Cisco Systems, Inc. - Climate Change 2021

C0. Introduction

C0.1

(C0.1) 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, 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

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Reporting year	August 1 2019	July 31 2020	No	<Not Applicable>

C0.3

(C0.3) Select the countries/areas for which you will be supplying data.

Algeria
Angola
Argentina
Armenia
Australia
Austria
Azerbaijan
Bahrain
Bangladesh
Belarus
Belgium
Bosnia & Herzegovina
Brazil
Bulgaria
Canada
Chile
China
China, Hong Kong Special Administrative Region
China, Macao Special Administrative Region
Colombia
Costa Rica
Croatia
Czechia
Denmark
Dominican Republic
Ecuador
Egypt
El Salvador
Estonia
Ethiopia
Finland
France
Germany
Greece
Guatemala
Hungary
Iceland
India
Indonesia

Ireland
Israel
Italy
Japan
Jordan
Kazakhstan
Kenya
Kuwait
Latvia
Lebanon
Lithuania
Luxembourg
Malaysia
Malta
Mexico
Morocco
Myanmar
Netherlands
New Zealand
Nigeria
Norway
Oman
Pakistan
Panama
Peru
Philippines
Poland
Portugal
Puerto Rico
Qatar
Republic of Korea
Romania
Russian Federation
Saudi Arabia
Senegal
Serbia
Singapore
Slovakia
Slovenia
South Africa
Spain
Sri Lanka
Sweden
Switzerland
Taiwan, Greater China
Thailand
Tunisia
Turkey
Ukraine
United Arab Emirates
United Kingdom of Great Britain and Northern Ireland
United States of America
Uzbekistan
Venezuela (Bolivarian Republic of)
Viet Nam

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.
USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.
Operational control

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Board-level committee	i) How responsibilities of the committee are related to climate issues: Cisco's Enterprise Risk Management (ERM) team of the Board of Directors has ultimate responsibility for climate-related issues. This team is responsible for reviewing the company's practices regarding environmental, social and related governance matters that are significant to the company. The team also has responsibility for overall climate related risks, evaluating and reporting on risks through its annual ERM process. The ERM process is in place to identify and proactively monitor, measure and avoid risks, including risks related to climate change. The ERM Team and the Board as a whole receive updates from the senior vice president of Corporate Affairs, and the executive vice president and Chief People, Policy & Purpose Officer who is the executive sponsor for all initiatives impacting operations, including Scope 1 and 2 emissions reduction, renewable energy, water conservation, and waste reduction, and our response to the annual CDP climate change questionnaire. ii) Example of climate-related decision: An important input to report content and CSR strategy, which includes our approach to climate, is our materiality assessment. The assessment helps us understand what issues are most important to stakeholders inside and outside Cisco. We conduct a full assessment every two years. In years that we do not conduct a full assessment, we do an internal materiality refresh. This helps us validate priorities relative to business risks and opportunities. In FY19, we conducted a full materiality refresh. Results were provided to the Cisco Governance, Risk, and Controls team, which feeds into Cisco's ERM program. The ERM Team reviewed and ultimately approved the results in FY19, which included elements related to climate. In FY20, the Board of Directors and ERM Team requested a presentation by the senior vice president of Corporate Affairs on Cisco's Corporate Social Responsibility program.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Scheduled – some meetings	Reviewing and guiding risk management policies	<Not Applicable>	The Board of Directors, acting directly and through its committees, is responsible for the oversight of Cisco's risk management. Cisco's Enterprise Risk Management (ERM) team has oversight of the identification, prioritization, aggregation, mitigation, and ownership of significant risks across the organization. The ERM Team reports to the Board of Directors at a minimum of once per year and more frequently as needed. All members of the team are members of senior management, including EVP and CFP, SVP and COO, and SVP, General Counsel and Chief Compliance Officer. The ERM Team is made up of leaders from each functional area of the company and manages risk assessment, risk ranking, establishing risk mitigation and reports quarterly to the ERM Executive team.

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Name of the position(s) and/or committee(s)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues
Other C-Suite Officer, please specify (Chief People, Policy & Purpose Officer)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Annually

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

Other C-Suite Officer, please specify: Chief People, Policy & Purpose Officer

Cisco's Chief People, Policy & Purpose Officer is the executive owner and sponsor of all sustainability programs and objectives. As the executive sponsor, the Chief People, Policy & Purpose Officer is the official owner of and conduit for sharing climate change related strategy and performance information with the Executive Leadership Team (ELT), our CEO, and the Board of Directors. The Chief People, Policy & Purpose Officer is responsible for reviewing and providing guidance and direction on Cisco's sustainability programs, and provides oversight for Cisco's Tier 1- and 2-related environmental initiatives - such as our FY17-FY22 Scope 1 and 2 emission reduction targets - and thus the Chief People, Policy & Purpose Officer is the executive owner responsible for the success of Cisco's climate change related efforts. The CSR team within Corporate Affairs and the larger Human Resources organization is responsible for Cisco's day-to-day sustainability strategy and leads efforts around stakeholder engagement, materiality assessment, CSR Reporting and communications. Cisco's Business Functions focus on prioritization, goal setting and initiatives in support of our material issues as well as implementation and performance measurement.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive	Type of incentive	Activity inventivized	Comment
Other C-Suite Officer	Monetary reward	Emissions reduction target	Energy / GHG emissions is Cisco's most material environmental issue. Cisco's Chief People, Policy & Purpose Officer is the executive sponsor responsible and 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.
Executive officer	Monetary reward	Emissions reduction target	Our Senior Vice President, Supply Chain Operations is the executive sponsor of initiatives related to supplier operations' energy efficiency and GHG emissions reduction. The performance and achievement of our supply chain emissions reduction target impacts bonuses awarded.
Environment/Sustainability manager	Monetary reward	Emissions 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).
Energy manager	Monetary reward	Emissions 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.
All employees	Non-monetary reward	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.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	2	
Medium-term	2	5	
Long-term	5	20	

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

i) A definition of 'substantive financial or strategic impact' when identifying or assessing climate-related risks: In keeping with GRI Reporting Principles, we conduct a comprehensive CSR Materiality Assessment every two years to confirm our environment-related priorities (which includes climate risks and opportunities) and inform CSR planning, management and reporting activities. The materiality assessment methodology follows GRI's recommended process and principles, and addresses ESG topics that have an impact on our business and on society. Cisco's materiality process is the beginning point for assessing the potential size and scope of risks and opportunities. Separately, our Enterprise Risk Management (ERM) process gathers feedback from a cross-functional set of Cisco executives, executive interviews, industry reports, and peer benchmarking to identify the most significant risk factors facing the business.

The Board of Directors, acting directly and through the Audit Committee, is responsible for oversight of risk management at Cisco, including risks associated with CSR and sustainability. Our enterprise risk management (ERM) process supports the identification, assessment, mitigation and monitoring of risks—including climate—and Cisco's response to those risks. Risks are identified through industry reports, peer benchmarks and executive interviews. Input is prioritized, risk owners are assigned, risk management and mitigation work plans are developed, and metrics measuring the effectiveness of risk management and mitigation actions are tracked and reported. Risk factors in our public financial reporting may include additional risks—including climate—not identified by the ERM process.

ii) A description of the quantifiable indicator(s) used to define substantive financial or strategic impact: Solely for the purposes of our CDP submission, Cisco defines a substantive climate-related financial impact as anything that creates a $0.01 a share impact or greater. Climate change risks are also assessed relative to other CSR and sustainability risks through the materiality assessment process. All risks are assessed and ranked for impact consequence, stakeholder concern, and likelihood, which are indicators used to determine potential substantive strategic risk.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered
Direct operations
Upstream
Downstream

Risk management process
Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment
Annually

Time horizon(s) covered
Short-term
Medium-term
Long-term

Description of process
i) Description of the process used to determine which risks and opportunities have a substantial or strategic impact: The Corporate Affairs team and relevant business units are responsible for identifying and prioritizing climate related risks & opportunities and highlighting them to the appropriate senior management. The Corporate Affairs team uses customer input, information from hundreds of other stakeholder inquiries and technical analysis to assess risk. All of the information collected feeds into our scenario analysis to test our preparation for current and future climate change related impacts (risks and opportunities). Net zero and the impact from scenario analysis and TCFD completion received extensive attention in FY20. As part of the annual enterprise risk management (ERM) Risk Assessment process Cisco's Board of Directors, CEO, the ELT and senior executives across the company are interviewed. If a climate-related risk is considered potentially significant, senior management will highlight this risk during the process. Additionally, several top risk surveys from industry leading groups and technology industry peers are benchmarked and evaluated by the ERM team. Top risks are collected, summarized and presented as part of the annual ERM process. Information collected is used to prioritize climate change related risks (e.g., GHG emissions) and opportunities (e.g., market expansion for travel substitution and other collaborative solutions). ii) Physical risk/opp case study: Acute physical impacts from climate change, specifically the increased severity of extreme weather events and their impacts as a potential risk to our material suppliers, product manufacturing supply chain and product delivery logistics were identified as part of our risk evaluation process. High temperature and rainfall events in China and the U.S. have in the past minimally delayed manufacturing (China) and rail delivery of products to customers in the U.S. Continuity-of-supply analysis has also indicated a potential increase in the likelihood of these weather events. The result of the continuity-of-supply analysis assessment helps Cisco maintain preparedness within our supply chain for these types of events and is part of our standard resiliency planning. Modelling tools allow executive-level decision-makers to consider variables like cost, resiliency, and lead time with each network design sourcing decision to manage this risk in the future. Opportunities for Cisco products also exist as a response to a potential for increased severity of extreme weather as more states and counties look to improve or implement network-based disaster response systems. These processes include the development and monitoring of mitigation action plans including activities to measure the effectiveness of those plans. iii) Transitional risk/opp case study: Changes in regulatory requirements were identified as a potential risk to the business. Although no regulatory scenarios analysed result in a significant risk, the opportunity to impact the business exists and thus we have identified the need for ongoing evaluation of climate change related regulations as a business necessity. For example, Cisco has been working with our suppliers in China on environmental protection. Topics we are focused on include wastewater management and pollution mitigation, as well as tracking and addressing reports of illegal pollution. We partnered with Institute of Public and Environmental Affairs (IPE) and launched a series of activities to prevent and mitigate the environmental risk from our suppliers in mainland China. This work included screening Cisco supplier sites in the IPE Blue Map database to identify existing and historical environmental violations. We work closely with these suppliers to ensure that they remediate any environmental issues and comply with the local environmental law. In addition, Cisco requires suppliers to publish their corrective actions on the IPE website to improve environmental transparency, and get the violations addressed and delisted within the required timeline. Cisco encourages high environmental impact suppliers to disclose energy conservation, water, air, and waste information through the Pollution Release and Transfer Report (PRTR) reporting system on the IPE website. In FY20, 102 supplier sites completed PRTR reporting compared to 60 in FY19. To identify wastewater treatment and drainage pathways in Cisco's supply chain, we conducted a wastewater treatment survey with 120 supplier sites in China. We then requested the targeted factories to register and disclose the wastewater management information in the national sewage permit management platform. Through this work, we also identified suppliers who dispose wastewater in their own on-site treatment systems, and which subcontracted to outside wastewater treatment facilities. We screened the subcontracted wastewater treatment facilities to assess if there were any environmental violations at those sites. Cisco does not have a direct relationship with those wastewater treatment facilities. However, if we found violations, we collaborated with our suppliers to influence the wastewater subcontractors to address any issues.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Because of the potential scope of impact on the business, monitoring and complying with relevant regulations in the regions we operate is a core business requirement. We have an internal regulatory and standards team that is part of Corporate Compliance that specifically monitors global regulations and their potential impact on the business. For example, Cisco continuously evaluates fuel and energy taxes globally to identify business risks. Currently there are no regulatory requirements that we consider a material risk to Cisco's business, however we do consider the impact from potential future regulations to be relevant enough to continuously monitor.
Emerging regulation	Relevant, always included	Because of the potential scope of impact on the business, monitoring the development of emerging regulations in the regions we operate is a core business requirement. Cisco's internal regulatory and standards team, that is part of Corporate Compliance, specifically monitors emerging global regulations and their potential impact on the business. Cisco considers the implementation of new product labelling requirements a potential risk but one of very low overall impact to the business; i.e. less than 1% of revenues. For Cisco, the immediate and ongoing concern, which has accelerated in the past few years, are requests from customers for product "carbon footprint" information, which is essentially the same as a product labelling regulation or standard (without a physical sticker on the product). For example, currently, the European Commission Directorate-General for Environment (EC DG Environment) is the primary region affected by product labelling regulations and standards that have the greatest potential to impact Cisco.
Technology	Relevant, always included	The implementation of technology and technology solutions to address climate change issues/risks is primarily an opportunity for Cisco's business as an increase in the network infrastructure to identify climate-related issues, such as efficiency, will result in more sales of our routing and switching products. These products may also include solutions to enable current or future risks associated with climate change, for example through increased data collection devices using Cisco's networking solutions. However, there could be reputational risks associated with our involvement with global digitization. For example, if we are unable to reskill and upskill a potentially displaced workforce, due to severe weather-related events and other climate change impacts, we run the risk of failing to promote workforce readiness and socioeconomic development as it relates to technological advancements. As such, we lead several ongoing programs through which Cisco is partnering with educational institutions and social change agents to co-develop curriculum, experiences, and engagement models that help build skills in digitization and entrepreneurship. One example of reskilling and upskilling our workforce is through our Networking Academy, a comprehensive e-learning program that provides students with the Internet technology skills essential in a global economy. In FY20, 2.7 million students who participated in Cisco career certification or IT Essentials courses report that Networking Academy helped them obtain a new job.
Legal	Relevant, always included	Cisco's internal legal team monitors global regulations related to privacy and security and their potential impact on the business. For example, Cisco continuously evaluates product energy efficiency and environmental labelling requirements globally, that are often used to address climate change related issues, to identify potential business risks that could impact our ability to sell product. If Cisco does not ensure compliance with new and changing laws to address climate change then we could lose the ability to sell routing and switching products in the European Union and other markets with similar legal requirements.
Market	Relevant, always included	Failure to consider market factors, such as customer environmental product-related requests, may negatively impact the sale of our products. Because of the potential scope of impact on the business, market risk from unmet customer environmental requirements - for example, increased product energy efficiency, design for recyclability, use of recycled materials, etc. - is assessed directly by the Quality organization through an outsourced and ongoing customer survey system which is part of the sales and service process and observed through customer inquiries about environmental attributes of our products.
Reputation	Relevant, always included	Reputation and brand value are included because of their perceived potential to significantly impact business performance. For example, in FY2017, we completed an aggressive 40% absolute GHG reduction goal that included Scope 1 and 2 as well as Scope 3 business air travel emissions, and in September 2017 we released a new set of five-year goals, which are approved Science-Based Targets. Because our customers and shareholders expect Cisco to set and achieve our climate change related goals, these goals present an ongoing risk from non-performance if we are unable to reach our targets or continue to set new goals. We are currently working towards a five year goal to reduce total Cisco Scope 1 and 2 GHG emissions worldwide by 60 percent absolute by FY22 (FY07 baseline).
Acute physical	Relevant, always included	Acute physical impacts from climate change are included because of its potential to significantly impact supply chain operations and product delivery. The processes in place to manage acute physical impacts include the development and monitoring of mitigation action plans including activities to measure the effectiveness of those plans. Risk Owners are assigned to enterprise risks and report to the ERM Team and ERM Executive and Operating Committees as necessary. The most likely source of an acute physical risk is the increased severity of extreme weather events and their impacts on our supply chain and product delivery logistics. For example, extremely high temperatures in China and large rainfall events in the USA have impacted rail delivery of component parts to our manufacturing partners (China) and delivery of final product to our customers (East coast USA). Issues like this could potentially happen again.
Chronic physical	Relevant, always included	Chronic physical impacts from climate change are included because of its potential to significantly impact operational and supply chain expenses and supply chain logistics. The processes in place to manage chronic physical impacts include the development and monitoring of mitigation action plans including activities to measure the effectiveness of those plans. Risk Owners are assigned to enterprise risks and report to the ERM Team and ERM Executive and Operating Committees as necessary. The most likely source of chronic physical risk is weather-related changes to water availability. In our supply chain, mining (metals) operations and oil extraction and processing (plastics) 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, China, India, and Mexico).

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation	Mandates on and regulation of existing products and services

Primary potential financial impact

Decreased revenues due to reduced demand for products and services

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

As an example, in 2021 the EU is set into legislation the objective of a climate-neutral EU by 2050. The European climate law sets a binding EU climate target of a reduction of net greenhouse gas emissions by at least 55% by 2030 compared to 1990. As part of these goals the EU is issuing regulations that will affect the design and/or operation of servers, network products and related end-use devices. Even without current regulation, requests from Cisco customers for product energy efficiency, product power consumption and "carbon footprint" (essentially the same as real-world product power consumption) information has increase dramatically over the last several years. Medium 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. Cisco customers and regulators have rising expectations of products to minimize energy costs and GHG emissions. If we are unable to meet these customer product expectations, we could see negative impacts to our sales. Currently, the EU, U.S., and Japan are the regions implementing product efficiency regulations and have customers that have expressed the most interest in product efficiency requirements as part of their product selection and procurement processes. These regions represent more than 75% of Cisco's sales and thus could have a significant potential impact on revenues.

Time horizon
Medium-term

Likelihood
Virtually certain

Magnitude of impact
Low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
520000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
The product categories potentially affected are a majority of our $49B sales: Routers and Switches, Enterprise and Internet Provider Routers and Switches, Servers and Data Centers. It is unlikely our products will not meet proposed or reasonably foreseeable regulations or customer requirements, or a viable market differentiation established. Impact on sales could be 1% based on customer surveys of lost sales, but evidence is anecdotal and estimate is an extrapolation.

Cost of response to risk
10000000

Description of response and explanation of cost calculation
i. The use of Cisco products can reduce our customers Scope 1 (purchased fuel), Scope 2 (purchased electricity) and Scope 3 (transportation / business travel) emissions. Cisco has enterprise level servers (e.g., Cisco UCSC-C220-M5SX) that are Energy Star certified; and Cisco's Energy Management Suite can reduce electricity use and GHG emissions. Cisco has also purchased compliance software to track product energy efficiency and product labelling regulations/standards and actively monitor this space. During the reporting year, Cisco tracked our customer 'green sentiment'. This was done through: 1) subscription to surveys of global consumer sentiment with customized analyses and consultation; 2) focus groups with IT professionals that are likely Cisco customers; 3) green procurement surveys as part of Cisco's ongoing, externally hosted corporate customer-satisfaction surveys; and 4) 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). In response to results from the customer survey, we are improving product efficiency of our products from plug to port and set a product power efficiency goal in early FY18. This goal is to improve large rack-mounted equipment system power efficiency—as measured from the input power from the facility to the board-mounted ASICs, memory, and other chip devices—from 77 percent to 87 percent by FY22 (FY16 baseline). This Scope 3, use of sold products goal is an approved science-based target. Such a goal drives Cisco to design new power systems that result in a net positive gain in overall product efficiency. We believe that we've identified all key actions to address risk from product energy efficiency requirements and there will be no measurable impact on revenue from new product EE requirements. ii. 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.

Comment

Identifier
Risk 2

Where in the value chain does the risk driver occur?
Downstream

Risk type & Primary climate-related risk driver

Market	Changing customer behavior

Primary potential financial impact
Decreased revenues due to reduced demand for products and services

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Even without regulation, requests from Cisco customers for product energy efficiency, product power consumption, and "carbon footprint" continue to increase. Carbon footprint is essentially the same as real-world product power consumption for most Cisco products, because the use phase is the dominant contributor to emissions. (Note that Cisco sells in the business-to-business space, so we interpreted "consumer" as "customer".) In spite of this interest in energy consumption and GHG emissions, we have found that impact on customer's actual purchasing decision is not clear. Long term, the demand for improved product energy efficiency is the most important risk driver for Cisco as it impacts our product portfolio and its operation. However, we don't believe competition has a strategic advantage to improve energy efficiency more than Cisco. That is, if Cisco customers place a higher value on energy efficiency, Cisco can respond at least as well as other IT companies. Because of our product breadth, it is in fact likely that Cisco can better 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 (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. While monitoring consumer intent we continue to pursue Energy Star certifications for products within certification scope (e.g. CISCO - CP-8851NR IP phone, CISCO - UCSC-C220-M5SX server) and work to continuously improve our product power efficiency to meet the product power efficiency goal (from 77% to 87%) we set for FY22.

Time horizon
Short-term

Likelihood

Very unlikely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
1000000

Potential financial impact figure – maximum (currency)
49000000

Explanation of financial impact figure
Cisco considers the long-term risk from changes in customer sentiment requiring improved energy efficiency and product carbon labelling to be manageable. The risk to sales from unmet energy efficiency or product carbon performance is thought to be low, i.e. less than $0.01 per share. A financial risk is considered immaterial if it results in less than $0.01 a share impact. However, these risks may still pose a potential substantive strategic impact. 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 changing purchasing decision.

Cost of response to risk
2000000

Description of response and explanation of cost calculation
i. Cisco tracks customer 'green sentiment' via various forms of outreach: subscription to surveys of global consumer sentiment with customized analyses and consultation; focus groups with IT professionals that are likely Cisco customers; Green procurement surveys as part of Cisco's ongoing, externally hosted corporate customer-satisfaction surveys; 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 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. ii. 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 between $1-2M over the next 5 years. We are reporting the cost of response at $2M per the higher end of the range.

Comment

Identifier
Risk 3

Where in the value chain does the risk driver occur?
Downstream

Risk type & Primary climate-related risk driver

Chronic physical	Changes in precipitation patterns and extreme variability in weather patterns

Primary potential financial impact
Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
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) 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, China, India, and Mexico). Time horizon selected is long-term 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).

Time horizon
Long-term

Likelihood
More likely than not

Magnitude of impact
Low

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
5000000

Potential financial impact figure – maximum (currency)
10000000

Explanation of financial impact figure
There may be impact on the local cost of energy and water, but these are not thought to be significant because these lower-tier material or manufacturing costs are less than 10% of our ~$5Bn product cost. Assuming a potential change in material cost of 1-2% the impact on total product cost would equate to $5-10MM. A financial risk is considered immaterial if it results in less than $0.01 a share impact. Cisco currently does not identify water availability in our supply chain as a material risk in our financial reporting.

Cost of response to risk
500000

Description of response and explanation of cost calculation
This risk is managed through implementation of conservation measures and active participation in the CDP Water program. We monitor water availability through annual risk assessments for our operations and by engaging our suppliers to encourage water and climate change reporting through CDP. Because our operational and supply chain water use is low we feel any impact can be ameliorated through conservation, recycling and other alternatives. We have implemented several conservation projects over the past few years that are still conserving water and will continue to do so for many years: using irrigation controls at the San Jose campus; using recycled water for irrigation; installing variable-frequency drives in 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; installing drip irrigation lines to improve efficiency; and using a water harvesting system at our Bangalore, India, campus to capture rainwater for filtering & use. Labor and LCA software costs have been estimated to be less than USD 500K/yr to follow and participate in carbon footprinting regulatory and standards activities. The incremental cost of LCA software libraries to assess water risk is negligible (less than $25,000). Most LCA costs accrue from our efforts to understand carbon footprinting, which is a more significant/material impact for Cisco.

Comment

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?
Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier
Opp1

Where in the value chain does the opportunity occur?
Downstream

Opportunity type
Products and services

Primary climate-related opportunity driver
Development of climate adaptation, resilience and insurance risk solutions

Primary potential financial impact
Increased revenues resulting from increased demand for products and services

Company-specific description
According to the Global Alliance for Buildings and Construction building operations is responsible for 28% of global GHG emissions. This same organization estimates that over the next 35 years 2.5 trillion ft2 of buildings will be constructed or renovated in cities worldwide. These new builds and renovations will need to comply with increasing operational energy efficiency requirements. The push to achieve new efficiency requirements creates a significant market opportunity for Cisco's Smart Buildings solutions. Cisco sells Smart Building products and solutions that improve building operational energy efficiency and reduce GHG emissions. For example, when the lighting and other building systems are connected via Cisco Catalyst Digital Building Series Switches, they can be monitored and managed together by the enterprise network management system. These switches are purpose-built to optimize for low voltage PoE deployments, IoT connectivity and building automation in smart buildings.

Time horizon
Medium-term

Likelihood
More likely than not

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
2000000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
The network and internet-enabled smart building market as a whole is estimated to be more than $43B/yr and growing according to Fortune Business Insights (2020). In FY20 Cisco product revenue from Smart Building implementations was ~$100M (estimated based on associated product and services sales) and is expected to grow proportionally with the market opportunity. The Smart Building market is estimated to be a $2B opportunity for Cisco. With over 2.5 trillion ft2 of construction and renovation due in the next 35 years and an average per project value of $5-10M, we estimate the potential market opportunity for Cisco to be $2B.

Cost to realize opportunity

50000000

Strategy to realize opportunity and explanation of cost calculation
i. Cisco develops and sells Smart Building technologies that support the digital transformation and enable improved building monitoring and management to maximize energy efficiency and operability. Interconnecting and interoperating isolated building systems such as lighting, HVAC, badging systems, security, CCTV, sensors and audio-video equipment, into a single converged system is fundamental to the digital transformation of buildings. This transformation can also enable new customer experiences, accelerate workforce innovation and introduce innovative business models and analytics. For example Cisco partnered with PlaceOS and developed a smart building solution that manages the return of employees to office buildings post pandemic. This system provides improved workplace health and safety along with maximized operational efficiency. ii. Cisco has invested more than $10M/yr, mostly in OpEx, in the products and solutions described above (Cisco Catalyst Digital Building Series Switches, etc.) over the last 5 years. We continue to invest more than $50M/yr (OpEx) for development and support of the products and services used to deliver these solutions to customers.

Comment

Identifier
Opp2

Where in the value chain does the opportunity occur?
Downstream

Opportunity type
Products and services

Primary climate-related opportunity driver
Development of climate adaptation, resilience and insurance risk solutions

Primary potential financial impact
Increased revenues resulting from increased demand for products and services

Company-specific description
Cisco sells products and solutions that provide or improve remote working or collaboration, emergency response and security. Severe weather events, and more recent pandemic events, require significant emergency response and the need to properly protect employees by allowing them to work remotely. We have specifically seen that such events drive demand for integrated communication systems (e.g., Cisco WebEx) that provide for broad interoperability and remote distribution of information to emergency teams. Where weather is more severe (or public health restrictions make travel unpredictable), interruption to business was reduced through remote working and collaboration products and services. For example, during the COVID-19 pandemic up to 70% of U.S. workers worked remotely from home (source: Gallup). Cisco supported it customers during this surge in teleworking demand with its Cisco Virtual Office (hardware) and VPN (software) remote working products. This circumstance has been notable because there has been significant press highlighting the effectiveness of using ICT to continue business as usual with considerable predictions that remote working will become the new normal. Increased revenues resulting from increased demand for products and services is expected from climate and health-related challenges to society.

Time horizon
Medium-term

Likelihood
Very likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
48300000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
In their most recent annual report, IDC Marketspace: Worldwide Unified Communications and Collaboration 2019 Vendor Assessment (July 2019), IDC forecasted that the worldwide unified communications and collaboration (UC&C) market will increase to $48.3 billion in 2023. This is due to the interest level that IDC is tracking in UC&C solutions among business segments and enterprise-wide organizations. Interest is being driven from combination of advances in technology, applications and deployment choices, including private and public cloud offerings, hybrid options, team messaging, team collaboration and mobile applications with communications applications and technology. The COVID-19 pandemic has led to an increase in remote working as a new normal, further driving the need and market value of the worldwide UC&C market. In FY20 Cisco product revenue from our Applications segment which includes our Collaborations and IoT portfolio (excludes Infrastructure Platforms, Security, Other products and Services) was ~$5.6B. Additionally, the increased use of collaboration solutions increases ISP traffic driving further demand for Cisco products.

Cost to realize opportunity
50000000

Strategy to realize opportunity and explanation of cost calculation
i. Action being implemented: Cisco continues to invest in its products that provide remote working or collaboration, improved emergency response and security services. Cisco is maximizing this opportunity by creating and growing dedicated business units, each with $1B+ in sales. As an example, in response to the COVID-19 pandemic the Georgia Department of Public Health (GDPH) needed to continue providing critical health care services without in person visits. GDPH partnered with Cisco and used our remote working and collaboration solutions to onboard more than a thousand providers in less than 3 months. ii. Cisco has invested more than $2B/yr, mostly in OpEx, in the products associated with remote work or collaboration, emergency response and security over the last 5 years. We continue to expand market opportunities and improve integration and interoperability in new generations of these products. We continue to invest more than $50M/yr (OpEx) in the development, support, integration and interoperability of the products listed.

Comment

Identifier
Opp3

Where in the value chain does the opportunity occur?
Downstream

Opportunity type
Products and services

Primary climate-related opportunity driver
Development of climate adaptation, resilience and insurance risk solutions

Primary potential financial impact
Increased revenues resulting from increased demand for products and services

Company-specific description
Extending the life cycle of our products and the components inside them has long been a Cisco priority. We operate programs for customers, partners, and employees to take back, refurbish, and reuse products and we're continually developing new ways to manage product materials. The circular economy presents significant business opportunities for Cisco, and for our partners and customers. This commitment starts at the very top. Our CEO, Chuck Robbins, committed to 100 percent product return (PACE Pledge) at the World Economic Forum (WEF) in 2018. Cisco Refresh, our certified remanufactured equipment program, provides a genuine and trusted complement to new Cisco equipment, without compromising performance, support, or value. Remanufacturing products saves approximately 85 percent of the energy, water, and materials used, compared to building the same new products, according to the APEC Market Access Group. Cisco Refresh therefore plays an important role in our circular economy initiatives, creating a secondary life for equipment that not only saves minerals and resources, but also reduces waste. When creating new products, the resource extraction phase is very energy intensive. Life Cycle Assessment studies have shown that considerable GHG emissions can be reduced from the reuse of product materials and the secondary market due to the elimination of the resource extraction phase. Cisco has an opportunity to reduce the GHG emissions and waste impacts from the end-of-life of our sold products, while also capitalizing on the secondary market for used product. Increasing our product return will help to realise these financial opportunities.

Time horizon
Medium-term

Likelihood
Very likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
2000000000

Potential financial impact figure – maximum (currency)
3000000000

Explanation of financial impact figure
Secondary market for used Cisco gear has been estimated to be between $2-3B worth of potential revenue. This estimate is based off the Gartner Report, Market Guide for IT Asset Disposition. In that report, Gartner Group estimates that the secondary market for networking equipment and accessories has grown over the past several years from a handful of providers to more than 400 companies with an estimated collective revenue of $2 billion to $3 billion. We therefore estimate that the market potential for this opportunity is ~$2-3B.

Cost to realize opportunity
10000000

Strategy to realize opportunity and explanation of cost calculation
i. At the WEF Annual Meeting in 2018, Cisco committed to 100 percent product return. We will do this by: • Providing product return pickup and transport at no cost for any customer worldwide upon request • Establishing alternative commercial models that promote product return, including purchase trade-in, return credit, leasing, and product-as-a-service • Offering comprehensive warranty, replacement, service, and repair for all products to extend useful product life and minimize obsolescence • Repurposing returned products, subsystems, components, and commodities, including a limited amount of closed-loop return to new product manufacturing The Cisco Migration Incentive Program (MIP; formerly the Technology Migration Program) and Exceptional Pick-Up Program (EPUP) enable customers to return used equipment. MIP is a global channel partner program that uses discounts in exchange for product returns to reward partners for migrating their customers' networks to new Cisco technologies. These programs provide Cisco with the newest and best-quality used equipment for refurbishment and reuse. Trade-in materials are refurbished, resold, or reused by Cisco Capital® Refresh, Cisco Service Supply, or our internal labs. Reuse is always our first priority. Any products The Cisco Takeback and Recycle (TB&R) program focuses on Cisco-branded items that do not qualify for either MIP or EPUP. TB&R also accepts equipment from other manufacturers that has been replaced by newly purchased Cisco items. The equipment is typically old or damaged and has no reuse value. These materials go to the closest Cisco-approved recycling site. Currently, there are 47 approved recycling locations globally. The number of locations of Cisco authorized recyclers continues to expand based on the growth in our business and the requirements of local regulations. In addition to TB&R, Cisco has a process called Send IT Back that allows for the easy return of Cisco products, using a smart phone app, in the Netherlands, the United Kingdom, and the U.S. ii. Cisco has invested ~$10M in Send IT Back and the OpEx Infrastructure (Cisco's Product Return Portal) that runs our product take back programs.

Comment

C3. Business Strategy

C3.1

(C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning?
Yes, and we have developed a low-carbon transition plan

C3.1a

(C3.1a) Is your organization's low-carbon transition plan a scheduled resolution item at Annual General Meetings (AGMs)?

	Is your low-carbon transition plan a scheduled resolution item at AGMs?	Comment
Row 1	No, but we intend it to become a scheduled resolution item within the next two years	

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

Yes, qualitative and quantitative

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenarios and models applied	Details
Other, please specify (SDA Tool V8)	i) Methodology: Inputs: We form our GHG emission reduction goals based on internal best practices and expert opinion, including recommendations from the IPCC, the U.S. EPA, the IEA, and The 3% Solution report from the World Wildlife Fund (WWF) and CDP. Since 2013, Cisco has been setting and achieving science-based targets that exceed the rate of decarbonization required to keep global average temperature increase below 2°C compared to preindustrial temperatures, as described in the Fifth Assessment Report of the IPCC. Our FY22 GHG reduction goal of 60 percent (FY07 baseline) equates to a 4 percent reduction per year. For reference, this reduction is nearly three times greater than the yearly emissions reduction of 1.35 percent recommended for our industry by the Sectoral Decarbonization Approach to science-based target setting. Assumptions: We are able to collect energy and GHG emissions data for approximately 92% of our scope 1 emissions and 98% of our scope 2 emissions in FY2016 when we set our target. 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. Analytical Methods: Cisco uses The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition) to collect activity data and calculate Scope 1 and Scope 2 emissions, and uses the IPCC Assessment Report (SAR - 100 year) as our source for global warming potentials (For CO2, CH4, N2O, and HFCs –PFCs and SF6 are not applicable for our inventory). Cisco uses operational control and consolidates all GHG data for operations for which we have operational control. ii) Time Horizon and relevance: The climate scenario analysis was conducted using a 5-year time horizon from 2017-2022. This time horizon was selected as we completed a five year emission reduction target in 2017 and were looking to create a new five emissions reduction goal. iii) Boundaries: Our climate scenario analysis is based on our Scope 1 and 2 direct GHG emissions related to all aspects of our business. iv) Results and Outcomes: The scenario analysis model resulted in a reduction target of 60% of our Scope 1 and 2 GHG emissions worldwide by FY22 (FY07 baseline). We obtained formal approval from the SBTi for the target, and now publicly report the target through our CDP submission along with tracking and monitoring performance in our annual Corporate Social Responsibility (CSR) Report. Energy Use and GHG Emissions tracking and calculations are monitored by our Facilities Organization (WPR). Monitoring procedures are a part of normal day to day business activities. Further, in FY20 we used TCFD guidelines to inform our annual CSR reporting, by discussing the qualitative environmental risks/opportunities related to physical and transitional impacts from climate change. v) Changes to Strategy and vi) Case Study of Impact on Corporate Objectives from Scenario Analysis: Cisco has been committed to reducing our GHG emissions for more than a decade, so it was only natural to work toward an approved SBT, as Energy and GHG emissions are the most material environmental issues for us. The results of target setting have prompted plans to achieve our target by: Investing more than $45 million between FY18 and FY22 in the areas of energy efficiency and renewable energy; Implementing more than 300 energy efficiency and on-site renewable energy projects across our real estate portfolio; Increasing renewable energy procurement through utility green power programs, power purchase agreements (PPAs), and renewable energy certificates; and improving product power efficiency through engineering innovations.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	i) A description of how your strategy in this area has been influenced by climate-related risks/opportunities: Transitional climate risks and opportunities as described in C2.3a/2.4a have affected our products and services activities through changes in product regulation and standards (risks) and creation of and access to new markets (opportunities). Risks associated with the changing regulations or standards (e.g., product efficiency, labelling, take back) could impact Cisco sales if we do not continue to monitor and manage our compliance with these requirements. An example indicator we see of this risk is the increased product power efficiency, product takeback requirements we see from our customers as part of proposal requirements. In response to improving emissions from use of sold products, we are improving product efficiency of our products from plug to port and set a product power efficiency goal in early FY18. This Scope 3, use of sold products goal is an approved science-based target. Such a goal drives Cisco to design new power systems that result in a net positive gain in overall product efficiency. Time horizons covered are short-term. ii) A case study of the most substantial strategic decision made in this area to date that have been influenced by the climate-related risks and opportunities: Opportunities from the creation of new markets, like the growing trend for more online collaboration and teleworking solutions to accommodate remote working, will create opportunities for all business units within Cisco to create and sell more collaboration solutions. The use of Cisco products can reduce our customers Scope 1 (purchased fuel), Scope 2 (purchased electricity) and Scope 3 (transportation / business travel) emissions and Cisco has an opportunity to capitalize on the growing need for remote working solutions to reduce climate-related impacts from travel. Cisco has enterprise level servers (e.g., Cisco UCSC-C220-M5SX) that are Energy Star certified; and Cisco's Energy Management Suite can reduce electricity use and GHG emissions. Cisco has also purchased compliance software to track product energy efficiency and product labelling regulations/standards and actively monitor this space. In FY20, we began developing sustainability criteria to include in our product datasheets to better supply this information to our customers.
Supply chain and/or value chain	Yes	i) A description of how your strategy in this area has been influenced by climate-related risks/opportunities: Physical climate risks and opportunities have affected our supply chain/value chain activities through changes in precipitation patterns and extreme variability in weather patterns. The most likely source of impact to our supply chain would be from weather-related changes to water 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, China, India, and Mexico). 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 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 energy conservation, recycling and other alternatives. Time horizons covered are short and medium terms. ii) A case study of the most substantial strategic decision made in this area to date: In response to the Supply Chain risks mentioned above, there is an opportunity for Cisco to grow the market for our products and reduce the impacts from climate change through our suppliers. Cisco joined the CDP Supply chain water program in FY20. We requested external manufacturing partners, strategic Original Design Manufacturers (ODMs), and component suppliers to complete the 2020 CDP water security questionnaire and make it public in CDP ORS system, covering 100% of Cisco Tier 1 supplier (EMS & strategic ODM) spend and more than 80% Tier 2 (Component) supplier spend. In FY20, Cisco identified the supply chain commodities that use large amounts of water and have high water dependency in their daily operations. We also identified supplier sites in high water stress regions. Through this analysis we prioritized suppliers to engage in water stewardship programs in FY21.
Investment in R&D	Yes	i) A description of how your strategy in this area has been influenced by climate-related risks and opportunities and the time horizon(s) it covers: Climate risks and opportunities have affected our investment in R&D (although minimally) through increased revenue opportunities from new solutions to adaptation needs. Over the last 5 years Cisco has invested over $100M in R&D and acquisitions of companies to better capitalize on the growth of network demand required to accommodate the tens of millions of new devices coming online every year. Some of these devices and new IoT solutions are being used to address climate change related impacts (e.g., Smart grids, emergency response and facility energy use measurement and management solutions). Time horizons covered are short and medium terms. ii) A case study of the most substantial strategic decision made in this area to date: Cisco develops and sells products that provide or improve emergency response, security, and remote working or collaboration. Cisco has maximized this opportunity by creating and growing dedicated business units, each with $1B+ in sales. The following product lines are robust and expected to grow substantially: 1. 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 3000/6000/7000/8000Series IP Cameras, Cisco Meraki Cloud Managed MV Series Smart Cameras, Cisco Video Surveillance Manager, Cisco Physical Security Multiservices Platform Series, and Cisco Video Analytics. 3. Remote working or collaboration products include: Cisco Virtual Office (end use device and infrastructure), Cisco WebEx (client software and supporting infrastructure), Cisco Collaboration Room and Desk Endpoints (end use devices and infrastructure), and Cisco WebEx Teams (client software and supporting infrastructure). Cisco has invested more than $2B/yr, mostly in OpEx, in the products listed above over the last 5 years. We continue to improve integration and interoperability in new generations of these products. We continue to invest more than $50M/yr (OpEx) in the development, support, integration and interoperability of the products listed.
Operations	Yes	i) A description of how your strategy in this area has been influenced by climate-related risks and opportunities and the time horizon(s) it covers: Climate risks and opportunities as described in C2.3a/2.4a have affected our operations (although minimally) through changes in taxation/operational costs (e.g. carbon taxes, cap and trade, and fuel/energy taxes and regulations that manifest themselves in increased electricity costs). The estimated magnitude of these risks is low because these issues are managed as part of day-to-day operations and undertaken during the course of regular business. Time horizons covered are medium and long terms. ii) A case study of the most substantial strategic decision made in this area to date that have been influenced by the climate-related risks and opportunities: We have an internal team that monitors electricity use in our labs and data centers, performance against our 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 a 5-year budget ($45M+) that represents about 8% of Cisco's annual utility budget to implement energy efficiency and onsite power projects. In FY20, the GEMS team enabled Cisco to avoid approximately 19.3 GWh of energy consumption and 8,600 metric tonne CO2e by investing $8.7 million to implement 44 energy efficiency projects. This does not include our renewable energy purchases or on-site renewable energy generation. We estimate that the over 440 energy efficiency and on-site renewable energy projects we have implemented since FY16 have avoided approximately 142 GWh of energy and 62,000 metric tonne CO2e. Thirty-six were projects were completed and eight projects were in progress at the end of the fiscal year. Projects implemented globally in FY20 include: • Updating lighting controls and using LED technologies to increase lighting efficiency • Installing and upgrading waterside economization technologies to improve free cooling utilization • Balancing airflow and improving hot and cold aisle containment within our labs • Recommissioning and optimizing major mechanical equipment and control systems to improve energy efficiency of our heating and cooling systems

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Indirect costs Capital expenditures Capital allocation Acquisitions and divestments Assets	i) Case study of how climate-related risks and opportunities have influenced our financial planning in the area of our indirect costs (i.e., operating cost): Physical climate risks as described in C2.3a have affected our financial planning related to operating costs by focusing our attention and some financial resources on mitigating the energy consumption of our real estate portfolio through the implementation of energy efficiency measures. In FY20, the GEMS team enabled Cisco to avoid approximately 19.3 GWh of energy consumption and 8,600 metric tonne CO2e by investing $8.7 million to implement 44 energy efficiency projects. Thirty-six were projects were completed and eight projects were in progress at the end of the fiscal year. The money allocated to invest in these energy efficiency projects ($45M over 5 years) was secured as part of the annual financial planning process for the Workplace Resources team that is responsible for our new set of 5 year GHG emission reduction goals, announced in September 2017. The physical climate opportunities as described in C2.4a have had minimal impact on our operating cost and associated planning through choices related to acquisitions and investments in R&D made over the years to further develop our products and solutions in the areas of the market that we see having the potential to grow in response to climate related challenges. The operating costs associated with these opportunities are not considered material. ii) Time horizons covered are short and medium terms.

C3.4a

(C3.4a) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).

N/A

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?
Absolute target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number
Abs 1

Year target was set
2017

Target coverage
Company-wide

Scope(s) (or Scope 3 category)
Scope 1+2 (market-based)

Base year
2007

Covered emissions in base year (metric tons CO2e)
450733

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)
100

Target year
2022

Targeted reduction from base year (%)
60

Covered emissions in target year (metric tons CO2e) [auto-calculated]
180293.2

Covered emissions in reporting year (metric tons CO2e)
202859

% of target achieved [auto-calculated]
91.6558879277385

Target status in reporting year
Underway

Is this a science-based target?
Yes, and this target has been approved by the Science-Based Targets initiative

Target ambition
Well-below 2°C aligned

Please explain (including target coverage)
These goals were set at the end of FY2017 following on the completion of our previous 5 year goals. These 5-year goals cover 100% of our Scope 1 and 2 emissions and exceeds the recommended 2.1% year-on-year emissions reduction. By 2020 we had reduced our Scope 1 and Scope 2 emissions by 55% absolute compared to our 2007 baseline. Our organization submitted this target to SBTi in April 2018 and it was successfully approved.

Target reference number
Abs 2

Year target was set
2017

Target coverage
Product-level

Scope(s) (or Scope 3 category)
Scope 3: Use of sold products

Base year
2016

Covered emissions in base year (metric tons CO2e)

26233018

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)
100

Target year
2022

Targeted reduction from base year (%)
13

Covered emissions in target year (metric tons CO2e) [auto-calculated]
22822725.66

Covered emissions in reporting year (metric tons CO2e)
23271302

% of target achieved [auto-calculated]
86.8463962828477

Target status in reporting year
Underway

Is this a science-based target?
Yes, and this target has been approved by the Science-Based Targets initiative

Target ambition
Well-below 2°C aligned

Please explain (including target coverage)
Our Scope 3 product energy use goal is: Improve system power efficiency—as measured from the input from the facility to the board-mounted ASICs, memory and other chip devices—from 77 to 87% by FY2022 for large, rack-mounted equipment. This efficiency target will result in 13% absolute reductions in GHG emissions from network and facilities equipment operations by FY2022 from a FY2016 base-year.

Target reference number
Abs 3

Year target was set
2019

Target coverage
Company-wide

Scope(s) (or Scope 3 category)
Other, please specify (Upstream (other) : our goal is a combination of Scope 3 categories 1 (Purchased Goods and Services) and 4 (Upstream Transportation and Distribution))

Base year
2019

Covered emissions in base year (metric tons CO2e)
1720000

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)
100

Target year
2030

Targeted reduction from base year (%)
30

Covered emissions in target year (metric tons CO2e) [auto-calculated]
1204000

Covered emissions in reporting year (metric tons CO2e)
1420000

% of target achieved [auto-calculated]
58.1395348837209

Target status in reporting year
New

Is this a science-based target?
No, but we are reporting another target that is science-based

Target ambition
<Not Applicable>

Please explain (including target coverage)
Reducing GHG emissions has clear business benefits to our suppliers and contributes to Cisco's long-term operational success. To drive progress, we have committed to a goal for suppliers to set public, absolute GHG emissions reduction targets, and a longer-term goal to reduce Cisco's absolute supply chain-related Scope 3 GHG emissions. Abs 3: Reduce Cisco supply chain-related Scope 3 GHG emissions by 30 percent absolute by FY30 (FY19 base year) Includes allocated emissions from Cisco's Tier 1 and Tier 2 manufacturing, component, and warehouse suppliers, and calculated emissions associated with transportation emissions managed and paid for by Cisco. Emissions are allocated based on Cisco's financial share of the supplier's reported global Scope 1 and Scope 2 GHG emissions. Transportation emissions will be reported as Upstream Transportation and Distribution according to GHG Protocol methodology because they are paid directly by Cisco. Due to the standard lag between when emissions occur at our suppliers and when they are reported to Cisco through CDP, we are reporting our FY19 baseline in this disclosure. Verified progress against this goal will not be available until our 2021 CSR report (when we have the data to calculate our FY20 results). This progress will be reported in the 2022 CDP disclosure. See section C6.5 to see more details on scope 3 methodology and the forecasted FY20 results for each upstream category included in this target. Please note that WSP

verifies Cisco's emissions on an annual basis.

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?
Target(s) to increase low-carbon energy consumption or production

C4.2a

(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.

Target reference number
Low 1

Year target was set
2017

Target coverage
Company-wide

Target type: absolute or intensity
Absolute

Target type: energy carrier
Electricity

Target type: activity
Consumption

Target type: energy source
Renewable energy source(s) only

Metric (target numerator if reporting an intensity target)
Percentage

Target denominator (intensity targets only)
<Not Applicable>

Base year
2007

Figure or percentage in base year
10.7

Target year
2022

Figure or percentage in target year
85

Figure or percentage in reporting year
83

% of target achieved [auto-calculated]
97.3082099596232

Target status in reporting year
Underway

Is this target part of an emissions target?
Achievement of this goal affects our Scope 1 and 2 emissions reduction goal, but it is not a part of those goals.

Is this target part of an overarching initiative?
No, it's not part of an overarching initiative

Please explain (including target coverage)
Our renewable energy goal is to use electricity generated from renewable sources for at least 85% of our global electricity by FY2022. This goal covers 100% of our global electricity use.

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.
Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	48	
To be implemented*	57	4750
Implementation commenced*	8	3016
Implemented*	36	458790
Not to be implemented	86	

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Energy efficiency in buildings	Other, please specify (Solar shading, Heating, Ventilation and Air Conditioning, Lighting, Motors and Drives)

Estimated annual CO2e savings (metric tonnes CO2e)
5536

Scope(s)
Scope 1
Scope 2 (location-based)
Scope 2 (market-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
1722400

Investment required (unit currency – as specified in C0.4)
5773525

Payback period
1-3 years

Estimated lifetime of the initiative
6-10 years

Comment
Cisco maintains a Global Energy Management and Sustainability (GEMS) team that leads sustainability initiatives across Cisco's real estate portfolio. This team manages a $45+ million, multi-year global EnergyOps program to implement hundreds of efficiency and renewable energy projects. This program makes our operations more efficient and allows us to increase the amount of renewable electricity we buy. In FY20, the GEMS team enabled Cisco to avoid approximately 19.3 GWh of energy consumption and 8,600 metric tonne CO2e by investing $8.7 million to implement 44 energy efficiency projects. This does not include our renewable energy purchases or on-site renewable energy generation. We estimate that the over 440 energy efficiency and on-site renewable energy projects we have implemented since FY16 have avoided approximately 142 GWh of energy and 62,000 metric tonne CO2e. Thirty-six projects were completed and eight projects were in progress at the end of the fiscal year. Projects implemented globally in FY20 include: • Updating lighting controls and using LED technologies to increase lighting efficiency • Installing and upgrading waterside economization technologies to improve free cooling utilization • Balancing airflow and improving hot and cold aisle containment within our labs • Recommissioning and optimizing major mechanical equipment and control systems to improve energy efficiency of our heating and cooling systems

Initiative category & Initiative type

Low-carbon energy consumption	Other, please specify (Solar PV, Geothermal, Hydro, Wind)

Estimated annual CO2e savings (metric tonnes CO2e)
453254

Scope(s)
Scope 2 (market-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
0

Investment required (unit currency – as specified in C0.4)
600000

Payback period
No payback

Estimated lifetime of the initiative
1-2 years

Comment
In FY2020, Cisco purchased 1,316,321 MWh of RECs, I-RECs, and green power through suppliers in the United States, Europe, and India. This is a difference of 27,305 MWh of renewable energy compared to Cisco's FY2019 purchase of 1,343,626 MWh of RECs and green power. Since Cisco's overall electricity use was lower in FY20 compared to FY19, we did not need to purchase as much renewable energy to meet our renewable energy requirements for the year. Our renewable electricity purchases in India include both long-term and short-term contracts supporting solar, wind, and hydropower development in a grid that is dominated by fossil fuels. We executed 2 long-term solar power contracts in April 2018 and numerous short-term renewable electricity contracts in 2019 and 2020. Collectively, these agreements will deliver 85,000 MWh of clean, renewable electricity every year to the local electric grid where our Bangalore campus is located. Through these contracts, we exceeded 60% renewable electricity for our India operations in FY20. The US RECs Cisco purchases are certified by Green-e, an independent auditor of renewable energy products, and are generated from wind, solar, geothermal, and hydropower sources throughout the United States. All the renewable energy that Cisco purchases meets the new WRI Scope 2 Greenhouse Gas Reporting rules regarding renewable energy purchase reporting. Purchasing renewable energy and green power has a 1-yr life and the contract must be renewed every year.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Dedicated budget for energy efficiency	The Global Energy Management and Sustainability (GEMS) team, mentioned above, leads sustainability initiatives across Cisco's global real estate. This team manages a multi-year global EnergyOps program to implement hundreds of efficiency and renewable energy projects across Cisco's real estate portfolio, which directly contributed to the achievement of our FY17 energy/GHG reduction goals and the funding of our FY18-FY22 energy/GHG reduction goals. To achieve our FY18-FY22 goals, Cisco has committed to invest more than $45 million over five years to implement more than 300 energy efficiency and onsite renewable energy projects across our real estate portfolio, and increase renewable energy procurement through utility green power programs, power purchase agreements, and renewable energy certificates.
Lower return on investment (ROI) specification	Cisco has a 4.3 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. 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.

C4.5

(C4.5) 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

C4.5a

(C4.5a) 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

Group of products

Description of product/Group of products

Cisco has a wide range of environmentally and energy efficient products. We have incorporated environmental design principles into our products and manufacturing processes so that fewer raw materials are used and less packaging is needed, and product refurbishment and recycling are more effective. The use of Cisco products can reduce our customers Scope 1 (purchased fuel), Scope 2 (purchased electricity) and Scope 3 (transportation / business travel) emissions. Cisco has enterprise level servers (e.g. Cisco UCSC-C220-M5SX) that are Energy Star certified; and Cisco's Energy Management Suite 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. More and more, stakeholders ask us to quantify the percent of our yearly revenue that is considered "clean" or "green." Cisco uses the Corporate Knights (CK) methodology when defining clean revenue (as it is the most comprehensive). CK uses the following definition for clean/green revenue: "Clean revenue measures a company's revenue from all goods and services which have clear environmental and, in a limited number of well-defined cases, social benefits. This includes revenue from clean transition, low-carbon economy and circular economy revenue segments." Revenue included in our green revenue calculation includes: • Products that meet ENERGY STAR or EPEAT requirements • Collaboration products such as Webex Meetings, Webex Rooms, Cisco Virtual Office and Meraki Virtual Office. • Products that have been recycled or refurbished • Software and services that reduce energy consumption and enable longer product life Based on this taxonomy, we determined that 58% percent of our FY19 revenue can be considered green/clean. However, we believe that stakeholders should use caution in comparing companies with a self-reported green/clean revenue number. There is not a public standard for such reporting, and this reporting is difficult to verify.

Are these low-carbon product(s) or do they enable avoided emissions?

Low-carbon product and avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Evaluating the carbon-reducing impacts of ICT

% revenue from low carbon product(s) in the reporting year

58

% of total portfolio value

<Not Applicable>

Asset classes/ product types

<Not Applicable>

Comment

An example application of Cisco' Energy Management Suite 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 the Cisco Energy Management Suite 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 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 the Energy Management Suite 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.

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start
August 1 2006

Base year end
July 31 2007

Base year emissions (metric tons CO2e)
48311

Comment

Scope 2 (location-based)

Base year start
August 1 2006

Base year end
July 31 2007

Base year emissions (metric tons CO2e)
448950

Comment

Scope 2 (market-based)

Base year start
August 1 2006

Base year end
July 31 2007

Base year emissions (metric tons CO2e)
402422

Comment

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)
39223

Start date
<Not Applicable>

End date
<Not Applicable>

Comment

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

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

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

Comment
We report market- and location-based Scope 2 emissions in accordance with the GHG Protocol's Scope 2 guidance.

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based
607969

Scope 2, market-based (if applicable)
163636

Start date
<Not Applicable>

End date
<Not Applicable>

Comment

C6.4

(C6.4) 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

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status
Relevant, calculated

Metric tonnes CO2e
1030000

Emissions calculation methodology
This calculation is based on primary data (collected from our suppliers via CDP supply chain program) and secondary data (Cisco calculated average intensity figures). Primary Data: Allocate supplier emissions based upon annual spend and their corporate intensity factor. Cisco calculates the corporate intensity factor by dividing scope 1 & scope 2 emissions data by the reported revenue figure (substitute public revenue figures as necessary). Secondary Data: For suppliers that do not report to CDP or provide inaccurate primary data, we allocate supplier emissions based upon annual spend and an average intensity factor. Cisco calculates the average intensity factors by grouping corporate intensity factors into major commodity/category groups. We remove suppliers' reported scope 3 data in these calculations because the data is inconsistent, not available from all suppliers and reporting boundaries often overlap due to our outsourced manufacturing environment.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
87

Please explain
This Scope 3 category is included in our supply chain absolute reduction goal. The boundary incorporates the allocated GHG emissions of our Tier 1 and Tier 2 manufacturing, component and warehouse suppliers. The majority of emissions are related to the electricity consumption used to manufacture sub-components and complete final testing for our products. Emissions are allocated based on Cisco's financial share of the supplier's reported global Scope 1 and Scope 2 GHG emissions. 2020 GHG Emissions include in this category are forecasted as it relates to the performance of our supply chain absolute reduction target. Due to the standard lag between when emissions occur at our suppliers and when they are reported to Cisco through CDP, we will be reporting verified performance numbers in our 2021 CSR report (when we have the data to calculate the FY20 results).

Capital goods

Evaluation status
Relevant, not yet calculated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Cisco operates an outsourced supply chain and our Tier 1 manufacturing partners procure and operate the majority of our capital equipment. The only significant category of capital equipment purchased and owned by Cisco is the final testing equipment. Since this equipment is operated by our Tier 1 manufacturing partners the emissions are captured in their Scope 2 data. Additionally, Cisco does not procure any significant category of capital equipment for internal operations. This Scope 3 category is not included in our supply chain absolute reduction goal because the electricity usage of final testing equipment is already included in our category 1 figure. In previous years we have reported an EIO based carbon number for the final testing equipment in our outsourced supply chain. This does not align to the other upstream scope 3 emission categories included in our supply chain reduction goal.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status
Not relevant, calculated

Metric tonnes CO2e
36478

Emissions calculation methodology
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 FY2020.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain

Upstream transportation and distribution

Evaluation status
Relevant, calculated

Metric tonnes CO2e
390000

Emissions calculation methodology
This calculation is based on the activity data (collected from our supply chain operations via our freight invoicing system) and GHG emissions factors (DEFRA 2020 freighting goods). Activity Data includes Transportation Mode, Carrier, Shipment Lane (Distance), and Mass. Since this data is pulled from our invoicing system, it has been verified and audited for accuracy by our third party solution partner. It provides a clear way for Cisco to consistently evaluate the absolute impact of transportation activity across our global network of carriers and locations. Emissions Factor: DERFA freighting goods factors are used to evaluate the environmental impact for shipments of goods by a third-party carrier. For this calculation, we are using the Freight Flight factors based on appropriate distances. This factor provides a Tank to Wheel (TTW) impact for our air freight transportation.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
This Scope 3 category is included in our supply chain absolute reduction goal. The boundary incorporates the GHG emissions from transportation services directly purchased by Cisco over the reporting year. The majority of emissions are related to the air transportation used to deliver products and services within our manufacturing and distribution networks. This category also includes the GHG emissions for Cisco routed transportation occurring downstream in our value chain. According to the GHG Protocol methodology, these transportation activities are reported as Upstream Transportation and Distribution because they are paid directly by Cisco. These activities include bulk shipments to third-party reselling partners and drop-shipments to customer specified locations. Cisco routed transportation services provide value to our customers; lowering costs, reducing delivery times, and managing GHG emissions. Air transportation makes up over 95% of Cisco's TTW logistics GHG emissions, so at this time we are only reporting impact from this mode of transportation. We are evaluating approaches to calculate or estimate the impacts of ground transportation.

Waste generated in operations

Evaluation status
Not relevant, calculated

Metric tonnes CO2e
1077

Emissions calculation methodology
We are reporting emissions generated from operational waste sent to landfill only, per the GHG Protocol Corporate Value Chain (Scope 3) Standard. In FY2020, Cisco recycled approximately 81% of operational waste generated at its facilities. Cisco used emission factors published by the EPA Waste Reduction Model (WARM), Version 15 to convert waste to landfill metrics to GHG emissions. For mixed municipal solid waste (MSW), this factor is 0.09 tCO2e per short ton of waste generated.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain

Business travel

Evaluation status
Relevant, calculated

Metric tonnes CO2e
207323

Emissions calculation methodology
While Cisco had an active travel goal, we measured travel using a rollup of individual flight segments for each employee worldwide. To this number we applied a correction factor, usually 98%, representing the flight segments for which we had primary data. (Previously, analysis of financial accounts indicated that employees were consistently using our global travel provider for 98% of our travel, so we only needed to boost calculated travel to account for the additional 2% from travel arranged outside our global travel provider. Cisco is no longer reporting business travel against a GHG emissions reduction goal, instead we are using linear trending based on 11 years (2007-2017) of actual flight segment data and calculated emissions. Over the last 8 years, air travel has increased on a steady linear basis, likely driven by growth in company revenue and/or employee count. The strong correlation between revenue and business travel emissions (R^2 = 0.93) suggests extrapolating year on year emissions is appropriate for the desired accuracy when there has been no significant change in business conditions that could disrupt travel spend.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain

Employee commuting

Evaluation status
Relevant, calculated

Metric tonnes CO2e
49463

Emissions calculation methodology
Cisco used our latest employee commuting survey completed in FY18 to estimate the emissions produced from employees commuting to work in FY20. Our Scope 3 emissions from employee commuting decreased from FY19 to FY20 by 38% due to our mandatory work from home policy during the COVID-19 pandemic.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain

Upstream leased assets

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Any upstream leased assets are included in the boundary of our Scope 1+2 emissions.

Downstream transportation and distribution

Evaluation status
Relevant, not yet calculated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
In FY20, Cisco updated our scope 3 methodologies for supply-chain-related emissions. We updated this methodology to improve how Cisco activity impacts GHG emissions in our supply chain. Since the GHG protocol requires you to report transportation activities paid directly as part of your upstream impact, we already account for the GHG emissions from Cisco routed transportation activities in category 4 (see the explanation, previous). In FY20, Cisco routed transportation accounted for roughly 70%, while customer routed activities accounted for 30% of shipments by weight. We are actively evaluating approaches to estimate the impact of customer-routed activities to report against this category moving forward.

Processing of sold products

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
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

Evaluation status
Relevant, calculated

Metric tonnes CO2e
23271302

Emissions calculation methodology
Cisco calculates our Scope 3 use of sold products GHG emissions based on the Greenhouse Gas Protocol guidance for calculating Scope 3 emissions (version 1.0). Our use of sold products are classified as direct use-phase emissions as our products directly consume energy during their use. To estimate the total CO2e from the use of our sold products, we estimate the energy use per product, multiplied by the number of products sold in a given year multiplied by an emission factor. Once sold, our can be used anywhere from 2-15 years depending on the product type. To account for this, we assume a conservative average of a 5-year lifetime and include the previous 4 years of product nergy consumption to estimate the total amount of energy consumed and corresponding GHG emissions by our products for FY20.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
80

Please explain

End of life treatment of sold products

Evaluation status
Not relevant, calculated

Metric tonnes CO2e
250

Emissions calculation methodology
This calculation is based on primary data (collected from our suppliers via CDP supply chain program) and secondary data (Cisco calculated average intensity figures). Primary Data: Allocate supplier emissions based upon annual spend and their corporate intensity factor. Cisco calculates the corporate intensity factor by dividing scope 1 & scope 2 emissions data by the reported revenue figure (substitute public revenue figures as necessary). Secondary Data: For suppliers that do not report to CDP or provide inaccurate primary data, we allocate supplier emissions based upon annual spend and an average intensity factor. Cisco calculates the average intensity factors by grouping corporate intensity factors into major commodity/category groups. We remove suppliers' reported scope 3 data in these calculations because the data is inconsistent, not available from all suppliers and reporting boundaries often overlap due to our outsourced manufacturing environment.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
87

Please explain
This Scope 3 category is not included in our supply chain absolute reduction goal. The boundary incorporates the allocated Scope 1 and Scope 2 GHG emissions of our Tier 1 recycling partners.

Downstream leased assets

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Any downstream leased assets are included in the boundary of our Scope 1+2 emissions.

Franchises

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
This category is not applicable to Cisco because we don't own or sell franchises.

Investments

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
According to the GHG protocol, this category is applicable only to financial institutions which Cisco is not, and therefore this does not apply to Cisco. (http://www.ghgprotocol.org/feature/scope-3-calculation-guidance).

Other (upstream)

Evaluation status

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain

Other (downstream)

Evaluation status

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?
No

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure
0.0000041

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
202859

Metric denominator
unit total revenue

Metric denominator: Unit total
49301000000

Scope 2 figure used
Market-based

% change from previous year
6.4

Direction of change
Decreased

Reason for change
This metric has decreased due to Cisco's emissions reduction activities in FY2020 as listed in our response to Question 4.3b, which includes our energy efficiency projects and our renewable energy purchasing, as well as reduced Cisco building energy use due to the COVID-19 pandemic. Cisco's revenue also decreased by approximately 5% in FY2020 compared to FY2019, while emissions decreased by 11.3% over the same period • Updating lighting controls and using LED technologies to increase lighting efficiency • Installing and upgrading waterside economization technologies to improve free cooling utilization • Balancing airflow and improving hot and cold aisle containment within our labs • Recommissioning and optimizing major mechanical equipment and control systems to improve energy efficiency of our heating and cooling systems • Participating in emergency energy demand response programs in both Texas and California • Continuing an employee engagement campaign to promote, educate, and incentivize employees to conserve energy

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?
Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	34961	IPCC Second Assessment Report (SAR - 100 year)
CH4	30	IPCC Second Assessment Report (SAR - 100 year)
N2O	131	IPCC Second Assessment Report (SAR - 100 year)
HFCs	4101	IPCC Second Assessment Report (SAR - 100 year)

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/region.

Country/Region	Scope 1 emissions (metric tons CO2e)
United States of America	12682
Other, please specify (Rest of World)	26541

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.
By activity

C7.3c

(C7.3c) Break down your total gross global Scope 1 emissions by business activity.

Activity	Scope 1 emissions (metric tons CO2e)
Natural Gas Use	14377
Diesel Use	9005
Propane Use	183
Refrigerant Use	3524
Fire Suppressant Use	577
Fleet Diesel and Petrol Use	11557

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted for in Scope 2 market-based approach (MWh)
United States of America	302906	0	1063238	1063238
Other, please specify (Rest of World)	305063	163636	492487	228945

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.
By activity

C7.6c

(C7.6c) Break down your total gross global Scope 2 emissions by business activity.

Activity	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Electricity Use	607969	163636
Purchased heat	0	0
Purchased steam	0	0
Purchased cooling	0	0

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?
Decreased

C7.9a

(C7.9a) 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.

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	8016	Decreased	3.5	As listed in Question 4.3b, Cisco purchased 1,316,321 MWh of RECs, I-RECs, and green power in FY2020 through various suppliers in the United States, Europe, and India. This is a difference of 27,305 MWh of renewable energy compared to Cisco's FY2019 purchase of 1,343,626 MWh of RECs and green power. Since Cisco's overall electricity use was lower in FY20 compared to FY19, we did not need to purchase as much renewable energy to meet our renewable energy requirements for the year. After normalizing the emissions reduction from the renewable energy Cisco purchased in FY2019 for the greening of the electricity grid (i.e. the addition of renewables to electricity grids in which Cisco has operations), we calculate that the renewable energy Cisco purchased in FY2020 reduced our combined scope 1 and 2 emissions by approximately 8,016 tCO2e. Since Cisco's scope 1 and 2 emissions in FY2019 was 228,610 tCO2e, this reduction equates to an 3.5% decrease (-8,016 / 228,610 = -3.5%) in scope 1 and 2 emissions in FY2020 compared to FY2019.
Other emissions reduction activities	5536	Decreased	2.4	As a result of the various energy efficiency activities listed in Question 4.3b that Cisco implemented in FY2020, Cisco reduced its combined scope 1 and 2 emissions in FY2020 by approximately 5,536 tCO2e. Since Cisco's scope 1 and 2 emissions in FY2019 were 228,610 tCO2e, this reduction equates to a 2.4% decrease (-5,536 / 228,610 = -2.4%) in scope 1 and 2 emissions in FY2020 compared to FY2019.
Divestment		<Not Applicable>		
Acquisitions		<Not Applicable>		
Mergers		<Not Applicable>		
Change in output	12116	Decreased	5.3	Due to natural fluctuations from FY2019 to FY2020 in the energy required to support Cisco's business during the COVID-19 pandemic, Cisco estimates that its scope 1 and 2 emissions would have decreased in FY2020 by approximately 12,116 tCO2e even if we had not implemented any renewable energy or energy efficiency projects. This increase would equate to a 5.3% increase (12,116 / 228,610 = 5.3%) in scope 1 and 2 emissions in FY2020 compared to FY2019.
Change in methodology		<Not Applicable>		
Change in boundary		<Not Applicable>		
Change in physical operating conditions		<Not Applicable>		
Unidentified		<Not Applicable>		
Other		<Not Applicable>		

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

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

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	Unable to confirm heating value	0	162047.99	162047.99
Consumption of purchased or acquired electricity	<Not Applicable>	1289819.21	263541.92	1553361.13
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	2363.66	<Not Applicable>	2363.66
Total energy consumption	<Not Applicable>	1292182.88	425589.92	1717772.79

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	No
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	Yes

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Fuels (excluding feedstocks)
Natural Gas

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
79329.23

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat
75453.5

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
3875.73

Emission factor
14.47

Unit
kg CO2 per million Btu

Emissions factor source
EPA Direct Emissions from Stationary Combustion Sources Guidance from http://www.epa.gov/climateleadership/documents/resources/stationarycombustionguidance.pdf

Comment

Fuels (excluding feedstocks)
Diesel

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
35562.12

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
0

Emission factor
19.95

Unit
kg CO2 per million Btu

Emissions factor source
EPA Direct Emissions from Stationary Combustion Sources Guidance from http://www.epa.gov/climateleadership/documents/resources/stationarycombustionguidance.pdf

Comment
This selection is for stationary diesel used in our generators

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Fuels (excluding feedstocks)
Petrol

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
19139.3

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
0

Emission factor
8.81

Unit
kg CO2 per gallon

Emissions factor source
EPA Mobile Source Guidance from http://www.epa.gov/climateleadership/documents/resources/mobilesource_guidance.pdf

Comment

Fuels (excluding feedstocks)
Propane Gas

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
869.13

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
0

Emission factor
17.2

Unit
kg CO2 per million Btu

Emissions factor source
EPA Direct Emissions from Stationary Combustion Sources Guidance from http://www.epa.gov/climateleadership/documents/resources/stationarycombustionguidance.pdf

Comment

Fuels (excluding feedstocks)
Other, please specify (Diesel (Mobile diesel))

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
27148.22

MWh fuel consumed for self-generation of electricity
<Not Applicable>

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
0

Emission factor
10.15

Unit
kg CO2 per gallon

Emissions factor source
EPA Mobile Source Guidance from http://www.epa.gov/climateleadership/documents/resources/mobilesource_guidance.pdf

Comment
This selection is for mobile diesel used in our car fleet

C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	2363.66	2363.66	2363.66	2363.66
Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero emission factor in the market-based Scope 2 figure reported in C6.3.

Sourcing method
Unbundled energy attribute certificates, Renewable Energy Certificates (RECs)

Low-carbon technology type
Other, please specify (Solar, Wind)

Country/area of consumption of low-carbon electricity, heat, steam or cooling
United States of America

MWh consumed accounted for at a zero emission factor
975277.28

Comment
Our operations in USA have purchased RECs to cover of our electricity consumption during the period. All renewable energy purchased in the US through these programs are Green-e certified.

Sourcing method
Power purchase agreement (PPA) with a grid-connected generator with energy attribute certificates

Low-carbon technology type
Other, please specify (Solar, Wind)

Country/area of consumption of low-carbon electricity, heat, steam or cooling
United States of America

MWh consumed accounted for at a zero emission factor
60611.58

Comment
This electricity is sourced from Cisco's solar and wind power purchase agreements in Blythe, California, and Mesquite, Texas. In FY2020, Cisco purchased 52,979.294

MWh of solar power from the Blythe solar farm and 7,632.290 MWh of wind power from the Mesquite wind farm.

Sourcing method
Green electricity products (e.g. green tariffs) from an energy supplier, supported by energy attribute certificates

Low-carbon technology type
Other, please specify (Solar, Wind)

Country/area of consumption of low-carbon electricity, heat, steam or cooling
United States of America

MWh consumed accounted for at a zero emission factor
26224.62

Comment
Cisco participates in utility green power programs in Austin, TX and Research Triangle Park, NC. 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.

Sourcing method
Other, please specify (Off-grid on-site renewable energy installation (direct line))

Low-carbon technology type
Solar

Country/area of consumption of low-carbon electricity, heat, steam or cooling
United States of America

MWh consumed accounted for at a zero emission factor
2363.66

Comment
Seven of our operations (4 in the USA, 3 in India) have installed onsite solar photovoltaic systems.. 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.

Sourcing method
Power purchase agreement (PPA) with a grid-connected generator with energy attribute certificates

Low-carbon technology type
Solar

Country/area of consumption of low-carbon electricity, heat, steam or cooling
India

MWh consumed accounted for at a zero emission factor
73700

Comment
This electricity is sourced from Cisco's solar power purchase agreements in Karnataka, India, signed in April 2018. Cisco purchased 73,700.001 MWh of solar power from the solar farms in FY2020.

Sourcing method
Power purchase agreement (PPA) with a grid-connected generator with energy attribute certificates

Low-carbon technology type
Other, please specify (Wind, Solar, Hydro)

Country/area of consumption of low-carbon electricity, heat, steam or cooling
India

MWh consumed accounted for at a zero emission factor
79678

Comment
This electricity is sourced from energy suppliers in India and is I-REC certified.

Sourcing method
Unbundled energy attribute certificates, Guarantees of Origin

Low-carbon technology type
Other, please specify (Solar, Hydro, Wind, Geothermal)

Country/area of consumption of low-carbon electricity, heat, steam or cooling
United Kingdom of Great Britain and Northern Ireland

MWh consumed accounted for at a zero emission factor
74327.73

Comment
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.

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

Description
Waste

Metric value
5715

Metric numerator
metric tons

Metric denominator (intensity metric only)

% change from previous year
45.6

Direction of change
Decreased

Please explain
This is the amount of waste generated within Cisco's internal operations during FY2020. COVID-19 had a significant impact on the total waste generated at our facilities. The majority of our sites were closed, with employees under mandatory work from home, for almost half the year. As a result, we produced about half of the waste compared to the previous year. This figure was verified as part of the third-party verification work completed by WSP USA. Cisco reports waste generated for 100% of its facilities, which includes an extrapolation of data to facilities where we are unable to receive waste data.

Description
Other, please specify (Water Consumption)

Metric value
3182870

Metric numerator
cubic meters

Metric denominator (intensity metric only)

% change from previous year
3.5

Direction of change
Decreased

Please explain
This is the amount of water used within Cisco's internal operations during FY2020. This figure was verified as part of the third-party verification work completed by WSP USA. Cisco reports water use for 100% of its facilities, which includes an extrapolation of data to facilities where we are unable to receive water data. This figure is reported as 3,183 m3 thousands on page 55 of Cisco's 2020 Environment Technical Review.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
Cisco FY2020 GHG Waste and Water Assurance Review Letter FINAL - 19MAY2021(1) (1).pdf

Page/ section reference
Page 1

Relevant standard
ISO14064-3

Proportion of reported emissions verified (%)
100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach
Scope 2 location-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
Cisco FY2020 GHG Waste and Water Assurance Review Letter FINAL - 19MAY2021(1) (1).pdf

Page/ section reference
Page 1

Relevant standard
ISO14064-3

Proportion of reported emissions verified (%)
100

Scope 2 approach
Scope 2 market-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
Cisco FY2020 GHG Waste and Water Assurance Review Letter FINAL - 19MAY2021(1) (1).pdf

Page/ section reference
Page 1

Relevant standard
ISO14064-3

Proportion of reported emissions verified (%)
100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category
Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
Cisco FY2020 GHG Waste and Water Assurance Review Letter FINAL - 19MAY2021(1) (1).pdf

Page/section reference
Page 2

Relevant standard
ISO14064-3

Proportion of reported emissions verified (%)
100

Scope 3 category
Scope 3: Waste generated in operations

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
Cisco FY2020 GHG Waste and Water Assurance Review Letter FINAL - 19MAY2021(1) (1).pdf

Page/section reference
Page 2

Relevant standard
ISO14064-3

Proportion of reported emissions verified (%)
100

Scope 3 category
Scope 3: Employee commuting

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
Cisco FY2020 GHG Waste and Water Assurance Review Letter FINAL - 19MAY2021(1) (1).pdf

Page/section reference
Page 2

Relevant standard
ISO14064-3

Proportion of reported emissions verified (%)
100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?
Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C9. Additional metrics	Other, please specify (Water and waste)	Verification guidance adapted for waste and water from ISO 14064-3	In addition to its Scope 1, Scope 2 (location-based), Scope 2 (market-based), and select Scope 3 categories, Cisco's water and waste data were verified as part of the third-party verification work completed by WSP USA. See attached assurance statement for details. CiscoFY2020GHGWasteandWaterAssuranceReviewLetterFINAL19MAY202111.pdf

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

No, and we do not anticipate being regulated in the next three years

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

No

C11.3

(C11.3) Does your organization use an internal price on carbon?

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

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

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

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement
Information collection (understanding supplier behavior)

Details of engagement
Collect climate change and carbon information at least annually from suppliers

% of suppliers by number
50

% total procurement spend (direct and indirect)
90

% of supplier-related Scope 3 emissions as reported in C6.5
5

Rationale for the coverage of your engagement
As a member of the CDP supply chain program, we request that all our direct suppliers with whom we have a significant business relationship report their GHG impacts to CDP. The suppliers we engage with include our manufacturing partners, component suppliers, logistics partners, and recycling partners. In FY20, 89% of our manufacturing, component, and logistics suppliers, by spend, publicly reported their Scope 1 and Scope 2 GHG emissions to CDP. 81% of the emissions data they reported was verified by a third party. This data allows Cisco to gain a more accurate picture of our extended operations and to better understand the impacts associated with our supplier GHG emissions. By engaging with these suppliers, we can calculate and analyze the GHG emissions associated with scope 3 categories 1 (purchased goods and services). These suppliers were selected for engagement because they represent more than 90% of our direct procurement spend and we can link this engagement effort to our internal supplier scorecard business process.

Impact of engagement, including measures of success
i. Measures of success: Cisco's measure of success for this engagement activity is a target of 80% response rate to the CDP supply chain questionnaire. Additionally, we hold our suppliers accountable to the following best practices via our sustainability metric in the supplier balanced scorecard: (1) report publicly, (2) verify emissions (via third party review), and (3) have an absolute reduction goal. Additionally, we encourage all our suppliers to (4) engage their own suppliers to report to CDP and utilize the best practices laid out above. ii. Impact of engagement according to measures of success: In 2020, 100% of our manufacturing, 86% of our component and 96% of our logistics suppliers responded to CDP, exceeding our internal goal. We report the performance against these metrics for the individual supplier categories in our Cisco 2020 Environmental Technical Review. The GHG emissions from our supply chain are five times greater than the footprint of our own operations. In FY19, we announced new goals to address supply chain GHG emissions: - 80% of Cisco component, manufacturing, and logistics suppliers by spend will have a public, absolute GHG emissions reduction target by FY25. - Reduce Cisco supply chain-related Scope 3 GHG emissions by 30% absolute by FY30 (FY19 base year)

Comment
The information provided above applies to our direct supply chain operations. Our justification is that Cisco operates a fully out-sourced supply chain that produces a tremendous amount of value for our business and thus has a large influence on the products and services we produce. Cisco has over 500 global components, manufacturing, and logistics suppliers worldwide in our direct supply chain. This makes our direct supplier engagement a critical part of managing potential risks to our business. Additionally, in 2020, for the first time we requested over 100 suppliers from our indirect supply chain to report to CDP.

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement
Education/information sharing

Details of engagement
Run an engagement campaign to education customers about your climate change performance and strategy

% of customers by number
26

% of customer - related Scope 3 emissions as reported in C6.5
1

Portfolio coverage (total or outstanding)
<Not Applicable>

Please explain the rationale for selecting this group of customers and scope of engagement
Cisco engages with the top 26% (by spend) of our customers through our account teams, investor relations and directly with our CSR team to provide information about our environmental programs, strategy, and performance. These customers are selected because they express an interest in understanding Cisco's sustainability program or have specific climate change related contractual requirements that they want Cisco to comply with. We also engage directly with stakeholders to provide details on products/solutions that can help customers be more sustainable by reducing GHG emissions or improving energy efficiency. The number of engagements varies per quarter based on customer and internal Cisco team needs, but on average we engage with more than a thousand stakeholders each year. We keep a record of all engagements to help inform our CSR process and make sure we are making the information requested by customers publicly available via our CSR reporting. 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.

Impact of engagement, including measures of success
We track number of engagements with our customers as a measure of successful market awareness and customer engagement and we compare the number of engagements year over year to see how this data is trending. We consider engaging the top 35% of our customers (by spend) a good measure of success. Tracking the number of customer requests received informs a variety of CSR channels within the business, including useful inputs into our annual materiality refresh, emerging trends, and best practice within our industry. It also allows us to gauge what our customers are asking of us and how we can support them in achieving their sustainability goals and targets. We respond to 100% of customer sustainability-related requests within the timeframe that they set, and we see this as a measure of success and good customer service. These inquiries are only considered complete once the stakeholder has the information they requested. We also use formal survey techniques to measure partner and customer awareness of Cisco sustainability performance (as reported in our annual CSR report), products and solutions (Cisco collaboration solutions, e.g., WebEx). In FY18, Cisco invited approximately 5,000 customers across all regions and market segments to complete an online survey on environmental sustainability. Feedback from this FY18 survey matched the results of the FY19 sustainability materiality assessment.

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

Environmental sustainability has become increasingly important to our employees, who have become key partners in the value chain for promoting and implementing our climate-related initiatives. We are committed to providing employees with tools that allow them to collaborate and solve environmental problems, both in the office and in their communities. We encourage employees to be global problem solvers and come up with innovative ways to improve reusability and recyclability. Our employee engagement efforts for 2020 include:

· Annual shutdown: Cisco requires employees in North America, and encourages other employees worldwide, to take time off at the end of December. The shutdown gives us an opportunity to power down facilities and unused equipment during a time when much of our workforce is already taking time off. Over the 10-day shutdown beginning in December 2019, Cisco avoided approximately $690,000 in energy costs and 3,400 metric tonne CO2e of emissions. Employees working in buildings in India, Hong Kong, reduced their electricity consumption by at least 40 percent during the shutdown.

· Recycle IT Day: Every year around Earth Day in April, we encourage employees to bring their used electronics to Cisco sites around the world to have them responsibly recycled using the same vendors we use to recycle Cisco products.

· Cisco GreenHouse. In 2016, we launched an interactive sustainability web platform for employees. Cisco GreenHouse connects passionate employees who want to find ways to lead more sustainable lives with likeminded peers all over the world. By the end of FY20, more than 8,000

employees had joined the site and taken 48,000 actions to learn about or be more sustainable.

· Earth Aware: While Earth Day is just one day, Cisco extends the celebration with a two-month employee volunteerism and awareness campaign. During Earth Aware, we invite employees to practice sustainable behaviors like biking to work and properly sorting waste in cafeterias. We also host activities like on-campus farmer's markets and information sessions about Cisco's species conservation efforts. Earth Aware sparks new ideas and renews dedication to live in more environmentally responsible ways.

· Bike to Work Day: As part of the Earth Aware campaign, Cisco sponsors Bike to Work Day activities. While it is a global opportunity, Cisco

· employees and contractors in San Jose come out in large numbers. They visit Cisco's energizer station, grab bagels and fruit, get free chair massages, use the repair station, and visit with fellow cyclists. In partnership with the Silicon Valley Bike Coalition, Cisco helps remove thousands of cars from the roads in the Bay Area through this event. Also in the month of May, employees in Bangalore take part in the Zero Emissions Ride.

· SustainX: Earth Aware culminates in the Cisco SustainX event, a thought leadership forum hosted on Cisco's campuses. Employees from around the world come together to learn about Cisco's sustainability practices and how they can help make a difference. In FY20, our fifth annual event was 100% virtual. During this event, we invite internal executives to share what their teams are doing to reduce their environmental impact and external speakers to discuss the innovative ways they are working to improve the environment. In FY20, leading environmentalist and author Paul Hawken shared his "Drawdown" approach to addressing global warming, and a Cisco Fellow explained how our new 8000 Series routers save significant amounts of power and materials.

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

Trade associations

Other

C12.3b

(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?

Yes

C12.3c

(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.

Trade association

RBA (formerly EICC)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

RBA is a nonprofit coalition of leading electronics companies dedicated to supply chain responsibility. In 2015 RBA partnered with CDP to help expand greenhouse gas (GHG) reporting and reductions in the electronics supply chain. RBA is collaborating with CDP to encourage electronics companies to disclose through CDP's supply chain program.

How have you influenced, or are you attempting to influence their position?

Cisco has been asking its supply chain partners to participate in the CDP supply chain initiative since 2014.

C12.3e

(C12.3e) 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 C2.7, 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 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 labelling) 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.

C12.3f

(C12.3f) 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, Corporate Affairs. 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 Corporate Affairs team 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).

C12.4

(C12.4) 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
In mainstream reports

Status
Complete

Attach the document
Cisco 2020 Annual Report.pdf

Page/Section reference
Governance – page 7-12 Strategy – page 6 Risks & Opportunities – pages 8, 11 (see "Item 1A Risk Factors") Emission targets – page 14 Other metrics – page 14-15

Content elements
Governance
Strategy
Risks & opportunities
Emission targets
Other metrics

Comment

Publication
In voluntary sustainability report

Status
Complete

Attach the document
Cisco 2020_Environment Technical Review.pdf

Page/Section reference
Governance - pages 9-18 Strategy - pages 9-18 Emissions figures - pages 28-34 Emissions targets - pages 15-16 Other metrics – pages 52, 55-56, 59

Content elements
Governance
Strategy
Emissions figures
Emission targets
Other metrics

Comment

Publication
In voluntary communications

Status
Complete

Attach the document
Cisco 2020 CSR Impact Report.pdf

Page/Section reference
Governance – pages 6-7 Strategy – pages 6-7 Emissions targets - pages 8-9 Other metrics – pages 70-81

Content elements
Governance
Strategy
Emission targets
Other metrics

Comment

C15. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

N/A

C15.1