+).
Abs2	Scope 3: Business travel	100%	40%	2007	205796	2017	No, but we are reporting another target which is science-based	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 covered by target	Target year	Is this a science-based target?	Comment
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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

Please provide details of your renewable energy consumption and/or production target

ID	Energy types covered by target	Base year	Base year energy for energy type covered (MWh)	% renewable energy in base year	Target year	% renewable energy in target year	Comment
RE1	Electricity consumption	2007	1025184	10.7%	2017	25%	Our current target was announced in February 2013 to use electricity generated from renewable sources for at least 25% of our electricity every year through FY2017. (http://blogs.cisco.com/csr/cisco-announces-new-greenhouse-gas-reduction-goals/).

CC3.1e

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

ID	% complete (time)	% complete (emissions or renewable energy)	Comment
Abs1	90%	83%	Though WRI's new scope 2 reporting guidance (http://www.ghgprotocol.org/scope_2_guidance) negatively impacted our progress against this target in FY15, we developed and implemented a plan to increase our efficiency and renewable efforts in order to meet this target over the last two years of our program. Due to these efforts, we are on track to meeting this goal.
Abs2	90%	7%	Our air travel emissions are still below our FY2007 baseline, but absolute reduction is now less than 10%. Even this smaller reduction is notable because our employee base--our potential air travelers--has increased about 50% since FY2007. That said, we are going to fall well short of our goal of a 40% reduction.
RE1	100%	100%	Cisco's goal was to use electricity generated from renewable sources for at least 25% of our electricity every year through FY2017. In FY16, 77.0% of our electricity globally came from renewable sources. This number is slightly different than the number reported in our CSR report due to data corrections made after the CSR report was released.

CC3.1f

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

Do you classify any of your existing goods and/or services as low carbon products or do they enable a third party to avoid GHG emissions?

Yes

CC3.2a

Please provide details of your products and/or services that you classify as low carbon products or that enable a third party to avoid GHG emissions

Level of aggregation	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
Group of products	The use of Cisco products can reduce our customers Scope 1 (purchased fuel), Scope 2 (purchased electricity) and Scope 3 (transportation / business travel) emissions. Products included in Cisco's Energy Management Suite (including Joulex) 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. 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.	Avoided emissions	Evaluating the carbon reducing impacts of ICT	63%		An example application of Cisco Joulex 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 Joulex is used to put Cisco IP phones into deep sleep, energy consumption drops by 90-95%. Over a 5-day business week in a 10,000 fully-featured IP phone installation, where offices are in use 12 hrs/day, annual carbon savings would be about 300 metric tonnes. 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

Level of aggregation	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
						<p>installation will continue to be three times more efficient than if the increased load were serviced in an old-style implementation). The methodology, assumptions, EFs and GWP used: Energy savings was estimated for a 10,000 IP phone business installation using Joulex to place the systems into a deep sleep during none business hours. Energy savings estimate was multiplied by IEA emissions factor (0.5 kg/kWh) to estimate MT CO2e savings. Reference: IEA Statistics CO2 Emissions From Fuel Combustion, 2013 Edition. The following GWP values were used, CO2: 1, CH4: 21, N2O: 310 (Source: IPCC Second Assessment Report (SAR - 100 year). Additionally, 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.</p>

Did you have emissions reduction initiatives that were active within the reporting year (this can include those in the planning and/or 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 CO2e (only for rows marked *)
Under investigation	289	
To be implemented*	91	24607
Implementation commenced*	3	888
Implemented*	105	510209
Not to be implemented	87	

CC3.3b

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

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Energy efficiency: Building services	To reduce scope 1 and 2 emissions, Cisco voluntarily maintains a Global Energy Management and Sustainability (GEMS) team that leads sustainability initiatives across Cisco's 23 million square feet of global real estate. This team includes Cisco employees as well as energy managers working for our facility partners that manage day-to-day operation and maintenance of our buildings. The GEMS team manages Cisco's global annual utility budget, identifies and implements demand side and supply side energy solutions such as energy efficiency upgrades and onsite renewable energy projects, embeds sustainability criteria into our building design standards and engages Cisco employees to participate in energy conservation. Currently, the GEMS team is managing a more than \$50 million, 4-year global EnergyOps program to implement hundreds of efficiency and renewable energy projects across Cisco's real estate portfolio to help achieve our FY17 energy/GHG reduction goals. In	11546	Scope 1 Scope 2 (location-based) Scope 2 (market-based)	Voluntary	4915079	13692211	1-3 years	6-10 years	The lifetime of the various projects implemented within this initiative vary from two to over ten years.

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	<p>FY2016, the following types projects were implemented through the team: - Increasing lighting efficiency by updating lighting controls and using LED technologies - Installing variable frequency drives and premium efficiency motors and pumps in our HVAC systems - Installing solar window film to reduce heat gain and improve occupant comfort - Installing waterside economization and dry cooler technologies to improve free cooling utilization - Improving insulation of heating and cooling piping, valves, and pumps - Improving hot and cold aisle containment within our labs - Implementing Cisco's energy management control policies on our production IT environment - Continuing an employee engagement campaign to promote, educate, and incentivize our employees to conserve energy. These projects are expected to have a system life ranging from 2-10 years depending on the measure. In FY2016, Cisco estimates that it conserved approximately 29.6 million kWh of energy and avoided 510,209 metric</p>								

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	tonnes of CO2e emissions. It is important to note that through Cisco's multi-year investment in energy conservation projects since FY2011, Cisco estimates it is now saving approximately 207 million kWh of energy and avoiding 93,176 metric tonnes CO2e each year. This is expected to continue to rise each year as Cisco continues to invest in energy conservation projects.								
Low carbon energy purchase	To reduce scope 2 emissions, Cisco has increased its voluntary renewable energy purchases since FY2005 by buying Renewable Energy Certificates (RECs) and entering into green power contracts with various electricity suppliers in the United States and Europe to reduce GHG emissions from Cisco operations. In FY2016, Cisco purchased 1,308,005 MWh of RECs and green power through various suppliers in the United States, Europe, India, and Australia. This is an increase of 142,663 MWh of renewable energy compared to Cisco's FY2015 purchase of 1,165,342 MWh of RECs and green power.	498664	Scope 2 (market-based)	Voluntary	0	523467	>25 years	1-2 years	The lifetime of this initiative is approximately 1 year.

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	Purchased US 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 as well as suppliers in India and Australia. All the renewable energy that Cisco purchases meets the new WRI Scope 2 Greenhouse Gas Reporting rules regarding renewable energy purchase reporting. Cisco also ranks consistently high on the US EPA's Top Partner Rankings, which highlight the annual green power use of leading Green Power Partners. As of the end of our FY16 reporting period (July 25, 2016) we were ranked fourth on the Fortune 500 list. Purchasing renewable energy and green power has a 1-yr life and the contract has to be renewed every year.								

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

Method	Comment
Lower return on investment (ROI) specification	Cisco has a 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 FY2013 through FY2017 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	Status	Page/Section reference	Attach the document	Comment
In mainstream reports (including an integrated report) but have not used the CDSB Framework	Complete	p. 14 of 2016 Annual Report [http://s2.q4cdn.com/230918913/files/doc_financials/annual/2016/2016-annual-report-full.pdf]	https://www.cdp.net/sites/2017/29/3329/Climate Change 2017/Shared Documents/Attachments/CC4.1/2016 Annual Report - Full.pdf	Cisco's annual CSR report is published as a set together with our financial report at our annual shareholder meeting (early November; next meeting is in November 2017). It is issued formally as a companion to the financial report but they are separate files however our annual financial report includes a summary of our CSR performance. Additionally Cisco publishes information regarding our Sustainability efforts on our CSR blog at the following URL http://blogs.cisco.com/csr/
In mainstream reports (including an integrated report) but have not used the CDSB Framework	Complete	p. 100-161 (2016 CSR Report, Environment Chapter) [http://www.cisco.com/assets/csr/pdf/CSR-Report-2016.pdf]	https://www.cdp.net/sites/2017/29/3329/Climate Change 2017/Shared Documents/Attachments/CC4.1/Cisco Corporate Social Responsibility 2016 Report.pdf	Cisco's annual CSR report is published as a set together with our financial report at our annual shareholder meeting held each year in early November. It is issued formally as a companion to the financial report but they are separate files. However, our annual

Publication n	Status	Page/Section reference	Attach the document	Comment
				financial report includes a summary of our CSR performance. Additionally Cisco publishes information regarding our Sustainability efforts on our CSR blog at the following URL http://blogs.cisco.com/csr/

Further Information

Module: Risks and Opportunities

Page: CC5. Climate Change Risks

CC5.1

Have you identified any inherent 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 inherent risks that are driven by changes in regulation

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Fuel/energy taxes and regulations	There are several drivers, including carbon taxes, cap and trade, and fuel/energy taxes and regulations, that manifest themselves in increased electricity costs, which are Cisco's main energy source as measured by GHG emissions. We have chosen to consolidate the discussion under this driver. Carbon taxes and cap-and-trade do not directly impact Cisco because our energy demands from utilities are minimal compared to other end users. For example our FY2016 Scope 2	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.	As in CC3.3b, we have an internal energy management and sustainability team that monitors internal electricity usage in our labs and data centers, performance against our voluntary GHG reduction goals, and the market premium for green energy on a continuous basis in order to justify the investment to improve operational efficiency. This team has an annual budget (>\$50M) that represents about 8% of Cisco's annual utility budget to implement energy efficiency and onsite power projects. This team also looks for renewable energy opportunities. Investments planned in operational efficiency have a 4.9 year average simple	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 impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	emissions were 247,933 MT CO2e (market-based), which is a decrease from previous years. It is of note, however, that any carbon-related costs will be passed down from the utility to Cisco and would have a similar impact as a fuel/energy tax or regulation (on the end user). Changes in energy pricing impact every part of the economy, specifically Cisco's supply chain, our operations and our customers. The most significant impact from this risk is to Cisco customers that have network-intensive (as opposed to							payback. Examples of cost efficiency projects during the reporting year include but are not limited to: <ul style="list-style-type: none"> - Updating lighting controls and installing LED technologies - Installing variable frequency drives, electric commutative (EC) fans, and premium efficiency motors and pumps to improve efficiency of HVAC systems - Installing waterside economization technologies to improve free cooling utilization - Applying coil optimization technologies that improve cooling system efficiency - Improving insulation of heating and cooling piping, valves, and pumps - Improving air-flow management and containment within our labs - Implementing building analytics services to better monitor, analyze, and fix 	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	server/storage-intensive) ICT infrastructure, such as service providers. Fuel/energy taxes that impact our customers that are large consumers of electricity could also impact product requirements and sales (if product requirements were not met). In the U.K., the CRC reporting scheme impacts all Cisco U.K. facilities, the largest ones being the 3 Bedfont Lake offices and the Greenpark office. Currently, the immediate impact is limited on a geographical basis as only a few jurisdictions have renewable							HVAC-related issues that reduce efficiency - Continuing a global employee engagement campaign to educate our employees about energy conservation and motivate them to conserve.	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	generation goals or reporting/fee drivers that impact electricity pricing. Weakness in many economies and ongoing budget deficits worldwide place a premium on economic growth to improve tax receipts, which lessens the likelihood of widespread regulatory action (and risk).								
Product efficiency regulations and standards	Japan, the EU, and the U.S. have issued or are in the process of issuing regulations that will affect the design and/or operation of network products and related end-use devices. Even without actual regulation, requests from	Reduced demand for goods/services	1 to 3 years	Direct	Virtually certain	Medium	The product categories potentially affected are a majority of our \$49B sales: Routers and Switches, SMB and SOHO Routers and Switches, Set Top Boxes, Servers and Data Centers. It is unlikely our products will	Cisco has purchased compliance software to track product energy efficiency-related and product labeling regulations and standards and actively monitors this space. During the reporting year Cisco tracked, via various forms of outreach, Cisco customer 'green sentiment'. This was done through (1)	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 impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	customers for product energy efficiency, product power consumption and "carbon footprint" (essentially the same as real-world product power consumption) information continue to increase. Long term, the demand for improved product energy efficiency (and reduced waste) is the most important risk driver for Cisco as it impacts our product portfolio and our core business. Currently, the EU, U.S., and Japan are the primary regions affected by product efficiency regulations and						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 surveys of lost sales, but evidence is anecdotal and estimate is an extrapolation.	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) stakeholder advisory groups as part of our CSR practices. The purpose of this outreach is to understand through primary data how, why and when procurement decisions will change due to green criteria (especially energy and GHG emissions). We believe that we've identified all key actions to address risk from product energy efficiency requirements and there will be no	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	customer requirements that have the greatest potential to impact Cisco.							measurable impact on revenue from new product EE requirements.	
Product labeling regulations and 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 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	Reduced demand for goods/services	1 to 3 years	Direct	About as likely as not	Low	Cisco considers the long-term risk from product carbon labeling (or footprinting) as low, i.e. < \$5M. A financial risk is considered immaterial if it results in less than a penny a share impact, less than \$50M in net income, or less than \$250M in revenue. Customer surveys show eco-labeling has lost favor, we suspect for more cost-effective, targeted product performance	Cisco has and will continue to be actively engaged in writing and contributing to the development of product carbon accounting standards that will enable quality analysis and calculation of product related emissions and footprint. - Cisco proposed and drove 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	Initial costs, including labor and LCA software are estimated to be less than \$500K/yr to follow and participate in carbon footprinting regulatory and standards activities - ATIS TEER testing requires specialized equipment and development team test time. The cumulative impact is estimated to be between \$1-5M/yr.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	ongoing concern, which has accelerated in the past year, is requests from customers for product "carbon footprint", which is essentially the same as a product labeling regulation or standard (without a physical sticker on the product). Currently, the EC (DG Environment) is the primary region affected by product labeling regulations and standards that have the greatest potential to impact Cisco. Sadly, potential regulatory misuse of LCA for product comparability or sector carbon scorecards						requirements.	phase. Understanding and managing use-phase carbon emissions depends on realistic and repeatable power measurement. Cisco co-authored the ATIS TEER standard defining the protocol for characterizing the energy consumption of ICT equipment. - We believe that we have initiated prudent steps to address product carbon labeling/footprinting. However, none of these actions will impact the cost of compliance if product carbon labeling is implemented. Current efforts are (1) intended to educate regulators to prevent carbon labeling from being instituted, and (2) install internal processes for any future required compliance.	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	diverts attention from prioritized GHG reduction efforts, ICT solutions adoption, and changing consumer behavior.								

CC5.1b

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

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Induced changes in natural resources	The most likely source of physical risk is weather-related changes to water availability. In our supply chain, mining (metals) operations and oil extraction and processing (plastics)	Increased operational cost	>6 years	Indirect (Supply 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	Cisco manages this risk through the implementation of water conservation measures AND our active participation in the CDP Water program and as a CDP Supply Chain	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

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>generally require substantial amounts of water, although the use of metals in general in our products (e.g. Catalyst and Nexus products) is relatively small compared to other industrial sectors. However, innovations in the efficiency of fossil fuel extraction in the U.S. has greatly reduced the size of this prior risk (related to oil/plastics availability). Water availability could increase materials and manufacturing costs for all products produced in areas of our supply chain that operate in, or receive materials from, water scarce regions (e.g. Africa,</p>						<p>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 (i.e. <1 cent/share earnings). A financial risk is considered immaterial if it results in less than a penny a share impact or about \$50M in net income or at least \$250M in revenue.</p>	<p>member. We monitor water availability through annual water risk assessments for our own operations and actively engage with our suppliers to encourage water and climate change reporting through CDP. Because our operational and supply chain water use is generally low we feel any impact on Cisco can be ameliorated through conservation, recycling and other alternatives. Over the next ten years these activities will reduce any impact from natural resource availability to a negligible effect on cost of goods (i.e. < \$0.01 per share earnings). A financial risk is</p>	<p>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.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	China, India, and Mexico). 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).							considered immaterial if it could result in less than a penny a share impact, less than \$50M in net income, or less than \$250M in revenue. In FY16, Cisco conserved water in our operations by - Using irrigation controllers throughout the San Jose main campus. - Using recycled water for irrigation. - Installing variable-frequency drives in our cooling towers. - Installing two-way valves for toilets, waterless urinals, sink aerators, low-flow showerheads, and pre-rinse spray valves for kitchen sinks. - Replacing water fountains and turf with native planter beds that require little water, and installing drip	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								irrigation lines to improve irrigation efficiency. - Using a water harvesting system at our Bangalore, India, campus to capture rainwater for filtering and use.	

CC5.1c

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

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management 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	Reduced demand for goods/services	1 to 3 years	Direct	Very unlikely	Low-medium	Financial impact from changes to reputation is thought to be low, i.e. < \$0.01 per share. A financial risk is considered immaterial if it results in less than a penny a share impact, less than \$50M in net income or less than \$250M in revenue.	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	Cost of >\$230M/yr for Cisco-on-Cisco implementation over past seven years, split about equally between CapEx and OpEx. These costs are completely offset by reduced operating expenses. - Cost

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>electricity consumption of the ICT sector, especially by large content providers and their data centers, and (2) the siting and consequent carbon content of the electricity used to run these data centers (i.e., the "cloud"). There is also sector-directed concern about the increasing numbers of end-use devices and associated chargers and wasted energy consumption when the device is on but idle. Conversely, the "enabling effect" promise of the ICT sector from the SMART 2020 report is generally accepted as valid though that promise must be realized in practice and at</p>						<p>In 2015 Cisco's brand value was on the order of \$30B (according to Interbrand). Given our current position and upward trajectory in sustainability, it is unlikely a measurable change in reputation would occur due to a climate-change-related issue and have a financially material impact (e.g., product energy consumption, missed GHG reduction target). By way of a benchmark, other Cisco-specific social corporate responsibility metrics, such as, human rights, privacy, labor, have been evaluated as having more potential impact on reputation and finances than climate-change--</p>	<p>maintain and increase market momentum, Cisco has made significant acquisitions in FY16 (e.g. Jasper Technologies, Inc.) and introduced new or updated products (Cisco WebEx, TelePresence, Spark). These investments exceed \$1B, and address potential billion-dollar markets. (2) Company Carbon Performance - Cisco is continuously 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</p>	<p>of \$2.5M/yr recurring OpEx associated with CSR governance and reporting.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	scale, and be verifiable. In FY2012, we completed an aggressive 25% absolute GHG reduction goal that included Scope 1 and 2 as well as Scope 3 business air travel emissions, and in Feb 2013 we released a new set of five-year goals which are soon coming to an end. We are in the process of establishing our next set of long term goals which we hope to announce in FY2018. These goals present an ongoing risk from non-performance. We have also noted that setting new goals is equally important to stakeholders as meeting the previous goals. Another aspect of reputation risk						probably by more than an order of magnitude.	environmental indicators. - We invest in the use of our own products and solutions to reduce our GHG emissions (which we refer to as 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 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 our Cisco WebEx and TelePresence customers, to build additional use cases upon	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>concerns the ultimate effectiveness of ICT/Cisco products and solutions, the "enabling effect," to reduce GHG emissions on a global scale. Because these solutions literally change the way individuals and organizations accomplish work (e.g., virtual presence vs. physical travel), social engineering is as much a part of implementation as the installation of the actual products. Although Cisco may be able to effectively reduce business air travel because of unique motivation or culture, similar reductions may be more difficult, or take longer, for other organizations. As</p>							extensive, actual company data.	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	for all climate change related risks, the EU (25% of sales) leads consideration in this area followed by the U.S. (60%) and Asia/Pacific/Japan (15%). These percentages are from FY16.								
Changing consumer behavior	Even without regulation, requests from customers for product energy efficiency, product power consumption, and "carbon footprint" continue to increase. Carbon footprint is essentially the same as real-world product power consumption for most Cisco products, because the use phase is the dominant contributor to emissions. (Note	Reduced demand for goods/services	Up to 1 year	Direct	Very unlikely	Medium	Cisco considers the long-term risk from changes in customer sentiment requiring improved energy efficiency and/or product carbon labeling/footprinting to be manageable. The risk to sales from unmet energy efficiency or product carbon performance is thought to be low, i.e. < \$0.01 per share. A financial risk is considered immaterial if it results in less than a penny a share impact, less than	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-	Relevant consumer/market research operating costs estimated to be \$500K/yr. Programs to improve product energy efficiency metrics and to build sustainability studies with our customers are estimated to cost between \$1-2M over the next 4 years.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	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, we have found that impact on customer's actual purchasing decision is not significant. 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						\$50M in net income, or less than \$250M in revenue. 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. - We continue to see year-over-year increases in 'green sentiment' among customers. There is no reason to expect this increase in sentiment not to continue upward among customers. However, in spite of this rising sentiment, which has been in place for 4-5 years, we haven't seen the disruptive market force that is	satisfaction surveys, and (4) and stakeholder inquiries and advisory groups as part of our CSR practices. The purpose of this outreach is to understand through primary data how, why and when procurement decisions will change due to green criteria (especially energy and GHG emissions). We believe we are gathering sufficient primary data to maintain a current assessment of risk from changing consumer behavior/customer requirements. - Cisco continues to improve its sustainability processes, progressing from its own operations to those of our	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>energy efficiency, Cisco can respond at least as well as other IT companies. Because of our product breadth, it is in fact likely that Cisco can better 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. Consumer intent is measured by</p>						changing purchasing decisions.	suppliers, and then to the energy consumption of our products, and then carbon-positive solutions offered to our customers. We believe the risk from changing customer behavior is decreasing as we build on a solid base of measurement and reporting to more systematically assess product energy efficiency, product carbon footprint, and the carbon impact of Cisco solutions at actual Cisco customers. - It is believed this risk can be essentially eliminated within 3-4 years as solutions adoption continues and metrics improve.	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	(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 inherent 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 inherent risks driven by changes in 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 inherent 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 inherent 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 inherent opportunities that are driven by changes in regulation

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Renewable energy regulation	Renewable energy regulation that increases renewable production will require a modernized grid that is more efficient, resilient, and capable of integrating renewable energy sources at scale. The modernized grid opportunity is large, and is trending upward with the growth in renewables and electrified transportation (an example being Tesla). Grid modernization is especially strong in the E.U. and U.S. - A	New products/business services	Up to 1 year	Indirect (Client)	Very likely	Medium	Between traditional IT and the evolving modernized grid components, nearly \$25 billion will likely be spent each year by the world's electric utilities. Nearly one-third of recent, annual information technology investments within electric utilities will be related to modernizing grids. Cisco opportunity could exceed \$1B. Utility investment will increase in future years. A publicly available report from Newton-Evans estimates the	Cisco's Connected Grid network management provides solutions 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) and bringing intelligence to routers so that the network can manage itself. - Cisco is part of several modernized grid pilots in the United States. One of Cisco's largest partnerships to date has been with Florida Power & Light (FPL) working with the utility and partners, designing network and security architectures, providing routing and switching products for the transmission and distribution, and piloting home energy-management	Cisco is investing >>\$10M/yr OpEx in our Connected Grid network BU since 2009 and will continue to build it through mostly operating and select capital investments. We foresee this utility-based BU to continue indefinitely to meet the challenges of revamping the world's utility electricity grids. - Terms of most acquisitions have not

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	modernized grid infrastructure helps utility companies optimize power supply and demand by routing power more efficiently, and allows demand-side management and real-time data exchange with customers. This information is critical for implementing dispersed or intermittent renewable generation (supply) and adding hybrid/electric vehicles to the utility grid (demand). - Combined with smart meters, a modernized grid also						market at \$7-12B over the next 5 years for communications infrastructure related to grid and energy management. Cisco is planning to leverage our IP/network expertise to be a leader in the electric utility networking market. Utility spending is somewhat dependent on renewable mandates that are driving that market, as well as the development of PHEV and all electric vehicles (and associated government provided incentives).	solutions as part of the utilities ongoing effort to modernize its grid infrastructure. - 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. For more information on the modernization of FPL's grid see the following video; https://youtu.be/Aemrq6mHstM	been disclosed publicly but are significant.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	allows customers to see how power is being used in order to influence behavior to reduce energy consumption or shift demand in time to permit use of lower-carbon sources of electricity. - 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								

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	20 percent, and generate 20 percent of electrical power from renewable sources, by the year 2020. California also has a 33% by 2020 renewable portfolio standards goal. - Cisco Connected Grid Network Architecture Services work to modernize the grid network by designing and implementing the secure communications fabric that will reach every device and that is required for grid monitoring and control to function. This communications network will								

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>also be used to implement sensor technologies needed for life extension and care for the existing, aging infrastructure. The benefits of a modernized grid: - A University of Oxford review indicated modernized grid-enabled metering can provide a 5-15% reduction due to end-user awareness - A modernized grid could decrease annual electric energy use and utility sector carbon emissions at least 12% by 2030, according to the Department of</p>								

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	Energy's Pacific Northwest National Laboratory.								

CC6.1b

Please describe your inherent opportunities that are driven by changes in physical climate parameters

Opportunity driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Other physical climate opportunities	Cisco sells products and solutions that provide or improve emergency response, security, and remote working or collaboration. Severe weather events--such as Tropical Storm Sandy--require significant emergency response. Large, regional weather events require substantial	Increased demand for existing products/services	>6 years	Indirect (Client)	More likely than not	Medium	The internet-enabled security, surveillance and emergency communications market as a whole is more than \$10B/yr and growing. In FY16 Cisco product revenue from Security was ~\$1.7B (see	Cisco develops and sells products that provide or improve emergency response, security, and remote working or collaboration. The following product lines are robust, and 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.	Cisco has invested >\$10B, mostly in OpEx, in the products listed under management method, over the last 5 years. This includes the WebEx and Tandberg acquisitions, which were CapEx/investments of \$3.3B and \$3.2B respectively in

Opportunity driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>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 (Cisco WebEx, Cisco Telepresence, Cisco Spark) 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 droughts - Snow and ice. Over a longer time scale, changes to precipitation/temperature and induced changes in natural</p>						<p>Investor Relations website for FY16) and is expected to continue to grow proportionally to the market opportunity. Remote collaboration along with desktop conferencing and teleworking, are each ~\$2B opportunities for Cisco. Teleworking alone has a potential market value of ~\$8B (assuming >25M workers, with a per worker spend of between \$200-500). These technologies increase ISP</p>	<p>Emergency response products include: Cisco IP Interoperability and Collaboration System (IPICS), Cisco IPICS Dispatch Console, and Cisco IPICS Mobile Client. 2. Security or access control products include: 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, and Cisco Video Analytics. 3. Remote working or collaboration products include : Cisco Virtual Office (end use device and infrastructure), Cisco WebEx/MeetingPlace (client software and supporting infrastructure), Cisco Tandberg (end use devices and infrastructure), and Cisco TelePresence (end use devices and infrastructure).</p>	<p>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 management method used to manage risks/opportunities.</p>

Opportunity driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>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 (average) precipitation - Change in precipitation pattern. Where weather is more severe (or social unrest makes</p>						traffic driving demand for Cisco products.		

Opportunity driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>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 storms in 2015 and 2016, Cisco employees and Cisco customers could continue to work normally using Cisco Virtual Office (hardware) and VPN (software) remote working products. This circumstance was notable because there was significant press highlighting the effectiveness of using ICT to continue business as usual. An intermediate time frame was selected, although the above product drivers are seen today, but it is not clear if climate change is the event</p>								

Opportunity driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	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 your inherent opportunities that are driven by changes in other climate-related developments

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Changing consumer behavior	There is tremendous opportunity to reduce GHG emissions if (a big if) consumer and customer behavior can be modified. A report (3% Solution) released in June 2013 by CDP/WWF with analysis by McKinsey	Increased demand for existing products/services	Up to 1 year	Indirect (Client)	Virtually certain	Medium	Remote collaboration along with desktop conferencing and teleworking are each ~\$2B opportunities for Cisco. Teleworking alone has a potential market value	Cisco has established BUs (with profit/loss responsibility) to develop products that address ever widening scopes of personal interactions. The goal is to reach a critical level of functionality that effectively substitutes for physical travel and	Cisco has invested more than \$10B in the products listed over the last 5 years, at least 60% in acquisition costs (CapEx). We continue to invest >\$100M/yr (OpEx) in developing and supporting

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	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 references two main sources when reviewing the sources of energy-related GHG emissions: 1. U.S. Energy						of ~\$8B (assuming >25M workers, with a per worker spend of between \$200-500). These technologies increase ISP traffic driving demand for Cisco products.	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, Connected Workplace, Remote Collaboration (TelePresence and WebEx) and Cisco Virtual Office/Teleworking. An additional,	such products. We continue to improve integration and interoperability in new generations of these products to drive further adoption and market growth.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>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 emissions from power generation, which is a different slice of this same data, represents about 40% of all energy-</p>							<p>stand-alone, web-based calculator for TelePresence has also been 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 codified an international standard the best practice for the carbon impact from ICT products.</p>	

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>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 Energy Manager, modernized grid/Connected Energy Networks - Buildings (cloud, data center): host collaboration solutions (HCS), Cisco server and data center network products - Transportation (remote collaboration): Cisco TelePresence, Cisco WebEx, Unified Communications - Transportation (teleworking): Cisco Virtual Office,</p>								

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	OfficeExtend, Cisco Connected Workplace, Unified Communications. These opportunities are distributed worldwide and impact developed countries as they 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 abundant, available now, and will grow for decades.								

Please explain why you do not consider your company to be exposed to inherent 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 inherent opportunities driven by changes in 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 inherent 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)

Scope	Base year	Base year emissions (metric tonnes CO2e)
Scope 1	Tue 01 Aug 2006 - Tue 31 Jul 2007	48311
Scope 2 (location-based)	Tue 01 Aug 2006 - Tue 31 Jul 2007	448950
Scope 2 (market-based)	Tue 01 Aug 2006 - Tue 31 Jul 2007	402422

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
CO2	IPCC Second Assessment Report (SAR - 100 year)
CH4	IPCC Second Assessment Report (SAR - 100 year)
N2O	IPCC Second Assessment Report (SAR - 100 year)
HFCs	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 Factor	Unit	Reference
Diesel/Gas oil	10.15	Other: kg CO2/gallon	http://www.epa.gov/climateleadership/documents/resources/mobilesource_guidance.pdf
Distillate fuel oil No 2	19.95	Other: kg C/mmBTU	http://www.epa.gov/climateleadership/documents/resources/stationarycombustionguidance.pdf
Motor gasoline	8.81	Other: kg CO2/gallon	http://www.epa.gov/climateleadership/documents/resources/mobilesource_guidance.pdf
Natural gas	14.47	Other: kg C/mmBTU	http://www.epa.gov/climateleadership/documents/resources/stationarycombustionguidance.pdf
Propane	17.20	Other: kg C/mmBTU	http://www.epa.gov/climateleadership/documents/resources/stationarycombustionguidance.pdf

Further Information

The electricity emission factors utilized by Cisco to complete its GHG inventory come from the following sources: 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

Page: CC8. Emissions Data - (1 Aug 2015 - 31 Jul 2016)

CC8.1

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

Operational control

CC8.2

Please provide your gross global Scope 1 emissions figures in metric tonnes CO2e

53123

CC8.3

Please describe your approach to reporting Scope 2 emissions

Scope 2, location-based	Scope 2, market-based	Comment
We are reporting a Scope 2, location-based figure	We are reporting a Scope 2, market-based figure	

CC8.3a

Please provide your gross global Scope 2 emissions figures in metric tonnes CO₂e

Scope 2, location-based	Scope 2, market-based (if applicable)	Comment
731622	247933	

CC8.4

Are there 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

CC8.4a

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 location-based Scope 2 emissions from this source	Relevance of market-based Scope 2 emissions from this source (if applicable)	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	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
Scope 1	More than 2% but less than or equal to 5%	Extrapolation Metering/ Measurement Constraints	Cisco has very complete real estate records of all Cisco offices and facilities and was able to collect energy and GHG emissions data for approximately 92% of its Scope 1 emissions in FY2016. 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 8% of its Scope 1 GHG emissions and as a result, strongly believes our uncertainty range is well under 5%.
Scope 2 (location-based)	Less than or equal to 2%	Extrapolation Metering/ Measurement Constraints	Cisco has very complete real estate records of all Cisco offices and facilities and is able to collect electricity data for approximately 98% of its Scope 2 emissions in FY2016. However, we are not able to obtain utility bills for 100% of our facilities, particularly small, satellite, leased office space. In these instances, we estimate the electricity consumption and GHG emissions for these facilities by assuming electricity consumption based on square footage and housed employee count for similar facilities. Using this methodology, Cisco is currently estimating less than 2% of its Scope 2 GHG emissions and as a result, strongly believes our uncertainty range is well under 2%.
Scope 2 (market-based)	Less than or equal to 2%	Extrapolation Metering/ Measurement Constraints	Cisco has very complete real estate records of all Cisco offices and facilities and is able to collect electricity data for approximately 98% of its Scope 2 emissions in FY2016. However, we are not able to obtain utility bills for 100% of our facilities, particularly small, satellite, leased office space. In these instances, we estimate the electricity consumption and GHG emissions for these facilities by assuming electricity consumption based on square footage and housed employee count for similar facilities. Using this methodology, Cisco is currently estimating less than 2% of its Scope 2 GHG emissions and as a result, strongly believes our uncertainty range is well under 2%.

CC8.6

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

Third party verification or assurance process in place

CC8.6a

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

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported Scope 1 emissions verified (%)
Annual process	Complete	Limited assurance	https://www.cdp.net/sites/2017/29/3329/Climate Change 2017/Shared Documents/Attachments/CC8.6a/Cisco FY2016 GHG, Waste, and Water Assurance Review Letter_20170315.pdf	1-2	ISO14064-3	100

CC8.6b

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

Regulation	% of emissions covered by the system	Compliance period	Evidence of submission
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CC8.7

Please indicate the verification/assurance status that applies to at least one of your reported Scope 2 emissions figures

Third party verification or assurance process in place

CC8.7a

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

Location-based or market-based figure?	Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 2 emissions verified (%)
Location-based	Annual process	Complete	Limited assurance	https://www.cdp.net/sites/2017/29/3329/Climate Change 2017/Shared Documents/Attachments/CC8.7a/Cisco FY2016 GHG, Waste, and Water Assurance Review Letter_20170315.pdf	2	ISO14064-3	100
Market-based	Annual process	Complete	Limited assurance	https://www.cdp.net/sites/2017/29/3329/Climate Change 2017/Shared Documents/Attachments/CC8.7a/Cisco FY2016 GHG, Waste, and Water Assurance Review Letter_20170315.pdf	2	ISO14064-3	100

CC8.8

Please identify if any data points have been verified as part of the third party verification work undertaken, other than the verification of emissions figures reported in CC8.6, CC8.7 and CC14.2

Additional data points verified	Comment
Year on year change in emissions (Scope 1 and 2)	
Year on year change in emissions (Scope 3)	
Emissions reduction activities	Many of our emission reduction projects had measurement and verification (M&V) built into the project scope. As a result,

Additional data points verified		Comment
		the projects were evaluated and savings verified by a third party.
Progress against emissions reduction target		
Other: Other		All energy consumption data, material utility bills, emission factors, emission calculations and methodology were verified as part of the third-party verification work completed.

CC8.9

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

No

CC8.9a

Please provide the emissions from biologically sequestered carbon relevant to your organization in metric tonnes CO2

Further Information

Page: CC9. Scope 1 Emissions Breakdown - (1 Aug 2015 - 31 Jul 2016)

CC9.1

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

Yes

CC9.1a

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

Country/Region	Scope 1 metric tonnes CO2e
United States of America	16078
Rest of world	37045

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
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CC9.2c

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

GHG type	Scope 1 emissions (metric tonnes CO2e)
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CC9.2d

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

Activity	Scope 1 emissions (metric tonnes CO2e)
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Further Information

Page: CC10. Scope 2 Emissions Breakdown - (1 Aug 2015 - 31 Jul 2016)

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, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
United States of America	393895	0	1109491	1155815
Rest of world	337727	247933	531085	106848

CC10.2

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

CC10.2a

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

Business division	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)
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CC10.2b

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

Facility	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)
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CC10.2c

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

Activity	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)
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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 heat, steam, and cooling in MWh your organization has purchased and consumed during the reporting year

Energy type	MWh
Heat	0
Steam	0
Cooling	0

CC11.3

Please state how much fuel in MWh your organization has consumed (for energy purposes) during the reporting year

209428

CC11.3a

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

Fuels	MWh

Fuels	MWh
Natural gas	94123
Diesel/Gas oil	33288
Other: Mobile Diesel/Gas Oil	81860
Propane	156

CC11.4

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

Basis for applying a low carbon emission factor	MWh consumed associated with low carbon electricity, heat, steam or cooling	Emissions factor (in units of metric tonnes CO2e per MWh)	Comment
Energy attribute certificates, Renewable Energy Certificates (RECs)	1130000	0	Our operations in USA have purchased RECs to cover part of our electricity consumption during the period. All renewable energy purchased in the US through these programs are Green-e certified.
Energy attribute certificates, I-RECs	84211	0	These I-RECs were purchased through in India through the Indian Energy Exchange (IEX).
Contract with suppliers or utilities, supported by energy attribute certificates	25324	0	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 purchased in the US through these programs are Green-e certified.
Off-grid energy consumption from an on-site installation or through a direct line to an off-site generator owned by another company	1710	0	Five of our operations (4 in the USA, one in India) have installed onsite solar photovoltaic systems, increasing our total onsite solar PV capacity from 200 kW in FY2013 to 2.7 MW in FY2016 with the addition of our most recent carport solar installation in Boxborough, MA. 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.

Basis for applying a low carbon emission factor	MWh consumed associated with low carbon electricity, heat, steam or cooling	Emissions factor (in units of metric tonnes CO2e per MWh)	Comment
Energy attribute certificates, Guarantees of Origin	68470	0	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.

CC11.5

Please report how much electricity you produce in MWh, and how much electricity you consume in MWh

Total electricity consumed (MWh)	Consumed electricity that is purchased (MWh)	Total electricity produced (MWh)	Total renewable electricity produced (MWh)	Consumed renewable electricity that is produced by company (MWh)	Comment
1640576	1638866	1710	1710	1710	All of the electricity produced by our onsite solar systems are used by the buildings that they are installed on and no electricity is sold back to the electric utility.

Further Information

CC12.1

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

Decreased

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 value (percentage)	Direction of change	Please explain and include calculation
Emissions reduction activities	23.9	Decrease	Due to the various emission reduction activities listed in Question 3.3b that Cisco implemented in FY2016, including our increase in low carbon energy purchases (1,262,172 MWh in FY2016 compared to 1,165,342 MWh in FY2015), Cisco reduced its combined scope 1 and 2 emissions in FY2016 by approximately 86,781 tCO ₂ e. Since Cisco's scope 1 and 2 emissions in FY2015 was 362,798 tCO ₂ e, this reduction equates to an 23.9% decrease ($86,781 / 362,798 = 23.9\%$) in scope 1 and 2 emissions in FY2016 compared to FY2015.
Divestment			
Acquisitions			
Mergers			
Change in output	5.8	Increase	Due to natural growth from FY2015 to FY2016 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 FY2016 by approximately 21,050 tCO ₂ e, which represents 5.8% of the emissions reported in FY2015 ($21,050 / 362,798 = 5.8\%$ percent).
Change in methodology			
Change in boundary			
Change in physical operating conditions			
Unidentified			

Reason	Emissions value (percentage)	Direction of change	Please explain and include calculation
Other			

CC12.1b

Is your emissions performance calculations in CC12.1 and CC12.1a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

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 figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator: Unit total revenue	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
0.0000063	metric tonnes CO2e	49247000000	Market-based	14.9	Decrease	This metric has decreased due to Cisco's revenue increasing by approximately 0.2% in FY2016 compared to FY2015, while emissions decreased by 17.0% over the same period. We were able to achieve this significant reduction in emissions due to the various emission reduction activities as listed in our response to Question 3.3b, including our significant increase in renewable energy purchasing.

CC12.3

Please provide any additional intensity (normalized) metrics that are appropriate to your business operations

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
3.499	metric tonnes CO ₂ e	full time equivalent (FTE) employee	86036	Market-based	19.8	Decrease	When comparing this intensity metric from FY2015 to FY2016, Cisco estimates that the change in emissions intensity per FTE is due to the following primary factors: (1) implementing the various emission reduction activities in FY2016 listed in Question 3.3b and (2) significantly increasing our purchase of low-carbon energy. As stated in Q3.3b, the various emission reduction activities implemented in FY2016 included: - Increasing lighting efficiency by updating lighting controls and using LED technologies - Installing occupancy sensors within parking garages - Installing variable frequency drives and premium efficiency motors and pumps in our HVAC systems - Installing solar window film to reduce heat gain and improve occupant comfort - Installing waterside economization and dry cooler technologies to improve free cooling utilization - Improving insulation of heating and cooling piping, valves, and pumps - Improving hot and cold aisle containment within our labs - Implementing Cisco's EnergyWise-as-a-service and energy management control policies on our production IT environment - Continuing a global employee engagement campaign to promote, educate, and incentivize our employees to conserve energy.

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
0.0132	metric tonnes CO2e	square foot	22752124	Market-based	19.0	Decrease	When comparing this intensity metric from FY2015 to FY2016, Cisco estimates that its reduction in emissions intensity per square foot of occupied real estate space is due to the following primary factors: (1) implementing the various emission reduction activities in FY2016 listed in Question 3.3b and (2) increasing our purchase of low-carbon energy. As stated in Q3.3b, the various emission reduction activities implemented in FY2016 included: - Increasing lighting efficiency by updating lighting controls and using LED technologies - Installing variable frequency drives and premium efficiency motors and pumps in our HVAC systems - Installing solar window film to reduce heat gain and improve occupant comfort - Installing waterside economization and dry cooler technologies to improve free cooling utilization - Improving insulation of heating and cooling piping, valves, and pumps - Improving hot and cold aisle containment within our labs - Implementing Cisco's EnergyWise-as-a-service and energy management control policies on our production IT environment - Continuing a global employee engagement campaign to promote, educate, and incentivize our employees to conserve energy.
0.4459	metric tonnes CO2e	megawatt hour (MWh)	1640576	Location-based	0.16	Decrease	The intensity metric reported in this question uses Cisco's location-based Scope 2 figure. We have reported this same intensity metric using our market-based figure 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. Location based Scope 2 emissions for Cisco, which is 100 percent from purchased electricity, represented 93 percent of our total scope 1+2 emissions in FY2016. As a result, a big

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
							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 FY2015 to FY2016, Cisco estimates that the small decrease in location based scope 2 emissions intensity per Megawatt hour (exclusive of Cisco's low-carbon energy purchases) is due to the following primary factors: (1) general decrease in regional electric grid emissions factors provided by IEA and the Government of India (Ministry of Power) in FY2016 compared to FY2015 and (2) increase in energy use in lower emission-intensive regions compared to higher emission-intensive regions.
0.1511	metric tonnes CO2e	megawatt hour (MWh)	1640576	Market-based	22.4	Decrease	The intensity metric reported in this question uses Cisco's market-based Scope 2 figure. We have reported this same intensity metric using our location-based figure 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. Market based Scope 2 emissions for Cisco, which is 100 percent from purchased electricity, represented 82 percent of our total scope 1+2 emissions in FY2016. 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 FY2015 to FY2016, Cisco estimates that the decrease in market based scope 2 emissions intensity per Megawatt hour is due to the following primary factors: (1) increase in Cisco's purchase of low-carbon energy in FY2016 compared to

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
							FY2015, and (2) continued onsite low-carbon energy production in FY2016. Both of these actions helped offset the general increase in regional electric grid emissions factors provided by IEA and the Government of India (Ministry of Power) in FY2015 compared to FY2015.

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 or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits canceled	Purpose, e.g. 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 Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Purchased goods and services	Relevant, calculated	1373745	Collected suppliers' scope 1 and 2 emissions (allocated to Cisco via financial allocation) from the CDP supply chain program (SM1.1), manually calculated intensity data from the CDP Scope 3 report) and sorted data by % spend. Suppliers include contract manufacturers, ODM/OEM manufacturers, and component suppliers. SM1.1 allocation data is used if the supplier scored >C. We calculated average emissions intensities (total reported Scope1+2/normalized revenue in SM = MT CO2e/\$ USD) by supplier category from suppliers who did provide intensity data and then applied the intensities to the suppliers of the same categories who did not provide allocated data. Note that this data does not provide suppliers' scope 3 data, as the data is inconsistent in selected categories in scope 3.	77.00%	
Capital goods	Relevant, calculated	67405	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 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	0.00%	

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			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/ . In 2016, we modeled the estimated percentage increase in in emissions from capital goods as a percentage increase in revenue. Our justification is that, in an outsourced supply chain, our only capital goods are test equipment leased to manufacturing partners, so the use impact is potentially double counted, as it may already be captured in Purchased Goods & Services.		
Fuel-and-energy-related activities (not included in Scope 1 or 2)	Not relevant, calculated	43897	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 location based Scope 2 emissions reported in FY2016.	0.00%	
Upstream transportation and distribution	Relevant, calculated	20062	Collected suppliers' scope 1 and 2 emissions (allocated to Cisco via financial allocation) from the CDP supply chain program (SM1.1), manually calculated intensity data from the CDP Scope 3 report) and sorted data by % spend. SM1.1 allocation data is used if the supplier scored >C. We calculated average emissions intensities (total reported Scope1+2/normalized revenue in SM = MT CO2e/\$ USD) by supplier category from suppliers who did provide intensity data and then applied the intensities to the suppliers of the same categories who did not provide allocated data. Note that this data does not provide suppliers' scope 3 data, as the data is	77.00%	

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			inconsistent in selected categories in scope 3. 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.		
Waste generated in operations	Not relevant, calculated	0	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 FY2016, Cisco recycled approximately 74% of all the waste that it generated at its facilities. We consider this to be an emission reduction activity, because Cisco's net GHG emissions from waste and recycling generation in our operations have stayed less than 0 (-21,829 metric tonnes CO2e) for FY2016. 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 0.48 tCO2e per short ton of waste generated and -2.83	0.00%	

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			tCO2e per short ton of recycled waste generated. The EPA WARM model is available at: http://epa.gov/epawaste/conserve/tools/warm/Warm_Form.html		
Business travel	Relevant, calculated	184901	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 complete records of all flight segments and can update emissions calculations from the FY2007 base year forward should it be warranted.	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.
Employee commuting	Relevant, calculated	91586	Cisco completed an employee commuting survey in FY2016 in order to estimate this figure. Though employee commuting	0.00%	

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			emissions is highly dependent on total employee population, and Cisco's employee population increased by a small amount (3.9% in FY2016 compared to FY2015), our GHG emissions from employee commuting actually decreased between FY15 and FY16 by 5.5%. Lastly, it is important to note that due to Cisco's flexible remote work policy, it is estimated that Cisco avoided over 59,673 tCO2e in incremental commuting emissions in FY2016.		
Upstream leased assets	Not relevant, explanation provided				Any upstream leased assets are included in the boundary of our Scope 1+2 emissions.
Downstream transportation and distribution	Relevant, calculated	46810	Collected suppliers' scope 1 and 2 emissions (allocated to Cisco via financial allocation) from the CDP supply chain program (SM1.1), manually calculated intensity data from the CDP Scope 3 report) and sorted data by % spend. SM1.1 allocation data is used if the supplier scored >C. We calculated average emissions intensities (total reported Scope1+2/normalized revenue in SM = MT CO2e/\$ USD) by supplier category from suppliers who did provide intensity data and then applied the intensities to the suppliers of the same categories who did not provide allocated data. Note that this data does not provide suppliers' scope 3 data, as the data is inconsistent in selected categories in scope 3. 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	77.00%	

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			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.		
Processing of sold products	Not relevant, explanation 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	33466582	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. Data was computed as product families over yearly consumption of products sold, scaled to FY16 revenue. We then projected the resultant CO2 emissions 5 years, according to our assumed product life (despite the fact that lifetime values can be more or less).	50.00%	
End of life treatment of sold products	Relevant, calculated	1138	Collected End of Life suppliers' scope 1 and 2 emissions (allocated to Cisco via financial allocation) from the CDP supply chain program (SM1.1), manually calculated intensity data from the CDP Scope 3 report) and data is sorted by % spend. SM1.1 allocation data is used if the supplier scored >C. We calculated average emissions intensities (total reported Scope1+2/normalized revenue in SM = MT CO2e/\$ USD) by supplier category from suppliers who did provide intensity data and then applied the intensities to the suppliers	77.00%	

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			of the same categories who did not provide allocated data. Note that this data does not provide suppliers' scope 3 data, as the data is inconsistent in selected categories in scope 3.		
Downstream leased assets	Not relevant, explanation provided				Any downstream leased assets are included in the boundary of our Scope 1+2 emissions.
Franchises	Not relevant, explanation provided				This category is not applicable to Cisco because we don't own or sell franchises.
Investments	Not relevant, explanation provided				According to the GHG protocol, this category is applicable only to financial institutions which Cisco is not. Therefore this does not apply to Cisco. (http://www.ghgprotocol.org/feature/scope-3-calculation-guidance).
Other (upstream)					
Other (downstream)					

CC14.2

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

Third party verification or assurance process in place

CC14.2a

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

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 3 emissions verified (%)
Annual process	Underway but not complete for reporting year – previous statement of process attached	Limited assurance	https://www.cdp.net/sites/2017/29/3329/Climate Change 2017/Shared Documents/Attachments/CC14.2a/Cisco FY2015 GHG Assurance Review Letter_20160721.pdf	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 Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Purchased goods & services	Change in methodology	342	Increase	Major contribution to increase is due to a methodology change. The new methodology is detailed in 14.1, includes an estimate of the Scope 1 & 2 contributions of our full supply base, whereas last year relied solely on suppliers that allocated data directly to Cisco via SM1.1, including Scopes 1,2, & 3.
Capital goods	Change in output	17	Decrease	Change is negligible based on accuracy of estimation methodology.
Fuel- and energy-related activities (not included in Scopes 1 or 2)	Change in output	5.3	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 location based Scope 2 emissions reported in FY2016.
Upstream transportation & distribution	Change in methodology	88	Decrease	Major contribution to decrease is due to a methodology change. The new methodology is detailed in 14.1, includes an estimate of the Scope 1 & 2 contributions of our full supply base, whereas last year relied solely on suppliers that allocated data directly to Cisco via SM1.1, including Scopes 1,2, & 3.
Waste generated in operations	Emissions reduction activities	7.3	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 FY2016, Cisco recycled approximately 74% of all the waste that it generated at its facilities. We consider this to be an emission reduction activity, because Cisco's net GHG emissions from waste and recycling generation in our operations have stayed less than 0 (-21,829 metric tonnes CO ₂ e) for FY2016. 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 0.48 tCO ₂ e per short ton of waste generated and -2.83 tCO ₂ e per short ton of recycled waste generated. The EPA WARM model is available at: http://epa.gov/epawaste/conserve/tools/warm/Warm_Form.html In FY2016, Cisco recycled approximately 74% of all the waste that it generated at its facilities. We consider this to be an emission reduction activity, because Cisco's net GHG emissions from waste and recycling generation in our operations have stayed less than 0 (-21,829 metric tonnes CO ₂ e) for FY2016. 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 0.48 tCO ₂ e per short ton of waste generated and -2.83 tCO ₂ e per short ton of

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
				recycled waste generated. The EPA WARM model is available at: http://epa.gov/epawaste/conserve/tools/warm/Warm_Form.html
Business travel	Change in output	7	Increase	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	5.5	Decrease	Cisco completed an employee commuting survey in FY2016 in order to estimate this figure. Though employee commuting emissions is highly dependent on total employee population, and Cisco's employee population increased by a small amount (3.9% in FY2016 compared to FY2015), our GHG emissions from employee commuting actually decreased between FY15 and FY16 by 5.5%. Lastly, it is important to note that due to Cisco's flexible remote work policy, it is estimated that Cisco avoided over 59,673tCO ₂ e in incremental commuting emissions in FY2016.
Downstream transportation and distribution	Change in methodology	88	Decrease	Major contribution to decrease is due to a methodology change. The new methodology is detailed in 14.1, includes an estimate of the Scope 1 & 2 contributions of our full supply base, whereas last year relied solely on suppliers that allocated data directly to Cisco via SM1.1, including Scopes 1,2, & 3.
Use of sold products	Change in output	0.8	Increase	Uptick in 2016 revenue and associated sales caused a minor increase due to estimation methodology.
End-of-life treatment of sold products	Change in methodology	83	Decrease	Major contribution to decrease is due to a methodology change. The new methodology is detailed in 14.1, includes an estimate of the Scope 1 & 2 contributions of our full supply base, whereas last year relied solely on suppliers that allocated data directly to Cisco via SM1.1, including Scopes 1,2, & 3.

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

CC14.4a**Please give details of methods of engagement, your strategy for prioritizing engagements and measures of success**

SUPPLIERS: We work with our suppliers through CDP's Supply Chain program. Every year we contact our key (manufacturing, component, and logistic) suppliers via a letter from our Supply Chain Senior Vice President. Cisco supplier relationship managers also engage with suppliers through the EICC and CDP to share best practices in measurement and reduction opportunities. We use CDP's standard webinars, and direct meetings with Cisco. We categorize suppliers to identify "hot spots" for funding and socializing GHG reduction initiatives. Our approach is customized based on the needs of the supplier. For example, high spend suppliers with high GHG emissions allocations might be prioritized for engagement on data quality, while a consistently low-scoring supplier might be prioritized for participation in Action Exchange regardless of spend.

CUSTOMERS: Customers approach Cisco through our account teams for presentations on Cisco's environmental strategy and products/solutions that can help customers be more sustainable by reducing GHG emissions or improving energy efficiency. We respond to thousands of customer inquiries annually about our environmental sustainability programs and commitments as part of RFI and RFP processes. Customer feedback is also analyzed to identify opportunities for improvement in Cisco's impact on their carbon footprint, such as implementing Cisco Energy Manager solution in a customer data center, or creation of special multi-packs of high volume products to avoid logistics & packaging emissions.

PARTNERS: The motivation of our partners is to develop their own go-to-market strategies based on sustainability, particularly energy/GHG emissions. We respond to all requests for engagement by our suppliers, customers, and partners. Every year we engage with key suppliers on their sustainability performance as part of the regular business reviews. A strong score is required to retain their status as key suppliers. Even as interest and engagement continues to increase, particularly for partners and customers, attacking energy consumption and GHG emissions is not yet a well-bounded problem. Also, the details of engagement leading to action can vary by customer type, geography, company culture, and industry vertical. 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 technology). Although we communicate with all suppliers, we are better able to affect large changes in behavior in proportion to our spend and the quality of our 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 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.

Measures of success:

SUPPLIERS: Our primary measure of success is "percent of spend reporting to CDP." We report 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 publicly, be reviewed by a third party, have a reduction goal & show progress (absolute preferred), and ask all their own suppliers to report to CDP. To manage supplier GHG 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. We also have a "Sustainability Award" at our yearly Supplier Appreciation Event, which honors one supplier who excels. Our criteria for this score heavily weights performance on energy/GHG emissions as it is Cisco's most material environmental issue. In 2016, we used CDP data to select finalists for the Award.

PARTNERS/CUSTOMERS: We track number of engagements as a measure of successful 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

Type of engagement	Number of suppliers	% of total spend (direct and indirect)	Impact of engagement
Active engagement	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 12 in 2014 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 2016. CDP Questionnaire answers make up 50% of the sustainability score for Supplier Scorecards.

CC14.4c

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

For CC14.2: Third party verification or assurance underway for the reporting year but not yet complete, and last year's statement attached.

Attachments

[https://www.cdp.net/sites/2017/29/3329/Climate Change 2017/Shared Documents/Attachments/ClimateChange2017/CC14.Scope3Emissions/Cisco FY2016 GHG, Waste, and Water Assurance Review Letter_20170315.pdf](https://www.cdp.net/sites/2017/29/3329/Climate%20Change%202017/Shared%20Documents/Attachments/ClimateChange2017/CC14.Scope3Emissions/Cisco%20FY2016%20GHG,%20Waste,%20and%20Water%20Assurance%20Review%20Letter_20170315.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
Rebecca Jacoby	SVP, Operations	Chief Operating Officer (COO)

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	Comment
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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
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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
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ICT1.4b

Please provide the range of PUE values across your data centers

Number of data centers	PUE Minimum Value	% change of PUE Minimum Value from previous year	PUE Maximum Value	% change of PUE Maximum Value from previous year	Direction of change	Comment
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ICT1.4c

Please provide your PUE values of all your data centers

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

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

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	Comment
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ICT2.3

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	Comment
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ICT2.4

Please explain how you calculated the intensity figures given in response to Question ICT2.3

ICT2.5

Do you provide carbon emissions data to your clients regarding the network/connectivity services they procure?

ICT2.5a

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

Further Information

Page: ICT3. Manufacture or assembly of hardware/components

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	Comment
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ICT3.3

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

Product type	Standard (sleep mode)	Percentage of products meeting the standard by sales volume (sleep mode)	Standard (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
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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 type	Standard (sleep mode)	Percentage of new products meeting the standard (sleep mode)	Standard (standby mode)	Percentage of new products meeting the standard (standby mode)	Standard (in use mode)	Percentage of new products meeting the standard (in use mode)	Comment
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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

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 (metric tonnes CO2e)	Scope 2 emissions (metric tonnes CO2e)	Annual electricity consumption (MWh)	Electricity data collection method	Comment

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	Comment

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. 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. Most of our buildings are mixed use and not separately metered by floor or by space type (e.g. office space, engineering labs and data centers). As a result, we addressed all contributors to emissions in our response to ICT5.

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 emissions (metric tonnes CO2e)	Scope 2 emissions (metric tonnes CO2e)	Annual electricity consumption (MWh)	Electricity data collection method	Comment
Business services (office based activities)	53123	731622	1640576	Meter or submeter reading	Scope 2 emissions listed in this table are for location-based emissions. Cisco's market-based scope 2 emissions is 247,933 metric tonnes CO2e, which is lower due to Cisco purchasing RECs and green power through various suppliers in the United States, Europe, India, and Australia.

ICT5.3

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

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change	Comment
0.3713	metric tonnes CO2e	Square meter	1.5	Decrease	When comparing this intensity metric from FY2015 to FY2016, Cisco estimates that its reduction in emissions intensity per square meter of occupied real estate space is due to implementing the various emission reduction activities in FY2016 listed in our CDP Climate Change Response to Question 3.3b: - Increasing lighting efficiency by updating lighting controls and using LED technologies - Installing variable frequency drives and premium efficiency motors and pumps in our HVAC systems - Installing solar window film to	It is important to note that the intensity figure reported in this question incorporates location-based scope 2 GHG emissions. Cisco increased its renewable energy purchases in FY16 compared to prior years. As a result, if you consider market-based scope 2 GHG emissions, this intensity figure decreases to 0.14243 metric tonnes CO2e/square meter, which is an 19.3% reduction compared to the same intensity figure in FY15.

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change	Comment
					reduce heat gain and improve occupant comfort - Installing waterside economization and dry cooler technologies to improve free cooling utilization - Improving insulation of heating and cooling piping, valves, and pumps - Improving hot and cold aisle containment within our labs - Implementing Cisco's EnergyWise-as-a-service and energy management control policies on our production IT environment - Continuing an employee engagement campaign to promote, educate, and incentivize our employees to conserve energy.	

ICT5.4

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

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change	Comment
0.77614	MWh	Square meter	2.6	Decrease	Comparing FY2015 to FY2016, energy use and building footprint increased slightly due to business as usual growth. The increase in building footprint, however, was large enough to result in a decrease in electricity use per square meter. We estimate that the reduction in electricity intensity per square meter of occupied real estate space is due to implementing the various electricity reduction activities in FY2016 listed in our CDP Climate Change Response to Question 3.3b: - Increasing lighting efficiency by updating lighting controls and using LED technologies - Installing variable frequency drives and premium efficiency motors and pumps in our HVAC systems - Installing solar window film	

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change	Comment
					to reduce heat gain and improve occupant comfort - Installing waterside economization and dry cooler technologies to improve free cooling utilization - Improving insulation of heating and cooling piping, valves, and pumps - Improving hot and cold aisle containment within our labs - Implementing Cisco's EnergyWise-as-a-service and energy management control policies on our production IT environment - Continuing an employee engagement campaign to promote, educate, and incentivize our employees to conserve energy.	

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. Most of our buildings are mixed use and not separately metered by floor or by space type (e.g. office space, engineering labs and data centers). As a result, we addressed all contributors to emissions in our response to Q5.

Page: ICT6. Other activities

ICT0.1f

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

No

ICT6.1

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	Comment
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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	% change from previous year	Direction of change from previous year	Reason for change	Comment
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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	Comment
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Further Information

CDP