Corporate Social Responsibility 2016 Report

Accelerating Global Problem Solving

CISCO

The Details

Introduction

Key GRI G4 Indicators

G4-28: Reporting period for information provided

G4-33: Policy and current practice with regard to seeking external assurance for the report

In the previous section, "Our Story," we discussed our strategy as outlined by our People–Society–Planet framework. In this section of "The Details," we transition into a format tailored to analysts and investors, who are typically seeking more detail on the three pillars of Governance, Society, and Environment. This part of the report sets out our approach, objectives, and progress on these three core pillars of our CSR strategy.

This report covers our 2016 fiscal year (FY16), from July 26, 2015, to July 30, 2016. Data includes all of our operations around the world, unless otherwise stated. Some data have been rounded. Monetary figures are in United States Dollars (USD) unless otherwise noted.

In our CSR strategy and reporting, we prioritize the issues that are most important to our business and our stakeholders. These issues are identified through a formal CSR materiality assessment. We use this report to respond to what we learn from a broad set of our stakeholders throughout the year.

Assurance

The data in the Environment chapter are subject to internal and external audits in line with our Environmental Management System and ISO 14001 requirements. Data that support public commitments, such as our goals to reduce greenhouse gas (GHG) emissions, are subject to external assurance.

In addition, our Cisco Foundation, which provides grants for our social investments, is also audited annually.

GRI Index

Cisco's 2016 CSR report addresses core indicators from the Global Reporting Initiative (GRI) G4 Guidelines. A full index of alignment with the GRI G4 indicators is available in the GRI Index.

An overview of our most significant CSR issues is provided in Our Story, with further information, data, and references to GRI indicators provided in The Details.

Objectives and Progress

A summary of our progress on the objectives that were provided in our FY15 CSR Report is listed in Table 4. Our 2017 Objectives are provided in the People, Society, and Planet sections of Our Story, and are also distributed throughout The Details where applicable.

How to Use This Report

Navigation between chapters is provided in the header. The Adobe PDF also contains Bookmarks; enable Bookmarks in your Adobe reader for detailed navigation function.

Recommended Software: Adobe Acrobat Version 7.0 and above.

Further Information

Further information on Cisco's CSR activities is available online at csr.cisco.com.

Table 4. 2016 Objectives and Progress		Target date	Progress
Governance	Conduct annual CSR materiality assessment.	End of FY16	Achieved/Ongoing
	Engage with diverse stakeholder groups to inform our CSR strategy, performance, and reporting.	End of FY16	Achieved/Ongoing
	100 percent of eligible1 employees to complete Cisco Code of Business Conduct annual certification.	End of FY16	Achieved/Ongoing
Society	Inspire and support our employees to reach or exceed 155,000 employee volunteer hours.	End of FY16	Achieved
	Engage 3500 Cisco employees in science, technology, engineering, and math (STEM) mentoring globally.	End of FY16	Achieved
	Empower Cisco employees to donate at least US$2.5 million to critical human needs nonprofit organizations through our annual employee giving campaigns.	End of FY16	Achieved
	Provide IT skills development for 1 million students globally, including women, minorities, veterans, and the underserved.	End of FY16	Achieved
	Reach 450,000 factory and farm workers through the Labor Link mobile-enabled, cloud-backed platform developed by Good World Solutions and supported by Cisco.	End of FY16	Achieved
	Reach 90 social enterprise customers supporting 250 micro-entrepreneurs and 5 million poor beneficiaries through the TaroWorks initiative, supported by Cisco.	End of FY16	Partially Achieved (89 social enterprises reached, supporting 200 micro-entrepreneurs and 4.6 million low income beneficiaries)
	Provide support to 250 diverse-owned partner organizations.	End of FY16	Achieved
	Transform the employee experience through Our People Deal by: • Focusing on Connecting Everything, Innovating Everywhere, and Benefiting Everyone • Continuing to focus on our employee experience by delivering the Moments That Matter (those defining career/personal moments for employees) • Launching a new performance management experience (building on our new Sync Up approach) • Continuing to engage employees to innovate through creative forums, including the Innovation Challenge	End of FY16	Achieved (Performance management is ongoing)
	Accelerate leadership development to elevate the Power of Teams by: • Using analytics and technology to provide leaders with insight into their team's strengths, work priorities, and engagements • Launching the best teams at Cisco, understanding what the leaders of these teams do to accelerate excellence	End of FY16	Achieved
	Build a plan for digital HR that will seamlessly allow our talent to be mobile, productive, and agile.	End of FY16	Ongoing
	Scale and accelerate our enterprise-wide approach to drive awareness, increase our workforce diversity, and integrate inclusion into key business and talent systems, policies, and practices.	End of FY16	Achieved
	Human Rights Working Group quarterly review and update of our Human Rights Roadmap, which aligns to the UN Guiding Principles on Business and Human Rights.	End of FY16	Partially Achieved
	Publish twice-yearly transparency report that includes data requests or demands for customer data received from law enforcement and national security agencies around the world.	End of FY16	Achieved
	Provide suppliers with human rights training focused on the protection of vulnerable workers.	End of FY16	Achieved
	Implement internal and external capacity building, systems, and collaboration tools to better position qualified diverse supplier procurement investment.	End of FY16	Achieved

Table 4. 2016 Objectives and Progress (continued)	Target date	Progress
Environment Reduce total Cisco Scope 1 and 2 GHG emissions worldwide by 40 percent absolute by FY17 (FY07 baseline).	End of FY17	Ongoing, -34.0%[2]
Reduce total Cisco business-air-travel Scope 3 GHG emissions worldwide by 40 percent absolute by FY17 (FY07 baseline).	End of FY17	Ongoing, *
Reduce total Cisco operational energy use per unit of revenue worldwide by 15 percent by FY17 (FY07 baseline).	End of FY17	Ongoing, +3.9%[3]
Reduce Cisco's FY17 net consumption-weighted electricity emission factor to half of the latest International Energy Agency (IEA) world average emission factor publicly available before the end of FY17.	End of FY17	Ongoing, -71.5%[4]
Use electricity generated from renewable sources for at least 25 percent of our electricity every year through FY17.	End of FY17	Ongoing, +77.1%[5]
100 percent of key suppliers reporting to CDP.	End of FY16	Achieved
Increase percentage of key suppliers that set GHG reduction goals in their CDP reports to 75 percent.	End of FY16	Partially Achieved

1. Excludes employees in France (which has a separate system), those recently joining Cisco through acquisitions, those on a leave of absence, and interns; also excludes contractors who must abide by our Supplier Code of Conduct.
2. A -34.0% reduction equates to 85% progress toward our -40% reduction goal.
3. In FY16 our energy use per unit of revenue increased 3.9% above our FY07 baseline intensity level.
4. In FY16 our net consumption-weighted electricity emission factor is 71.5% lower than the global IEA average.
5. Due to changes in GHG Protocol Scope 2 reporting requirements, Cisco has significantly increased our renewable energy purchased compared with FY14.
* To be updated later once data is available, no later than January 31, 2017.

Governance

Governance and CSR Priorities

Cisco is committed to creating technology solutions that solve our customers' challenges and connect the unconnected, making the world a better place. To bring that value to the world, it is essential that we have the trust of all of our stakeholders—our employees, customers, partners, and suppliers, as well as the communities in which we operate.

Our strong governance structures and commitment to ethical conduct provide the foundation for us to earn that trust. We continue to assess our current corporate social responsibility (CSR) structure to identify ways to better integrate processes and communication channels within our corporate governance structure.

In this section, we describe how we have dealt with ethical concerns, how we address emerging issues, and how we continue to strengthen our business resiliency to CSR risks and opportunities.

Risk Management at Cisco

Our business grows through our culture of innovation—finding new ways to connect people and improve lives across the world. Because risk is an inherent component of innovation and the pursuit of long-term growth opportunities, we take a comprehensive approach to risk management.

The Board of Directors, acting directly and through its committees, is responsible for the oversight of Cisco's risk management. With Board oversight, Cisco has implemented practices and programs designed to help manage the risks to which we are exposed in our business and to align risk-taking appropriately with our efforts to increase shareholder value.

Cisco's Enterprise Risk Management (ERM) program works across the business to identify, assess, and manage risks and oversee Cisco's response to those risks. The ERM program leverages the annual risk assessment performed by Cisco's internal audit function. The structure of the ERM program includes both an operating committee and an executive committee.

- The ERM Operating Committee is made up of leaders from each functional area of the company and manages risk assessment, risk ranking, establishing risk mitigation plans, and reporting. The ERM Operating Committee reports to the ERM Executive Committee.
- The ERM Executive Committee has oversight of the identification, prioritization, aggregation, mitigation, and ownership of significant risks across the organization. This committee reports to the Board of Directors and consists of members of senior management, including Executive Vice President and Chief Financial Officer Kelly Kramer, Senior Vice President and Chief Operations Officer Rebecca Jacoby, and Senior Vice President, General Counsel and Chief Compliance Officer Mark Chandler. The ERM Executive Committee generally receives quarterly updates from the ERM Operating Committee. Cisco's management is responsible for day-to-day risk management activities.

Key GRI G4 Indicators

GRI G4 Standard Disclosures:

G4-15, G4-16, G4-18, G4-19, G4-24, G4-25, G4-26, G4-27, G4-34, G4-35, G4-36, G4-37, G4-39, G4-40, G4-41, G4-42, G4-43, G4-44, G4-45, G4-46, G4-47, G4-48, G4-49, G4-50, G4-56, G4-57, G4-58.

GRI G4-PR5: Results of surveys measuring customer satisfaction

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Further Materials

Details of our corporate governance policies and process are available in our Annual Report and on our Investor Relations website.

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The Audit Committee, which oversees our financial and risk management policies, receives regular ERM reports from the ERM Operating Committee. As part of the overall risk oversight framework, other Board committees also oversee certain categories of risk associated with their areas of responsibility. For example, the Compensation Committee oversees compensation-related risk management, and the Finance Committee oversees matters related to risk management policies and programs addressing currency, interest rates, equity, and insurance risk. The Finance Committee also oversees Cisco's customer and channel partner financing activities, investment policy, and certain risk management activities of Cisco's treasury function.

Each committee reports regularly to the full Board of Directors on its activities. In addition, the Board of Directors participates in regular discussions with Cisco's senior management on many core subjects, including strategy, operations, finance, and legal and public policy matters, in which risk oversight is an inherent element. This structure allows the Board, with leadership from the Lead Independent Director and working through its committees, including the independent Audit Committee, to participate actively in the oversight of management's actions.
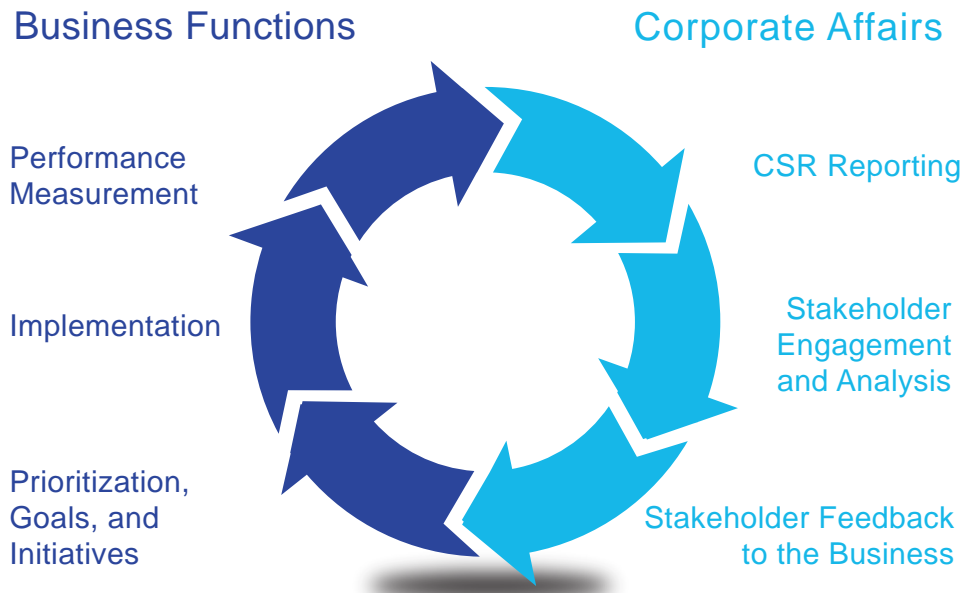
We conduct our enterprise-level risk assessment annually. Operational assessments are done quarterly, although it's important to note that substantial work continues on an ongoing basis to mitigate risk and address opportunities. Our brand/reputation is monitored twice a year.

CSR Governance and Priorities

Corporate social responsibility is integrated into Cisco's business strategy and functions. It is foundational to our culture and a core value by which we do business.

Corporate Affairs champions Cisco's company-wide commitment to corporate social responsibility performance and transparency. It leads the company's social investment programs and stewards corporate social responsibility across the business through our CSR reporting activities, external stakeholder engagement, and CSR analysis (see Figure 1).

Figure 1. Cisco CSR Business Process

Business Functions

Corporate Affairs

Performance Measurement

CSR Reporting

Implementation

Stakeholder Engagement and Analysis

Prioritization, Goals, and Initiatives

Stakeholder Feedback to the Business

Cisco's individual business functions set CSR goals, then implement plans and measure performance. In some cases, CSR goals/objectives may be linked to performance factors and compensation for CSR owners. For example, supplier performance with respect to the code of conduct is a consideration when assessing performance of key supply chain leaders.

Where issues require a cross-functional approach, teams are established to implement our commitments. For example, our Human Rights Working Group (HRWG) includes experts from Supply Chain, Privacy, Inclusion & Collaboration, Government Affairs, Communications, Marketing, Investor Relations, and Corporate Affairs. The HRWG is sponsored by Mark Chandler, Senior Vice President, General Counsel and Chief Compliance Officer. Our Sustainability Executive Team (SET) sponsors our environmental initiatives and regularly reviews our environmental strategy and performance. SET is sponsored by Rebecca Jacoby, Senior Vice President and Chief Operations Officer. SET is discussed in more detail in the Policy section of the Environment chapter.

CSR Materiality Assessment

The Sustainable Business Practices (SBP) team conducts an annual CSR materiality assessment, bringing teams across the business together to identify and evaluate key CSR issues of concern or opportunities. Inputs to the process include year-round external stakeholder engagement on key issues, stakeholder inquiries, benchmarking, industry standards, and policy and regulatory developments around the world.

Results from the assessment inform our annual CSR planning process and are used to prioritize resources and investments in the context of the changing business environment. CSR focus areas assessed as being of highest priority to the business and to our stakeholders in FY16 and FY17 are highlighted in Our Story and are listed in Table 5. Further segmentation of each priority is also provided within each related section of The Details.

CSR priority issues are included in the ERM risk assessment process, where they are considered in the context of other key business risks.

Table 5. Our CSR Priorities		
People	**Society**	**Planet**
Ethical conduct	Building knowledge and the digital foundation	Energy and greenhouse gas emissions reduction
Our people	Human rights (ethics, labor, data security/privacy, digital rights)	Promoting circular economy principles (sustainable design and product end-of-life management)
Building skills and entrepreneurship	Responsible sourcing and manufacturing	

CSR Stakeholder Engagement and Global Forums

We maintain regular dialogue with our key stakeholders (Table 6). Their views help us prioritize issues, better align our business to society's needs, and develop our CSR strategy and programs. We also encourage our shareholders to provide feedback.

We partner with a wide range of global and local organizations to shape and extend the reach of our CSR programs, including governments, nonprofits, multilateral organizations, and peers. A member since 2002 of the World Economic Forum (WEF), Cisco's engagement with the WEF influences our CSR strategy and helps us learn from others and share best practices. Other memberships in FY16 include Business for Social Responsibility (BSR), the Clinton Global Initiative (CGI), the Conference Board's Sustainability Council II on Products, Technologies and Solutions, and the United Nations Global Compact (UNGC).

Table 6. Stakeholder Engagement		
Stakeholder Groups	**Engagement Forums (External)**	**Engagement Forums (Internal)**
Communities	Cisco Foundation	Ethics Helpline
CSR opinion leaders	Cisco support forums	Team listening:
Customers	Annual customer satisfaction survey	• Engagement Pulse
Employees	Public policy engagement	• Real Deal survey
Government and regulators	Global Customer Advisory Board	• Voice of the Employee
Industry	Cisco Platform blog	Monthly "Cisco Beat" company meeting
Investors	High-Tech Policy blog	Annual internal leadership summit
Nonprofits	Industry working groups and standards bodies	
Sales channel partners	Annual meeting of shareholders and company reporting	
Suppliers	Investor Relations	
	Partner community forums	
	Partner Education Connection	
	Social media–Facebook, Twitter	
	Cisco CEO Leadership Council	
	Cisco CIO Exchange	
	Electronics Industry Citizenship Coalition (EICC)	
	Committee Encouraging Corporate	
	Philanthropy (CECP)	

SUSTAINABLE DEVELOPMENT GOALS

While the United Nations (UN) Sustainable Development Goals (SDGs) do not drive our CSR strategy, Figure 2 shows how our past and present CSR efforts align closely to many of the SDGs.

Figure 2. Alignment to UN Sustainable Development Goals

		Cisco Alignment	Cisco Grantees/Partners	Cisco Programs
1	1. No Poverty	1.1, 1.2	Innovations for Poverty Action, NetHope, American Red Cross	TacOps
2	2. Zero Hunger	2.1, 2.2, 2. 4	Feeding America, World Food Programme	
3	3. Good Health and Well-Being	3.1, 3.2, 3.4, 3.7	Living Goods (also SDG 5, 8)	Connected Healthy Children Jordan Healthcare Initiative, Lucille Packard Children's Hospital, Virtual Pediatric Network, Connecting Sichuan
4	4. Quality Education	4.1, 4.3, 4.4, 4.5, 4.6, 4.7c	MIND Research Institute, Gooru Learning, GenerationYES, Teaching Channel, Teach for All	NetAcad (also SDG 8)
5	5. Gender Equality	5.6, 5a, 5b	Anudip, also (SDG 8), Digital Divide Data (also SDG 8), Good World Solutions (also SDG 8), Living Goods (also SDG 3 and 8), Kiva (also SDG 8)	Networking Academy (also SDG 4 and 8)
6	6. Clean Water and Sanitation	6.1, 6.2, 6.3, 6.4, 6b	AKVO Foundation, CAWST, Water for People	Driving clean air and water requirements in our operations and extended operations (supply chain)
7	7. Affordable and Clean Energy	7.2, 7.3		Cisco solutions for energy efficiency, company renewable energy goals, reducing Scope 1 and 2 GHG emissions
8	8. Good Jobs and Economic Growth	8.3, 8.4, 8.5, 8.6, 8.7, 8.8, 8.10	Anudip, Digital Divide Data (DDD), Good World Solutions, TaroWorks, Living Goods (also SDG 3), Kiva, Freedom from Hunger, Opportunity International, Women's World Banking, EICC	NetAcad, Veterans program, Supplier Code of Conduct
9	9. Industry, Innovation, and Infrastructure	9.4		Internet of Things (IoT) and Applications, Circular Economy
11	11. Sustainable Cities and Communities	11.1	Community Solutions, Habitat for Humanity	Smart + Connected Communities
12	12. Responsible Consumption and Production	12.2, 12.4, 12.5, 12.6, 12.7		Product Return/EOL programs; Sustainable Product Fulfillment; Circular Economy; CDP and CSR reporting
13	13. Climate Action	13.1	Ushahidi, American Red Cross	
17	17. Partnerships for the Goals	17.7, 17.17	World Economic Forum (WEF), Electronics Industry Citizenship Coalition (EICC), Committee Encouraging Corporate Philanthropy (CECP), Clinton Global Initiative (CGI)	

* Note: "Cisco Programs" refers to Cisco-run programs. "Cisco Grantees/Partners" refers to non-profit/non-government organizations that have received cash and/or product grants from Cisco and/or the Cisco Foundation (cash only), as well as advisory/consulting support.

Public Policy and Political Support

Cisco engages with governments to help shape public policy and regulations that support the technology sector and help governments meet their goals. Cisco's Global Government Affairs team develops and influences pro-technology public policies and regulations. Further details can be found on our Cisco Public Policy Engagements website and our High Tech Policy blog.

Cisco does not make political contributions to candidates for U.S. federal or state elective office, or to political parties or other committees for the purpose of influencing the election of candidates to federal, state, or local public office. Cisco also does not engage in independent expenditures or electioneering communications, nor do we make payments to trade associations or other industry groups to be used specifically for political purposes. As a reminder to trade associations, industry groups, and other politically active tax-exempt organizations, such as those organized under Internal Revenue Code section 501(c)4, to comply with this policy, Cisco informs all groups of which we are a member of this restriction by written communication on an annual basis. We occasionally make corporate contributions in support of U.S. local and state ballot measures on issues that affect our operations. Cisco fully complies with all reporting requirements regarding such contributions and discloses those contributions on a quarterly basis here. The Board of Directors reviews the company's political contributions on at least an annual basis.

Cisco's employee-sponsored political action committee (ePAC) enables eligible U.S. employees to contribute their own funds to the campaigns of U.S. federal and state elected officials and political candidates who champion the technology industry's public policy priorities.

Key GRI G4 Indicators

GRI G4-SO6: Total value of political contributions by country and recipient/ beneficiary

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Ethics

At Cisco we put our values into practice every day; doing the right thing is just a part of our DNA. Doing business honestly, ethically, and with integrity helps us build long-term, trusting relationships with our customers, suppliers, employees, and stakeholders worldwide.

Code of Business Conduct

Our user-friendly Code of Business Conduct (COBC), offered in 16 languages, helps guide our employee behavior and decisions in an engaging way, providing interactive elements such as an ethics decision tree, videos, FAQs, and links to other policies and resources.

Ethics Training

All regular employees (where permitted by law) must recertify compliance with the COBC each year. In FY16, 99.8 percent of our eligible employees completed an annual certification of compliance with the Cisco COBC. Anti-corruption training is mandatory for most legal staff; employees in sales, marketing, and services; and channel partners, distributors, and sales-supporting consultants. Human Rights certification continues to be an annual requirement for all employees in roles which have human rights impacts.

Other ethics training materials are available via an internal ethics website that includes videos, links to policies, and an ethics discussion forum. As with the COBC, some training is tailored for different functions and roles, such as sales teams, finance professionals, and employees who interact with government officials.

Reporting a Concern

We encourage employees and other stakeholders to promptly report concerns about suspected unethical behavior. We do not tolerate retaliation against individuals raising good faith reports of misconduct or allegations of policy violation.
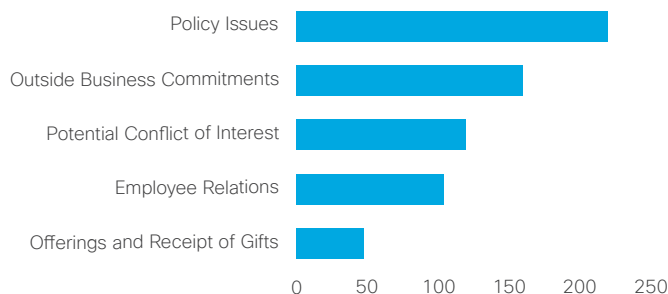
We provide several confidential ways to get help with an ethical question or concern:

- Speak to a manager or Human Resources representative.
- Contact members of our Legal or Ethics Office directly.
- Contact the Ethics Office by email at ethics@cisco.com or through our anonymous web form.
- Call our global Ethics Helpline, available 24 hours a day in more than 150 languages.
- Submit a concern via the Ethics Fax Line.
- Submit a concern by mail.

Most concerns raised relate to conflicts of interest and Human Resources issues. We strive to manage all inquiries promptly and confidentially, to the extent provided by law. All concerns are addressed, investigated, and documented appropriately. Violations of the COBC are subject to disciplinary action which could range from formal warnings to termination of employment. The Ethics Office reports quarterly to the Cisco Audit Committee. Find out more in our COBC.

Key GRI G4 Indicators
GRI G4 Standard Disclosures:

G4-49, G4-50, G4-54, G4-56, G4-57, G4-58.

GRI G4-HR3: Total number of incidents of discrimination and corrective actions taken.

GRI G4-HR12: Number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms.

GRI DMA: Anti-Corruption

GRI G4-SO3: Total number and percentage of operations assessed for risks related to corruption and the significant risks identified

GRI G4-SO4: Communication and training on anti-corruption policies and procedures

World's Most Ethical Companies

Cisco has been recognized by the Ethisphere Institute as one of the World's Most Ethical Companies for nine consecutive years.

Case Study: Ethics Helpline FY16 Results

Top 5 Case Types for FY16

In FY16 the Ethics Office received 871 reported cases in total; over half were questions seeking further guidance on integrity and ethics questions. This is an increase from 584 cases in FY15, which we believe demonstrates continued confidence in the ethics reporting mechanisms and enhanced awareness of Cisco's commitment to business integrity.

The five most common types of topics raised in FY16 are policy issues (218), outside business commitments (158), potential conflict of interest (117), employee relations (97), and the offering and receipt of gifts (46).

Supply Chain Management

"We have a profound responsibility to deliver superior technology solutions in an ethical and environmentally responsible manner. As a global supply chain, we've embraced sustainability as part of our values and operating model to adapt, innovate, and transform the way we deliver business outcomes to our customers."

John L. Kern, Senior Vice President, Supply Chain Operations

Technology continues to transform all aspects of the business landscape, including our highly dynamic and complex supply chain. As customer needs change, our supply chain has to be able to adapt, scale, and innovate; we invest in people, processes, and digital technologies to enable this agility. Through digitization, we are automating processes for greater efficiency, increased quality, cost savings, and more sustainable business practices.

Understanding Our Supply Chain

Our supply chain is entirely outsourced to a network of specialist suppliers and partners. Hundreds of suppliers around the world supply the parts that go into our products; assemble and test finished products; provide logistical services; and collect, refurbish, and recycle products at the end of their useful life.

We spend billions of dollars each year with these suppliers, the majority with:

- Manufacturing partners: A select group of suppliers that produce finished Cisco products.
- Component suppliers: A much wider group of suppliers, often contracted directly by Cisco to provide parts to our manufacturing partners according to our specifications.
- Logistics service providers: A small number of suppliers that distribute our products to our customers.

Figure 3. Supply Chain Global Footprint

Global. Complex. Diverse.

· Worldwide manufacturing and partnerships
· Products ranging from mass produced to highly configured
· Expertise from many regions, backgrounds, experiences, and perspectives

12 countries

25+ locations

● logistics hubs   ● manufacturing sites

Supply Chain Scope

2,500+ orderable items

2,500+ orders daily

25,000 extended workforce

220,000 items shipped daily

2,400+ SCO employees

62,000 components

20,000+ virtual teams

700+ suppliers

Our Sustainability Compass: Why We Do It

At Cisco, we believe we have the opportunity to create a better future through technology. Upholding high standards for responsible manufacturing practices in our supply chain is part of this. Leadership, collaboration, and innovation create the "compass" we use to navigate improved business processes and promote long-term success.

Figure 4. Supply Chain Sustainability Compass

We embed sustainability into our business processes because:

It's the Right Thing to Do

Acting responsibly to promote safe and ethical working conditions, and being conscious of our environmental impact is core to our values, and simply the right thing to do.

It's Our Responsibility

As a large, outsourced supply chain we have the responsibility to drive common high standards across our contract manufacturing & supplier ecosystem while contributing to industry-wide initiatives.

It's How We Engage Employees

Encouraging our employees to connect with sustainability drives purpose and responsibility into every facet of Cisco's business model so Cisco benefits everyone, everywhere.

It Creates Business Value

Sustainability creates value for Cisco by reducing costs, increasing efficiencies and eliminating waste, while also meeting the increasing expectations of our many customers and shareholders.

Managing Sustainability in the Supply Chain

Sustainability is a core objective for Cisco's Supply Chain Organization (SCO), and it is managed through established business processes as part of an integrated supply chain strategy. Sustainability issues are considered at key stages in strategic planning, risk management, evaluation, new supplier onboarding, and performance management. The process of embedding sustainability into supply chain operations is described in more detail below.

John Kern, Senior Vice President, Supply Chain Operations, has overall responsibility for CSR supply chain activities. Kathleen Shaver leads the Supply Chain Value Protection group, which works cross-functionally across all SCO functions to embed CSR into operating practices including product development, regulatory compliance, supplier risk assessment, and relationship management. Champions throughout the SCO and beyond collaborate to help define and drive opportunities for sustainable innovation.

Supply Chain Employee Engagement

In 2016, we launched an employee engagement program designed to empower individuals to boldly explore how they could drive business value and have a positive global impact. An online community was created to encourage continued engagement and foster new and disruptive ideas.

Our first event, SustainX, brought together employees from several cross-functional supply chain teams and other parts of Cisco to learn and discuss how they could influence and advocate for supply chain sustainability initiatives. More than 800 employees worldwide connected with Cisco leaders and globally recognized expert and author Andrew Winston. Through powerful speaker presentations and panels, employees learned how to weave sustainability into each aspect of our business model and use our tools, processes, and technology to create a more sustainable environment.

We also established an ongoing global event series that includes executive panel discussions to encourage dialogue around Cisco's efforts. During these events, supply chain executive leaders provide insight into the most crucial CSR priorities and challenges. SCO has also implemented the "Multi-Company Rotation Program" to attract the next generation of professionals through co-operative education. New ideas for driving carbon reduction and other sustainability improvements were discovered through harnessing the power of fun competitions.

For more information on employee engagement on environmental issues beyond SCO, please see the Environment chapter.

Case Study: Multi-Company Rotation Program

The "Multi-Company Rotation Program" is the result of collaboration between Cisco's logistics organization and two key supply chain partners. The program offers a unique view into Cisco's complex, highly outsourced supply chain model.

Cisco, Jabil, and DB Schenker will hire college co-ops to complete rotations with each of the companies, working on initiatives that link the companies. At the completion of each rotation, the student co-op will have gained insight from several key supply chain perspectives: Cisco, the customer; Jabil, the manufacturer building products for Cisco; and DB Schenker, the warehouse company managing storage and shipments of Cisco products.

In addition to each capability perspective, students will gain a deeper understanding of the touch points across Cisco's connected supply chain. Each of the participating companies also will add business value by leveraging early-in-career perspectives, as well as strengthening partner relationships. Cisco is proud to offer a program that aligns to our priorities; fosters strong, innovative university ties; and cultivates the next generation of talent.

Advancing Transparency

Advancing transparency about social and environmental performance in the supply chain is crucial to helping us address some of our most significant sustainability issues—supply chain labor standards, lifecycle environmental impacts, and ethical sourcing of raw materials—and is a fundamental foundation to building trust and effective stakeholder engagement.

To help understand key impacts in our supply chain and how they are managed, we:

- Encourage suppliers to publish CSR reports describing how they manage their most significant sustainability impacts.
- Reward key suppliers as part of their performance scorecard for reporting GHG emissions and reduction targets via CDP.
- Engage with stakeholders and analysts with respect to rankings and research inquiries.
- Publish externally ongoing public dialogue on blogs that discuss progress, challenges, and breakthroughs.
- Apply technology to gather actionable inputs on factory conditions to complement traditional audits.

Embedding Sustainability in Supply Chain Operations

Cisco has adopted the Electronics Industry Citizenship Coalition (EICC) Supplier Code of Conduct (the Code) as a cornerstone of supply chain sustainability. We use it to extend the same high standards for ethics, labor rights, health and safety, and the environment to our partners and suppliers that we set for ourselves through our own Code of Business Conduct. These codes of conduct establish the baseline expectation, not the end goal, and help to set shared expectations and values that promote trust and underpin our supply chain relationships.

Figure 5. Supplier Engagement Process

1
Code of Conduct requirements
communicated to all suppliers

6 Corrective actions and capability building

2 Scorecard evaluation for key suppliers

3 Identify suppliers representing top 80% of spend

4 EICC self-assessment evaluated to identify high-risk facilities

5 Site audits of selected high-risk facilities
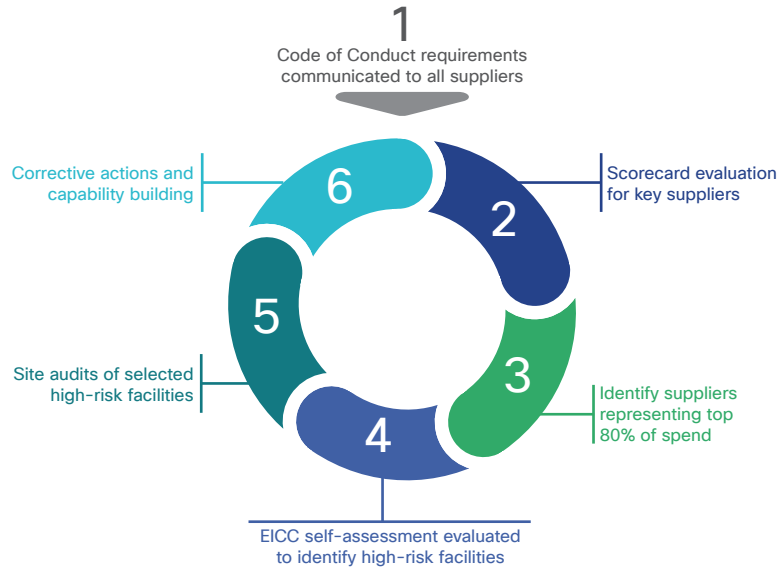
All suppliers must acknowledge their commitment to the EICC Supplier Code of Conduct; adhering to the Code's requirements is essential for maintaining eligibility to do business with Cisco. The evolving Code continuously drives progress in sustainability and human rights and is core to our transparency efforts. EICC members review and update the Code regularly to reflect best practices and address emerging issues. Version 5.1 of the EICC Supplier Code of Conduct was ratified on January 1, 2016, to prohibit recruitment fees paid by workers for employment.

Supplier Scorecard

We use scorecards to assess key suppliers' sustainability performance at least once per year as part of regular business reviews. Our scorecards monitor performance on a range of criteria, including technology, cost, quality, responsiveness, and collaboration. Suppliers must maintain strong scores to earn and retain their status as key suppliers.

Clearly defined scorecards help suppliers see the bigger picture of what Cisco is working to accomplish, and help illustrate what is important to industry, business, and the communities in which suppliers operate. Sustainability performance indicators express our fundamental expectation of our logistics and component suppliers and contract manufacturers.

Key GRI DMA

GRI G4-HR-11: Significant actual and potential negative human rights impacts in the supply chain and actions taken.

GRI G4-SO10: Significant actual and potential negative impacts on society in the supply chain, and actions taken.

Sustainability represents between 5 and 10 percent of a supplier's total score. The sustainability portion of the scorecard includes:

- Acknowledgement of the Code
- GHG reporting through the CDP
- Data on labor issues, such as injury and illness rates, working hours, and employee turnover
- Acknowledgement of the Cisco Controlled Substances Specification, including compliance with environmental regulations such as the European Union (EU) Restriction of Hazardous Substances Directive (RoHS)
- Conflict Minerals Due Diligence Disclosure
- Supply Chain Emissions Reduction Program
- Scope 3 Cradle-to-Gate Emissions

Scorecard questions are tailored to each type of supplier.

To address findings from the survey appropriately, we include targeted capability-building initiatives in our regular engagement with suppliers. We also encourage our suppliers to report on their own progress (see Table 7).

Table 7. Suppliers Publishing a CSR Report				
	FY13	FY14	FY15	FY16
Contract manufacturers	86%	100%	100%	100%
Logistics providers	100%	100%	100%	100%
Component providers	52%	52%	63%	66%

Taking a Risk-Based Approach

The Code applies to all of our suppliers, but our efforts are focused on suppliers with more than $1 million spend; we require an annual self-assessment questionnaire from these suppliers. We take a risk-based approach to oversee deployment of resources using the EICC self-assessment process. Factors include spend, incidents, previous performance, geographical criteria, self-assessment score, and public reporting practices.

For a supplier deemed high risk, Cisco will pursue an audit in accordance with EICC's Validated Audit Protocol (VAP). Our aim is to audit all high-risk manufacturing facilities and component suppliers every two years. In FY16 we met this commitment, as well as our EICC member commitment to audit at least 25 percent of our high-risk suppliers. Our aim is to help our suppliers improve, but we will not continue to work with those that fail to comply with our standards. More information about our audit process and findings is detailed the Society chapter.

The ethics section of the Code addresses the protection of identity and non-retaliation of whistleblowers. Our suppliers must maintain such programs and communicate them to their personnel, so employees can raise concerns without fear of retaliation. We rely on our suppliers to track and resolve formal grievances. In FY16, Cisco supported the launch of the EICC's Workplace of Choice Program, a voluntary educational and capacity-building initiative designed to improve dialogue between workers and management. The program, being piloted first in Malaysia, includes a worker helpline to address grievances. This program provides a scalable solution to help suppliers meet EICC Code requirements.

Supply Chain Operations Hackathon

In early 2016, Cisco SCO hosted a new event allowing teams to work directly with IT for a 48-hour period to hack previously manual processes and systems.

The supply chain team worked to hack eight highly manual audit and corrective action tools with the goal of automating the real-time analysis and reporting of audits across the organization. Using the power of digitization to improve traditional supply chain programs is just one way Cisco is innovating through employee collaboration.

Photo by: Jeff Stevenson

The new tool to come of this program will be the basis for a revamped audit program in FY17.

Site Audits

Our audit program has allowed us to monitor progress among suppliers and track issues to get an accurate picture both of the effort being put in and the results. Now, as we adjust our focus from effort to impact, digitization is a key driver to move beyond audits and address root cause issues within the supply chain. Core to our success with digitization is connecting with workers and creating a digital relationship, which allows for additional communications channels and real-time tracking of challenges and solutions.

While Cisco continues to promote auditing protocol improvements and auditor trainings to enable best practices among our supply chain partners, we also embrace digitization innovations to scale impact. More about these initiatives can be found in the Audit Performance section of the Society chapter. In addition, in FY17 we plan to expand our risk assessment process beyond industry guidelines to be more Cisco-specific to the unique risks of our supply chain.

Learn More

Learn more about the Validated Audit Process on the EICC website.

Key findings from the FY16 supplier audits are highlighted and discussed in the Human Rights and Environment sections.

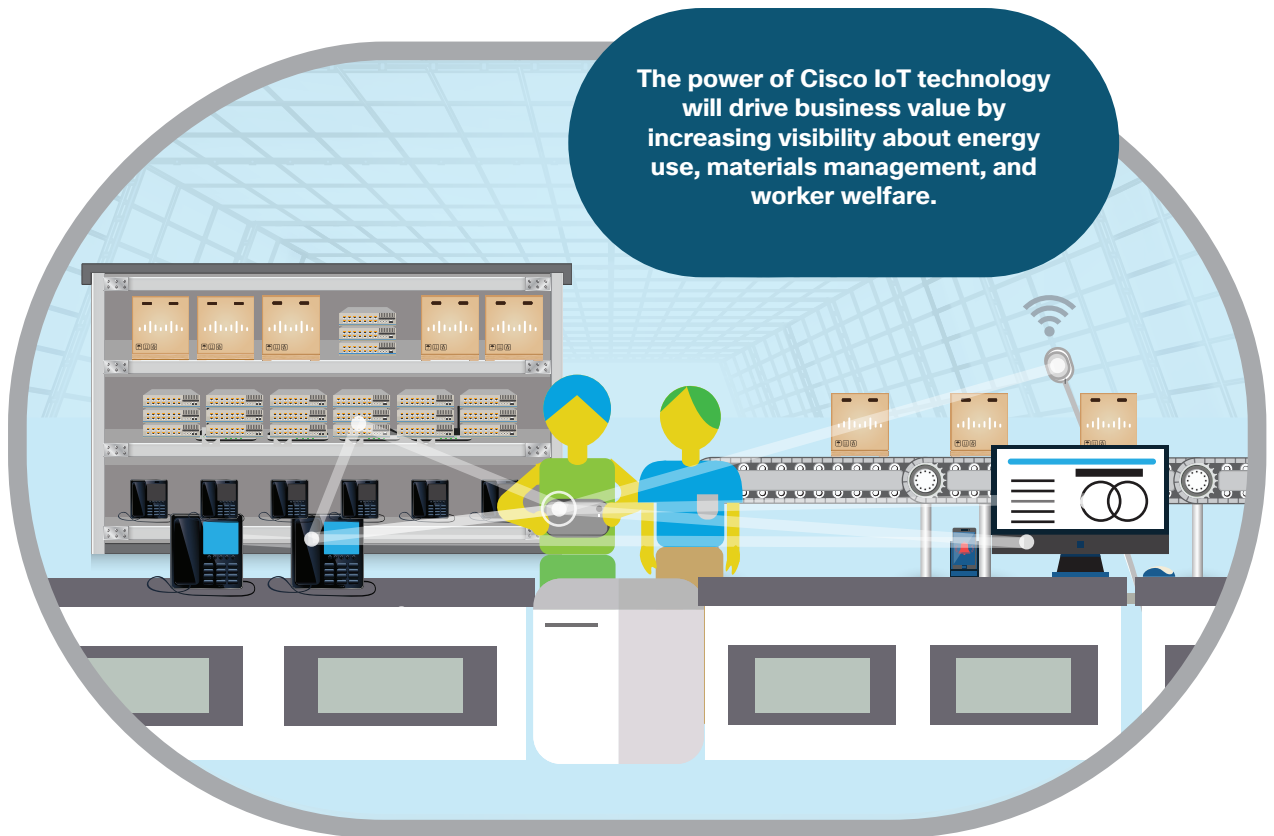| Table 8. Distribution of Audits by Supplier Type					
	FY12	FY13	FY14	FY15	FY16
Manufacturing partner facilities	11	22	12	17	18
Component supplier facilities	21	30	22	29	37
Total	32	52	34	46	55

Working with Suppliers to Build Capacity

In addition to our audit program, we believe engaging with suppliers can also result in sustained improvements in performance. In FY16, we focused on improving component suppliers' awareness of EICC standards, driving improved management accountability, and further embedding risk management processes into supplier operations. We are also working on ways to enhance worker training and to scale our existing capability-building programs.

In addition to traditional supplier engagement techniques, our vision is to connect Cisco technology and capabilities so that we may better identify root cause issues, identify improvement opportunities, and align with the Code. In FY17 we intend to focus on digitizing our supply chain engagement practices to provide access to sustainability performance data that will in turn help us to measure, analyze, and communicate audit-related metrics and further build the business case for increased sustainability initiatives that will benefit the workers in our extended supply chain.

Figure 6. Digitization – Connecting Cisco Technology to Workers

The power of Cisco IoT technology will drive business value by increasing visibility about energy use, materials management, and worker welfare.

Supplier Award: Excellence in Sustainability

Excellence in Sustainability Nominees:

Celestica's Global Energy Management Strategy ensures electricity consumption is effectively measured and controlled, contributing toward the reduction of 120,000 kWh/year.

DW Morgan reduced annual CO_2 emissions by 750,000 pounds with reusable mesh pallet shrouds, eliminating 125,000 pounds of waste from disposable shrink-wrap.

Amphenol made substantial progress in documenting the origin of their materials and driving progress toward having a conflict-free supply chain, and contributing to Cisco's continued progress to do the same.

FedEx leverages their transportation expertise to reduce the carbon footprint associated with moving Cisco's products by air and ground, saving cumulative four million metric tonnes of CO_2 emissions as of 2016 via the Fuel Sense Program.

Teleplan facilitated an increase in customer product returns with innovative thinking on circular economy.

Winner: Celestica

Each year, Cisco awards one supplier with the Excellence in Sustainability Award. By recognizing the work our suppliers and partners are doing to increase supply chain sustainability and reduce carbon emissions, Cisco helps promote bold ideas, innovation, and above all, the collaborative spirit and leadership required for meaningful and lasting change.

Supplier Award: Excellence in Diversity

Excellence in Diversity Nominees:

DW Morgan, a certified minority-owned business, has pursued innovative solutions to optimize the productivity of their distribution services while promoting sustainability.

Celestica has supported Cisco's efforts to improve automated systems to more accurately identify qualified diverse suppliers and track both direct and sub-tier diverse spend.

Trans-Expedite, a certified woman-owned logistics provider, has consistently offered Cisco additional capabilities and tailored solutions while delivering significant cost savings.

WoodTech, a certified minority-owned small business, provides elegant surroundings for our collaboration products constructed

of certified sustainably sourced wood and manufactured in an environmentally responsible manner in a factory operated on 100% solar power.

Winner: DW Morgan

Cisco is proud to recognize suppliers that share and reflect our commitment to inclusion and diversity while delivering strong capabilities, innovation, and value. Each year, Cisco honors top suppliers for their progress in this area, identifying high-performing diverse suppliers on an ongoing basis.

Cisco's commitment to supplier diversity programs advocates for an inclusive business environment and opportunity for suppliers of all types, sizes, and backgrounds, recognizing those that exemplify excellence.

Industry Leadership: Partnering for Progress

Being a leader means strengthening efforts around conflict minerals, promoting human rights, and using technology to continue driving safe and ethical working conditions.

Sustainable innovation powers our entire process, from delivering our products using optimized routes and transportation modes to pioneering connected manufacturing to expanding visibility into supplier performance to responsibly reusing and recycling returned products. To keep pace with the rate of disruption and to maintain our industry leadership, we partner with leading academic, nonprofit, and professional organizations that provide expertise to a specific area of focus for our program (Figure 7).

Figure 7. Partnering for Progress
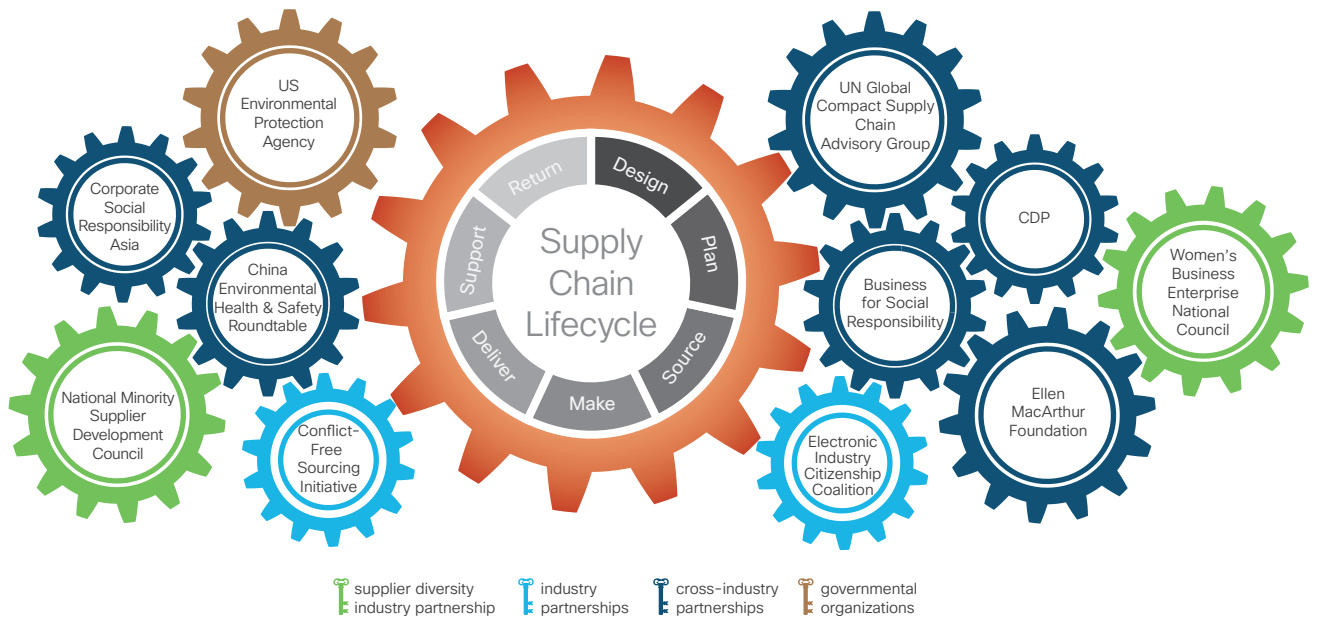
EICC Membership

The Electronics Industry Citizenship Coalition (EICC) seeks to create an industry-wide common standard on social, environmental, and ethical issues in the electronics industry supply chain through a unified approach. In 2011, Cisco officially adopted the EICC Code of Conduct for its supply chain operations, which reflects the basic tenets of responsible management. Kathleen Shaver, Cisco's Director of Supply Chain Value Protection, has served as the chair of the EICC Board of Directors since 2015.

Rolling out new membership categories in 2016 to better reflect the electronic industry's maturity, the EICC continues to lead in its commitment to evolving along with the requirements of global manufacturing. Membership categories range from the supporter level for learning, the affiliate level for commitment to common standards and the Code of Conduct, the member level for compliance with EICC standards, and full membership with verification of compliance. To encourage our supply chain partners to achieve the EICC's highest membership categories, Cisco offers tools and training, leadership opportunities, conferences and networking, and the ability to participate in working groups.

Cisco and EICC believe a rising tide lifts all. To promote sustained industry improvements, it's imperative to continue building a community of practice and assist all companies through leadership, support, and education. During the next several years the EICC will focus on articulating membership levels based on compliance and transparency.

website feedback

Society

Through our CSR strategy, Cisco accelerates global problem solving by creating exponential opportunity for social and business impact. This starts with attracting and retaining the best talent for Cisco, and transforming the employee experience so our people can flourish in a way that is both responsible and ethical.

A "global problem solver" is a person who can innovate using technology and data intelligence to imagine new solutions to the world's greatest challenges. They innovate as a technologist, think as an entrepreneur, and act as a social change agent. Global problem solvers are all around us: our employees, our customers, our partners, and our neighbors.

As a company, Cisco strives to inspire, enable, and invest in opportunities that accelerate global problem solving—empowering people everywhere to work toward eradicating poverty, unemployment, and hunger. We give people the skills to thrive in a digital economy, empowering them to be global problem solvers and speed the pace of social change. We do so through employee engagement as well as by expanding access to technical education and providing opportunities to assist nonprofit organizations to better serve communities. When disaster strikes, we quickly respond by providing critical on-the-ground networking support to restore communications for first responders.

Some highlights of FY16:

- Volunteering: Cisco's employees volunteered over 187,000 hours in service to their communities. Our employees, directly and through our remarkable partner ecosystem, mentored young people in science, technology, engineering, and mathematics (STEM). Cisco employees have provided more than 48,996 hours focused on STEM mentoring.
- Skill development: More than one million students learned valuable ICT and business skills through Cisco Networking Academy®, an increase of 12.4 percent over 2015.
- Investing in social change: Cisco continued our unique approach to accelerating global problem solving by making early stage investments of cash and product to support innovative, nonprofit organizations. In FY16 Cisco and the Cisco Foundation donated $309 million in cash and in-kind contributions, which includes $242 million in in-kind contributions for the Cisco Networking Academy. Over 2666 nonprofit organizations in 47 countries received support via Cisco's matching gifts and volunteerism program.

Table 9. Performance Summary			
	FY14	FY15	FY16
Total corporate and Cisco Foundation cash and in-kind contributions (USD)	$275 million	$286 million	$309 million
Number of hours volunteered by employees	136,000	155,600	187,100
Number of students in Cisco Networking Academy	1 million	1 million	1.09 million

Human Capital

Our People Deal

"Our People Deal" is the culture we want our employees to experience every day. It's a culture that enables us to move quickly; be agile, innovative, and collaborative; and attract top talent. It is the mutual agreement between Cisco and each employee. It encompasses what each employee can expect from Cisco—and what Cisco asks in return.

> "As a company, Cisco emphasizes a culture that provides our employees with the most innovative experience, where they can learn, live their passions, and be their best selves."
>
> Fran Katsoudas,
> Senior Vice President and
> Chief People Officer

Our People Deal has three core parts:

We Connect Everything

Cisco helps connect employees with the people, information, and opportunities they need to succeed. And we give our employees the tools they need to help our customers achieve their goals and change the world for the better.

Our employees align their work to business goals and customer needs. They connect with peers to deliver the best outcomes and results, and make no excuses. They understand that when we connect the unconnected, amazing things happen.

We Innovate Everywhere

Cisco provides an open environment where employees can explore their best ideas, challenge the norm, and hone their skills to help us create innovative new technologies.

Our employees relentlessly pursue a better, smarter, and faster tomorrow. They take bold risks to help our customers reach their full potential.

We Benefit Everyone

Cisco welcomes our employees to a team of the best and brightest. We support their development and acknowledge the value of their contributions. Great satisfaction comes from our joint ability to make a meaningful difference in the world.

Our employees commit to our values and believe we will win together. Employees share knowledge. They offer support, respect, and care for those around them. In this way, every day, we all contribute to our shared success.

Our People Deal: Moments That Matter

One way we're bringing Our People Deal to life is through Moments That Matter, a culture-changing effort to improve the key moments that define an employee's journey at Cisco. Through employee feedback, we learned that people want to participate in more activities that spur innovation, have more choices in the way they recognize others for great work, and spend more time volunteering in their local communities. In short, they want more moments that matter. We are making this vision a reality for all Cisco employees.

Close your eyes, and imagine working at a company where:

- The next breakthrough solution can come from anyone in the company. The Innovate Everywhere Challenge invites all employees to team up and brainstorm ideas for new technologies and services.
- The company recognizes and rewards people's passion for giving back. Time2Give lets employees take five paid days per year, separate from their paid time off, to volunteer for the organization(s) of their choice.
- Appreciation for a job well done is shown often and is easy to do. Our Connected Recognition program makes it easier to recognize remarkable work with new options such as cash-based gift cards and award options.
- Your birthday is your own personal holiday.

We've identified 11 "Moments That Matter" (Figure 8). For each, we've pulled together a team that comprises an Executive Leadership Sponsor, a senior leader, and experts from across the company. The teams are looking at our processes, policies, and experiences, and are already putting enhancements in place. With more improvements coming in the next fiscal year, we're "all in" to make every moment matter.

Figure 8. Our People Deal: Moments That Matter

My Making a Difference Be The Bridge...
to your cause
to your team and community
to global impact

My Team
Best Teams
Team Space

My Lasting Impression
Alumni Network
Listen. Appreciate. Respect

My Workplace
Workplace Environment
Workplace Amenities
Workplace Technology

My Technology
PC Refresh
My Cisco
Internal Tools

CISCO
Our People Deal
Moments That Matter
connect · innovate · benefit

My First Impression
Interview
Offer
First Day

My Development
Individual and Team Learning
Talent Marketplace
One Cisco, Many Careers

My Leader
Selecting Motivated Leaders
Developing Leaders
Coaching Leaders

My Personal Experiences
Life's Changing Moments
Life's Challenging Moments
Life's Milestone Moments

My Innovation
Innovate Everywhere Challenge
Innovation Hub
Tools, Training, and Innovation Spaces

My Rewards
Connected Recognition
Pay and Benefits
Perks

Our People Deal: A Day-to-Day Approach

A company's culture is shaped by its people. Cisco is made up of employees who are committed to helping our company—and the world—grow and thrive. Our People Deal becomes a reality when our employees see what they do as something more than a job. When we put our culture into action to improve the world for the better.

Our People at Their Best

We have implemented several key initiatives to help our employees be at their best every day, including:

Strengths-based approach: Through our new StandOut assessment, we can help people understand their strengths in new ways, and help them spend most of their time doing the activities that give them energy and allow them to be their most innovative and resilient. This is how our people stay engaged and make their greatest contributions—and it's where their abilities will grow most rapidly. Team leaders can orchestrate the work of their team to the strengths of each team member, thereby achieving exceptional results across the entire team.

More teams like our "best" teams: In a study conducted earlier this year, we learned what characterized the best teams at Cisco: They play to their strengths, they have a shared understanding of excellence, and they work in a team environment of safety and trust. We're now scaling this excellence across the company. Team Space, our new technology platform for teams, enables all teams and team leaders to introduce and implement team rituals in real time. Like having frequent conversations about the work they do, their priorities, and how they're using their strengths at work. Team leaders can easily give team members the attention they need when they need it, and understand the overall experience on their teams.

Listen better: We've evolved our listening strategy by implementing new tools to make it easier for our leaders at all levels to listen, learn, and act in a timely fashion. This has taken communication to another level. We're able to hear employees more immediately, more frequently, and less formally— placing the right information into the hands of those who can act on it quickly. This approach helps teams and their leaders take immediate actions that can have a big impact throughout the company.

We also review all employee feedback and opinions to better understand overall workforce morale. This includes questions and comments shared around events and announcements, company forums, surveys, focus groups, and social networks. We use this knowledge to continually improve our practices, workspaces, and programs.

Leadership and Team Intelligence

In FY15 and FY16 we conducted People Leader Feedback surveys, asking our people how their leaders were living up to their commitments and giving our leaders the opportunity to see how they had improved. Almost 35,000 people provided feedback, including 72,700 verbatim suggestions. Individual reports were provided to 7800 leaders (91% of our leader population at all levels).

Building on this foundation, we extended our effort to support and develop our focus on teams (both static and dynamic) and their team leaders. A dedicated Human Resources organization was created to deliberately serve teams and team leaders and amplify team excellence across the company. The Leadership and Team Intelligence organization is on a mission to make more teams like our best teams by focusing on four approaches: activate teams, elevate leaders, apply intelligence, and accelerate with digitalization.

Digital Technology with a Human Touch

We're using technology to identify and scale successful team behaviors and practices. In FY16 we launched StandOut—an assessment tool that predicts future behavior—to uncover our people's strengths and give them the opportunity to share them with their peers and leaders. When our people understand their strengths and can apply them in their daily roles, they're better able to bring their best selves to work every day.

> "If you're a technologist, and you want to change the world, this is the place."
>
> David Goeckeler,
> Senior Vice President and General Manager, Networking and Security Business

Our Story

The Details

Accelerating Global
Problem Solving

Summary of Our
Priorities

Governance

Society

Environment

GRI Index

We also introduced Team Space, a "home for teams" at Cisco, where teams and team leaders can easily implement powerful rituals to enhance performance, accelerate engagement, and develop themselves. In FY16, 22,000 people were onboarded to Team Space; the target is to have the entire company on within FY17.

Case Study: Team Space

We serve our teams best by supporting their performance and giving them real-time intelligence into how they work. Team Space starts with an online platform that helps identify the strengths of individual contributors as well as what matters to a specific team, then helps each team discover how to work at its best.

Team Space includes ways to help people understand their strengths at work, share with others the things that energize them, and identify all of the teams they interact with (static and dynamic). It also provides information about how people can best work within their teams and enables frequent, future-focused conversations about the work that are tactical in nature.

STANDOUT ASSESSMENT	Understand and share my strengths
MY TEAMS	Activate the teams
MY SNAPSHOT	Share the best of me with my team and team leader
WEEKLY CHECK-IN	Conversations about making your strengths visible through your work
ENGAGEMENT PULSE	Assessing team engagement to predict performance
PERFORMANCE SNAPSHOT	Team leader input into talent-related decisions

Cisco Team Space
A platform for team intelligence
Serve our teams and team leaders by supporting their performance, and by delivering real-time intelligence to them. A space for what matters to a team, and how we work at our best to win together.

Team Space gives team leaders a way to measure the collective engagement of their teams and the individual performance of each team member, making it easy for leaders to give their people the attention they need.
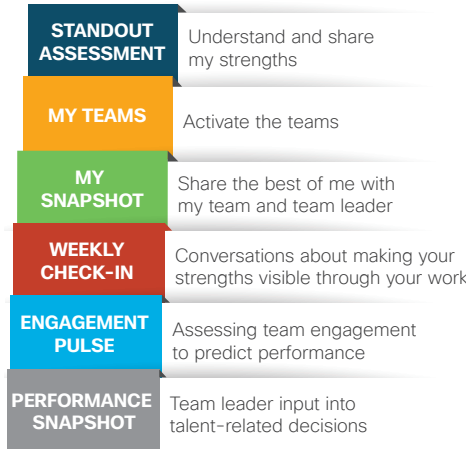
Case Study: People Listening Strategy

To better serve our teams and team leaders, we've evolved our listening to be more immediate, more frequent, less formal, and more varied in how feedback is obtained. Most of all, we're putting information quickly into the hands of those who can act on it. We've discontinued the annual Pulse Survey and People Leader Feedback activity and have introduced a range of targeted, real-time solutions to get a better understanding of the employee experience. We will gain holistic and timely information with the "Team Engagement" survey, "The Real Deal" survey, and "Voice of the Employee" technology:

TEAM ENGAGEMENT

To Serve Team Leaders

On-demand Engagement Pulse survey from Team Space that predicts performance of the team

- Team leaders can launch at the time of their choosing but, at minimum, on a quarterly basis
- Aggregated team results are available to leaders as soon as survey closes
- Results compared to both Cisco and external benchmarks
- Leaders can access coaching that suggests actions tailored to the leader's unique strengths

THE REAL DEAL

To Serve the Executive Leadership Team (ELT) & the Company

Quarterly survey sent to selected sample for 100% representation

- A short survey to measure employee perception on topics that are actionable either at the ELT or corporate program level
- Topics may include organizational alignment, agility, confidence in leadership, innovation, recognition, etc.
- High-level insights and actions taken will be shared with employees where appropriate

VOICE OF THE EMPLOYEE

To Serve the People

Event-based real-time listening (open text feedback) to understand employee sentiment

- Use natural language processing technology to identify meaningful themes and emotional context of unstructured text
- Capture deeper insight into issues impacting employees
- Leverage key company and function events such as the Cisco Best and Leadership Quarterly event
- Themes shared with ELT and Communications

Inclusion and Collaboration

At Cisco, we have a vision of unleashing the full power and potential of our people from an expanded view of diversity—valuing and embracing a full spectrum of different backgrounds, cultures, affiliations, abilities, work styles, and perspectives. Two years ago, we created the first-of-its-kind Office of Inclusion and Collaboration (OIC). We believe that this expansive view of diversity is fundamental to who we are—and the possibilities we see through the convergence of diversity, inclusion, collaboration, and technology are fundamental to where we are going.

We've taken our first transformational strides, delivering innovative new solutions to some of our most business-critical challenges and opportunities—like pay parity, attracting a highly competitive share of diverse talent, and advocating for fairness and inclusion throughout our communities. We've created a new Program Management Office (PMO) structure to drive a consistent approach to these complex initiatives, help us build new capabilities, and leverage expanded data and advanced analytics to accelerate our progress.

We have driven broad improvements in overall representation that have resulted in the most diverse Cisco since 2000. We attribute these shifts to our holistic strategies for expanding hiring and developing and promoting emerging leaders across the full spectrum of diversity. While at first glance the year-over-year growth percentages may seem modest, we believe they are leading indicators of success in breaking through the challenges that have long plagued our industry and a sign of major shifts ahead.

It's been a big year for Cisco in realizing the true value of diversity, inclusion, collaboration, and technology across our company and with our customers, partners, and communities. Here are some of the strides we're making.

Expanding Our Impact

As with Our People Deal, our bold new strategies for diversity, inclusion, and collaboration are designed to be a movement—not a mandate. We're collaborating and innovating at new levels. Driving new business outcomes that create value now and build for the future. Fully leveraging our tools, technologies, and advanced analytics to create what we're calling "the future of fairness." Going bold means we're going beyond traditional policies, practices, and programs to the heart of where fairness is created—and everyone thrives.

By reaching out across our company and to our strategic partners, we've been able to deliver big on our first inclusion and collaboration strategic initiatives, like our new pay parity framework. We're creating new ways of adding value to our brand and benefiting our ecosystem of diverse suppliers, customers, and partners. We're also expanding the ways we advocate for inclusion and social justice for our people inside and outside the workplace.

We've continued to excel at the fundamentals while increasing our reach through new levels of internal and external engagement. In addition to building a pipeline of diverse talent, we've started building the next generation of global problem solvers and leaders.

We're already driving exciting new outcomes—life-changing impacts now possible through the convergence of inclusion, collaboration, and technology. For example, allowing a young girl to continue to go to school while receiving lifesaving cancer treatment, thanks to the innovative use of our collaboration technologies (see the Connected Health and Education case study).

Our Connected Disability Awareness Network is also driving inclusion—their winning idea in our annual Innovation Challenge is transforming access to the workforce for people of all abilities (see the Project Life Changer case study).

Case Study: Connected Health and Education

What does it mean for a 10-year-old with cancer to be able to continue attending the school she loves while getting lifesaving treatment hundreds of miles away? Everything. For fifth-grader Peyton Walton. For her family. And for the passionate team of experts who came together to break down barriers and create innovative new solutions for inclusion in the classroom and beyond.

From the beginning of her treatment, Peyton and her mother Lynn had struggled with the limited options for attending school daily. After tackling many roadblocks with her healthcare providers, local legislation, and their school district, Peyton and Lynn were connected with Cisco. We provided a turnkey system for video collaboration that would allow Peyton to participate with her class virtually, either from home or from the hospital. Our collaboration technology not only helped her stay connected academically but also helped her remain engaged and feel included with her teachers, her friends, and her entire social network. As Peyton's teacher at Woodland Elementary described the experience, "It's almost like she's sitting in the room with you…it was very exciting."

Giving Peyton the opportunity to be included in the classroom had a huge impact on her treatment. Today, she's cancer-free. Her story–and the collaboration that made it possible–have opened up a world of possibilities for Cisco. We're building on our commitment to apply technology and inclusion beyond our own organization by creating a new team called Connected Health and Education. Our mission: Bridge the worlds of education, healthcare, government/legislation, and technology in order to connect everything, collaborate everywhere, and benefit everyone.

Case Study: Project LifeChanger = Video + Collaboration + Accommodations

What happens when inclusion, collaboration, and technology converge? Transformation. Project LifeChanger is creating new possibilities for how Cisco can change the way the world works, tap into the tremendous untapped potential of people with disabilities, and change lives.

Collaborating with a wide range of experts including the National Council for Vocational Rehabilitation, not-for-profit employment service agencies, the State of California, and other technology companies, the passionate volunteers behind Project LifeChanger developed innovative solutions to overcome the primary employment barriers facing people with disabilities: limited access to employment and employers, and bias concerning their capabilities.

Project LifeChanger combines Cisco's passion for inclusion and our commitment to finding the best people with an innovative application of our video and collaboration technologies plus accommodations to help people with disabilities transcend location, mobility, and challenges to seamlessly join teams and contribute value. The result: 50 talented people have been hired to date, demonstrating the true value of a diverse workforce through high talent retention, low absenteeism and error rates, and increased productivity. In India, LifeChanger hires were 120 percent more productive than their peer groups.

With this initial success, we're planning to scale Project LifeChanger across Cisco worldwide.

Expanding Our Commitment to Fair Pay

Cisco has always been committed to paying our people fairly and equitably. Our pay parity initiative expands our capabilities—creating new insights through a framework of powerful analytics and targeted strategies to identify the factors that influence fairness and equity. Our strategies are holistic, looking across gender (women and men) plus race and ethnicity in the United States (as defined by the U.S. government). To date, we've completed our U.S. analysis, which revealed a healthy compensation system and only minor disparities within approximately 2 percent of our entire U.S. employee population.

We've given pay adjustments to close those minor gaps. The funds required to address these gaps represent a small fraction—approximately 0.1 percent—of the U.S. base payroll. Now, we're scaling globally. Pay parity is an ongoing commitment for us. We'll be testing for parity regularly and where we see gaps, we'll look to fix them.

Cisco is also proud to have taken a national leadership role in advancing fair pay for everyone as one of the 28 founding signers of the White House Equal Pay Pledge. We've joined forces with 24 companies across multiple industries to form the Employers for Pay Equity Consortium to help make the promise of fair pay a reality for all employees.

Innovating to Change the Cisco Diverse Talent Equation

We've also been working to increase what we call "full spectrum diversity" across our company. The numbers don't really tell the whole story when it comes to diverse representation at Cisco. With more data, we can see that we need to focus on diversity in certain technical roles and functions. Although this issue is common in our industry, we're committed to creating uncommon solutions to address it.

To start, we've changed our approach to finding talent. A new framework of powerful analytics will create data-driven insights to help us explore the factors behind the numbers. We're also developing real-time leadership tools and piloting applications that create a level of business intelligence that will transform our understanding of the talent market across job family, geography, and tenure. This will allow us to shift our talent strategy to create new pipelines of diverse talent

Taking a Stand for Social Justice

Benefitting everyone starts with fairness and equality for everyone. Cisco is taking a stand on key issues that violate our zero tolerance policy on discrimination and threaten the equal rights, safety, and dignity of our people.

For example, the discriminatory anti-LGBTQ HB2 bill passed into law in March 2016 in North Carolina, where our employees number over 5500. The legislation requires transgender persons to use restrooms and other facilities inconsistent with their gender identity, and removes non-discrimination protections that we believe endanger the LGBTQ community.

In collaboration with the Human Rights Campaign, our CEO Chuck Robbins and dozens of other leaders of major companies sent a letter calling on North Carolina's Governor Pat McCrory and the State General Assembly to repeal the bill, stating that *"HB2 is not a bill that reflects the values of our companies, of our country, or even the overwhelming majority of North Carolinians."*

We made our position clear and are opening new channels to give our people a forum to voice the real impacts within their lives. In FY16, Fran Katsoudas, Senior Vice President and Chief People Officer, and Shari Slate, Vice President and Chief Inclusion and Collaboration Officer, hosted a town hall for employees in North Carolina to give voice to every perspective

on HB2. We have also expanded awareness of our own global bathroom guidelines and we continue to maintain a gender-neutral individual restroom in each of our Cisco-owned facilities. We've maintained gender-neutral restrooms since the early days of our company—it enables transgender employees to make the choice that best represents the gender with which they identify.

Social injustices and tragedies continue to unfold in communities across the U.S. where people are being targeted simply because of their race, sexual orientation, gender identity, and/or beliefs. We have expanded our engagement around this growing crisis, including the area of fair and equitable treatment by law enforcement. We've created a number of opportunities for dialogue with our leaders, our employees, and our Employee Resource Organizations like Connected Black Professionals (CBP). Our people view our company as a critical voice in the fight for fairness and equity, and we're committed to keeping the dialogue going, collaborating with communities, advocating for long-term solutions that build fairness into policies, practices, and laws that break down barriers.

Cisco's Executive Leadership Team (ELT) members attended an early morning forum hosted by members of Cisco's Connected Black Professionals (CBP) Employee Resource Organization to listen to concerns and understand what we as a company could do to be supportive. The sharing was emotional and transformational. What we now understand is this: For many of us, this grief, pain, and fear is a frequent or daily experience. For many of our employees, their dignity, respect, and security are threatened. After the conversation, the Executive Leadership Team sent our employees a communication acknowledging the impact on individuals and inviting a deeper conversation about inequality. We created a real shift in how we are going to support each other in facing and understanding the impacts of inequality, and the role that Cisco will be playing in our communities as lines between the borders of our company and our community are blurred in the realm of social justice issues.

Making Great Strides for Diversity, Inclusion, and Collaboration

Our commitment to inclusion is widely recognized. We're especially proud of the many industry distinctions and inclusive leadership awards we received this year, including Diversity Magazine MBA, the National Association of Female Executives Top Companies, Military Friendly® Employer, Working Mother Best Companies for Multicultural Women, Disability Matters, Aon Hewitt's "Best of the Best," and Great Places to Work. We scored 100 percent on the Human Rights Campaign's 2016 Corporate Equality Index, and 9 of our executives received individual inclusive leadership awards.

As we continue to build on our success, to innovate, and to expand our impact throughout and beyond our company, we're also making great strides and creating tremendous value in the ways we are taking action on our core strategies.

Amplifying the Power of Partnering

At Cisco, creating an environment in which everyone can thrive isn't just the job of the OIC or Human Resources. In fact, *everyone* plays a leadership role. As one of the most diverse executive teams in our industry, our ELT sets a powerful precedent for transformation across our company. This year we accelerated the way we work together to co-create, build new practices, and accelerate our new inclusion and collaboration strategy.

To start, we've expanded our Inclusion Leadership Teams within every region and function at Cisco. Our Inclusion Leadership Teams act at every level and give us new insight into how we make our systems, policies, and practices relevant in every part of our business. For example,

our U.K. and Ireland (UKI) Inclusion Leadership Team's focus on generation, disability, sexual orientation, and ethnicity has resulted in Cisco becoming the first IT company in the U.K. to achieve the National Equality Standard certification.

To accelerate our strategy, we're also partnering with 25 world-class organizations that excel in areas that align to our expanded definition of diversity and help amplify our own inclusive leadership capabilities. Many of our greatest opportunities to attract, develop, and promote our diverse talent come through global strategic engagements with organizations that include the Anita Borg Institute, Hispanic IT Executive Council, IT Senior Management Forum, Disability Matters, Out and Equal, Diversity Best Practices, Simmons, and the Executive Leadership Council (ELC).

In FY16, approximately 2400 of our high-potential employees participated in our strategic partner conferences, events, and development programs. For example, over 400 Cisco employees at all levels of our company attended the Grace Hopper Celebration of Women in Computing Conference in the U.S. and India. This level of Cisco engagement is critical to not only attracting new talent but also keeping and promoting our own top people. Participants in Grace Hopper are shown to be four times more likely to stay with Cisco than comparison groups and have an 80-percent improvement in their odds of earning a promotion. We've expanded our investments this past year to include additional opportunities in Europe.

Figure 9. Executive Leadership Team (as of December 1, 2016)*

* This graphic represents the current ELT and not the FY16 dataset presented in the Diversity Data section that follows.

Changing the Equation for Diverse Talent

In FY16 we made significant strides in attracting and interviewing more diverse candidates, including a 14-percent increase globally in the number of women candidates interviewed, an 18-percent increase in Asian candidates interviewed, and a 20-percent increase in African-American/Black candidates interviewed. As a result, diverse hiring this year has increased significantly over last year—up over 4 percent for women, 13 percent for African American/Black candidates, 14 percent for Hispanic/Latino candidates, and 30 percent for those candidates representing American Indian, Native Hawaiian, or more than two races.

We're also accelerating adoption of Diverse Interviewer Panels (DIPs), which include members who are diverse in gender globally and in both gender and ethnicity in the U.S., for hiring opportunities across every function and region in our company. Our research tells us that DIPs improve the likelihood of hiring African-American/Black candidates by as much as 70 percent and Hispanic/Latino and women candidates by 50 percent.

We offer our leaders a wide spectrum of training and resources. One example is our Managing Bias training, which teaches people leaders how to recognize bias and drive the policies, practices, and systems that will help us all be accountable for neutralizing it. Our analysis shows that leaders who attended Managing Bias have up to a 20 percent higher likelihood of retaining their direct reports compared to non-participants.

We've also expanded in other ways to support those who want to learn more about inclusive practices and enhance their hiring and management styles. Our 15-minute "Pit Stops" webinars bring hundreds together to engage on thought-provoking topics in the time of an average coffee break. Recent topics have included The Power of Participation, Interviewing Without Bias, Black Girls Who Code, Management as a Service, How to Start Your Own Non-Profit, and Hidden Disabilities.

Investing in our Diverse Emerging Leaders

Our inclusion and collaboration strategy also includes a focus on investing in our emerging leaders. We're creating unique opportunities for our diverse talent to gain the access, mentoring, skills, and capabilities they need to succeed. We're seeing phenomenal growth in year-over-year participation, growing talent retention rates, and increasing the odds of promotion for those who participate. For example, we've created a 100-percent increase in the number of African American/Black vice presidents in one year and a 551-percent increase since 2014.

In FY16, we worked closely with the Executive Leadership Council to create breakthroughs in the development of 118 of our emerging African-American/Black leaders at the ELC's 2015 Fall Forum. A total of 39 Cisco executives attended, including CEO Chuck Robbins and Chief People Officer Fran Katsoudas, to coach individuals and to work with teams to solve real-life business challenges facing the company. Participants are now four times as likely to stay at Cisco as a result.

We're continuing to make strides to develop the next generation of female leaders for the company. Our DARE program encourages and inspires women who are just starting out in their careers by focusing on key issues like visibility, internal politics, and positive branding. JUMP brings high-potential, mid-level female participants together to focus on authentic leadership, strategic thinking, and increasing impact. Both programs are significantly improving talent retention and making it more likely that our emerging women leaders will stay and develop their career at Cisco.

Since cross-cultural competency is vital to our success, we're also developing high-potential mid- to senior-level managers and their diverse employees through our Next Generation Leaders (NGL) program. The program is designed to embrace differences, unlock talent, and foster disruptive thinking on culture, ethnicity, and socioeconomic issues. Our initial participants showed a promotion rate that is 74 percent higher than that of non-participants.

"Project Quantum" is building the leadership pipeline for high-potential women in Cisco Japan through a 9-month journey with classroom intensives, stretch assignments, and mentoring. Project Quantum's initial participants were so impacted by their journey that they decided to compile their learnings and insights into a book titled "Discover the Aspiring Leader in You: Bringing the People Deal to Life," which has been published and is available at bookstores globally.

Fueling Our Culture of Inclusion Through Employee Communities

From the perspective of our new inclusion and collaboration (I&C) model, the best way to attract and keep the best people is through full participation. In 160 chapters across 43 countries, over 25,000 of our people now participate in Cisco's I&C Community—a platform for diverse groups to connect, explore their unique passions and talents, innovate, and excel. Some of our groups include PRIDE, Conexion, Women in Science and Engineering, Connected Black Professionals, Connected Women, Cancer Support Network, Women in Finance, and Men for Inclusion.

Across Cisco, the I&C Community is having a transformational impact on our company, our communities, and our world. Globally, community members significantly improve the likelihood they will be promoted. Within the United States, the likelihood for promotion is doubled.

Our people are doing amazing things within the I&C Community. Our Connected Disability Awareness Network (CDAN) is expanding awareness around hidden disabilities such as autism, dyslexia, diabetes, and ADHD. Our VETS Employee Resource Organization paid tribute to the Fallen Heroes and the Gold Star parents (those who have lost a son or daughter in war) by hosting a "Remembering Our Fallen" memorial to honor servicewomen and men who have lost their lives in the wars since 9/11 and hosting a reception for their families. Our PRIDE group for LGBTQ employees and their allies flew the rainbow flag at our San Jose headquarters in a show of unity following the mass shooting in Orlando, Florida.

Conexion is creating tremendous impact on the next generation of problem solvers through Programa Escuela, which connects Cisco employees with middle- and high-school students in Spain, Belgium, Mexico, and the United States to inspire local youth from high-risk areas to seek higher education by promoting interest in technology. This dynamic program concludes with a visit to a local Cisco campus and a certification ceremony.

Co-sponsored by our Connected Women Employee Resource Organization (ERO), our wildly successful Women of Impact (WOI) global event created a unique opportunity to get connected, be empowered, and find inspiration for over 10,500 women and men at 89 live sites across 43 countries as well as via virtual technology. WOI's growing success is creating tremendous impact in fulfilling some of the OIC's key objectives—inspiring and accelerating inclusive leadership capabilities, advancing and developing our diverse emerging leaders, and helping us change the equation to attract and keep the best diverse talent. Connected Women members are over 30 percent more likely to stay with Cisco. This year's theme was, appropriately, "Be Unstoppable."

Diversity Data

We have published workforce diversity statistics in our Corporate Social Responsibility Report since 2005. Last year we expanded the data to include additional gender, race, and ethnicity information. Our diversity summary data is listed below, and our 2016 EEO-1 submission can be found online.

Figure 10. FY16 Diversity Snapshot[1] (Total Employees in FY16: 73,700)

Workforce Diversity – Overall

Global Gender Overall
- 24% Women
- 76% Men

U.S. Gender Overall
- 26% Women
- 74% Men

U.S. Ethnicity Overall
- 36%
- 5.1%
- 3.4%
- 0.3%
- 0.2%
- 0.9%
- 54%

Workforce Diversity – Technical[2]

Global Gender Technical
- 15% Women
- 85% Men

U.S. Ethnicity Technical
- 50%
- 3.8%
- 3.0%
- 0.2%
- 0.1%
- 0.8%
- 42%

Workforce Diversity – Non-Technical[2]

Global Gender Non-Technical
- 37% Women
- 63% Men

U.S. Ethnicity Non-Technical
- 23%
- 6.8%
- 4.5%
- 0.2%
- 0.2%
- 1.2%
- 64%

Workforce Diversity – Leadership and People Managers[3] and VPs

Global Gender Leadership and People Managers*
- 18% Women
- 82% Men

U.S. Gender Leadership and People Managers*
- 21% Women
- 79% Men

U.S. Ethnicity Leadership and People Managers*
- 30%
- 4.7%
- 2.1%
- 0.3%
- 0.1%
- 0.6%
- 62%

Global Gender VPs
- 20% Women
- 80% Men

U.S. Gender VPs
- 20% Women
- 80% Men

U.S. Ethnicity VPs
- 22%
- 2.6%
- 2.0%
- 1.0%
- 0.0%
- 0.3%
- 72%

Executive Leadership Team (ELT) Diversity
(includes CEO and his direct reports)

Global ELT Gender Overall
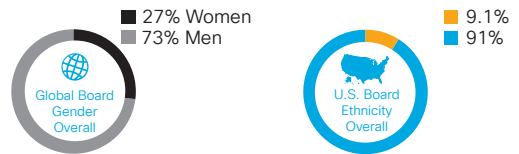- 36% Women
- 64% Men

U.S. ELT Ethnicity Overall
- 7.1%
- 7.1%
- 7.1%
- 79%

0%: Indian/Alaska Native, Native Hawaiian/Other Pacific Islander
* Two or More Races represented are African American and Asian

Cisco Board Diversity

Global Board Gender Overall
- 27% Women
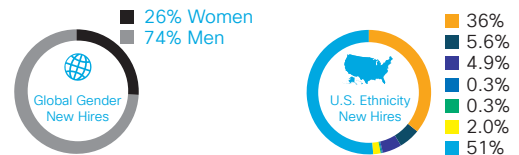- 73% Men

U.S. Board Ethnicity Overall
- 9.1%
- 91%

0%: Hispanic/Latino, African American/Black, American Indian/Alaska Native, Native Hawaiian/Other Pacific Islander, Two or More Races (Not Hispanic or Latino)

Hiring Diversity

Global Gender New Hires
- 26% Women
- 74% Men

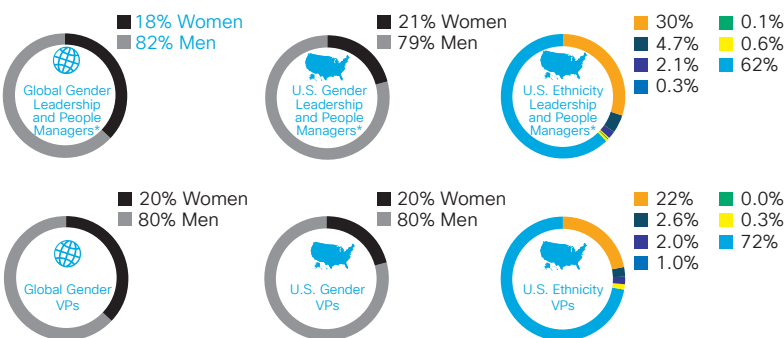**U.S. Ethnicity New Hires**
- 36%
- 5.6%
- 4.9%
- 0.3%
- 0.3%
- 2.0%
- 51%

Legend:
- Asian
- Hispanic/Latino
- African American/Black
- American Indian/Alaska Native
- Native Hawaiian/Other Pacific Islander
- Two or More Races (Not Hispanic or Latino)
- White/Caucasian

1. Some figures may not total 100% due to rounding of underlying data.
2. Based on alignment to EEO-1 job categories.
3. People managers, directors, and senior directors.

Table 10. Gender Diversity at Cisco

	FY14	FY15	FY16
Female employees globally	23%	23%	24%
Female new hires globally	23%	25%	26%
Female managers globally (including directors)	19%	18%	18%
Female vice presidents globally	17%	19%	20%
Female employees in the United States	26%	26%	26%
Female managers in the United States (including directors)	22%	20%	21%
Female vice presidents in the United States	18%	19%	20%

Table 11. U.S. Total Headcount Representation by Ethnicity

	FY14	FY15	FY16
Asian	36%	36%	36%
Hispanic/Latino	5.0%	5.0%	5.1%
African American/Black	3.3%	3.3%	3.4%
American Indian/Alaska Native	0.3%	0.2%	0.2%
Native Hawaiian/Other Pacific Islander	0.1%	0.1%	0.1%
Two or More Races	0.8%	0.9%	0.9%
White/Caucasian	54%	55%	54%

U.S. New Hires by Ethnicity

	FY14	FY15	FY16
Asian	32%	35%	36%
Hispanic/Latino	4.8%	4.9%	5.6%
African American/Black	4.1%	4.3%	4.9%
American Indian/Alaska Native	0.3%	0.2%	0.3%
Native Hawaiian/Other Pacific Islander	0.3%	0.3%	0.3%
Two or More Races	1.9%	1.5%	2.0%
White/Caucasian	56%	53%	51%

U.S. VP Representation by Ethnicity

	FY14	FY15	FY16
Asian	22%	22%	22%
Hispanic/Latino	4.2%	3.8%	2.6%
African American/Black	0.3%	1.0%	2.0%
American Indian/Alaska Native	0.9%	1.0%	1.0%
Native Hawaiian/Other Pacific Islander	0.0%	0.0%	0.0%
Two or More Races	0.0%	0.0%	0.3%
White/Caucasian	72%	73%	72%

Supplier Diversity

Supplier diversity can play a powerful role as it opens new channels to access skills, provide resiliency, promote inclusiveness, broaden partnering opportunities, and offer an abundance of viewpoints needed to solve today's complex challenges. We believe diversity boosts our ability to understand and successfully operate around the world.

Our program helps us access a new lens of understanding, build strong relationships, and reduce the risk of disruption. The Supplier and Partner Diversity Program is governed through the Sales Channel Partner, Supply Chain, and Global Procurement organizations. These groups work together to provide innovative thinking that guides more thoughtful decision making.

Cisco spends billions of dollars with our suppliers and partners every year. This large spend allows us to provide opportunities to support diverse businesses where appropriate. To best capitalize on our diversity impact, we are optimizing our processes to maximize mutual benefit within the communities we serve.

We demonstrate our commitment to supplier diversity through our ongoing efforts to recruit and develop diverse partners and businesses and to provide them with access to opportunities. As Cisco continues to track progress, data, and trends, it has become clear that digitization represents a significant opportunity with potential to bolster our efforts, expand our impact, and measure our progress.

Figure 11. Supplier Diversity Trends on the Horizon

Diversity Business Practices (Sales Channel Relationships)

Global Procurement Services (Indirect Procurement)

Supply Chain Operations (Direct Procurement)

Expand best-in-class supplier diversity program

Connect procurement to digital supply chain strategy

Long Term
Cultivate organic growth and expanded capabilities

Drive employee awareness and capacity building

Focus on supplier mentorship

Develop internal supplier diversity training

Establish scalable platforms for supplier ecosystem

Scale partner/sales mentorship

Intermediate
Embed into cultural mindset

Current
Reinforce with centralized strategy across Cisco

- **Top Organizations** For Multicultural Business Opportunities-DiversityBusiness.com
- Corporate 101: America's **Most Admired** Corporations for Supplier Diversity-Minority Business News USA
- Partner Operations Diversity Forum: Represented **$3.75B in revenue, and high customer satisfaction score**

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Promoting Diverse Businesses

Diverse businesses are defined as being at least 51 percent owned by a member of one of eight historically disadvantaged groups identified by the U.S. government (see box) and headquartered in the U.S. Cisco actively solicits diverse businesses to give them the greatest opportunity to supply us with goods or services.

We believe that improving supplier diversity is essential to meet growing stakeholder, customer, and regulatory demands. Internally, that means increasing awareness of the value proposition and of the inherent resiliency that supplier diversity encourages within our procurement function.

In FY16, we improved our ability to track, verify, and recognize diverse suppliers. Many of our customers support diverse suppliers and require the same of Cisco, and we responded to information and reporting requests from more than 100 customers this year. In countries where supplier diversity is a requirement, including Australia, Canada, South Africa, and the U.S., we look to meet all regulatory obligations.

As part of Cisco's role on the United Nations Global Compact (UNGC) Supply Chain Sustainability Advisory Group, we contributed to the inclusive sourcing section of the UNGC's Second Edition of The Practical Guide for Continuous Improvement (see page 50 of the guide).

Capability Building and Business Development

We connect diverse suppliers and partners with relevant Cisco business units and other potential customers. Diverse suppliers and partners meet with executives from Cisco and other Fortune 500 companies to discuss potential business opportunities at our Partner Operations Diversity Forums. Our forums average 100 or more stakeholders in attendance.

Supplier diversity in the indirect/direct supply chain must be a priority. While it's no simple task for a large global organization like Cisco to be agile, we know that prioritizing diversity in our workforce and supply chain generates flexibility. As the global marketplace becomes even more dynamic and complex, we will continue to evolve by embracing diverse perspectives across our workforce and partner ecosystem to drive a more sustainable supply chain and business for the future.

Developing Our People

Developing Ability

At Cisco we are changing the way the world learns, starting with our employees. Whatever their role, function, grade, or location, our people always have the opportunity to learn and grow in new areas. Our learning curriculum focuses on building capabilities as individual team members, as teams, and as leaders of teams.

As individual team members, our employees benefit from between 40–50 professional skills courses most relevant to employees at Cisco, as well as technical learning specific to their functional organization. In FY16, 10,713 employees took advantage of professional skills courses, totaling approximately 164,100 hours of learning. More than 34,100 people took advantage of our internal Learning Portal.

In addition to offering traditional types of learning, such as instructor-led training (ILT) through in-person and virtual courses, we are introducing next-generation learning practices, such as video-based learning, labs, simulations, or gamification of our courses. In FY16 we delivered more than 2.6 million hours of training to approximately 77,336 unique learners.

We also provide both social and peer-to-peer learning, as well as offering employees mentorship opportunities through our Global Mentoring Connection website.

Developing Team Leaders

At Cisco we believe that great companies are centered on great teams—and that great teams have great leaders. Our goal is to focus on helping our leaders achieve desired outcomes, while recognizing them as individuals. We want to help our leaders learn from other leaders through sharing what works for them.

To enable our team leaders in FY16, we developed programs to drive greatness through our People Leadership initiative. Beyond traditional and virtual ILT formats, we offered interactive experiences to give leaders the exposure, practical experience, and education needed to build the right leadership abilities. Examples include Cisco TV broadcasts, Learning Circles (where leaders collaborate and learn from each other), and "Walk the Talk" sessions (TED-like events where leaders share personal experiences). Our leadership program suite includes new leader orientation, manager training, and advanced management training (more than three years in a manager role), and also includes a leadership pipeline program developing current high-potential and future leaders. More than 1000 leaders participated in these programs in FY16, for a total of more than 99,000 training hours.

We are shaping a new approach to leadership that provides a range of learning offerings that help leaders learn and grow in ways that are best suited for them.

Key GRI G4 Indicators

GRI G4-40: Process for determining the composition, qualifications, and expertise of the members of the highest governance body and its committees, including any consideration of gender and other indicators of diversity

GRI G4-LA9: Average hours of training per year per employee by gender, and by employee category.

GRI G4-LA10: Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.

Developing a Strong Leadership Pipeline

We are committed to developing leaders who can successfully navigate market changes and take Cisco into the next decade. To build a leadership pipeline that helps us prepare for leadership succession, we've established a variety of talent development programs.

In FY14, we started our High Potential Senior Director Program, which gives our next-generation VPs a chance to build and flex their leadership skills over an 8-week period. The program gives participants an opportunity to improve the business by working across the organization to tackle a current issue. To date, 25 projects have been completed by these cross-functional teams of senior leaders. The projects have ranged from evaluating new market segments to improving global business coordination.

Project participants are given tools, strategies, and exposure to our top leaders to help them complete their project. Once done, they are assessed and given actionable feedback on areas in which they can improve to be more effective. They can then hone their skills in their day-to-day roles, supported by ongoing development and coaching opportunities, and demonstrate their abilities as they take on new challenges.

Given the exposure they received during their project, many participants have taken different job assignments to further their understanding of different parts of the business. Since the program's inception, 6 groups have gone through the program together, accounting for 24 percent of our senior director population. Sixteen percent of participants have been promoted to VP, accounting for 30 percent of all VP promotions. The program has also helped us identify and develop more female leaders—women account for 23 percent of our participants. In FY17, we are evolving the program to target the top 50 executives.

Leadership Pipeline in Action: A Smooth CEO Succession

The appointment of Charles "Chuck" H. Robbins as Cisco's new CEO demonstrates the value our talent development programs bring to the business. When Chairman and CEO John Chambers announced in January 2014 he would step down as CEO in 18 months, our Board of Directors immediately started looking for the best candidate to replace "one of the most dynamic, respected, and longest-tenured CEOs in the tech industry."[i]

They looked at who had participated in the Executive Talent Development Program, which identifies our top one percent via annual in-depth executive assessments, to highlight potential internal CEO candidates. The assessments provide both quantitative and qualitative feedback of an individual leader's business and functional competencies, measured against industry peers and based on Cisco's strategic requirements.

With this information in hand, the Board quickly agreed that an internal appointment from an already strong CEO candidate bench would lead to greater success in such a fast-evolving industry transition. Board members held formal, one-on-one, multi-hour interviews with each internal candidate and had opportunities to get to know the top one percent in both formal and informal settings over a greater period of time than might have otherwise been available. External candidates were then reviewed against the top-performing internal candidates. The succession planning process led to the Cisco Board of Directors' unanimous decision for Robbins to succeed Chambers as CEO.

Enabling a More Fluid Workforce: One Company, Many Careers

We have also supported the acceleration of our talent mobility within Cisco through the Cisco Talent Marketplace. This platform gives our people the chance to find and apply for diverse work assignments in various functions, to experience new roles and organizations, and to develop new skills and expertise by "doing."

This year we added two types of "swap" opportunities: Job Swaps and Time Swaps. These programs give our people the choice to either swap up to 20 percent of their time with another individual for a defined period, or swap their role entirely for a limited time, or even permanently—within their organization or cross-functionally. Swap opportunities make it much easier for our people to change roles or simply try something new. They also give them the opportunity to have more effective conversations with their managers when it comes to career development. In FY16, more than 18,000 employees visited the Cisco Talent Marketplace with more than 1100 taking advantage of the opportunities within.

We continue to support our people in their career journeys and aspirations, through Career Days, Learning Days, University Days, and our Career Advisory Services. Once again our Career Development website has been the most highly trafficked internal website at Cisco, with close to 64,000 employees using it. Our people can also take advantage of Plan Your Career to learn about available assignments or to connect with mentors, peers, and advisors. Our Talent Connection Program also helps our people find and apply for available jobs around the business.

Talent Cloud

To enable a fluid workforce we have created the Talent Cloud, a transparent ecosystem of apps and platforms that help employees, team leaders, and enterprise leaders gain important insights about the skills and strengths at Cisco today and how we can use these insights to capture the business opportunities we see in the market, and deliver the choice, flexibility, and mobility our employees expect.

The Talent Cloud consists of multiple apps and platforms, similar to the consumer experience with a mobile phone. However, just like the apps on your phone, it will be clear which platform you need to go to for the experience you need or the work you want to do. Today, we have brought together Team Space and my Development Space under the Talent Cloud umbrella.
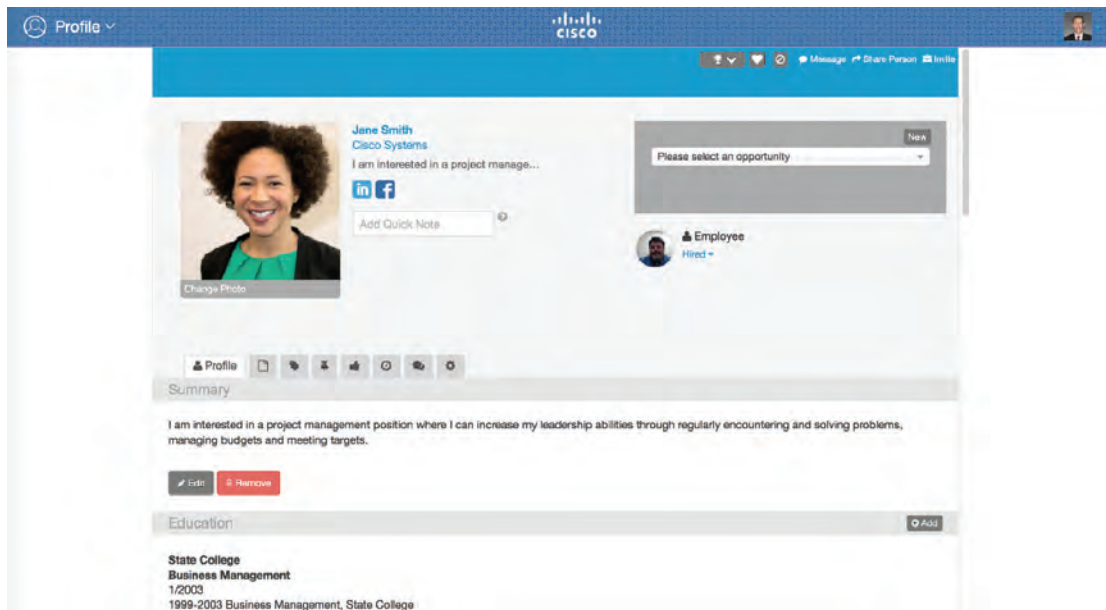
Case Study: my Development Space

my Development Space outlines the skills and capabilities needed for an employee to succeed in their current role. They start with a profile that outlines their existing experience and skills.

A self/manager/colleague assessment of the employee's skills in their current role provides more information and a baseline for skill development. Development recommendations are personalized to help employees develop needed skills for today (to fill gaps identified in the assessment process), and the future.

my Development Space links employee skills to the Career Navigator Tool for permanent roles, and to the Talent Marketplace for short-term assignments. This lets employees see the roles and assignments across Cisco aligned to their skills, so they can build on them. The inverse is also true: Leaders can see employees who might be a match for a job or assignment they have available.

my Development Space will build an internal reputation for employees based on their work and interaction with other teams, helping employees build their skills for today and for what Cisco needs in the future.

Rewarding Our People

Our employees are everything. They are the dreamers and innovators who see past societal, business, and technological boundaries. They're the caretakers of our culture, our customers, and our business. They are the catalysts behind our storied past—as well as our bright future. Our employees share in the perks and benefits that support our great culture.

Total Rewards

We want our people to share in our mutual success. So our compensation strategies focus on pay for performance, market competitiveness, and fairness and equity. Pay parity helps us bring to life the trusting environment that drives the best teams, allows us to retain the best talent, and positions us as a top employer. As a founding signer of the White House Equal Pay Pledge, Cisco is proud to be taking a national leadership role in sharing best practices and advancing pay parity for our workers.

We provide our people with compensation, benefits, and long-term savings packages that are market competitive, that are differentiated (as appropriate), and that every employee values. The packages are designed to be innovative, personal, fair, simple, and based on our shared values.

In FY16 our total compensation was approximately $14 billion. That includes salary, benefits, bonus, commissions, stock awards, and retirement benefit. We reward our people in many other ways, from big awards to recognition with a simple "bravo."

We believe that we are all in this together—each and every one of us. Our motto is: If you help us succeed, we will share that success with you. So when Cisco does well, we all do well. Helping each other and sharing our collective achievement is at the heart of Our People Deal.

Giving Kudos

"Thank you" means so much more when it comes from your peers. That's why we have a Connected Recognition program. Any employee can nominate an individual or team for a monetary award to recognize outstanding work.

Around 54,000 employees have received a Connected Recognition award each year since the program launched in 2014. No approval is required for gifts under $100, and employees can give rewards with higher value—up to $2,000—with a manager's approval.

Health and Wellness

You can't run a healthy business with unhealthy employees. That's why we do everything we can to help our employees to be their best.

We continually improve how we offer our benefits to employees so it's easy for them to pick what's best for them and their families. During annual open enrollment in the U.S., we pull out all the stops. We offer award-winning online tools, interactive virtual information sessions, and onsite health and savings events that include free health screenings. We show employees how the plans stack up against each other for different family scenarios. Last year we hosted 18 health and savings events at our major U.S. campuses. Employees got to quiz our benefits team and benefits providers about our offerings and even meet our on-campus doctors.

If employees need a medical checkup or want to work out during their lunch break, we make it easy for the employees at our largest campuses, which feature state-of-the-art medical care and fitness centers.

The 24,000 square-foot facility in San Jose, for example, provides comprehensive, integrated healthcare. It's got a medical office, pharmacy, vision center, and dental center all under one roof, eliminating the need to visit multiple offices for various doctor appointments. Employees also enjoy the 48,000-square-foot connected fitness facility, which contains state-of-the-art equipment, certified experts, a wide range of classes, personal training, and even nutrition counseling.

Our employees love to geek out even when they work out. The cardiovascular and strength equipment has advanced technology displays that provide an engaging and entirely customized member experience, enabled by our network. Plus, content is stored in the cloud from one workout to the next so members can stay connected with their personal content and training data whenever and wherever they like.

Our Employee Assistance Program (EAP) helps employees and their household members better manage life transitions, work-related stress, and other personal challenges. Our free, confidential services—available 24/7/365—cover assessment, referral, and intervention assistance for:

- Life events (births, accidents, and deaths)
- Anxiety or emotional stress
- Financial and legal issues
- Work relationships
- Parenting concerns
- Physical abuse
- Alcohol and drug addiction

Plus, we're always asking our employees what more we can do to make things easier. For example, how can we relieve stress on the job? Last year, we implemented a Bring Your Dog to Work pilot program based on popular demand at some of our U.S. locations to boost workplace happiness. Woof!

"What's awesome about Connected Recognition is that there are so many different ways to spend your funds. I have coworkers who have redecorated their homes, bought furniture, gotten sports equipment, and since we're all techies here, they've gotten more tech gear. It's nice that you can either have 'stuff' or experiences. I saved up several rewards to help me fund a seven-day stay at the Kamala Beach Resort in Thailand. The rewards meant that I stayed in a more upscale resort than I would have booked if I were paying for it on my own."

David Faik,
Procurement Manager

"I use the Cisco Health and Fitness Center on a daily basis. The gym has been absolutely phenomenal for me and my work/life balance. It's really a way for me to get in, de-stress, and then be able to focus on work. I think Cisco has put in 100 percent effort regarding their unique approach to the fitness center. It's a very clean facility, the staff is great, and there is high-quality equipment and lots of amenities. It's unbelievable."

Sam Foley, Finance Analyst

Case Study: Expert Medical Opinion Program

> "My dad has been diagnosed with cancer and he's utilized the Expert Medical Opinion service and is very impressed. Thanks for everything you did to get this off the ground—it's a wonderful help for families when things like this happen and is, for me, example #454412 why I am so very grateful to be at Cisco."
>
> MaryAnne Flynn, Director, IT

Let's face it. You can't put a price tag on peace of mind.

When faced with a medical diagnosis or complex treatment options, people often have to make important decisions that can feel overwhelming. A second opinion from an expert can help bring peace of mind. So before any major medical decision, our employees and their families can get a free, independent medical opinion from a recognized physician in whatever specialty they need. Not only is this service available to spouses, domestic partners, and kids, but we also cover parents and in-laws too—whether they live close by or hundreds of miles away.

Worldwide, we make sure Cisco employees and their families are never alone in their time of need. They can mobilize a team of expert physicians to help, regardless of the complexity or rarity of a health situation. The Expert Medical Opinion program lifts the stressful burden of researching the best specialists, procedures, and treatment options— and lets people focus on healing.

Flexible Working

When people have a choice over how, where, and when they work, engagement and productivity rise. We give our people that choice and flexibility, depending on their job function and management approval. Our employees can choose from many different spaces in which to work: workstations, open collaboration areas, quiet rooms, audio privacy rooms, eCafes, and "creativity/fun zones." In addition, our technology allows flexible working, including high-speed wireless access, a wide variety of TelePresence® video devices, and social software platforms that drive community connections.

Employee-Friendly Leave Packages

We know that time off is a priority for our employees. We provide time off each year so employees can travel, take care of life matters, recover from illness, or simply relax and recharge. Our traditional leave packages are industry leading and locally relevant, and include paid leaves for adoption, bonding with a new child, or providing caregiving for a family member. Our culture is about giving people flexibility to pursue their personal ambitions, to focus on their loved ones at the moment that matters, and to have access to well-being support services to manage work and life. The newest leave types that we rolled out in FY16 include Time2Give and Birthday Day Off, which are available to our employees globally. They are the direct result of the listening we did as part of Our People Deal.

Birthday Day Off

We give our employees the day off on their birthday, with full pay. If they are unable to take their actual birthday off due to various reasons, we allow them the flexibility to take the day off within 10 days before or after their actual birthday. Our thinking is this: Your birthday is a celebration of you—the people who make Cisco who we are—and what better way to celebrate you than with a day off, on us?

Childcare Services

To help employees put their families first, we offer a host of programs, services, and support in a number of locations.

In San Jose, Bangalore, and the U.K., we have childcare centers conveniently located on campus. These state-of-the-art centers are accredited and operated by our top-notch globally recognized childcare partners. We provide services to children from 6 weeks to 12 years old depending on the location and the time of year. Parents are able to have peace of mind while their children are learning and playing close by in a secure environment.

For families in the U.S., we provide discount programs and priority access to our partner childcare centers all across the nation. We have arranged for backup care in centers or in even in our employee's homes for those days when a caregiver calls in sick or a child care center closes unexpectedly. This is available for children or elder loved ones, too!

Employee Engagement

Empowering employees to volunteer with nonprofit and educational organizations is an essential part of our culture. Volunteering inspires employees, helping them gain new perspectives, develop leadership and other skills, and work better as a team. Our employees have unique talents, career aspirations, and passions that extend beyond their day-to-day work.

Cisco offers a robust set of programs to support our employees in volunteering for the causes, issues, and nonprofits that reflect their passions and interests. Year round, employees are empowered to "be the bridge" in their communities. In FY16, Cisco employees volunteered more than 187,100 hours, a 20-percent increase over FY15. Also in FY16, employee donations and matched funds amounted to nearly $12 million for nonprofit organizations.

Time2Give

We launched Time2Give so regular Cisco employees can take five days off per year to volunteer at a nonprofit or charity of their choice. Where and how the employee volunteers is up to them—they can take a few hours by volunteering an afternoon at their child's school or can take all five days at once and travel to help build houses in another country.

We want to make it easier for our employees to contribute time and talent to make a difference in their communities, and in our world. This time given to community service may be eligible for a matching gift if the charity or school is approved by the Cisco Foundation. We also allow employees to track and report Time2Give using the time off tool in many Cisco locations globally. This helps us see how this benefit is being used, share the statistics with other employees to inspire them, and share our activities with the rest of the world to showcase how Cisco employees care about making a difference.

In the past 6 months, over 3000 employees have created meaningful volunteer experiences by using their Time2Give benefit in a variety of ways, including mentoring orphans in Kenya, judging local science fair projects, hosting soccer tournaments for vulnerable children in Haiti, helping out at local animal shelters, and working with migrant families in China (to name a few).

Key GRI G4 Indicators

GRI G4-SO1: Percentage of operations with implemented local community engagement, impact assessments, and development programs.

Cisco Goal:

80%
employee engagement (volunteering and donations) by 2020

The decision to offer paid volunteer time off as an employee benefit shows Cisco's enduring commitment to supporting our employees and their passion for giving back to the communities where they live, work, play, and learn. Overall, the feedback we have received since rolling out Time2Give has been positive. One employee shared at a recent Cisco-wide employee meeting, "Time2Give is one of the best ideas I've seen in my 20 years here." Another shared, "I am so thankful for the Time2Give program. Thank you Cisco for giving me the time to do what I love to do best help others!" This type of feedback reaffirms that we are moving the needle in the right direction when it comes to employee engagement.
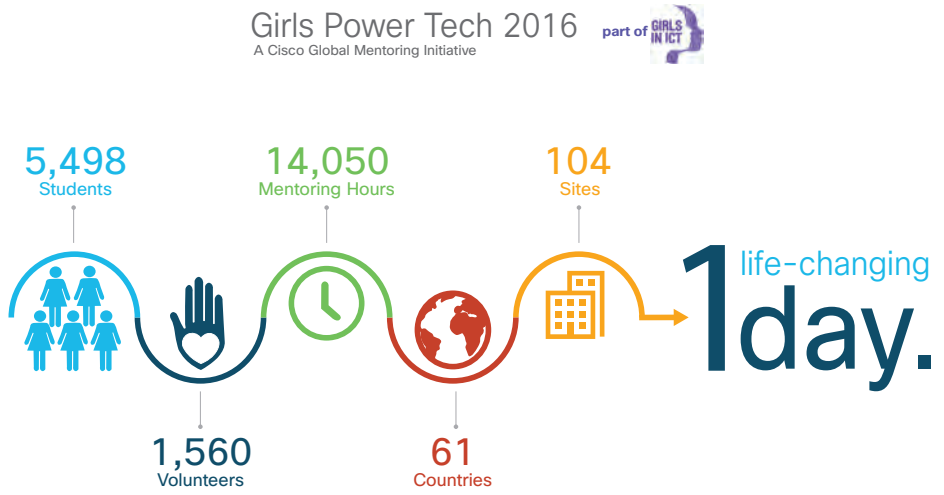
Cisco Citizen Networks

Our employees are key to the success of our employee volunteer strategy. We use their engagement, feedback, and local needs to help create meaningful volunteer opportunities and experiences. Our programs put the employee at the center of the experience and emphasize the importance of regional, national, and local culture.

In February and March of 2016, we assessed the impact our employees made in their communities through focus groups, surveys, and strategic meetings with key stakeholders. From our evaluation of employee engagement, we wanted to find ways to multiply this impact. In FY16, we re-launched our regional employee-run civic engagement chapters as the Cisco Citizen Network (formerly Civic Councils). Local chapters drive employee engagement and volunteerism in cities and regions around the world where Cisco has significant employee presence. Chapters plan volunteer projects and develop relationships with local nonprofits and non-governmental organizations—each initiative tailored to the specific needs of the local community. We currently have 48 chapters in 32 countries around the world.

By championing Cisco's culture and increasing employee civic engagement, Cisco Citizen Network chapters foster enthusiasm for giving back and create meaningful change in their communities. The relationships between our global programs and the Cisco Citizen Network are a great example: Each of our global programs has a theme, an overarching strategy that aligns to business priorities, but each local chapter interprets the most appropriate way to execute against this theme. A mentoring event for girls in China may focus more on university students given an announcement to grow a portion of the business that will require bringing on new talent, whereas a mentoring event for girls in Chicago may focus more on middle-school youth in attempt to participate in the mayor's challenge for corporations to support local schools in closing the achievement gap.

Engaging volunteers globally also provides an opportunity to learn more about the scope of the business in different locations. It provides valuable feedback to our executive leadership, senior management, and direct supervisors by understanding more about the business from the perspective of regional volunteers. This further strengthens Our People Deal by supporting our employees' passion to make a difference while shaping their overall employee experience.

Figure 12. Girls Power Tech and STEM Mentoring

Girls Power Tech 2016   part of GIRLS IN ICT
A Cisco Global Mentoring Initiative

5,498 Students   **14,050** Mentoring Hours   **104** Sites   **1** life-changing **day.**

1,560 Volunteers   **61** Countries

Cisco is committed to inspiring more people to pursue science, technology, engineering, and math (STEM) education and careers. We feel it is imperative to develop initiatives to increase the number of girls and women who pursue STEM careers. Although women make up 46 percent of the workforce, they hold less than 25 percent of STEM jobs.

Every April, we support Girls in ICT Day, a global event organized by the United Nations International Telecommunication Union that is in its sixth year. Cisco has been participating in this initiative from the beginning, inspiring thousands of young women from around the world to learn about the opportunities that the technology sector holds for their future through hands-on exposure to the latest technology and engagement with Cisco employee volunteers.

In 2015, Cisco launched Girls Power Tech, a Cisco Global Mentoring Initiative dedicated to mentoring young women on or around Girls in ICT Day. In 2016, Cisco provided nearly 5500 young women at 104 Cisco offices in 61 countries a special learning opportunity to connect with Cisco mentors onsite and to learn about Cisco technology. Thrilled to empower and encourage the next generation of tech talent, over 1500 of our employees signed up to volunteer—providing over 14,000 volunteer hours in STEM mentoring.

In addition to launching Girls Power Tech, Cisco has also pledged that 20 percent of its workforce will spend 20 hours a year on STEM mentoring by 2020, with an emphasis on women and girls. We first met this goal in FY16 at our campus in Research Triangle Park (RTP), North Carolina. We also have made a commitment to Million Women Mentors to have our employees mentor 5000 female students in the U.S. by 2020. In FY16, 48,996 hours were devoted to mentoring in STEM, a 13-percent increase over FY15.

US2020
Igniting Moments of Discovery

MWM
Million Women Mentors®
Advancing Women and Girls in STEM Careers Through Mentoring

> "At Cisco, we're collectively helping to change the world through active participation in our communities, and employees are empowered to choose where they want to contribute."
>
> Carlos Pignataro
> Distinguished Engineer
> Services Business

Be the Bridge: Annual Giving Campaign

For the past 15 years, Cisco has helped raise more than US$40 million and deliver nearly 160 million meals as part of its global hunger relief efforts. In FY16, we created a new employee giving campaign that empowers employees to provide direct aid to those with uncertain access to life's necessities—to "Be the Bridge" for those in need.

As part of this more expansive initiative, our Be the Bridge Annual Giving Campaign opened up our giving pool to more than 400 different organizations around the globe between November and December. We empowered employees to support social issues that are important to them or their communities. While hunger relief remained a top priority, other important organizations—which provide shelter, housing, nutritious food, and clean water—became eligible for employee giving as well.

The results: More than 8500 employees participated, generating over $4.5 million in direct employee donations and matching funds from the Cisco Foundation for 406 community partners. It was evident that our employees understood their communities best. For us, we found our employees saw this giving campaign as a positive part of our culture. Most of them wanted to help, and were only looking for an opportunity to do so.

The monies raised during the Be the Bridge campaign have had an incredible impact in our communities:

- In San Jose, our donations helped Second Harvest Food Bank provide three meals a day for hundreds of thousands of people in need in the San Mateo and Santa Clara communities.
- In India, our donations helped the Akshaya Patra Foundation provide midday meals to over 16,700 children in government schools.
- Globally, our donations helped Doctors Without Borders provide emergency medical supplies to aid over 600,000 disaster victims for an entire month.

And that's only just a few examples of how our employees' donations impact our communities worldwide. One Shanghai-based employee donated to provide fuel to heat a rural school in the winter. Others supported the Food Bank of Central and Eastern North Carolina as a part of their campaign to ensure that "no one goes hungry" during the holiday season. Another employee supported Water for People to bring safe and sanitary water to over four million people in nine countries. Still others provided "un kilo de ayuda" to those who need help throughout Mexico.

Our Story

Accelerating Global
Problem Solving

Summary of Our
Priorities

The Details

Governance

Society

Environment

GRI Index

Figure 13. Be the Bridge: Annual Giving Campaign

Thank You!

Be the Bridge
Benefit Everyone

BE THE BRIDGE: BY THE NUMBERS

Money Raised:
(in U.S. dollars)

$4,577,135

Over $4.5 million raised in direct employee donations and matching funds from the Cisco Foundation to fight hunger and provide access to shelter, nutritious food, clean water, and emergency care.

406 Partners
will benefit in our communities

10,657 Gifts
were made by Cisco employees

$291
average gift amount donated

18,000 Hours
were volunteered by Cisco employees

BE THE BRIDGE: IMPACT IN OUR COMMUNITIES

Second Harvest
$997,747 in donations* =
3 meals a day for nearly 332,605 people in need in San Mateo and Santa Clara counties.

Akshaya Patra Foundation
$334,002 in donations* =
Feeds over 16,700 children midday meals for an entire school year in India.

Food Bank of Central & Eastern North Carolina
$238,565 in donations* =
1,192,825 meals for people at risk of hunger in 34 counties of North Carolina.

Doctors Without Borders
$120,403 in donations* =
Provides emergency medical supplies to aid over 600,000 disaster victims for an entire month.

* includes amount raised in direct employee donations and matching funds from the Cisco Foundation

BE THE BRIDGE: CISCO EMPLOYEE ENGAGEMENT

8500 Donors
More than 8500 Cisco employees around the world donated during Be the Bridge campaign.

47 Countries
Cisco employees from around the world participated

216 Locations
number of Cisco offices and sites engaged during campaign

TOP 5 COUNTRIES
(worldwide)
1. India
2. Switzerland
3. United States
4. Germany
5. Norway

TOP 5 FUNCTIONS
(worldwide)
1. Legal
2. Information Technology
3. Marketing & Communications
4. Human Resources
5. Corporate Strategic Innovation Group

Be the Bridge is a Cisco employee giving initiative that ran from November 2 to December 18, 2015. The campaign supports more than 400 nonprofits and non-governmental organizations (NGOs) worldwide through employee donations, volunteerism, and matching from the Cisco Foundation. Contact communityrelations@cisco.com with any questions.

CISCO

Case Study: Earth Aware

Every April 22, Earth Day is celebrated worldwide with the purpose of raising awareness about environmental issues, recognizing positive actions taken, and assessing the work still needed to protect our planet. Historically, Cisco has used Earth Day to hold educational sessions for employees globally, including virtual events around the clock, bringing speakers to discuss important environmental issues and solutions. In the spirit of ongoing learning, we have expanded our initiative from a single Earth Day celebration to a campaign celebrated throughout the entire month of April.

In FY16 we launched Earth Aware, a month-long employee volunteerism and awareness campaign to support the environment and sustainability. During this month, hundreds of Cisco employees participated in "green" volunteer opportunities across Cisco offices to encourage employees to take personal action in environmentally responsible behaviors at work and at home.

At our San Jose campus, more than 425 employees helped local organizations harvest sustainable produce, maintained the San Jose Heritage Rose Garden, learned how to host a Bike to Work Day, recycled electronic waste, picked up litter around Cisco, and planted trees.

- Rose Gardening with the Guadalupe River Park Conservancy: More than 90 employees volunteered their time to weed the rose garden and prepare the plants for a fresh pour of wood chips. San Jose's Rose Garden has the largest number of different varieties of roses of any garden in the Northern hemisphere, and volunteers made sure they're also the healthiest flowers.
- Harvesting and Packaging Produce at Hidden Villa: At Hidden Villa, an organic, nonprofit organic farm in Los Altos, California, 25 Cisco employee volunteers harvested and packaged produce to be distributed to the community at local farmers' markets. They weeded the farm's grape vineyards, apricot trees, raspberry plants, and strawberry plants to promote healthy crops. The volunteers also repotted hundreds of chard, basil, and kale plants.
- Walk for the World: The Coyote Creek Trail runs adjacent to Cisco's San Jose campus, and more than 70 volunteers took the initiative to clean up the beautiful path. The group grabbed trash bags and gloves, picking up litter as they walked; some even went off on their own to clean up the smaller trails. It was a beautiful day that allowed employees to connect and make a positive impact in their own "backyard."

For information on additional activities, see the Earth Aware section in the Environment chapter.

A Safe and Healthy Workplace

At Cisco, we give our employees the ultimate freedom to manage their professional and personal lives. That trust is part of Our People Deal. It means flexible hours and technology that allows people to work flexibly. It means job sharing, telecommuting, and even alternative work schedules. It also means more time to pursue personal ambitions, look after loved ones, and focus on things essential for our overall health, like taking time both to exercise and to schedule medical appointments we may be putting off. We offer a number of medical and wellness resources. And we provide a wide range of benefits. All to keep our people healthy, safe, productive, and creative.

Occupational Health and Safety

In FY16 we continued to spread the word about our safety program, modeled on the OHSAS 18001 standard. In support of our commitment to provide a safe and healthy work environment and efforts to prevent injuries, we have:

- Improved how we assess and keep occupational health and safety risks in check.
- Provided training, outreach, and promotions to raise safety awareness.
- Continued to drive a consistent approach to safety management across the organization.
- Evaluated operations for compliance with relevant regulations.

Our local teams continue to investigate injuries, work with management, and keep track of how well the program is working. We address occupational hazards through our programs, risk assessments, tools, and training. We base our occupational health and safety programs on global regulatory and industry standards that help manage and reduce specific hazards.

Our Global Ergonomics Program continues to help employees be comfortable and productive, allowing for quick action to identify, understand, and reduce ergonomic risks. The inclusion of user-adjustable furniture in our workplace design allows for greater efficiency, comfort, and customization to individual preferences.

In FY17 we will continue to focus on injury data collection, raising employee safety awareness, and pursuit of a third-party certification to the OHSAS 18001 standard in Australia. We will evaluate additional opportunities to expand the program.

Emergency Response

More than 3076 of our people are part of 122 Emergency Response Teams worldwide, ready to respond in emergency situations. They are trained to give first aid, help evacuate buildings, and provide other support.

We carry out Incident Management Drills every year to keep us prepared for a real emergency. In the event of a disaster, we will keep our employees and others informed through the Cisco Employee Connection website. In certain countries, people can sign up for our Emergency Notification System, which allows them to let us know whether they are safe or need help.

Injuries and Lost Time

Increased safety awareness has brought down the injury and lost time rates in the U.S. This is the first year we are reporting global injury rates. We will continue to monitor for trends.

Table 12. Health and Safety Data

	FY13	FY14	FY15	FY16
Total incident rate, per 100 full-time-equivalent (FTE) employees	0.23	0.38	0.28	0.31
Lost work days, per 100 FTE employees	0.7	3.67	2.85	1.96
All injuries, globally (new metric in FY15)	–	–	0.41	0.23

Human Rights

At Cisco, conducting business in an ethical manner is part of our DNA.

Our products and solutions connect to virtually everything. We are creating unprecedented opportunities for our customers and communities—creating jobs, making cities smarter, and enhancing health and education. However, we also recognize that technologies, including ours, can be used by governments and organizations to both enable and impede communications, and to both protect and impair privacy.

Our Approach

Human rights concerns span issues such as labor rights, data security, privacy, and freedom of expression. Cisco believes it is our responsibility to continually improve how we integrate human rights principles and practices across our operations, business relationships, products, and services. Our approach has five pillars: policy, governance, stakeholder engagement, training, and advocacy.

1. Human Rights Policy

Our Human Rights Policy, which we have maintained since 2012, is informed by international human rights frameworks, including the Universal Declaration of Human Rights (UDHR), the International Labour Organization (ILO) core labor standards, and the UN Global Compact. The policy reflects our commitment to apply the UN Guiding Principles on Business and Human Rights, which clarify the relationship between the state's duty to protect human rights and the corporate responsibility to respect human rights.

We review our policy annually. In FY16, the policy was updated to reflect human rights messaging from our new CEO, Chuck Robbins.

2. Human Rights Governance

We use a formal, company-wide human rights governance structure to implement our commitment to human rights. Mark Chandler, Senior Vice President, General Counsel and Chief Compliance Officer, is the executive sponsor of human rights at Cisco. Our Human Rights Working Group includes experts from across the business, including Supply Chain, Privacy, Inclusion & Collaboration, Government and Community Relations, Communications, Global Marketing, Investor Relations, and Corporate Affairs (CSR) functions.

This cross-functional working group meets regularly to discuss implementation of our Human Rights Policy and is overseen by our Corporate Affairs and Legal departments. In FY17 we plan to review our overall CSR governance and management strategy.

3. Human Rights Stakeholder Engagement

We regularly collaborate with stakeholders on human rights issues to gain greater understanding, measure the ongoing effectiveness of our work, and gauge expectations. Collaborations include the following:

- We are an active participant in the Business for Social Responsibility (BSR) Working Group on human rights, a forum for companies from all industries to share ideas, exchange best practices, and discuss challenges. We work closely with BSR to continually improve our human rights program. In FY17, BSR will facilitate our human rights stakeholder engagement meeting and a supply chain impact assessment.
- We play a leading role in driving ethical sourcing practices as a member of the Electronic Industry Citizenship Coalition (EICC). For more information about our involvement with the EICC, see EICC Membership in the Governance chapter.
- We support the principles of the Global Network Initiative (GNI), which apply to operators of public Internet access networks, and include them in our contracts and processes where applicable.
- We meet with analysts, investors, and customers throughout the year to inform them of our approach to human rights and address their questions.

In FY17 we plan to deepen our engagement with stakeholders on the relationship between human rights and the future of the Internet. This will include topics such as multi-stakeholder Internet governance, Internet security and privacy, trust and transparency, and open and global product standards.

4. Human Rights Training

To help Cisco employees understand the relationship between technology and human rights, we offer a video-based training course titled "Human Rights in the Digital Age." This training provides employees with the tools to support our human rights priorities by introducing the basics of human rights and reviewing core elements of Cisco's policy and how it applies to our employees and their work.

Our human rights training is rolled out annually and is also offered to new employees when they join the company. It is mandatory for employees who work in business functions most likely to have direct engagement with human-rights-related business decisions, such as our Sales, Services, and Supply Chain teams. As of FY16, more than 25,000 of our employees had completed human rights training.

We have updated our human rights training to include scenarios that can affect various job roles and provide guidance on what our people can do to help Cisco achieve its human rights commitments. The updated training program includes a test that employees must pass in order to complete the training. The updated training will launch in FY17. Our FY17 goal is 75-percent completion for those for whom the training is mandatory.
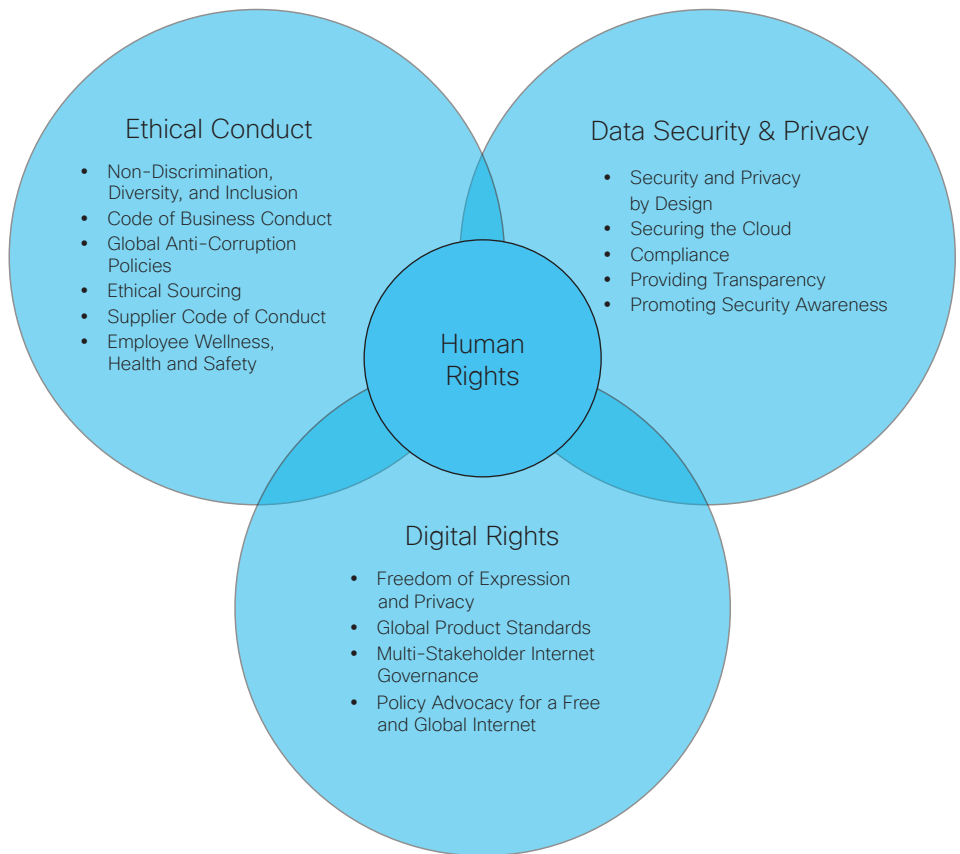
5. Human Rights Advocacy

Cisco recognizes the role we can play in increasing the community of organizations that are able to promote, defend, and discuss a free and open Internet. We are vocal in policy, diplomatic, and standards-setting channels about our support for open and global product standards, and we take a multi-stakeholder approach to Internet governance. While significant progress has been made in recent years, it is essential to continue bridging gaps between the human rights and technology communities.

Our Priorities

We organize our human rights priority issues around ethical conduct, data security and privacy, and digital rights. Figure 14 illustrates our specific focus within each priority area.

Figure 14. Human Rights Priorities

Ethical Conduct
- Non-Discrimination, Diversity, and Inclusion
- Code of Business Conduct
- Global Anti-Corruption Policies
- Ethical Sourcing
- Supplier Code of Conduct
- Employee Wellness, Health and Safety

Data Security & Privacy
- Security and Privacy by Design
- Securing the Cloud
- Compliance
- Providing Transparency
- Promoting Security Awareness

Human Rights

Digital Rights
- Freedom of Expression and Privacy
- Global Product Standards
- Multi-Stakeholder Internet Governance
- Policy Advocacy for a Free and Global Internet

Ethical Conduct

Ethical conduct in our business operations is a fundamental pillar of our human rights priorities.

The rights of Cisco employees are enshrined in our Code of Business Conduct and in policies and guidelines that direct our day-to-day activities and business decisions. These policies and guidelines incorporate relevant laws and ethical principles that employees can relate to their daily activities, including privacy, avoiding conflicts of interest, respecting others, using company resources responsibly, non-discrimination, immigration, fair pay, freedom of expression, and responsibility to report ethical concerns.

One important area of our ethical conduct strategy is ethical sourcing. To help protect the rights of workers in our supply chain, we maintain a Supplier Code of Conduct, which describes our expectations on key human rights issues, including freely chosen employment, freedom of association, working hours, protection of worker health and safety, and the prevention of child, forced, and bonded labor. All suppliers must acknowledge their commitment to our Supplier Code of Conduct.

Our Supplier Code of Conduct is based on the Electronic Industry Citizenship Coalition's Code of Conduct, which promotes worker safety and responsible labor practices, environmental sustainability, and ethical business practices. We also have a program whose aim it to help make sure our sourcing of materials, such as conflict minerals, does not support human rights violators.

We partner with suppliers who share our values, maintain a supplier audit process and capability-building programs, and uncover and remediate human rights violations in a timely manner. For more information about our supply chain program, including our positions on prevention of slavery and human trafficking, and conflict minerals, see our Supply Chain Management section in Governance.

Other salient human rights issues are addressed in other relevant sections in The Details, including our commitments to ethics and anti-corruption discussed in Governance and how our human rights commitments apply to our people.

Key GRI G4 Indicators

GRI G4-LA15: Significant actual and potential negative impacts for labor practices in the supply chain and actions taken.

GRI G4-HR4: Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights.

GRI G4-HR5: Operations and suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor.

GRI G4-HR6: Operations and suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures taken to contribute to the elimination of all forms of forced or compulsory labor.

GRI G4-HR9: Total number and percentage of operations that have been subject to human rights reviews or impact assessments.

G4-HR10: Percentage of new suppliers that were screened using human rights criteria.

GRI G4-HR11: Significant actual and potential negative human rights impacts in the supply chain and actions taken.

GRI G4-HR12: Number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms

Human Rights in Our Supply Chain

At Cisco, labor standards matter. Not only is it the right thing to do, but our stakeholders expect us to take more responsibility for the working conditions, welfare, and human rights of the people employed by our first-, second-, and even third-tier suppliers, where transparency can be challenging to achieve. Cisco is continuing to make progress by more deeply understanding how our Code of Conduct compliance efforts impact our manufacturing footprint and supply chain strategy. Our objective is to more deeply embed this insight into the business so that we can better identify areas where Cisco can make the biggest difference. These efforts help focus industry and supplier collaborations and maximize Cisco's positive impact across the electronics industry.

Our FY17 human rights and ethical sourcing engagement priorities are:

- Protecting the most vulnerable workers in the supply chain.
- Supporting an industry-wide approach to address issues related to raw material sourcing in the supply chain sub-tiers.
- Using digital solutions to advance factory capacity building.

Cisco's adoption of the EICC Supplier Code of Conduct is the foundation of our supplier engagement process. While we remain committed to auditing contract manufacturers and suppliers per the EICC protocol, we realize the dynamic nature of our evolving business model; constant changes in human rights issues, and gaps within the audit process itself, limit the ability to comprehensively identify root cause human rights issues. We also recognize that the real impact of driving continuous improvement stems not from audits but from remediation and capacity building. In FY16, we began developing a supplier risk assessment method more specific to our supply chain to inform our priorities and explore better ways to incorporate Cisco's own technology to better implement the Code.

In addition to our Code of Conduct, the principles embodied in the Universal Declaration of Human Rights are reflected in Cisco's Human Rights Policy, and include the ethical treatment of all workers in our supply chain. This not only comprises the supplier workforce on the factory floor, but also those in our extended supply chain, who source the minerals and other raw materials in our products.

We have found solving for such complex, cross-industry challenges is best done through broad coalitions, such as the Conflict Free Sourcing Initiative (CFSI). In taking this multi-pronged approach, we are investing in focused ways to maximize our influence.

To better understand our impact, Cisco will conduct a human rights impact assessment of our supply chain in FY17. The findings will identify opportunities to improve our supplier engagement and capacity-building initiatives and inform our prioritization process.
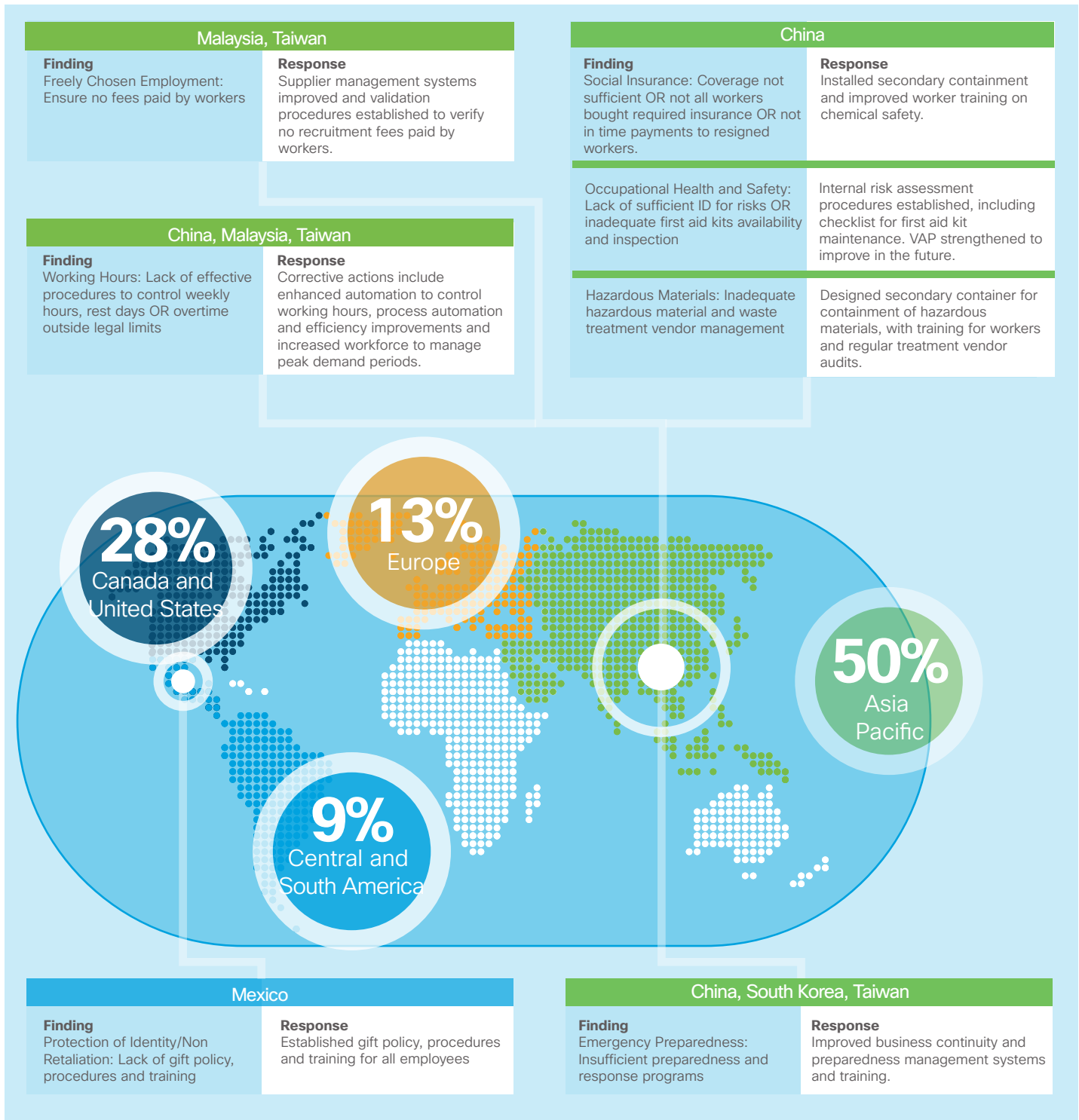
Audit Performance

During FY16, Cisco completed on-site audits of 55 supplier facilities, which were conducted by third-party auditors. We prioritize high-risk supplier facilities for site audits using the EICC self-assessment process. Our aim is to audit any high-risk manufacturing facilities and component suppliers every two years. As in FY15, we met our EICC commitment to audit at least 25 percent of our high-risk suppliers in FY16.

While all audits in FY16 were announced, we do conduct unannounced audits as necessary. We share audit findings with other EICC member companies through the EICC-ON platform. Auditors use the standard protocols and audit tools developed by the EICC, which cover all

aspects of the EICC Code of Conduct, including reviewing documentation, conducting site tours, and assessing how suppliers monitor their own suppliers. For any findings identified, the supplier must produce a corrective action plan and then provide evidence that the corrective actions have been implemented. Action must be taken on priority issues within 30 days. All findings must be addressed within 180 days, except for issues that require long-term improvement plans, such as the monitoring of working hours. Cisco works closely with suppliers until performance improves. A follow-up audit is conducted if needed to confirm closure of the finding. During FY16, more than 80 percent of corrective action plans were addressed and closed within the EICC's prescribed timeframe, up from 71 percent in FY15.

The electronics industry continues to advance audit protocols to address evolving issues. In January 2016, version 5.1 of the EICC Supplier Code of Conduct was ratified and the Validated Audit Process (VAP) 5.1 was released. This update prohibited worker-paid recruitment fees to employers or recruitment agents. It also added a dimension to the Code related to stormwater management. Minor changes also were made regarding protection for younger workers entering the workforce, wages and benefits, freedom of association, environmental reporting, corrective action, and supplier responsibility.

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Figure 15. Supply Chain Global Operating System Percent Spend and Key Audit Findings by Region

Malaysia, Taiwan

Finding
Freely Chosen Employment: Ensure no fees paid by workers

Response
Supplier management systems improved and validation procedures established to verify no recruitment fees paid by workers.

China, Malaysia, Taiwan

Finding
Working Hours: Lack of effective procedures to control weekly hours, rest days OR overtime outside legal limits

Response
Corrective actions include enhanced automation to control working hours, process automation and efficiency improvements and increased workforce to manage peak demand periods.

China

Finding
Social Insurance: Coverage not sufficient OR not all workers bought required insurance OR not in time payments to resigned workers.

Response
Installed secondary containment and improved worker training on chemical safety.

Finding
Occupational Health and Safety: Lack of sufficient ID for risks OR inadequate first aid kits availability and inspection

Response
Internal risk assessment procedures established, including checklist for first aid kit maintenance. VAP strengthened to improve in the future.

Finding
Hazardous Materials: Inadequate hazardous material and waste treatment vendor management

Response
Designed secondary container for containment of hazardous materials, with training for workers and regular treatment vendor audits.

28%
Canada and United States

13%
Europe

50%
Asia Pacific

9%
Central and South America

Mexico

Finding
Protection of Identity/Non Retaliation: Lack of gift policy, procedures and training

Response
Established gift policy, procedures and training for all employees

China, South Korea, Taiwan

Finding
Emergency Preparedness: Insufficient preparedness and response programs

Response
Improved business continuity and preparedness management systems and training.

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Supplier Audit Findings

Due to the overlap in Cisco's fiscal year calendar and the EICC launch of the revised Code in January 2016, audit results for FY16 represent a combination of audits conducted using EICC 4.3 and 5.1 standards. As detailed in Table 13, in FY16 the overall percentage of audit elements resulting in a finding remained stable at approximately 10 percent. Working hours, non-discrimination, and freedom of association were specific labor findings that increased and represent opportunities for further supplier engagement and capacity building. While the percent of working-hours-related findings increased, there were proportionately fewer priority findings for excessively high hours. Root cause analysis of labor findings revealed that this increase likely was the result of an initial audit for some of our component suppliers. A majority of the management systems findings were attributed to lack of a formal procedure. Table 14 details the number of audits and types of findings by country. Using a geographic lens, we can more quickly assess areas of improvement to move our capacity-building opportunities forward—benefitting Cisco's business and the overall industry. Our audit results this year indicate that the evolving Code is appropriately targeting performance issues needing improvement.

Table 13. Categorization of Audit Findings in FY16

	Total Component Supplier	Total Contract Manufacturer	Findings Identified as Priority[1]	Findings Identified as Major[2]	Findings Identified as Minor[3]	Total Number of Audit Elements[4]	% of Audit Elements Resulting in Findings
Labor			**37**	**166**	**99**	**2,365**	**12.77%**
Freely chosen employment (updated in 5.01)	20	10	4	18	8		
Young workers/child labor	10	11	4	7	10		
Working hours	108	51	24	80	55		
Wages and benefits	29	10	4	24	11		
Humane treatment	2	4	1	5	0		
Non-discrimination	20	4	0	16	8		
Freedom of association	15	8	0	16	7		
Ethics			**1**	**39**	**16**	**715**	**7.83%**
Business integrity	5	1	0	4	2		
No improper advantage	7	2	0	3	6		
Disclosure of information	2	0	0	2	0		
Intellectual property	5	0	0	4	1		
Fair business, advertising, and competition (updated in 4.03)	7	2	0	8	1		
Protection of identity and non-retaliation	9	7	1	11	4		
Privacy (updated in 4.03)	4	1	0	5	1		
Responsible sourcing of minerals[5]	2	1	0	2	1		
Health and Safety			**13**	**149**	**73**	**2,145**	**10.96%**
Occupational safety	39	8	0	31	16		
Emergency preparedness	69	17	9	58	19		
Occupational injury and illness	33	7	3	19	18		
Industrial hygiene	16	1	0	14	3		
Physically demanding work	5	2	1	3	3		
Machine safeguarding	9	2	0	9	2		
Food, sanitation, and housing	17	6	0	13	10		
Health and safety communication	4	0	0	2	2		
Environment			**1**	**59**	**20**	**1,375**	**5.82%**
Environmental permits and reporting	7	0	0	6	1		
Pollution prevention and resource reduction	6	1	1	5	1		
Hazardous substances	26	3	0	22	7		
Wastewater and solid waste	6	0	0	3	3		
Air emissions	7	1	0	6	2		
Materials restrictions	1	0	0	1	0		
Stormwater management (new in 5.1)	9	4	0	11	2		
Energy consumption and greenhouse gas emissions (updated in 5.1)	5	4	0	5	4		
Management System			**0**	**93**	**49**	**1,265**	**11.23%**
Company commitment	4	1	0	5	0		
Management accountability and responsibility	8	5	0	11	2		
Legal and customer requirements	12	1	0	4	9		
Risk assessment and risk management	11	6	0	11	6		
Improvement objectives	9	4	0	9	4		
Training	5	3	0	5	3		
Communication	4	3	0	7	0		
Worker feedback and participation	5	5	0	7	3		
Audits and assessments	6	6	0	7	5		
Corrective action process (updated in 5.1)	4	2	0	3	3		
Documentation and records	3	0	0	3	0		
Supplier responsibility (updated in 5.1)	23	12	0	21	14		

A finding is defined as a non-conformance with the EICC Code of Conduct found during an audit.

Criteria for categorization of findings are in accordance with the EICC Validated Audit Process Audit Operations Manual.

1. Priority finding: A major non-conformance with significant and immediate impact.
2. Major finding: A significant failure in the management system that renders established processes or procedures ineffective.
3. Minor finding: Typically an isolated or random incident that does not necessarily indicate a systemic problem with management systems.
4. Total audit elements: The total number of audit elements with the potential for a finding for the 46 FY16 audits.
5. Table includes remaining audits from V4.03 from before code updates. In V4.03, D8 was Non-Retaliation and D9 was Responsible Sourcing. In V5.01, Non-Retaliation has been integrated into D6, D8 becomes Responsible sourcing, and there is no more D9 in future audits.

website
feedback

Table 14. Audit Findings by Country

Location	Labor	Environment	Ethics	Health and Safety	Management System	Total	Number of Audits	Number of Follow-up Audits
Brazil	0	1	1	3	2	7	1	0
China	175	56	27	147	77	482	27	14
Czech Republic	1	0	0	0	0	1	1	0
India	3	3	0	6	3	15	0	1
Malaysia	20	3	0	21	6	50	6	1
Mexico	30	0	2	5	2	39	5	1
Philippines	0	0	0	1	0	1	1	0
Poland	0	0	0	0	2	2	1	0
South Korea	18	9	10	26	13	76	2	0
Taiwan	43	8	11	21	30	113	5	3
Thailand	6	0	0	1	7	14	3	1
USA	6	0	5	4	0	15	3	0
Total	**302**	**80**	**56**	**235**	**142**	**815**	**55**	**21**

Cisco's audit program has a wide reach; in fact, we estimate our program touched more than 190,000 manufacturing employees worldwide in FY16. As we continue to dive more deeply into audit data to gain insights into our progress and our challenges, we see that regions are showing even more clear differentiations. Partnering with EICC enables Cisco through increased agility to continually adapt a more flexible audit program and focus on regional-specific issues. With a continued expansion into our component supply base, incorporating data-driven analytics and holistic assessment methods will help refine our understanding of root cause issues and better focus resources on the biggest opportunities for impact.

While audits are a valuable tool to help track the maturity of our risk assessment model, going beyond audits and using automated, data-driven efforts to measure performance is a key priority given the fact that our supply chain spend varies over time and by region. Insights from audit findings are used to support our engagement with suppliers around vulnerable workers, tracking of working hours, and worker engagement practices. To help support their efforts, we also direct suppliers to use the EICC Learning Academy when they need to make improvements in response to specific audit findings. Internally, we engage with supplier-facing employees around the globe to provide training on Code fundamentals and guidance on how to embed sustainability into their roles. Moving forward, we will continue to enhance supplier and employee access to learning tools through our ongoing digitization efforts. This regular engagement between supplier management, factory workers, and internal Cisco employees helps us maximize technology and optimize resources to quickly gather insight, build capacity, and be able to measure improvement.

Focus on Social Insurance

Cisco invests a lot of time and resources in how the company monitors the progress and challenges of suppliers, especially when it comes to the welfare of the people who make our products—and that focus does not conclude with auditing. In China, focus continues around the country's social insurance program, a codified system that provides benefits in five areas, including medical, workplace accident, retirement, unemployment, and maternity leave. The program requires contributions from both employers and employees.

To gain a deeper understanding, Cisco worked with BSR to participate in a study into current practices and perceptions and to help identify gaps in supplier participation. As part of the study, BSR interviewed several suppliers and worker focus groups to learn from their direct experiences and perceptions of the purpose and value of social insurance. The main obstacles identified stem from cost pressures for employers and challenges with employee participation, especially among migrant workers. For employers, failure to properly implement full contributions to the program can result in negative consequences for factories, including worker discontent and loss of trust, resulting in strikes and other disputes. Among workers, confusion about the program, especially for those who work and live in different provinces, has caused many to forego enrollment.

Cisco is following audit findings that relate to compliance with social insurance programs and is working with factories and directing resources to help engage workers to understand their benefits. It is a systemic challenge—factories must be more actively engaged in seeking worker participation but must also help increase workers' understanding of their options.

Capacity Building with Social Insurance

Cisco is committed to building capacity across its supply chain by working with suppliers to understand the importance of responsible operations. In an effort to meet the EICC expectations around social insurance, Cisco developed an improvement process to help two suppliers in Dongguan understand industry and local law requirements using CAP tracking and review processes. Meeting regularly via WebEx and onsite training, Cisco Supply Chain Sustainability team members are helping the suppliers define improvement targets and navigate the process.

These suppliers have agreed to improvements in social insurance performance beyond the industry average level, have generated social insurance improvement plans, and have recommitted to sharing their progress each quarter. This is just one example of how Cisco's efforts continue to influence positive long-term outcomes across the industry and in workers' lives.

Ethical Sourcing of Raw Materials

As with our broader supply chain programs, Cisco is committed to sourcing components and materials from suppliers that share our values around human rights, ethics, and environmental responsibility. We view the addressing of issues associated with harvesting and/or extracting raw materials as a global responsibility, not limited to certain locations or materials. Cisco is working closely with the EICC Conflict-Free Sourcing Initiative (CFSI) and our direct suppliers to drive cross-industry engagement on ethical sourcing of raw materials.

Our customers, government regulators, and other stakeholders expect transparency and proactive management of conflict minerals in the supply chain. We have made considerable strides over the past few years. We are closely engaged with our suppliers and have received due diligence reporting from suppliers representing more than 99.4 percent of our direct spend. In 2015, 83 percent of the identified smelters and refiners in our supply chain for current product on the market had been audited or are active in the Conflict-Free Smelter Program (CFSP) audit process, a 47 percent increase over the previous year.

In addition, the total number of identified smelters or refiners in our supply chain has declined by 39 percent from the previous year. This change is associated with efforts within the CFSI around smelter identification, as well as supplier behavior changes as suppliers have removed smelters from their supply chain or changed sourcing habits. The results achieved this year have greatly improved based on efforts made in the industry and by our supply chain.

As we look more deeply at the dimension of impact, it becomes clear that that while we can't do everything alone, digitization is a key factor in making improvements and tracking progress. As leading industry players continue to understand and evolve within the complex arena of conflict minerals, it's clear there is still a long way to go in the realm of ethical sourcing when considering extended producer responsibility and developing industry-wide strategies to address solutions.

Table 15. Smelters and Refiners Verified as Conflict-Free or in the CFSI Verification Process

	Previous Percentage Validated or Active (CY14)	Number Validated or Active (CY15)	Current Percentage Validated or Active (CY15)	Total Smelters or Refiners, by Conflict Mineral (CY15)*
Gold	32%	94	73%	128
Tantalum	70%	47	100%	47
Tin	22%	77	86%	90
Tungsten	52%	44	88%	50

* Includes smelters or refiners that are potential sources of 3TG.

Data Security and Privacy

The Internet of Things brings significant benefits to society, but also raises potential data security and privacy concerns. People can now access and share personal or business information anywhere, at any time, on any device. This makes securing data more difficult and increases design challenges.

We are accountable for trustworthy product development, supply chain security, customer data protection, and transparency to earn the verifiable trust of our customers, partners, shareholders and employees. This is clearly reflected in our Trust and Transparency Center, which we launched in FY15.

Security and Privacy by Design

At Cisco, "data security by design" means that security is not an add-on but a core component of the development of our products, services, and systems. A dedicated Cisco team provides guidance and targeted training on designing with security in mind throughout our business. These activities complement our annual Global Security Education event, privacy and security videos, and other training.

Our guidelines and other resources help engineers and product managers understand how to integrate security, privacy, and data protection into new products and applications. This helps them design features and functionality that make it easier for Cisco, customers, and end users to protect their personal information and comply with relevant regulations. For example, the Cisco Secure Development Lifecycle is a repeatable and measurable process we have designed to increase the resiliency and trustworthiness of our products. Read more.

Securing the Cloud

Cloud computing has changed the way people and organizations share information. Our cloud systems help companies to secure access to their cloud, and we protect them using best-practice security systems, such as Security Intelligence Operations. We analyze emerging trends, threats, and innovations to help identify new opportunities and look for early warnings where security threats may occur. We use the Cloud Security Alliance guidance to assess potential security risks related to cloud solutions.

We use our cloud security services to help maintain the integrity of our own operations. This helps reduce risks and improve the protection of proprietary information. Our supplier review program assesses service providers to mitigate potential risks for cloud solutions in particular.

Learn more about Cisco's commitment to cloud security.

Compliance

Compliance with privacy regulations is managed by a team of representatives from our Legal, IT, Information Security, Sales, Services, Marketing, and Human Resources functions. Our global program for reporting and tracking incidents provides a standard process to report, categorize, monitor, refer, and investigate alleged incidents.

Training is a key component of our compliance program. We make online privacy training modules and resources available to all employees and contractors through our internal privacy portal. We also provide privacy and security training specific to certain roles; this is also part of our COBC and accompanying training.

In addition to regulatory compliance, we voluntarily support several ambitious and successful industry-led initiatives, such as the Online Privacy Alliance and TRUSTe, which are well-respected efforts that achieve a reasonable balance between consumer protection and business requirements.

Providing Transparency

It is our priority to drive increased transparency into our security and privacy approach. For this reason, our new Trust and Transparency Center is dedicated to providing the information, resources, and answers to cybersecurity questions that help manage security and privacy risk.

The Trust and Transparency Center contains:

- Our Trust Principles, which describe our commitment to strong protections for our customers, products, and company—such as providing equal and simultaneous access to security vulnerability information for all parties globally.
- Our approach to building the highest levels of security into everything we do.
- Our data protection program and policies.
- Our new Transparency Report, which contains data and Cisco's principles regarding requests or demands for customer data that we receive from law enforcement and national security agencies around the world. Like other technology companies, we will publish this data twice yearly. Read more.

Promoting Security Awareness

The Cisco Data Protection Program training focuses on educating global employees to make sure they understand:

- Our customer data protection risk principles.
- The importance of their role and the impact they have on the proper handling and protection of customer data.
- Customer data protection best practices in their daily roles.
- Procedures for reporting an actual or suspected loss of customer data.

Cisco shares leading practices in Data Protection with our customers so they too can increase security awareness within their organizations. The Cisco Trust and Transparency Center is dedicated to providing information and resources to answer cybersecurity questions and help organizations manage risk. The Cisco Security blog offers the latest cybersecurity insights and threat research, while our Cisco Security Advisories and Alerts report threat outbreaks and vulnerability activity. The report addresses seven major risk management categories: vulnerability, physical, legal, trust, identity, human, and geopolitical.

We also collaborate with security and privacy professional organizations to share our experiences through organizations such as:

- Cloud Security Alliance
- Health Information Trust Alliance
- National Cyber Security Alliance
- Payment Card Industry Board of Advisors
- International Association of Privacy Professionals

Case Study: Supporting Industry Peers and Protecting International Law Compliance

Cisco has been a prominent supporter in Microsoft's landmark case with the U.S. government which debated the legality of a search warrant for msn.com emails stored on a server located in Ireland. Microsoft refused to comply with the request to provide the content of the user's emails, arguing that the U.S. has no authority to issue a search warrant outside its territory. Rather, the company suggested the government process this request for personal data through the U.S.-Ireland Mutual Legal Assistance Treaty (MLAT).

In June 2014, Cisco joined with Apple to submit an amicus brief to the U.S. District Court in support of Microsoft, supporting their position that the warrant does not apply overseas and that the MLAT process is the best course of action. The Electronic Frontier Foundation submitted a similar brief, providing further support on behalf of our industry as we try to balance the interests and privacy of our customers with the appropriate application of domestic and international law.

Cisco continues to support Microsoft as the case continues in the Second U.S. Circuit Court of Appeals.

Case Study: EU-U.S. Privacy Shield Certification

Cisco participates in and has certified its compliance with the EU-U.S. Privacy Shield Framework. Cisco is committed to subjecting all personal data received from European Union (EU) member countries, in reliance on the Privacy Shield Framework, to the Framework's applicable Principles. To learn more about the Privacy Shield Framework, visit the U.S. Department of Commerce's Privacy Shield website.

Cisco is responsible for the processing of personal data it receives, under the Privacy Shield Framework, and subsequently transfers to a third party acting as an agent on its behalf. Cisco complies with the Privacy Shield Principles for all onward transfers of personal data from the EU, including the onward transfer liability provisions. In certain situations, Cisco may be required to disclose personal data in response to lawful requests by public authorities, including to meet national security or law enforcement requirements.

With respect to personal data received or transferred pursuant to the Privacy Shield Framework, Cisco is subject to the regulatory enforcement powers of the U.S. Federal Trade Commission.

Digital Rights

Digital Rights: Freedom of Expression and Privacy

We believe that the rights to freedom of expression and privacy are fundamental to our business and society. The Internet has transformed these rights, allowing billions of people in nearly every nation to access information previously unavailable to them—and we are proud of our role in this. However, technologies, including ours, can be used by governments and organizations to both enable and impede communications, and to both protect and impair privacy.

Our goal in developing ICT systems is to expand access to information and promote innovation. To meet this objective, we build our products on open, global standards, which we believe are critical to overcoming censorship, protecting privacy, and keeping the world connected. Our work across the world is guided by the following principles:

- We do not participate in business activities that would aid repression.
- We do not support attempts by governments to fragment the Internet or create a "closed" Internet; such attempts undermine fundamental human rights, including the right to freedom of expression.
- We do not customize or develop specialized or unique filtering capabilities to enable regimes to block access to information.
- We do not supply or support mediation equipment that allows the interception of telephone calls made over the Internet using Voice over Internet Protocol (VoIP).
- We do not deliberately build backdoors into our products, and we do not knowingly enable backdoors in our products.

A full appreciation of the human rights issues associated with network equipment requires an understanding of the equipment's core features. The nature of Internet routing is such that in order to deliver messages and content, service providers generally can see the IP addresses of the senders and recipients of information and, in the absence of adequate encryption, the contents of messages and attachments.

Individuals, companies, and countries make their own decisions with respect to how they operate networks and network security in terms of protecting the network itself from denial of service and other attacks and protecting users from spam, hacking, and virus attacks. This requires operators to have capabilities that can also be used to block access to particular websites or copy and download users' communications. For network management purposes, network operators also require the ability to identify the protocols used for different types of traffic. We cannot shut down such networks—only network operators have that capability. We advocate that users should have access to workable encryption, and we have opposed the efforts of some governments to block users from adequate encryption.

For these reasons, we believe that the threat to freedom of expression and Internet freedom today resides not in standardized equipment, but in efforts to adopt special protocols that deviate from global norms and efforts to enable special censorship or filtering systems. We have worked in opposition to such efforts and will continue to do so. We do not and will not supply video surveillance cameras or video surveillance monitoring software in our public infrastructure projects. We are strongly committed to a standards-based global Internet that maximizes the opportunities for freedom of expression, and we do not customize our equipment to help any government to censor content, track Internet use by individuals, or intercept Internet communications.

Digital Rights: Product Use

We believe our role in providing more people across the world with access to the Internet is critically important and that operating in most countries brings more benefits than if we were not present. In all countries where we do business, our technology and systems, whether they are sold directly or through local partners and service providers, include the same standard Internet-access equipment and network management capabilities that are used by public libraries in the United States, which include such capabilities as blocking inappropriate content for children.

We also believe in an open Internet where people can access the same information no matter where they are in the world. We design our products and services to enable this access while safeguarding human rights. Our commitment to an approach that balances protecting user data privacy and the rule of law is further demonstrated by our support for the LEADS Act introduced to the U.S. Congress earlier this year. We will continue to support legislation that is an appropriate response to the modern innovation era, which generates great technological advances that need to be used and regulated responsibly.

Despite these efforts, it has been alleged that some customers in some countries have misused our technology. In some cases, awareness of the fact that a government does not respect the open Internet is confused with complicity in efforts to limit communications or repress freedom, even where the equipment being supplied is standards-based, non-customized access equipment that is necessary to facilitate communications.

Our technology and systems can also play an important role in helping to promote public safety—through crime prevention assistance, for example—but we recognize that there is a growing concern about the use of networking equipment for improper surveillance that would violate individuals' privacy rights.

Digital Rights: Internet Security

There is undoubtedly a tension between security and freedom today. We want governments to detect and disrupt terrorist networks while respecting their citizens' basic human rights.

Cisco does not work with any government, including the U.S. government, to weaken our products. As a part of our normal course of product development, we spend a great deal of energy designing products in ways that avoid vulnerabilities, and then attacking those same products through testing to proactively identify security issues before attackers might. When we learn of a security vulnerability in a product or service, we respond by validating it, fixing it, and informing our customers. If a customer's security has been impacted by external forces, we react the same way, regardless of the origin of the security breach. We offer customers robust tools to defend their environments against attack—and to detect attacks when they are happening.

Digital Rights: Global Standards

We believe that open and global product standards play an important role in protecting and respecting human rights. For this reason, we work with policy makers and participate in standards-setting bodies, working groups, and industry coalitions to create and maintain a secure global standard for many of our leading technologies, ranging from wireline and wireless local-area network (WLAN) connections to video encoding/decoding and security/encryption services. Some examples include:

- Institute of Electrical and Electronics Engineers (IEEE)
- Internet Engineering Task Force (IETF)
- International Standards Organization (ISO)
- Common Criteria for Information Technology Security Evaluation
- International Telecommunications Union (ITU)
- World Summit on the Information Society (WSIS)

In addition, Cisco continues to be an active participant in important discussions relating to the future of Internet governance.

For example, alongside other companies and civil society organizations, we are continuing our efforts to encourage the ITU not to replace the existing multi-stakeholder approach to Internet governance with a government-led multilateral approach. We believe that Internet governance needs to remain a multi-stakeholder process, a proven approach that created the open Internet of interconnected network of networks in which anyone can access content and use applications from anywhere on the globe. Read more.

We are also active participants in the World Economic Forum's Digital Economy and Society Systems Initiative, which aims to strengthen trust and expand cooperation on Internet-related challenges and opportunities. The purpose of the initiative is to help develop the Internet as a core engine of human progress and safeguard its globally integrated, highly distributed, and multi-stakeholder nature. This initiative will consider topics such as internet governance, privacy, cybercrime, access, and adoption.

Social Investment

Cisco's Corporate Affairs organization champions our company-wide commitment to CSR and leads the company's social investment strategy and programs. Our CSR goals and initiatives enable people to reach their full potential in a digital economy and scale inclusive social and economic impact in countries around the world.

We are inspired by the opportunities the digital revolution brings to global problem solving. In FY16 we committed to:

- Empower global problem solvers by catalyzing an innovative and entrepreneurial ecosystem
- Advance positive social and environmental change through technology-based solutions and partnering with multiple stakeholders
- Promote sustainable outcomes across our business operations, supply chain, and customer base through good business practices and transformative solutions.

We have set an ambitious goal to positively impact one billion people by 2025. To do this, we have focused our social investment priorities around:

- Building Skills and Entrepreneurship
- Building Knowledge and the Digital Foundation

We will look to accomplish our objectives by evolving our strategic social investment portfolio, including:

- Our flagship Networking Academy® program
- Our portfolio of nonprofit grantees, which we support through a "venture capital" model of early stage investment in IT-based solutions

Details on our FY16 social investment priorities are outlined in this section. Learn more by visiting csr.cisco.com.

Figure 16. Social Investment Priorities

Knowledge
Research and Thought Leadership

Solution Forums

Skills
Digital Skills Development

Co-Creation

Digitization Labs

Entrepreneurship
Innovation Capacity Grants

Innovation Challenges and Investments

Digital Foundation
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Building Skills and Entrepreneurship

Skills

Digital Skills Development

Co-Creation

Digitization Labs

Building Skills

Cisco is committed to empowering people to grow and thrive in the digital economy. We focus on:

- Digital Skills Development: Building foundational digitization skills required to thrive in the digital economy.
- Co-Creation: Partnering with universities and social change agents to co-develop curriculum, experiences, and engagement models.

Cisco Networking Academy

Through our Networking Academy program, Cisco nurtures the talents of problem solvers around the world by providing the foundational digital and entrepreneurship skills that prepare students to reach their full potential.

Since 1997, the Networking Academy course curriculum has helped more than 6.7 million students worldwide to build skills that will enable them to prepare for ICT and networking careers in a range of industries. In FY16, more than 1 million people in 170 countries were enrolled—21 percent of them female. Some countries have significantly higher female participation; for example, female student enrollment is 55 percent of students in Kuwait, 41 percent in Jordan, 33 percent in the Philippines, 31 percent in China, and 28 percent in Mexico.

Figure 17. Cisco Networking Academy

FY16

170 Countries

20,000 Instructors

9600 Academies

1.09 Million Learners
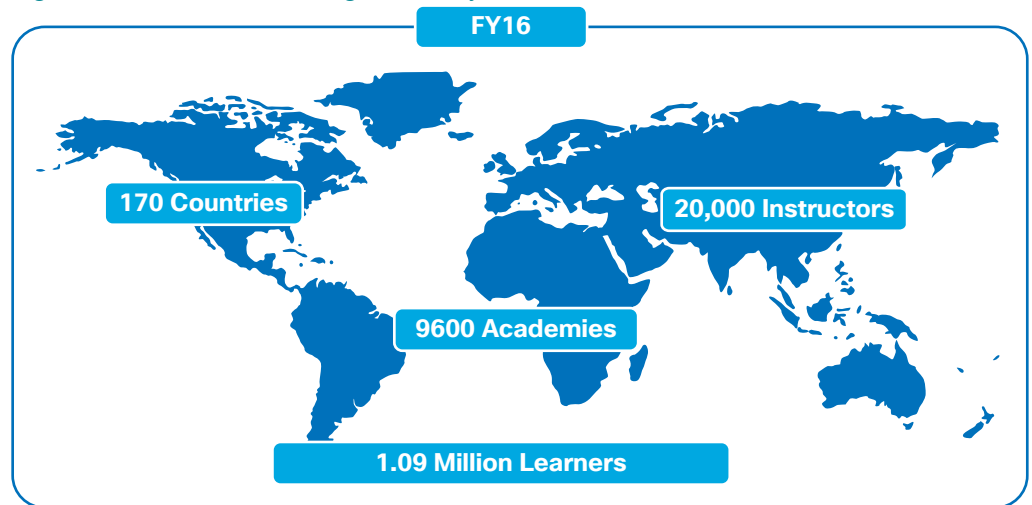
Networking Academy provides a comprehensive learning experience, with an interactive curriculum, access to lab equipment and network simulation tools, and programming environments for hands-on technical experience. From the start, students are encouraged to solve problems and work together, just as they will in the workplace. Courses are taught in classrooms around the world, and are delivered in multiple languages and online through netacad.com, a cloud-based learning and collaboration environment. We also provide our students with career resources and connections to employers seeking ICT talent, which we believe benefits Cisco, our customers, and our partners and communities worldwide. Our goal is to achieve a milestone of two million students enrolled by 2021.

Cisco partners with governments and educational institutions around the world to establish local academies and initiatives that leverage Networking Academy courses to promote workforce readiness and socioeconomic development. Courses are delivered in collaboration with 9600 schools, community colleges, universities, and other organizations. In FY16, Networking Academy was a key component of Cisco's digitization efforts in France, Italy, and the U.K. In FY17, this will expand to Israel, Germany, and Mexico.

Much of our curricula is developed in-house; however, we also work with third-party organizations like C++ Institute and Network Development Group to create industry-relevant content that prepares learners for the needs of today's workforce. We also partner with employers and other organizations to deliver mentorships, internships, and other hands-on experiences that help students prepare for and get new jobs.

Cisco Networking Academy courses focus on skills around data networking and entrepreneurship. In 2016, the Networking Academy Program expanded its portfolio of courses to include Internet of Things, Cyber Security, Linux, and Programming. Cisco believes in a blended learning experience, and in 2016 launched the Packet Tracer simulation tool for mobile devices.

The Networking Academy Program also emphasizes learning through hackathons and competitions. In 2016, Cisco ran the NetRiders Competition, which brings students from across the world to virtually compete against each other. In 2016, over 15,000 students competed in the NetRiders competition, an increase of 31 percent over 2015. The competition focuses on technical proficiencies in building and troubleshooting networks, as well as soft skills in the ability to present a comprehensive solution to a panel of industry judges over video conference.

Educational institution administrators and instructors provide ongoing feedback on courses and the direction of the program through annual academy/instructor conferences and ongoing surveys. To build on this, in FY16 Cisco created an Academy Advisory Board to formally gather requirements and assess future needs. Board members include students, instructors, partners, and alumni.

Since 2005, Cisco has conducted exit surveys of Networking Academy students who have completed all four Cisco CCNA® Routing and Switching courses. According to the results, the program has helped 1.4 million students get a new job; 93 percent of students indicated that they use their skills in their daily lives. For more impact stories, see Networking Academy.

Cisco partners are tapping into the Networking Academy's Talent Bridge program to fill their early in career ICT jobs. For example, Ingram Micro, a top-tier Cisco distributor, is investing in their future workforce through a public-private partnership with the Networking Academy at a local community college in Buffalo, New York, to develop talent. Ingram Micro and their Cisco partners have hired dozens of Networking Academy graduates in 2015/2016 and plan to expand this model to other regions. Watch the video.

Networking Academy is Cisco's largest and longest-running CSR program. In FY16 we contributed over $242 million in in-kind contributions for the Networking Academy. This is a subset of the overall total of $309 million in cash and in-kind contributions for social investments by Cisco and the Cisco Foundation. For more impact stories, see Networking Academy.

Cisco Veterans Program

In 1998, Cisco began collaborating with the U.S. military to bring the Networking Academy curriculum to bases. Today, there are Networking Academy locations on 22 U.S. military installations. Over 66,000 U.S. military personnel have been able to develop and advance their ICT skills, better equipping them for their roles within the military as well as career opportunities once they have completed their military service.

In 2011, Cisco established a corporate veterans program to support transitioning U.S. military personnel, veterans, and military spouses in areas of employment and ICT education. Through the GI Bill, veterans can enroll in a Networking Academy program, providing a gateway to entry-level jobs and certifications in the ICT field.

Seeding Innovative Solutions

Since FY12 Cisco has provided $2.5 million in seed funding to Futures, Inc. to support development of a cloud-based job pipeline, which uses a sophisticated algorithm to match military job codes with civilian jobs and career paths. Active-duty military personnel, military spouses, reservists, National Guardsmen, and veterans can access this job portal. The pipeline is free to job seekers and employers and is the engine for the U.S. military pipeline as well as a state-level initiative in Arizona. Between January 2013 and the end of FY16, more than 250,000 veterans and military personnel found work through this portal.

Public/Private Partnerships

As part of the White House Joining Forces initiative, Cisco sponsored the IT Training and Certification pilot leveraging Future's, Inc.'s pipeline talent exchange technology. The pilot was completed in 2014 with 375 veterans participating in the program, and 59 percent of those who have left the military say it helped them get a new job. At the White House Joining Forces event in May 2016, celebrating the fifth anniversary of the initiative, Cisco announced it would offer 1000 cyber training and certification scholarships to veterans over the next 2 years. By the end of July 2016, almost 4000 veterans had applied for this scholarship program. Final selection of the 1000 recipients will be made in FY17.

Collaboration and Thought Leadership

North Carolina for Military Employment (NC4ME) brings together key stakeholders in the military employment process to take an employer-centric approach to strengthening the flow of military talent into North Carolina's businesses. Cisco led the launch of the IT Industry component of the NC4ME program. Two IT Industry Awareness Days introduced transitioning service members at Camp Lejeune and Fort Bragg to IT career opportunities in North Carolina. As a result, Cisco also launched the Veterans Talent Incubation Program (VTIP) to create a pipeline to help transition service members and veterans to entry-level engineering roles at Cisco. Cisco values veteran employees and was recognized as a Military Friendly® employer.

Employee Engagement

Our Veterans Program is also aligned to our Veterans Enablement and Troop Support Employee Resource Organization (VETS ERO) activities. The VETS ERO is a military service employee affinity group focused on outreach and enablement, professional networking, and veteran advocacy. Cisco volunteers are engaged at eight Cisco sites throughout the U.S. In FY16, the group led Veterans Career Transition Days at five Cisco sites to introduce veterans to career and mentoring opportunities. As part of the annual Care Package Drive, VETS ERO members in four locations—San Jose, RTP, Ohio, and Herndon—sent 246 care packages to deployed U.S. service members, giving them a taste of home and highlighting our gratitude for their service.

"Normally when we receive (care) packages from a group…they send 2 to 3 boxes and we are very grateful. I lost count, but I think your team managed to send over 30 boxes and each one of them was a little slice of heaven."

Air Force Master Sergeant

Entrepreneurship

Innovation Capacity Grants

Innovation Challenges and Investments

Cisco's cash grant investments positively impacted more than 78 million people in FY16.

Building Entrepreneurship

Cisco is committed to building entrepreneurship capabilities to enable innovation and job creation. To do this, our social investment portfolio focuses on Innovation Capacity Grants and Innovation Challenges and Investments.

Innovation Capacity Grants

Cisco's Innovation Capacity Grants are centered on culturally relevant and socially focused programming and initiatives cultivating leaders and entrepreneurs. As an example, Cisco partnered with Founder.org to sponsor $50,000 in awards to student entrepreneurs in universities around the world. By working on ideas and applying the concepts of digitization, these entrepreneurs produce viable services or products that simultaneously benefit society and the environment. Read more.

Innovation Challenges and Investments

Cisco creates experiential learning opportunities aimed at identifying a spectrum of early stage innovation investments, from concepts to startups. Examples of our entrepreneurship initiatives include:

- Arizona State University (ASU): Supported by Cisco-managed funds at the Silicon Valley Community Foundation, Cisco is collaborating with ASU on a 3-year pilot program launched in 2016 to support Arizona Latino youths' significant potential to drive social and economic development. Read more.
- Rice University: Cisco collaborated with the world's largest student startup competition to encourage technological innovation that benefits social and environmental issues. (See case study below.)

Case Study: The 2016 Rice Business Plan Competition

The Rice Business Plan Competition (RBPC) is the world's largest intercollegiate startup competition. Forty-two university teams, chosen from more than 750 applications, are invited to compete for more than $1.5 million in prizes in front of over 275 judges. The RBPC is open to all universities, regardless of location. Since inception, more than 169 competitors at the RBPC have gone on to successfully launch their companies, many of which are in business today or have been acquired. These companies have raised more than $1.2 billion in funding.

The Cisco Innovation Challenge was held as a separate award category within the 2016 RBPC. The Innovation Challenge aims to recognize, promote, and accelerate the adoption of breakthrough technologies, products, and services that will benefit society. Cisco wishes to foster growth in startup businesses that will contribute to digital advancement and evolution while providing a social and/or environmental benefit. Prizes included a $100,000 first prize, and are intended to directly support entrepreneurs that are developing technology-based businesses that capture the value of digitization.

A team of Cisco judges awarded Cisco Innovation Challenge prizes to the following teams in the 2016 RBPC:

- First Prize: Neopenda (www.neopenda.com), Columbia University
- Second Prize: Bold Diagnostics (www.bolddiagnostics.com), Northwestern University
- Third Prize: Gecko Robotics (www.geckorobotics.com), Carnegie Mellon University

Building Knowledge and the Digital Foundation

Building Knowledge

Through original research and thought leadership, Cisco strives to drive momentum for the digital revolution by understanding and sharing insights related to economic opportunity, economic impact, and advancing positive social change. We engage in forums that bring together innovators, thought leaders, and change agents to develop and accelerate solutions to social and environmental challenges.

Research and Thought Leadership

To enable people to reach their full potential in a digital economy, as well as to scale inclusive positive social and economic impact in countries around the world, we must understand global trends and economic opportunities, and their potential impact in underserved communities.

Research, data, and metrics are an integral part of everything we do. We conduct market research to understand the future of work, to anticipate trends in job skills technology, and to capture market transitions and support strategic decisions. We partner with leading research firms to commission original studies to build knowledge, democratize access to information and opportunities, and accelerate the positive impacts of digitization.

Digitization enables countries to maintain global competitiveness, increase GDP, foster innovation, and create new jobs. To embrace the opportunities this transformation can bring, countries need people with the right technology skills. Because the technology landscape is changing so rapidly, new and more complex skills will continue to be needed for current and future jobs.

In FY16 Cisco partnered with Gartner to better understand the landscape of skills and jobs in the technology environment. Changes in technology will create a revolution in the way we work, dramatically changing jobs within almost all organizations. Gartner identified the key skills[1] and job families[2] that are critical for digitization and that are expected to represent approximately 75 percent of the needed full-time equivalents for digitization by 2020.[3]

Employers worldwide report having difficulty filling jobs, up from 26 percent in 2014 to 38 percent in 2015, and the gap between supply and demand for technical skills remains an issue for all countries.[4] Cisco partnered with IDC to support a 2016 study that shows that when it comes to the skills needed for digitization, many countries are not ready. For example, Latin America faces a shortage of over 400,000 full-time equivalents (FTEs) now and through 2019. The European Commission estimates that 90 percent of all jobs in 2020 in a variety of industries will require digital skills.

While digitization can accelerate and differentiate a country's ability to progress, lack of adequate digital skills can limit its potential to digitize and grow economically. To keep up, the world will need millions of people to fill ICT jobs in every country, and in almost every field. Companies like Cisco, as well as governments, educational institutions, and other organizations, all have a role to play if we are to succeed.

Knowledge

Research and
Thought Leadership

Solution Forums

[1] Network management, digital security and privacy, analytics, application development, device management, problem solving, collaboration, creativity, and business knowledge.

[2] Digital security and privacy, device management, network management, applications development, digital business integration engineering, systems integration, systems operations, business analytics, product design/experience, and digital business architecture.

[3] Cisco/Gartner study, 2014.

[4] https://www.manpowergroup.fi/Global/2015_Talent_Shortage_Survey-full%20report.pdf

Solution Forums

We must work together to develop regional expertise and capacity that enables all people—regardless of socioeconomic background or gender—to master, succeed in, and lead in the digitized economy. To this end, Cisco engages in forums that bring together leaders from businesses, governments, nonprofit organizations, and social enterprises that shape and accelerate solutions to societal and environmental challenges.

2016 World Economic Forum

We have been a member of the World Economic Forum since 2002. In January 2016 we attended their annual meeting in Davos, Switzerland, as part of our commitment to helping individuals, organizations, and governments better their societies through digitization. The forum provided an opportunity to engage with more than 2900 global problem solvers, including 1500 leaders of the world's largest companies and more than 300 public figures. The theme was The Fourth Digital Revolution. Cisco participated in and led discussions focused on CSR issues such as employment, skills and human capital, economic growth and social inclusion, the environment and natural resource security, and the future governance of the Internet. Cisco strived to inspire others to see the opportunities that digitization provides by connecting the unconnected, and speeding the pace of social change around the world.

During the June 2016 World Economic Forum regional summit in Medellin, Colombia, Cisco highlighted Plan Ceibal, an initiative to digitize education in Uruguay. Through that initiative, Uruguay became one of the first countries in the world to provide a laptop to every primary school student. This is an example of Cisco's efforts to work with governments in Latin America to accelerate digitization in the education system.

Cisco's ongoing commitment highlights how institutions, organizations, businesses, and individuals are coming together to create a new generation of digitally skilled global problem solvers in Latin America and beyond.

Building a Digital Foundation

Our Public Benefit Investment (PBI) focus is to support nonprofits and build a digital foundation. We offer a variety of resources to nonprofits, leveraging multiple Cisco assets. This includes donations of Cisco technology, cash grants, advisory support, employee volunteerism, and Board participation. For our cash grant investments, we apply a "venture capital" approach, investing in innovative, early stage solutions that use technology to address social and environmental challenges. We focus on supporting solutions that can be scaled and replicated sustainably to positively impact millions in underserved communities around the world. Our support enables social enterprises and non-profits to accelerate technology-based solutions for critical human needs and disaster relief, education, and economic empowerment.

In FY16, total corporate and Cisco Foundation cash and in-kind contributions totaled over $309 million (see Table 9). Our nonprofit partners report that our cash grant investments positively impacted more than 78 million people in FY16.

Digital Foundation: Critical Human Needs and Disaster Relief

We support nonprofit organizations around the world that help meet critical human needs for food, drinking water, and shelter. Additionally, we support relief efforts to save lives and restore communities following natural disasters.

Critical Human Needs

We help nonprofits use technology to increase access to basic needs for the underserved communities they serve, while also helping these organizations become more financially sustainable and effective. Examples of some of our nonprofit partners are listed below. See our website for more information about our social investments for Critical Human Needs.

World Economic Forum strategic partner since 2002

Digital Foundation

Critical Human Needs

Education

Economic Empowerment

Key GRI G4 Indicators

GRI G4-SO1: Percentage of operations with implemented local community engagement, impact assessments, and development programs.

Feeding America

Since 2009, Cisco has awarded more than $2 million in cash and product grants to Feeding America, the largest domestic hunger-relief organization and network of food banks that serves more than 12 million children each year. Our support helped Feeding America use technology to improve efficiency, save money, and serve more people. Cisco supported development of their Transportation Management System (TMS), which automated shipping management to increase efficiency and reduce transportation costs.

In its first year of use, the TMS saved $353,000. Cisco also supported their IT Platform Redesign Initiative, resulting in the development of a common technology platform for enterprise and constituent relationship management. This platform is helping Feeding America and its network of 200 food banks reduce costs for transportation, purchasing, marketing, IT, and more. By providing technology resources and platforms to the Feeding America food bank network, food banks are able to deploy resources more efficiently and capitalize on shared skills and shared capacity. Read more.

Akvo (Water for People)

Cisco first partnered with Water for People in 2010, helping the organization reach its ambitious goal to secure permanent access to safe drinking water for 30 districts in 9 countries by 2018. Cisco supported the development of a mobile-based application called Field Level Operations Watch (FLOW), which enables collection and analysis of water-related data via mobile phones and web-based dashboards.

In 2012, Water for People transitioned management and further development of FLOW to Akvo Foundation, a nonprofit that builds open-source software applications for aid organizations. The tool is currently being used by over 258 organizations in more than 40 countries, often in remote communities lacking reliable basic infrastructure. FLOW helps increase the transparency, accountability, and sustainability of water projects in developing regions, and gives organizations data that helps them make timely and informed decisions that lead to secure, sustainable development. FLOW impacted over 10.8 million people in 2016.

On the Front Lines of Disaster Relief

We have strategic engagements with a number of nonprofit organizations and NGOs—such as the American Red Cross, CARE, Mercy Corps, and the UN World Food Programme—that help increase preparedness and provide immediate assistance in the wake of natural disasters. We also provide extensive support to organizations responding to the refugee crisis in the Middle East and Europe.

When major disasters strike, we establish special giving campaigns that allow our employees to donate to relief efforts and increase their impact through matching gifts from the Cisco Foundation. The Cisco Foundation will match up to $10,000 per employee for every disaster campaign. Between 2010 and 2015, employees contributed over $3.9 million to 28 disaster campaigns. With Cisco Foundation matches, over $7.8 million was donated to relief efforts. When campaigns are not launched, employees are often directed to the American Red Cross' U.S. or International Disaster Relief Funds. Between 2010 and 2015, employees contributed more than $668,000 to these funds. Combined with Cisco Foundation matches, over $1.3 million was contributed to non-campaign emergency relief efforts.

Cisco's Tactical Operations (TacOps) team is critical to our disaster response capabilities, providing emergency communications when traditional communications are degraded or destroyed. By responding to emergencies and natural disasters within the first few days, TacOps often enables agencies to get communications up and running faster than government or local providers can.

The Refugee Crisis

Cisco has responded to the refugee crisis by leveraging our own core competencies:

- Encouraging employee donations and matching those to provide critical financial support to responding organizations.
- Donating Cisco equipment to establish Wi-Fi hotspots and connectivity to refugees on the move and in camps.
- Providing time and in-kind technical support through our Tactical Operations (TacOps) team, Disaster Response Team (DRT), and local offices in Europe.
- Awarding cash grants to strategic nonprofit partners to provide Internet-based information and coordination services to refugees and NGOs on the ground.

In October 2015, we expanded our annual giving campaign to include over 40 NGOs from 22 countries that are providing refugees with access to food, water, and shelter. Over the course of the 2-month campaign, employee donations and Cisco Foundation matches to support the refugee crisis totaled over $743,000.

Cisco employees also develop cutting-edge, technology-based solutions for some of the key challenges faced by refugees.

Refugee First Response Center (RFRC)

The Cisco team in Hamburg, in close collaboration with a range of ecosystem partners, developed and implemented the Refugee First Response Center (RFRC). The RFRC units are shipping containers transformed into doctors' offices, equipped with Cisco technology that enables access to the Internet and real-time translation services. The first Refugee First Response Center has been fully operational at a refugee camp managed by the German Red Cross in Hamburg since November 2015, and averages 30 medical consultations per day. With funding from a local family foundation, 10 more RFRC units have been produced and deployed to refugee camps throughout Hamburg.

NetHope and Mercy Corps

NetHope was founded with Cisco support and in collaboration with Save the Children in 2001. Since October 2015, Cisco has granted over $872,000 in equipment to NetHope to establish Wi-Fi hotspots and charging stations along the refugee migration route and in refugee camps. Cisco also provided a $100,000 cash grant to NetHope to support coordination efforts among responding organizations through crisis informatics, and a $100,000 grant to Mercy Corps for the development of a mobile-enabled Refugee Information Hub. The Refugee Info Hub has been accessed by over 146,000 refugees since October 2015 and is now being used by over 30 NGOs. Assuming that there is one device for every three to four refugees (many are children without a device), an estimated 511,000 people have been reached through this program.

TacOps

Cisco's TacOps team, supported by the volunteer DRT from the U.K. and Ireland, has also responded to the refugee crisis. In collaboration with NetHope, TacOps has carried out seven 2-week deployments to install Meraki-based Wi-Fi networks at 52 sites in Greece, Slovenia, and Serbia. These Wi-Fi sites have provided connectivity to over 125,000 unique user devices as of August 2016, reaching an estimated 437,000 refugees. Cisco has provided over $968,000 in equipment (including the $872,000 granted to NetHope) to enable the installation of Wi-Fi hotspots in Germany, Greece, Slovenia, and Serbia.

Cisco's Refugee First Response Center (RFRC) in the news:

In June 2016 RFRC was featured on NPR's Morning Edition at TEDx Hamburg and at the opening of Singularity University in the Netherlands.

Cisco's TacOps in the news:

"In the event of a natural disaster or emergency, this crack squad of 10 full-time, highly trained specialists quickly deploy to ground zero—setting up mobile communications centers with the help of their two state-of-the-art Networking Emergency Relief Vehicles (NERVs) when deployed in the U.S.

Each NERV is equipped with a satellite dish, Cisco Unified IP Phones, a Cisco TelePresence solution, and other options for Internet connectivity, which enable the TacOps team to open communication and coordinate relief efforts with organizations like FEMA, the United Nations, and the Red Cross."

Patrick Moorehead, Founder, President and Principal Analyst at Moor Insights & Strategy

Digital Foundation

Critical Human Needs

Education

Economic Empowerment

Key GRI G4 Indicators

GRI G4-EC8: Significant indirect economic impacts, including the extent of impacts.

Digital Foundation: Education

Cisco is committed to building a digital foundation to improve education in our society. Programs in our education investment portfolio are designed for expanding reach, improving outcomes, increasing student engagement in STEM, and improving the professional development of teachers worldwide.

In addition to our Networking Academy program, our education investment portfolio supports the creation and deployment of innovative IT-enabled education delivery models. The focus is to improve both teaching and learning through the use of Internet technology and digitization to expand efficiency and reach. Successful grantees focus on STEM. Their unique solutions address the development of programs or tools that demonstrate applied knowledge or skills to applicable career paths within these fields.

Some examples of our community partners in education are MIND Research Institute, War Child, and GooruLearning.org. Additional partners are listed on our website at CSR Community Partners.

MIND Research Institute (MIND) is a U.S.-based education nonprofit founded by neuroscientists and cognitive learning researchers to study the way children learn math. The researchers have found that many children are able to grasp concepts visually before they can express them verbally, and that those who are language- or learning-disadvantaged will encounter barriers when it comes to mastering math concepts. The scientists founded MIND to create the SpatialTemporal (ST) Math® software program, which teaches math without words.

Since 2004 through grants, donated equipment, and technology support, Cisco has helped MIND reach over 3.5 million students and 44,000 teachers in more than 3200 schools in 45 states. In FY16, MIND reached more than 1 million students. We will continue to work with MIND to improve their ICT infrastructure and programs with the goal of increasing MIND's reach to over 3 million students annually. Read more.

War Child is an international nonprofit organization that provides programs in education, psychosocial support, and protection for children in the most conflict-affected areas. In 2015, War Child touched over 260,000 children and youths in highly vulnerable and underserved communities in Afghanistan, Burundi, Colombia, Democratic Republic of Congo, Lebanon, Occupied Palestinian Territory, South Sudan, Sri Lanka, Sudan, Syria, and Uganda.

Cisco began supporting War Child in 2006 with product grants to improve reachability and communications. In 2013, Cisco awarded a series of cash grants to support the Connect. Teaching program in South Sudan, an initiative that improves children's learning through a tablet-based professional development program for teachers. The project currently involves 150 teachers with the aim to improve learning for 7500 children. In FY16, the program positively impacted over 4500 people. Read more.

Gooru Learning.org is a platform that blends big data with crowdsourced content to provide actionable, immediate information encouraging teachers and students to interact with each other while learning. The platform provides the ability to search for and develop collections of multimedia resources, digital textbooks, videos, handouts, games, and quizzes, specifically around science, math, social studies, and language arts.

Since 2012 Cisco has funded various Gooru projects through cash and equipment donations and consulting support to develop a free search engine for easy access to teacher-created lesson plans, content, and assessments. Currently there are over 600,000 teachers and classrooms using Gooru in 140 countries worldwide. In FY16, this program has positively impacted over 2000 people. Read more.

Digital Foundation

Critical Human Needs

Education

Economic Empowerment

Digital Foundation: Economic Empowerment

Cisco CSR economic empowerment programs and third party engagements connect underserved people to relevant skills, meaningful employment, financial products and services, and opportunities they need to thrive. Our investments have helped lift young people out of poverty, match U.S. veterans to civilian jobs, and move workers in developing economies toward financial self-sufficiency.

Listed below are selected examples of how our social investments are positively impacting disadvantaged and under-represented individuals, their families, and their communities. For more information, see the Economic Empowerment page on our website.

Kiva provides an online, crowd-sourced, peer-to-peer lending network where people can lend money to underserved individuals around the world. In the initial pilot more than 2400 U.S. jobs were saved or created, with an average of 2.1 net jobs created per Kiva loan. Also, 72 percent of borrowers reported an increase in business revenue.

Cisco is partnering with Kiva on their Kiva U.S initiative that supports U.S.-based micro- and small entrepreneurs. Cisco provided funding to develop and pilot the Kiva U.S. model and apply digitization to integrate the program into Kiva's main platform. In FY16, the pilot positively impacted over 915 people. Read more.

Digital Divide Data (DDD)'s IT-enabled "Impact Outsourcing" model provides IT skills training, university scholarships, and employment for disadvantaged young people in Cambodia, Laos, and Kenya, and for veterans and military spouses in the United States.

Cisco began support in 2011 with cash and technology grants to enable expansion to Kenya and later to the United States. Today, DDD employs over 1200 people. In FY16, DDD was named among the world's Top 100 Outsourcers by the IAOP. Read more.

Living Goods empowers women to deliver health-related products to the poor through a network of health entrepreneurs in Kenya and Uganda. Living Goods has grown from 400 community health workers serving 200,000 clients in 2012 to 4000 health promoters (10X) serving 3 million clients today, including 675,000 children.

In FY16, Living Goods positively impacted more than 3 million people. The program has lowered child mortality by 25 percent at an annual cost of less than $2/person, while creating livelihoods for thousands of women.

Cisco has provided cash grant investments to help design and implement a mobile technology platform that is now the cornerstone of its program. Read more.

Labor Link, developed by **Good World Solutions**, is a mobile-phone-enabled, cloud-backed tool that increases transparency in global supply chains and empowers factory workers. Workers can anonymously provide feedback on working conditions and receive important information on safety, labor rights, healthcare, financial services, and more.

In 2011, Cisco provided seed funding to develop the first version of Labor Link and pilot test it with 100 factory workers in Peru. In FY16 Labor Link reached over 365,000 workers, for a total of more than 750,000 workers in 16 countries to date. We have implemented Labor Link surveys with our own supply chain manufacturers, to survey workers on working conditions and to help inform our policy on working hours.

Anudip is an innovative social enterprise that is leveraging the power of digitization to address un- and under-employment among disadvantaged populations in India. Anudip provides technical, professional, and business skills training to low-income women and youth, and transitions its graduates into technology-enabled jobs and/or self-employment.

Cisco supports Anudip's skills training programs and technology-driven blended learning platform, as well as providing donations of Cisco technology. In FY16, Anudip positively impacted more than 50,000 individuals, with an 80-percent job placement rate, and an average 300-percent increase in family income. Read more.

Environment

Environmental Strategy

We advance environmentally sustainable growth in a connected world. Our vision is to build sustainability into our business functions and processes and then enable this level of connectivity and environmental impact reduction for our customers. We are doing this by focusing on two priority areas where we can make the largest impact: Energy & Greenhouse Gas Reductions, and the Circular Economy.

We are investing in transformative solutions and sharing energy-efficiency best practices with our customers and partners. Our products improve building energy management; facilitate remote collaboration to improve productivity and reduce business travel; promote teleworking and office mobility, also increasing the utilization of company real estate; and enable energy-efficient cloud computing for businesses and their customers worldwide.

We are using circular economy principles to increase used-product returns for resale or recycling; study leasing and as-a-service models to facilitate return and reuse; implement IoT technologies for improved asset tracking, maintenance, and operations; and improve product and packaging design to support these principles.

Energy and Greenhouse Gases

We divide our energy- and greenhouse gas-related efforts into four areas:

- **Operations:** GHG emissions from our operations
- **Extended operations (supply chain):** GHG emissions from our supply chain
- **Products:** GHG emissions from the electricity used to power our products
- **Solutions:** GHG emissions saved or avoided through the use of Cisco solutions

We set long-term goals to reduce emissions associated with our business **operations**. These efforts focus on workplace utilization, building efficiency, onsite power generation, and purchasing renewable electricity. For more information, see the Scope 1 and 2 GHG Emissions Reduction Strategy section.

In FY16, we announced a **supply chain** emissions goal of avoiding one million metric tonne (cumulative) of supply chain GHG emissions between FY12 and FY20. We encourage our suppliers to report to the CDP standard to push transparency and goal setting into our supply chain. We are working with our supply chain partners to pilot IoT implementations to improve manufacturing facility operations.

We are continuing to improve **product** power consumption, from plug to port, for each new generation of product. We do this by optimizing input voltage, improving power conversion, and increasing the energy efficiency of key components.

Cisco offers **solutions** in four areas that help our customers be more sustainable:

- Energy management
- Remote collaboration
- Teleworking and mobility
- Cloud and data center

Circular Economy (Product End of Life)

We discovered in our efforts to address product end of life that the larger opportunity is the circular economy, and we are developing initiatives to implement these principles at Cisco. We believe the network is the platform for the connectivity, technologies, and applications that enable monitoring, data collection, analytics, and decision making—key components of a circular economy.

Cisco has been a Global Partner of the Ellen MacArthur Foundation (EMF) circular economy program since 2011. The EMF program works across industry verticals to discover how to build circular principles into product and service life cycles to create a more sustainable economy. Cisco's circular economy strategy has four elements that involve a range of business functions: product return, go-to-market models, IoT and cloud solutions, and product design.

Product Return

Cisco currently receives about 12,000–13,000 tonne per year of used Cisco product that is used for life extension through our service contracts, for development in our labs, to support our demonstration loan program, for remanufacture to like-new condition for resale, or that is recycled.

Cisco is working with suppliers, customers, employees, and communities to develop, pilot, and implement circular economy principles. To improve return rates, we have introduced the Send IT Back mobile app to facilitate the return of used gear from our customers. Today, less than 15 percent of our used products are returned to Cisco for reuse, resale, or recycling. We believe there is an opportunity to increase this product return rate to as much as 50 percent for new product sales in the coming years.

Go-to-Market Models

Retaining ownership of our products throughout their life cycle allows Cisco to extend their useful life, optimize utilization, and recover more value at the end of each use phase. As Cisco shifts its business model to focus more on software and subscriptions, we see more opportunity to accelerate the impact of our circular economy initiatives.

IoT and Cloud Solutions

The continued adoption of IoT and cloud solutions will enable better management and maintenance of physical materials throughout their life cycle and across ownership transitions. In FY16 Cisco made several significant acquisitions in IoT, cloud, and security solutions to facilitate global adoption. We are also actively supporting IoT-related standards development and the creation of specifications for security and interoperability of wireless technology. For example, Cisco is a founder and board member of the LoRa Alliance, which creates specifications for security and interoperability of wireless technologies. These standards are being adopted by many IoT infrastructure projects for smart cities, utilities, and other industry sectors.

The circular economy is highly reliant on the cloud and network security. Cisco continues to invest in cloud security solutions to help customers adopt secure, cloud-based business models faster and more confidently.

Product Design

Part of circularity is designing products to be maintained and upgraded to extend their life. These design features facilitate greater opportunity for remanufacture and resale of products, and for harvesting more value from components and materials during demanufacture. Other core Cisco product design innovations also improve circularity, such as increasing product functionality, improving energy efficiency, and reducing the use of materials through miniaturization, together with more intensive use of products through our software and subscription services.

Environmental Sustainability

Environmental sustainability offers businesses significant opportunities and challenges. At Cisco we are applying a long-term approach to setting and achieving our goals to address the core environmental impacts related to our business and climate change, using Intergovernmental Panel on Climate Change (IPCC) findings. We continue to strengthen business processes to improve our environmental performance and leverage our products and services to address climate change. This report's Environment chapter is an extension of our Environmental Policy; all the actions, commitments, and performance updates described in this chapter build on the fundamental core values outlined in our Environmental Policy.

Environmental Sustainability Materiality Assessment

Our sustainability materiality assessment, which informs our corporate social responsibility (CSR) materiality assessment, is based on input from stakeholders, results of life-cycle assessments (LCAs), and assessments by independent consultancies. The assessment process is described in more detail in the Governance chapter.

Our priorities are based on the impact from Cisco's operations, from our supply chain, and from the use of our products by our customers.

Table 16 indicates how we prioritize environmental issues. Tiers 1 and 2 receive increased investment and oversight. While also important, Tiers 3 through 5 are considered "due diligence" because the supporting processes are fully incorporated into the responsible business function.

Table 16. Sustainability Materiality Tiers for Cisco Environment-Related Issues	
Tier	**Environment Topic**
1	Energy consumption (operations)
	Product energy efficiency
	IT enabling effect
2	Waste (product EOL)
	Waste (product packaging EOL)
3	Transport emissions (from product logistics)
	Water pollution (liquid effluents)
4	Hazardous materials
	Biodiversity and land use
	Water use
	Waste (operational "trash")
5	Non-GHG airborne emissions

In FY14 Cisco invited about 5000 customers across all regions and market segments to complete an online survey on environmental sustainability. Our customers confirmed our environmental sustainability priorities. The top three issues identified by customers were:

1. Product energy efficiency (Tier 1)
2. Sustainable product fulfillment, including electronic delivery of software, documentation, and product packaging (Tier 2)
3. Product takeback and recycling (Tier 2)

In FY16 we continued to see a trend of increasing customer interest in environmental sustainability as reflected in requests for proposals, surveys, and other customer inquiries. Details about our performance and actions in all these areas are provided in the relevant sections that follow.

Policy

Cisco's environmental policies are developed using the following governing principles:

- We integrate environmental responsibility throughout our business while meeting customer expectations with respect to product function, delivery, quality, service, and EOL management.
- We work with our suppliers to integrate environmental responsibility into all life cycle phases of our products.
- We use the Global Reporting Initiative (GRI) G4 performance indicators to guide our environmental impact assessment, reporting, and initiatives.
- We provide complete, accurate, and public environmental reporting for our stakeholders.
- Per our Code of Business Conduct (CoBC) all employees are required to be aware of and act in a manner consistent with our CSR principles.
- Our annual CSR report enumerates our CSR policies and practices.

We maintain the following governance for our environmental sustainability efforts:

- We seek stakeholder engagement and analysis on our sustainability materiality assessment, our reporting, and the results of our initiatives.
- We maintain ISO 14001 certification for sites with significant potential for environmental impact.
- We use our CSR Business Process to govern reporting, stakeholder engagement, feedback to the business, prioritization, goal setting, initiatives, and performance measurement for environmental sustainability issues.

Cisco's Sustainability Executive Team (SET) sponsors our environmental initiatives and periodically reviews our environmental strategy and performance. SET is organized around specific tracks. Each track is sponsored by an executive from the lead business function. All tracks are co-sponsored by the executive that chairs SET. Current SET tracks include:

- Operational Energy Management: Tracking GHG emissions, reducing overall energy usage, and sourcing renewable energy.
- 100% Product Return: Increasing the return of used equipment from customers for refurbishment, reuse, or recycling.
- Product Energy Efficiency: Innovating products and facilities to use less energy.
- Sustainable Product Fulfillment: Offering bulk pack, multipack, and eDelivery to reduce materials for new product sales.

We believe that the most effective leadership is done by example. We will continue to improve our environmental impact assessment, reporting, and initiatives and encourage our supply chain and business partners to further develop sustainability best practices for their own operations.

Organization

Key executives, along with business functions covered by our environmental management system, create and implement operational change. Teams focus on corporate-level initiatives that directly enhance Cisco's environmental performance.

SET provides oversight for our Tier 1- and 2-related environmental initiatives. Rebecca Jacoby, Senior Vice President, Chief of Operations and a Cisco Executive Officer, is the executive sponsor of SET and is the official conduit to the Executive Leadership Team (ELT), our CEO, and the Board of Directors on sustainability-related issues.

The Sustainable Business Practices (SBP) team within Corporate Affairs and the larger Human Resources organization is responsible for Cisco's overall sustainability strategy and coordinates funding, resources, organization, schedule, and execution of each SET track with engagement from business units across Cisco.

The Board of Directors, acting directly and through its committees, is responsible for the oversight of Cisco's risk management. Our Enterprise Risk Management (ERM) program works across the company to identify, assess, govern, and manage risks, as well as Cisco's response to those risks. Top risks are assigned owners and have specific work plans and scorecards around mitigation of risk. Risks associated with CSR and sustainability are included in this process.

Cisco's overarching CSR objective of accelerating global problem solving to positively impact people, society, and the planet can be achieved by continuing to build sustainability into our business functions and processes. Our corporate environmental policy and progress toward our goals is outlined in the Environment chapter of our annual CSR report. More information about how our corporate environmental policy fits into our environmental management system is provided below.

Environmental Management System

Cisco's ISO 14001 Environmental Management System (EMS) relies on individual accountability, management responsibility, measurement of key performance indicators, and a continuous improvement philosophy to meet business and environmental goals. The EMS is certified by TUV SUD America Inc. to the international EMS standard ISO 14001:2004.

Cisco sites for ISO 14001 certification are selected based on a set of criteria that includes:

- Facility size and lab area
- Building headcount capacity or persons housed
- Primary facility function

These criteria focus on sites that will make the greatest contribution to reducing environmental impact. Once a site has been selected for certification, we evaluate its associated environmental impacts, including corporate functional areas; associated products, activities, or services at that location; and the environmental impacts associated with the generation or use of materials, impacts on air and water, and depletion of natural resources. We use this information to calculate an environmental score, which helps us prioritize facilities and issues, mitigate the associated negative environmental impacts, and enhance the positive impacts. In CY16 Cisco plans to certify three new sites and one acquisition site as part of our ISO 14001 program. These include new sites in Krakow, Poland; Jerusalem, Israel; Dusseldorf, Germany; and an acquisition site in Paris, France (Figure 18).

Figure 18. Cisco ISO 14001 Certified Site Locations

Scope and Implementation

All of Cisco's ISO 14001 certified sites are audited by an independent third party. Sites that were part of an acquisition are included in the scope of our corporate environmental policy and associated environmental initiatives. Table 17 shows our ISO 14001 certification key performance indicators (KPIs).

Table 17. Cisco Environmental Management System ISO 14001 Certification						
KPI	FY12	FY13	FY14	FY15	FY16	Comments
Number of Cisco sites with ISO 14001 certification	30	30	28	28	26	Fewer sites due to Chatswood being consolidated into St. Leonards and Tewksbury being consolidated into Boxborough. Note: Implementation of the new sites occurred during FY16.
Percent of real estate portfolio with ISO 14001 certification	96%	93%	93%	94%	*	

* To be updated later once data is available, no later than January 31, 2017.

Our EMS helps us identify the most significant environmental impacts at each Cisco site and set relevant corporate and local environmental objectives or targets. Based on potential impacts, site teams adopt one or more initiatives to implement, which are aligned to corporate-level programs where possible.

All ISO 14001 certified sites have teams that pursue environmental goals. Sites support corporate environmental initiatives, and site-specific environmental aspect teams report on goals, initiatives, and metrics to measure our environmental performance. Table 18 lists the number of aspect teams per region.

Table 18. Aspect Teams per Region					
Aspect Teams	Global Teams	Americas	Europe, Middle East, Africa, and Russia (EMEAR)	Asia Pacific, Japan, China, and India (APJCI)	Total
Waste reduction and recycling		8	8	7	23
E-scrap management*	√	7	10	2	19
Energy management**	√	0	2	7	9
Green initiative/environmental awareness**		4	3	0	7
Wastewater management		1	0	0	1
Total per region		20	23	16	59

* These teams have site-specific activities and goals but also support a corporate-level/global goal.
** Used at smaller sites, these teams typically include activities around employee engagement, energy management, e-scrap management, waste reduction and recycling, and local green activities.

Cisco's primary corporate sustainability activities are included in our certified EMS and are part of the internal and external audits performed annually. This enables us to internally track key corporate environmental performance goals, initiatives, and metrics.

Our EMS aligns closely with our GHG and energy management program and supports the management of our sustainability information. This alignment has helped us automate our sustainability data collection and focus limited resources on other important tasks, such as evaluating and implementing mitigation projects.

Internal EMS audits provide regular insight into how our environmental processes and commitments have been implemented and how well we are improving our EMS at our certified sites. The frequency of these audits depends on criteria such as site size, operational activities at the site, and the results of previous audits. In a typical three-year period, every site will receive one onsite audit and one virtual audit. In FY16, we conducted 20 internal audits, including 6 virtual audits using Cisco TelePresence® or Cisco WebEx®.

As part of our ISO 14001 certification, we participate in annual audits conducted by a third-party registrar. These audits identify areas of improvement and performance while providing external validation and verification of our EMS processes and programs.

During internal and external audits in FY16, Cisco received 3 Best Practices and 39 Positive Comments on its ISO 14001 certified EMS. The Best Practices were found during internal audits at the following locations:

- Bangalore, India: The facilities team has implemented a process that allows treated water from the onsite sewage treatment plant to be diverted for use in the chilling systems for campus buildings BGL 16 and 17. An ultrafiltration system along with reverse osmosis tanks enables the treated water to meet the requirements for cleanliness to be suitable for use in the chillers. Utilizing treated water to provide 100 percent of the water requirements for the site chillers saves 85 cubic meters of fresh water per day.
- Research Triangle Park (RTP), North Carolina: An access system permits only appropriately trained and certified contractors to access the refrigerant storage area. Additionally, the inventory management system process allows traceability for the amount used in each container, who used it, and where it was used. This can help identify equipment issues or leaks through refrigerant usage trends.
- Paris, France: The site coordinator has developed an EMS communication package that contains site-specific information that is posted in all of the Paris campus buildings. This approach improves employee awareness and engagement in site environmental activities, which should result in improved environmental performance.

All numeric claims made in the Environment chapter of the CSR report are subject to a multi-day, detailed, bottom-up audit that is conducted by our internal ISO 14001 audit team and is part of the annual ISO 14001 internal audit plan. Verification of both data and processes is key to reporting valid data and is a proactive process to identify corrective action. Environment-related claims in the 2016 CSR report will be audited in FY17.

Employee Training

To incorporate environmental design principles into our products and solutions, we run companywide events and training such as video-on-demand classes. These show employees how they can contribute to our environmental goal of reducing carbon emissions by creating new products, improving upon existing product designs, and working with our supply chain to make upstream operations more environmentally conscious.

We continue to engage employees who have a significant role in defining product requirements or developing our products and packaging. Live learning sessions with both internal and external experts cover topics that inspire and promote expansion of new and existing sustainability best practices and Design for Environment principles.

To further embed environmental practices into our standard business operations, Cisco offers employee training on our business management system, which includes our EMS and environmental policies. We also offer training to our IT and engineering employees with information on how they can reduce energy use within Cisco's labs and data centers.

Cisco works in collaboration with the Electronic Industry Citizenship Coalition (EICC) to develop common industry training, tools, and standards to support suppliers in improving their sustainability capabilities and performance. For more information on Cisco's engagement as a member of EICC, see the Society chapter.

Life-Cycle Assessments

Cisco uses life-cycle assessments (LCAs) to estimate GHG emissions associated with our products. LCAs are a holistic approach for assessing the environmental impact of a system, process, or product. LCAs help us:

- Assess the materiality of various contributors to environmental impact.
- Select alternative materials that are environmentally preferable.
- Understand the impact of product power consumption.
- Develop more energy-efficient manufacturing processes by comparing assembly and test scenarios.
- Inform packaging and accessory kit reduction projects; in particular, the trade-offs in using alternative and reduced materials.
- Understand the relative carbon efficiency of different modes of transport for distributing our products.

To support our LCA work, we utilize external tools and data sources, including thinkstep GaBi 6.4 and other publicly available data sources, such as the International Energy Agency (IEA), the United Kingdom (DEFRA), and the Greenhouse Gas Protocol (GHGP).

Design for Environment

We have incorporated environmental design principles into our products and manufacturing processes so that less raw material, packaging, and transportation are used and product refurbishment and recycling are more effective. To this end, environmental design features are incorporated into our product requirements document.

We have incorporated a Design for Environment (DfE) approach into our standard design processes that focuses on the following areas:

- Energy efficiency (minimum 80 percent efficient power supply and efficient component selection)
- Hazardous materials
- Design for recyclability and upgradability
- Recycling marking on plastic components (ISO 11469, SPI codes) for ease of sorting during recycling
- Packaging and fulfillment (reduction of materials and package volume as well as logistics impacts)
- Design for longevity
- Compatibility with product takeback programs

Cisco's DfE principles are derived from a combination of sources, including formal requirements (for example, ECMA-TR/370) and other best practices developed within our business. In FY16, we began updating our DfE principles to include evolving customer requirements and industry and regulatory trends. Implementation will include training for a growing community of new employees.

Hazardous Materials

As a global supplier of network equipment to industry, we conform to applicable material regulations for product, packaging, and battery materials. We have developed our Controlled Substances Specification to fulfill global environmental regulations and we are committed to reducing the impact of the materials used in our products and in our supply chain. The purpose of this specification is to communicate Cisco's substance use and reporting requirements to component suppliers and manufacturing partners. The specification outlines the controlled substances and any conditions of use, regulatory restrictions, substances to be reported and phased out, and substances under study for potential inclusion. For additional information on materials-related regulations, visit Cisco's Materials webpage. In addition, for up-to-date product-level information, visit our self-service Product Approvals Status (PAS) tool.[1]

The following sections cover a number of materials that, while currently not proscribed for use in our industry, we are working to reduce or substitute in our products where possible.

Halogenated Flame Retardants and Polyvinyl Chloride

- Polyvinyl chloride (PVC) and nonregulated halogenated flame retardants (HFRs) are used in printed circuit boards, plastic parts, and cable insulation. We are working with manufacturing partners, industry standards technical committees, and academia to validate proposed alternatives for HFRs and PVC. Cisco continues to identify, confirm, and, where technically practical, phase out HFRs and PVC. Since FY12 we have qualified additional halogen-free PCB laminate materials and have increased their use in many new products.
- We have eliminated from thousands of Cisco designed plastic parts the HFRs found in the resin compounds.
- Over the past four years, we have performed material assessments and identified the areas within our business with the greatest opportunity to move to HFR- and PVC-free materials.

Cisco will continue to research alternate materials and apply them to new products where quality and performance requirements can be met.

PVC in Cable Insulation

Cisco worked on the International Electronics Manufacturing Initiative (iNEMI) PVC Alternatives Project to reduce the PVC content in cable insulation. This effort focused on understanding the environmental trade-offs of standard, halogen-free, and bio-based cable jacketing. Cisco will continue to research alternate materials and apply them to new products where quality and performance requirements can be met.

Batteries

Batteries in Cisco products are generally used to maintain information in system memory when a device is powered off. These products are designed so the batteries can be easily located and recycled. Product labels are provided to indicate that the product contains a battery. This information alerts our recyclers that a battery should be removed before further processing.

[1] Cisco.com registration is required. Register here. Note: This tool is only accessible using Internet Explorer

Promoting Transparency in the Supply Chain

We have embedded CSR practices into our supply chain business processes. We continue to improve these processes to make environmental sustainability a key criterion in our relationships with and assessment of our suppliers. In this chapter we will focus only on supply chain issues that relate to the environment. Discussion of our CSR supply chain practices not related to the environment is in the Society chapter.

Improving transparency in the supply chain is critical to helping us address some of our most significant sustainability issues and impacts. To target our work with suppliers and peers and improve performance, we need to identify key concerns and impacts. Supply chain transparency is also something our stakeholders want to see—customers and governments are demanding it. To help us understand key impacts in our supply chain and how they are managed, we:

- Encourage suppliers to publish CSR reports describing how they manage their most significant sustainability impacts.
- Require suppliers to report GHG emissions and targets via CDP Supply Chain and our scorecard.
- Conduct site audits of high-risk supplier facilities.
- Use worker interviews and support other EICC-sponsored research and training initiatives to gather actionable, direct feedback from factory workers to complement audit findings.

To gain an accurate picture of the life cycle impacts of our products, we also need to understand the impacts associated with our supplier GHG emissions. By the end of FY16, 92 percent of our key component suppliers had set goals to reduce their GHG emissions, up from 89 percent in FY15. All of our key manufacturing partners and logistics providers have set such goals, and all are able to provide data on GHG emissions related to Cisco products.

We encourage suppliers to share information, even in areas where they are not performing well. For example, we ask suppliers to report any environmental infractions, as well as remedial actions, through an annual self-assessment audit process. Using standardized EICC self-assessment tools makes this process efficient for suppliers serving multiple customers. Active participation in the self-assessment process is reflected in each supplier's scorecard. We make it clear that they will not be penalized for disclosing this information. Our aim is to promote open dialogue and to work with suppliers to reach an acceptable outcome. In FY16, 66 percent of our key suppliers had published CSR reports. A complete overview of our supplier engagement process is available in the Society chapter.

Supplier Audit Findings

Cisco performs audits on our high-risk suppliers through the EICC Validated Audit Protocol (VAP). Environmental findings in our suppliers' factories are a key dimension of the Supplier Code of Conduct. Hazardous substances and pollution prevention were priority environmental audit finding areas in FY16.

Labor practices and health and safety make up the largest portion of our audit findings. A total of 24 suppliers are currently being tracked for working-hours findings (11 contract manufacturers and 13 component suppliers). These suppliers will be tracked for a minimum of six months to demonstrate improvement in or compliance with EICC work hours and rest day standards. To learn more about our audit processes, see the Society chapter.

Key GRI G4 Indicators

GRI G4-EN32: Percentage of new suppliers that were screened using environmental criteria

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Key GRI G4 Indicators

GRI G4-EN33: Significant actual and potential negative environmental impacts in the supply chain and actions taken

Table 19 details environment-related supplier audit findings and our planned response. Table 20 further categorizes these findings.

Table 19. Environment-Related Supplier Audit Findings and Responses in FY16

Category	Finding	Response
Environment		
Hazardous substances	Hazardous materials including wastes are properly categorized, labeled, handled, stored, transported, and disposed using government-approved and/or licensed vendors as per local laws.	Supplier equipped sufficient secondary container for the hazardous material and provided training to workers; supplier also conducted regular audit on waste treatment vendors.
Stormwater management	Stormwater programs are adequate and effective and include objectives and targets to identify, manage, and mitigate the impact of wastes of all types.	Supplier established sufficient stormwater management procedures and provided training to workers.

Table 20. Environment - Categorization of Supplier Audit Findings* in FY16

	Findings Identified as Priority[1]	Findings Identified as Major[2]	Findings Identified as Minor[3]	Total Number of Audit Elements[4]	% of Audit Elements Resulting in Findings
Environment	**1**	**59**	**20**	**1375**	**6%**
Environmental permits and reporting	0	6	1		
Pollution prevention and resource reduction	1	5	1		
Hazardous substances	0	22	7		
Wastewater and solid waste	0	3	3		
Air emissions	0	6	2		
Materials restrictions	0	1	0		
Stormwater management	0	11	2		
Energy consumption and GHG air emissions	0	5	4		

* An audit finding is defined as a nonconformance with our Supplier Code of Conduct found during an audit. Criteria for categorization of findings are in accordance with the EICC Validated Audit Process Audit Operations Manual.
1. Priority finding: A major nonconformance with significant and immediate impact.
2. Major finding: A significant failure in the management system that renders established processes or procedures ineffective.
3. Minor finding: Typically an isolated or random incident that does not necessarily indicate a systemic problem with management systems.
4. Total audit elements: The total number of audit elements with the potential for a finding for the 55 FY16 audits.

Employee Engagement

In FY16, Cisco encouraged and supported our employees who are interested in sustainability through the following activities:

- Environmental Management Newsletter: Internal, monthly newsletters we use to share information with employees on Cisco's recent environmental activities across the globe.
- Year-end 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 lab and ICT equipment during a time when much of our workforce is already taking time off. Over the 10-day shutdown that began in December 2015, Cisco was able to avoid approximately US$600,000 in energy costs and 2900 metric tonne CO2 equivalent (CO2e) of GHG emissions. Employees who work in 12 buildings located in India, Germany, and the United States that were able to reduce their electricity consumption by 50 percent or more during the shutdown were rewarded with an ice cream social or catered lunch.
- 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 for our own takeback and recycling processes. This year, 143 sites collected 238 metric tonne of e-scrap. This was a significant improvement over last year's total. See the Internal Programs for Cisco in the Waste section.
- Earth Aware: In April 2016 we launched a new month-long employee volunteerism and awareness campaign to support environmental sustainability. Cisco hosted activities, events, and volunteer opportunities to encourage employees to take personal action in environmentally responsible behaviors at work and at home. Hundreds of employees around the world took part; for more information, see the Cisco blog about the event. Earth Aware culminated in the Cisco SustainX event, a thought leadership forum hosted on Cisco's campuses. Employees from around the world came together to learn about Cisco's sustainability practices and gain insights into how every individual can help make a difference. As a result of the Earth Aware campaign, there has been an increase in formally planned sustainability-related volunteerism events and activities across Cisco.
- Cisco Green: This new hub on our internal social media site enables employees to learn about Cisco's environmental sustainability activities and provides links to programs, information, and other tools.
- Cisco GreenHouse: In July 2016 we launched an interactive sustainability web platform to enable positive environmental, social, and economic impacts. Cisco GreenHouse connects passionate employees with like-minded peers all over the world who want to find ways to lead more sustainable lives. Only two weeks after launch, more than 1000 employees had joined the site and almost 3000 actions had been taken.

- Employee Solar Discount Program: In October 2014, Cisco launched a program to give employees and contractors (and their friends and families) in the United States and Canada the ability to install solar panels on their homes at around a 10-percent discount. This program is still active today.
- Green teams: Grassroots "green teams" are organically developing at Cisco sites worldwide. Made up of volunteers from multiple departments, green teams work to reduce energy usage, waste, and travel. We currently have active green teams in Amsterdam, the Netherlands; Kortrijk, Belgium; Bangalore, India; and San Jose, California.

Case Study: Engaging Employees in GHG Reductions

From the perspective of Cisco's supply chain, to maintain market leadership you must begin with responsible business practices, innovation of products and processes, and a collaborative workforce that puts sustainability into practice. Cisco has made a conscious decision to embed this sustainability mindset into our organization's business processes.

Employee engagement is a crucial part of Cisco's sustainability efforts, from reducing emissions, saving energy, and managing our resources efficiently to transforming our products and packaging. By tapping into the passion of employees to help enable sustainable thinking and actions, Cisco is learning where to better align projects within functions.

Cisco's Pack It Green 2.0 project seeks to align team members to establish carbon reduction strategies across business functions. More than 54 sustainability "champions" across 16 business groups are involved in an average of 60 active projects at any given time, and are finding ways to reduce Cisco's footprint with sustainable packaging ideas. By actively driving the Supply Chain Emissions Reduction Program, our Pack It Green champions evangelize and lead carbon reduction projects for their particular products, tapping into the newest innovations, industry best practices, and direct customer feedback.

To learn more about the progress Cisco is making around our 2020 emissions reduction goal, see Table 30.

Key GRI G4 Indicators

GRI G4-EN29: Monetary value of significant fines and total number of nonmonetary sanctions for noncompliance with environmental laws and regulations.

GRI G4-EN34: Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms.

For more information on our sustainable transportation initiatives, including shuttles, carpooling services, and electric vehicle charging stations, see Transportation Services.

Regulatory Fines
Cisco has received no fines, penalties, or grievances greater than our US$10,000 reporting threshold in the past five years.

Our Story | The Details
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Materials

Understanding our customers' needs and the materials that make up our products and packaging helps us identify opportunities to reduce or eliminate waste. A key requirement for our product and packaging designs is minimizing materials while achieving performance and reliability targets; see the DfE section for more information.

Pack It Green, Cisco's sustainable packaging and fulfillment solutions program, has helped to reduce the unwanted or redundant items that are often included in a typical shipment, reducing packaging and material waste. These packaging and fulfillment strategies not only reduce our material usage, but also help reduce GHG emissions through lower transportation weights.

In FY16, guided by customer input, we launched Pack It Green 2.0 with an expanded scope to include a wider breadth of DfE principles. The expanded program now includes optional dematerialization (e.g., cables and wire management clips) and the use of recycled materials in our products and packaging.

Product

Cisco provides basic product weight and percent of recycled material information to customers upon request. We continue to review and improve our ability to support the increase in these customer requests and product information requirements for component-level materials and related weight data. Stakeholders remain a large part of influencing our roadmap in this area. Examples of ongoing work are listed in Table 21.

Table 21. Sustainable Product, Packaging, and Fulfillment Solutions: Focus Area

Category	Benefits	Cisco Product Examples
Primary product configurable options	Reduce packaging and shipping costs by integrating products, subcomponents, and accessories into one carton.	• Cisco routers and switches • Cisco UCS® blade servers
Secondary product configurable options	Reduce materials, packaging, and shipping costs by providing customers with a way to opt out of receiving cables, brackets, and similar items.	Customers can choose not to receive: • Cisco UCS storage product power cables • Cisco Aironet® wireless access point mounting brackets and clips We intend to expand the availability of such options to address growing sustainability-minded customer demands. However, widespread customer awareness and adoption of such options remains a challenge.
Bulk packaging	Reduce packaging and shipping costs, and increase operations efficiencies, by shipping like products in a carton selected during packing based on the order quantity.	Bulk-pack models are now available for high-volume spare products, including cables, optics pluggables, memory, and rack gear kits.
Electronic delivery of software, licenses, and product documentation	Increase dematerialization and operational efficiencies. Reduce CDs, paper, and packaging. Reduce packaging and fulfillment costs.	The eDelivery program updates software-related products available for electronic delivery though unique product IDs and/or Cisco Commerce-based electronic fulfillment preferences. "Pointer cards" continue to be used across Cisco product lines to consolidate web links for product and compliance documentation.
Multipack products (or eco-pack products)	Reduce packaging and shipping costs, and increase operations efficiencies, by selling "bundles" of like products in specific volumes. Increase customer satisfaction; customers identified this as a significant issue in our 2013 Sustainability Customer Survey.	Cisco Aironet products are offered in eco-packs of 5 and 10 units. We continue to work internally to address process-related roadblocks that can inhibit the adoption of this solution by our distributors and partners. Once addressed, we plan to expand eco-pack availability to more of our high-volume products.
Dense packaging	Reduce packaging and shipping costs by optimizing supply chain packaging between our factories.	In FY16, we continued to make strides in optimizing our inbound shipments for Cisco ISR 4300 Series router products, avoiding over 109 metric tonne of packaging (corrugated, metal, and wood) and $450,000 in material and freight costs.
Use of recycled materials	Reduce the amount of new materials required to produce our products and packaging while diverting waste from landfill.	The Cisco IP Phone 7861 now contains 35% post-consumer recycled plastic in seven of its major plastic components. Additional models to follow in FY17.
Packaging reuse and recycling within our supply chain and to our customers	Reduce packaging and related costs.	Cisco products use recyclable polyethylene bags for moisture protection or consolidation of accessory kit subassemblies. Over the years, we have reduced the thickness and size of many bags, and we have regularly encouraged suppliers to reuse these and any electrostatic discharge (i.e., static shielding) bags. In addition, Cisco continues to substitute metallized antistatic bags with a fully recyclable antistatic bag when possible, particularly for high-volume products (e.g., optical modules).

Packaging

The amount of packaging waste being added to landfills is an environmental concern for Cisco. To address our impacts in this area, our packaging designs minimize material usage while protecting our products during shipping, warehousing, and delivery. Packaging engineers work with the product design teams to reduce protrusions, product fragility, and product dimensions to minimize product packaging and increase packing efficiency during transport.

Products that are damaged in transit have negative business and environmental impacts. Our affected customers are dissatisfied and additional resources, energy, and materials are needed to repair or replace the damaged product.

Each packaging design goes through rigorous drop and vibration testing to confirm it provides the required level of product protection. Once basic packaging and material requirements have been met, Cisco evaluates four additional aspects of environmental package design:

- Packaging material optimization: Designing a package that adequately protects the product from transport damage or waste while optimizing the volume of material and complying with all relevant environmental regulations.
- Space efficiency optimization: Designing a package that optimizes space/cube efficiency during transport.
- Optimizing distribution: Designing the product for distribution in order to further reduce the amount of packaging material used and/or GHG emitted in transportation.
- Environmentally friendly materials: Designing in recycled content and recyclability.

Packaging Material and Distribution Optimization

Cisco's Supply Chain GHG Reduction Program has estimated product transport as the primary contributor to our supply chain carbon footprint.

Since FY12, the Mode Shift Program has been working to optimize transport between our virtual factories by balancing air vs. ocean shipments while maintaining our customers' expected lead times. In FY16, this program achieved a cumulative reduction of 128,239 metric tonne of GHG emissions.

In addition, we continue to apply the four dimensions of environmental packaging design as part of our release process for both new products and some legacy product offerings. Aligned to the SET Sustainable Product Fulfillment track, Pack It Green 2.0 is a cross-functional, cross-product initiative to limit the waste and costs associated with packaging while reducing carbon emissions and improving the customer experience. Pack It Green 2.0 continues to view our packaging challenges from the product fulfillment level in order to prioritize, design, and implement improvements that go beyond just the packaging itself.

To help identify packaging and fulfillment inefficiencies for our products, we conducted detailed investigations. These historically have included customer surveys and a Six Sigma "green belt" process improvement project. We have addressed losses of efficiencies in the following ways:

- Increased business participation in Pack It Green 2.0
- Expanded sustainable packaging and fulfillment solutions best practices across the business
- Continued development of new capabilities

As a result of Pack It Green 2.0 product and packaging optimization projects, approximately 1368 cumulative metric tonne of material (corrugated board, plastic, wood, CDs/DVDs, cables, and other materials) and 7432 cumulative metric tonne of CO_2e were avoided in FY16. GHG emissions included those avoided from reduced material and freight weight reduction. In addition, these FY16 changes have saved an annualized US$3.2 million through material and freight cost reductions.

For more information about how Pack It Green 2.0 helps reduce Scope 3 emissions, see Scope 3 Transportation & Distribution.

Key GRI G4 Indicators

GRI G4-EN30: Significant environmental impacts of transporting products and other goods and materials for the organization's operations, and transporting members of the workforce.

Recycled Content
Products

We use recycled industrial content in our products and our packaging through standard manufacturing processes (for example, reground plastic in our IP phones). Electronic products consist primarily of electronic circuit boards, steel, and plastics. Cisco generally does not require a minimum percentage of post-consumer recycled content in new product and/or packaging manufacturing. However, we continue to research the percentage of recycled materials already being used in our products, and the potential for us to specify a broader requirement.

In FY16, we piloted and released the Cisco IP Phone 7861 to utilize a minimum of 35 percent post-consumer plastic in seven of its unique plastic components. By the end of FY17, three more models are expected to be released with this new material strategy.

Most product documentation is distributed electronically to consumers. However, some physical documentation is still necessary, such as regional regulatory requirements, safety materials, and operating instructions. In these cases, the supplier qualification process requires suppliers to print their documentation on paper that is chlorine-free and that contains at least 10 percent post-consumer waste.

We continue to work on ways to reduce the amount of physical documents shipped, including the evaluation of new fulfillment technologies that may provide region-specific documentation solutions. For more information on Pack It Green 2.0 focus areas, see Table 21.

Packaging

Generally, our packaging uses corrugated cardboard that includes about 30 percent recycled content.

We use thermoformed medium-density polyethylene (MDPE) cushions made from virgin material or from recycled substitutes that are recyclable in most regions after use. When regionally available and technically feasible, we use cushions made from 100 percent recycled polyethylene, which are also recyclable.

Almost all our packaging for new products is made either of one material or multiple materials that are separable for recycling. In our global market, customer, municipal, and regional recycling practices vary greatly. The ability of customers to recycle our packaging depends on the recycling facilities in place in their location.

Cisco legacy products, including those produced by our acquired companies, may not incorporate all current best packaging practices. A similar challenge also exists for packaging provided with OEM products that the Cisco supplier delivers directly to the end customer.

Based on planned volume, customer input, and projected savings, we redesign packaging to reduce the volume of material used and to improve recyclability. As products become more widely available to our customers, our overall packaging becomes more resource efficient.

The plastic used in Cisco packaging falls into categories identified by Resin Identification Codes 1 to 7. Polyethylene (codes 2 and 4) is the predominant material. Some plastic components carry labels indicating their plastic recycling code number to aid end-of-life recycling.

While we promote recyclable packaging, sometimes this is not possible. Although metallized antistatic bags are not easily recycled, they are essential to the safe transport of products susceptible to damage from electrostatic discharge (ESD). For example, a Cisco CRS blade shipped as an upgrade for an existing Cisco CRS chassis would require an antistatic bag. Bags are sized to fit the product being shipped and minimize the amount of material used.

Energy and GHG Emissions

Key GRI G4 Indicators

GRI G4-14: Explanation
of whether and how the
precautionary approach or
principle is addressed by the
organization.

We are reducing our global GHG emissions by improving the efficiency of our products and operations and by encouraging our suppliers to reduce their GHG emissions as well. We also use our own collaboration products to reduce GHG emissions in our operations, and help our customers leverage our solutions to do the same. Almost all of the GHG emissions from our operations are directly associated with energy use (typically electricity). Therefore, we report our GHG emissions with our energy use.

Goals

Cisco has been committed to reducing our GHG emissions for a decade, and we have made significant progress in this regard. We are in the fourth year of the 5-year goals we set in 2013 to reduce all Scope 1, Scope 2, and business-air-travel Scope 3 GHG emissions worldwide by 40 percent absolute by 2017, compared to our 2007 baseline.

We have also been aggressive in setting new sustainability goals. In June 2016 Cisco announced our first Scope 3 supply chain GHG emission reduction goal: to avoid one million metric tonne of GHG emissions in our supply chain between FY12 and FY20. This is the first quantitative goal to include Scope 3 supply chain activities that Cisco directs or influences; for more information, see Scope 3 Supply Chain. Going forward, we intend to include supplier GHG emissions as a component of our supply chain procurement and refinement processes. Table 22 provides a summary of our GHG emissions goals.

Table 22. Cisco GHG Emissions Goals	
Date Goal Established	GHG Emission Reduction Goal Description
September 2006	Clinton Global Initiative (CGI) commitment to reduce GHG emissions from all Cisco business air travel worldwide by 10 percent absolute by FY09 (against a FY06 baseline).
	This goal was met in 2009 and the commitment has been closed.
June 2008	U.S. Environmental Protection Agency (EPA) Climate Leaders commitment to reduce all Scope 1, Scope 2, and business-air-travel Scope 3 GHG emissions worldwide by 25 percent absolute by end of CY12 (CY07 baseline).
	This goal was met in 2012 and the commitment has been closed.
February 2013	Cisco announced five new goals related to our operational energy use and GHG emissions:
	1. Reduce total Cisco Scope 1 and 2 GHG emissions worldwide by 40 percent absolute by FY17 (FY07 baseline).
	2. Reduce total Cisco business-air-travel Scope 3 GHG emissions worldwide by 40 percent absolute by FY17 (FY07 baseline).
	3. Reduce Cisco's FY17 net consumption-weighted electricity emission factor to half of the latest International Energy Agency (IEA) world average emission factor publicly available before the end of FY17.
	4. Reduce total Cisco operational energy use per unit of revenue worldwide by 15 percent by FY17 (FY07 baseline).
	5. Use electricity generated from renewable sources for at least 25 percent of our electricity every year through FY17.
June 2016	Cisco announced our first Scope 3 supply chain GHG emissions goal:
	Avoid one million metric tonne of GHG emissions within our supply chain between FY12 and FY20.

We formed our 2013 goals based on internal best practices and expert opinion, including recommendations from the IPCC, the U.S. Environmental Protection Agency (EPA), and *The 3% Solution report*[2] from the World Wildlife Fund (WWF) and CDP (formerly, the Carbon Disclosure Project).

According to EPA predictions, ICT industry revenues will grow significantly through FY17, and industry emissions normalized to millions of dollars will increase 16.5 percent over the same period. These two projections indicate a business-as-usual increase in absolute emissions, so any goal to reduce absolute emissions is considered aggressive. Our current GHG goal is to reduce absolute emissions by an additional 15 percent by FY17, which, combined with our 2012 achievement, will give a 40 percent absolute reduction using our original FY07 baseline.

Our goals are set as 5-year commitments because long-time horizons allow for large investments, which have a potential for big payoffs. For example, to achieve our new goals, we secured a 5-year spending plan of approximately US$57.5 million to implement hundreds of energy-related projects throughout our operations. Starting in FY14 and by the end of our 4-year program in FY17, we will have implemented over 450 energy efficiency and renewable energy projects—102 in FY16 alone—with a net present value of $69 million over 10 years. When all projects are complete in FY17, they will collectively avoid 140 GWh of energy each year.

We believe we demonstrate a best-practice approach to goal setting by:

- Committing to realistic longer-time-horizon goals, befitting the scale of the problem.
- Consistent and precise wording of goals with clear measurement methodology.
- Consistent and transparent reporting from year to year.
- Third-party assurance for all goal-related reporting.
- Setting goals based on IPCC findings.

Performance

We have been recognized in the past year for our sustainability efforts by CDP, the EPA, Duke Energy, the Institute of Directors in India, and the Association of Energy Engineers (AEE). In October 2016 Cisco achieved an A rating by CDP, and was listed on their 2016 Climate A List based on information submitted to CDP in June 2015.[3] This represents our twelfth year reporting to CDP and our sixth time on their Performance Leadership Index / Climate A List. The CDP Climate A List includes companies from around the world that have been identified as leaders in their efforts and actions to combat climate change. Table 23 shows Cisco's participation and performance in CDP over the last 12 years. Our consistently high rankings are strong evidence of our commitment to improving GHG emissions disclosure and performance.

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[2] The 3% Solution report is named for the annual emissions reduction thought to be needed through 2020 to meet IPCC guidance. According to the IPCC Annex 1, developed countries need to reduce GHG emissions by 25 to 40 percent below 1990 levels by 2020, and by 80 to 95 percent below 1990 levels by 2050. Such a stabilization pathway was said to provide a "reasonable chance" of averting warming beyond 2°C above preindustrial temperature.

[3] In each annual CSR report, we report on activities within the previous, completed fiscal year (through end of July). CDP's latest scoring was released in October 2016 and was based on FY15 data.

Table 23. CDP Performance History

CDP Year / Cisco Fiscal Year	CDP Score Disclosure / Performance	Carbon Disclosure Leadership Index	Carbon Performance Leadership Index	The A List
2005 / FY04 (CDP1)	Responded / †	–	–	–
2006 / FY05 (CDP2)	70 / †	–	–	–
2007 / FY06 (CDP3)	70 / †	–	–	–
2008 / FY07 (CDP4)	96 / †	√	–	–
2009 / FY08 (CDP5)	88 / †	√	–	–
2010 / FY09 (CDP6)	92 / A	√	√	–
2011 / FY10	98 / A	√	√	–
2012 / FY11	96 / B	√	–	–
2013 / FY12	100 / A	√	√	–
2014 / FY13	100 / A	√	√	–
2015 / FY14	100 / A	√	√	√
2016 / FY15	A‡	‡	‡	√

† Performance scoring began with CDP 2010.
‡ Starting with CDP 2016, a letter grade represents disclosure and performance.

Also in October 2016, Cisco was recognized as one of only three organizations nationwide as a "Green Power Partner of the Year" by the U.S. EPA. The Green Power Leadership Awards recognize Green Power Partners for their leadership, overall renewables strategy, and impact on the green power market. Cisco was one of only three organizations nationwide to be chosen as a Green Power Partner of the Year in 2016.

In March 2016, the U.S. EPA recognized Cisco for driving progress on climate change in its supply chain. The 2016 Climate Leadership Award for Supply Chain recognizes our achievements in Mode Shift, Pack It Green, eDelivery, the deployment of energy management digitization technologies, our active engagement of suppliers and partners to set emission reduction goals, and more. Cisco was recognized with Climate Leadership Awards for Supply Chain Leadership in 2013 and Goal Achievement in 2014.

In January 2016, Cisco won the 2015 Duke Energy Power Partner of the Year for our responsible energy use and the lasting value we have created for the organizations and communities we serve. Also in January 2016, we won the Golden Peacock Global Award for Corporate Social Responsibility from the Institute of Directors in India. Cisco was selected to receive this award based on our supply chain management, energy, water, and carbon management policies; our social innovations; our human rights performance; and other corporate social responsibility policies.

Cisco was presented with the International AEE Corporate Energy Management Award in September 2015 for promoting the practices and principles of energy engineering and energy management.

Cisco also ranks consistently high on the EPA's Top Partner Rankings, which highlight the annual green power use of leading Green Power Partners within the United States and across individual industry sectors. As of July 25, 2016, we were ranked third among the top 30 tech and telecommunications companies, fourth on the national top 100 list, and fourth on the Fortune 500 list.

For more information on the CSR awards Cisco received in 2015 and 2016, please visit our CSR website.

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Energy and Scope 1 and 2 GHG Emissions

Our Scope 2 emissions result almost exclusively from electricity use and represent over 94 percent of our Scope 1 and 2 emissions. As a result, identifying and implementing projects that reduce our electricity use is a major part of our energy and GHG reduction strategy. In FY16, our Scope 1 and 2 GHG emissions were 34 percent lower than our FY07 baseline on an absolute basis; this is solid progress against our plan to meet a 40 percent absolute reduction by FY17. See Table 24 for details.

To support standardization and benchmarking across companies, Cisco uses the GHG Protocol Corporate Accounting and Reporting Standard as the basis for our Scope 1 and 2 calculations. The EPA Center for Corporate Climate Leadership provides additional program guidance. All GHG emissions reported in this section are inclusive of the seven greenhouse gases covered by the GHG Protocol: CO_2, CH_4, N_2O, HFCs, PFCs, SF6, and NF3. PFCs, SF6, and NF3 are not applicable to our operations and we do not have biogenic carbon emissions.

Historical Scope 1 and 2 emissions data often vary from previous publicly reported values, either in the most recent CDP survey or our previous CSR report, because of updated reporting guidance, emissions factors, adjustments for acquisitions or divestitures, or correction of any errors found during review. In particular, all Scope 2 emissions reported this year have been adjusted to reflect the GHG Protocol's recently updated Scope 2 guidance.

Each year, an independent third party provides a limited assurance review of our GHG inventory, including the emissions relevant to our current GHG reduction goals, namely Scope 1 and 2 emission sources. This limited assurance review is provided in accordance with the ISO 14064-3 International Standard and is published as part of our CDP submittal, which is available online.

Indirect energy or electricity represents 94 percent of our energy consumption (Table 25). Through the projects described in this section we have effectively plateaued our level of energy consumption for the last several years. We do expect that our energy use will rise over time and as a result, we are working to reduce the carbon intensity of the electricity we use. Including renewable energy purchases, our global average contractual emissions factor is 71.5 percent below the world average (Table 26). We have achieved this by locating facilities where low-carbon grid electricity is available and buying renewable energy from utilities and green power providers. Our challenge will be to prevent our global average emissions factor from increasing as we grow in emerging markets such as India, where low-carbon and no-carbon electricity is less readily available.

Table 24. Summary of Scope 1 and 2 GHG Emissions

KPI	FY07 Baseline Year[1]	FY12	FY13	FY14	FY15	FY16	Comments
Total GHG emissions: Scope 1, metric tonne CO_2e	48,311	65,832	55,811	49,721	43,734	47,413	
Total GHG emissions: Scope 2 (location-based), metric tonne CO_2e	448,950	628,164	666,373	704,756	731,506	734,306	"Location-based" is used consistent with GHG Protocol and does not include renewable energy purchases.
Total GHG emissions: Scope 2 (market-based), metric tonne CO_2e	402,422	418,568	471,819	497,581	319,063	250,265	"Market-based" is used consistent with GHG Protocol and does include renewable energy purchases.
Scope 1 and 2 emissions (location-based) intensity, metric tonne CO_2e per million dollars of revenue	14.2	15.1	14.9	16.0	15.8	15.9	Location-based intensity is a measure of operational efficiency commonly used by many Cisco stakeholders.
Scope 2 emissions from primary data, percent	96.4%	97.7%	96.3%	97.1%	98.2%	98.1%	
Total GHG emissions: Scope 1 and 2 (market-based), metric tonne CO_2e	450,733	484,400	527,630	547,302	362,798	297,678	
Percent progress against reduction goal2 Goal: Reduce total Cisco Scope 1 and 2 GHG emissions worldwide by 40% absolute by FY17 (FY07 baseline)	base year	+7.0%	+16.6%	+20.9%	-19.5%	-34.0%	Results are based on 2015 revisions to Scope 2 GHG Protocol methodology. Cisco's new corporate GHG reduction goal was announced in February 2013.

1. In the interests of transparency, our reporting policy for environmental metrics is to show the baseline year, data for the past five completed years, the goal, and progress against the goal.
2. Scope 2 emissions for all years have been adjusted to reflect the GHG Protocol's new Scope 2 guidance. This new guidance was released in 2015 and has had material impacts on Cisco's current and prior-year Scope 2 figures.
3. See Cisco's current and previous CDP Water and Climate Responses at www.cdp.net.

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Table 25. Energy Totals

KPI	FY07 Baseline Year	FY12	FY13	FY14	FY15	FY16	Comments
Energy usage, GWh	1239	1750	1763	1791	1819	1825	
Indirect energy usage, GWh	1025	1465	1521	1573	1638	1638	Electricity is the only indirect energy source used by Cisco.
Direct energy usage, GWh	213	285	241	218	182	187	Direct energy consumption is the sum of Cisco's natural gas, propane, and diesel usage for heating and backup power generation and regular gasoline and diesel fuel used in Cisco's fleet.
Electricity usage, GWh	1025	1465	1521	1573	1638	1638	
Natural gas usage, GWh	135	144	111	103	81	94	
Diesel fuel usage, GWh	77	141	130	116	101	92	Diesel fuel is the sum of diesel used for heating and backup power generation as well as diesel fuel used in Cisco's fleet. Natural gas usage and diesel fuel usage subtracted from direct energy use provides propane usage.
Energy use per unit of revenue, GWh of energy consumed per billion dollars in revenue	35.5	38.0	36.3	38.0	37.1	37.1	Energy use per unit of revenue is one of our five new goals; we have reported historical values where available.
Percent progress against reduction goal	N/A	+5.8%	+1.0%	+5.8%	+3.8%	+3.9%	
Goal: Reduce total Cisco operational energy use per unit of revenue worldwide by 15 percent by FY17 (FY07 baseline)							

Table 26. Electricity Emissions Factors

KPI	FY07 Baseline Year	FY12	FY13	FY14	FY15	FY16	Comments
IEA world average emission factor, g CO_2e per kWh	507.1	502.3	528.7	536.0	536.0	536.0	Latest 2011 International Energy Agency (IEA) emission factor used for FY14–FY16. Prior years used latest IEA factors available at time of prior-year reporting.
Cisco global average electricity emission factor (gross), g CO_2e per kWh	437.9	428.7	438.0	448.0	446.6	448.2	
Cisco major data center average electricity emission factor (gross), g CO_2e per kWh	394.7	423.0	438.2	447.9	421.0	419.4	
Cisco global average electricity emission factor (market-based), g CO_2e per kWh	392.5	285.6	310.1	316.3	194.8	152.8	
Percent progress against reduction goal	−22.6%	−43.1%	−41.3%	−41.0%	−63.7%	−71.5%	
Goal: Reduce Cisco's FY17 net consumption-weighted electricity emission factor to half of the latest IEA world average emission factor publicly available before the end of FY17							

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feedback

Scope 1 and 2 GHG Emissions Reduction Strategy

Reducing our energy consumption and GHG emissions while enabling a diverse energy supply for our operations helps us stay competitive and benefits the environment. Our overall strategy to accomplish these objectives is to:

- Utilize our real estate space more efficiently through Cisco Connected Workplace.
- Increase the energy efficiency of our real estate operations.
- Generate low-carbon electricity from onsite systems.
- Purchase renewable energy.

Space Policy and Cisco Connected Workplace

Cisco Connected Workplace increases average occupancy and space utilization, making it a cost-effective GHG-reduction strategy. Cisco Connected Workplace decreases the number of buildings we need in our portfolio and increases the utilization rates of our remaining buildings. These layouts can accommodate approximately 30 percent more employees than a traditional office layout, substantially reducing space and land requirements and therefore reducing associated environmental impacts.

We require that all new buildings and renovation projects meet our Connected Workplace design specifications, which build in energy efficiency requirements, including standards for LED lighting and efficient air conditioning. By the end of FY16, approximately 45.8 percent of our total office space used the Connected Workplace design. We are in the process of applying this design to many of our buildings and expect to have reduced our facility footprint by more than one million square feet after the planned conversion is complete in FY18.

Building Efficiency: Strategy and Management

Cisco has a dedicated Global Energy Management and Sustainability (GEMS) team that leads all energy and sustainability initiatives across our 22 million square feet of global real estate. This team includes Cisco employees and contracted energy managers that have the following primary responsibilities:

- Manage Cisco's global annual utility budget and contracts.
- Identify and implement demand- and supply-side energy solutions such as energy efficiency upgrades and onsite renewable energy projects.
- Embed sustainability and efficiency criteria into our building, lab, and data center design standards.
- Explore and evaluate options for higher efficiency in all of Cisco's real estate projects.
- Engage employees to participate in resource conservation.

Currently, the GEMS team is managing a multimillion-dollar, multi-year EnergyOps program to implement energy efficiency and renewable energy projects across Cisco's real estate portfolio and help Cisco achieve its FY17 energy and GHG reduction goals. In FY16, this team enabled Cisco to avoid approximately 31 GWh of energy consumption and 12,434 metric tonne CO2e by investing US$14 million to implement 102 energy efficiency and renewable energy projects. We estimate that the energy efficiency and onsite renewable energy projects that we have implemented since FY12 have avoided approximately 192 million GWh of energy and avoided 87,000 metric tonne CO_2e for Cisco.

Key GRI G4 Indicators

GRI G4-EN6: Reduction of energy consumption.

GRI G4-EN19: Reduction of greenhouse gas (GHG) emissions.

GRI G4-EN31: Total environmental protection expenditures and investments by type.

Table 27 shows the energy savings associated with our GHG reduction projects implemented from FY12 to FY16. Here are a few examples of projects implemented globally in FY16 by the GEMS team:

- Updating lighting controls and installing LED technologies.
- Installing variable frequency drives, electric commutative (EC) fans, and premium-efficiency motors and pumps to improve efficiency of HVAC systems.
- Installing waterside economization technologies to improve free cooling utilization.
- Installing solar window film to reduce heat gain and improve occupant comfort.
- Applying coil optimization technologies that improve cooling system efficiency.
- Improving insulation of heating and cooling piping, valves, and pumps.
- Improving air-flow management and containment within our labs.
- Implementing building analytics services to better monitor, analyze, and fix HVAC-related issues that reduce efficiency.
- Continuing an employee engagement campaign to educate our employees about energy conservation and motivate them to conserve.

Table 27. Energy and GHG Emissions Reduction Projects

KPI	FY12	FY13	FY14	FY15	FY16
Number of projects implemented	26	103	90	148	102
Annual energy avoided, GWh/yr	15.6	76.5	27.2	41.4	31.2
Total estimated annual CO_2e savings, metric tonne CO_2e/yr	7,300	34,000	14,100	19,100	12,400

Building Efficiency: Labs

Over 60 percent of our operational electricity is used to power and cool equipment in our engineering and services labs. Increasing the energy efficiency of our labs is our largest opportunity to reduce Cisco's GHG emissions and energy costs. Our strategy to increase efficiency in our labs is to build and use high-density powered labs with built-in airflow management, and utilize virtualization where possible. To reduce lab energy consumption, we are focusing our efforts in the areas of design, utilization, and power management.

Design

Our new Global Lab Specification includes best practice efficiency standards for new, high-density labs and retrofits. For instance, we require airflow management in all our new labs, and highly recommend it for renovation projects. Airflow management is mandatory in the state of California according to Title 24, and we hold all our new projects to that standard globally. We also have implemented measures to improve airflow management and reduce the time and cost to deliver labs. We make improvements to existing airflow management, ventilation, cooling, and other building infrastructure systems through our EnergyOps projects or through projects initiated by the lab managers. Examples of projects completed include installing virtual containment (see Case Study: Data Center Virtual Containment), rebalancing airflow in HVAC systems, installing LED lights in labs, and installing variable frequency drives on major facilities equipment, including pumps, chillers, and computer-room air handler units.

Utilization

Lab employees are encouraged to routinely evaluate their lab operations and power off or remove unused equipment, especially before our annual shutdown. We also use virtual machines to increase server utilization. Our Cisco Technical Services (TS) labs across the world (which make up the majority of our labs) use a check-in, check-out system of

Automation Pods to allow lab employees to set up configurations virtually and then release equipment when they are finished with it. This system maximizes the amount of people who can use the equipment, minimizes the amount of equipment physically needed in each lab, and reduces the amount of energy used collectively by our TS labs. When a lab team moves to a different lab, the users perform a "green clean" exercise, which eliminates unused or old equipment, thereby saving space, power, and cooling in the move.

Case Study: Cisco Technical Services (TS) labs

TS labs have developed Automation PODs to help engineers quickly recreate customers' issues with high-demand equipment. Rather than assigning exclusive ownership to equipment for periods of time that can range from several days to weeks, our TS labs have established a new allocation model where engineers are assigned a pod for a much shorter duration of time, ranging from minutes to hours. With several pre-cabled interconnections among the set of devices available at each pod, this model provides greater flexibility in the number of possible topologies that can be established.

The pods are completely static—only code version and software configuration changes can be made. By keeping the physical topology of the equipment unchanged, complex customer issues can be recreated quickly, and configurations can be saved and automatically reapplied at any time. This ability to "snapshot" a configuration and auto-configure that snapshot is a key advantage of Automation Pods, enabling high utilization of shared equipment that can be rapidly set up. Now, an engineer can check out a pod and use it for a concise amount of time, snapshot the configuration, and then release the pod. At a later time, that engineer can quickly restore the configuration to its previous state by auto-configuring the saved snapshot.

Power Management

Powering down equipment saves money and energy spent on cooling and electricity. We install smart Power Distribution Units (PDUs) and Cisco Energy Manager software to monitor power and control the use of our lab equipment, powering it down whenever possible. In our San Jose engineering labs, our goal is to have 90 percent of our equipment connected to smart PDUs and Cisco Energy Manager by mid FY17. We plan to expand this goal to our Research Triangle Park, North Carolina engineering labs in FY17 as well. The Automation Pods mentioned in the case study above also have smart PDUs installed, coupled with Cisco Energy Manager to monitor power and control the use of the lab equipment, appropriately powering it down whenever possible. In FY16, sizeable savings were achieved by the use of smart PDUs at these TS labs; equipment was powered down 44 percent of the time during nights and weekends, and when the labs were not in use.

Building Efficiency: Data Centers

Cisco is working to make our data centers smarter, denser, and faster by consolidating our footprint and increasing their efficiency. Again, our strategy focuses on design, utilization, and power management.

Design

When we build new data centers, we build them to operate efficiently. Our newest data centers in Research Triangle Park, North Carolina, and Allen, Texas, were designed to achieve a Power Usage Effectiveness (PUE) of 1.41 and 1.35 at full load, respectively. Both centers have achieved a Leadership in Energy and Environmental Design (LEED)-NC Gold Certification (v2.2) from the U.S. Green Building Council by incorporating numerous sustainable design features. Case studies are available on the design and construction of the data center in Allen, Texas.

Case Study: Data Center Virtual Containment

Cisco has implemented a new energy-saving technology called virtual containment, which can be used in both labs and data centers. Virtual containment systems create "invisible" containment systems by balancing static pressure beneath raised floors. Specially designed tiles deliver "turbulent" air, which travels in multiple directions and is better able to break down thermal barriers. Virtual containment systems provide a flood of cold air in the cold aisles and enhanced directional airflow directly to the racks. Our first virtual containment system, which was installed in one of our San Jose labs in late FY16, is expected to reduce the lab's energy consumption by 324,000 kWh annually. We are currently identifying more locations where we can install this technology in FY17 and beyond.

\We also retrofit our data center spaces with more efficient technologies in order to reduce the amount of energy needed to operate them. Examples of efficiency retrofits we completed in FY16 include:

- Installing LED lights.
- Replacing electric-resistance heaters with more efficient heat pumps in our backup generators.
- Applying coil optimization technologies that improve cooling system efficiency.
- Retrofitting existing computer room air handler (CRAH) units with EC fans to allow more efficient variable fan speed.
- Installing mixed-mode waterside economizers to allow greater utilization of free cooling throughout the year.

We also conduct research and development on new technology for cooling high-powered racks. We plan to use the technology we develop in our own data centers where possible. Finally, Cisco is implementing Data Center Infrastructure Management (DCIM) tools, allowing us to "digitize" the data center. By doing so, we enable maximum resource allocation efficiency and can now bridge the gap between IT workloads and facilities, helping us to automatically collect IT and facility data and to better manage power, cooling, and physical space supply and demand. DCIM will also provide predictive analytics to identify capacity trends and operational conditions that require attention or preventative action. These tools help our teams make better decisions on whether we need to build new data centers.

Utilization

In our data centers, we work to balance loads in order to reduce demand on our power and cooling systems. We are also consolidating capacity by migrating loads into key locations. By consolidating our footprint, we will have fewer locations to support while reducing our square footage costs and our overall carbon footprint. Since April 2012, we have reduced our data center square footage by 20 percent.

Power Management

Similar to our labs, we install smart PDUs and Cisco Energy Manager software in our data centers to monitor power and control the use of equipment. Approximately half of our data centers have smart PDUs linked to Cisco Energy Manager; we are currently evaluating other areas in our data centers to install these solutions. Real-time monitoring, alerting, and reporting helps our capacity teams efficiently manage compute storage and network equipment.

Building Efficiency: Green Building

We have made significant progress toward integrating green building standards into our real estate since our first LEED-certified building was built in August 2009.

By the end of FY16, 29 Cisco facilities had achieved LEED certification, with 22 of them rated Gold or Platinum. These 29 certifications represent over 3.3 million square feet of LEED-certified space, which is more than 15 percent of Cisco's global real estate portfolio. We built the following sustainable design features into our (LEED)-NC Gold Certified data centers in Research Triangle Park, North Carolina, and Allen, Texas:

- Waterside and airside economization
- Variable frequency drives on major equipment, including pumps, chillers, and CRAH units
- Higher-voltage electrical service distribution of 480/277V; rack distribution of 415/230V
- Rooftop solar photovoltaic (PV)
- Heat recovery from data hall for office space use (in North Carolina)
- LED lighting
- Low-e glass windows
- Reclaimed water use in cooling towers (in North Carolina)
- Non-chemical water treatment system
- Water-efficient plumbing
- Occupancy sensors integrated with lighting and temperature controls
- Landfill diversion during construction

Onsite Power: Solar and Combined Heat and Power (CHP)

Our renewables strategy is to identify and evaluate potential projects in the following order: onsite power opportunities, green power contracts with utilities, offsite power opportunities, and Renewable Energy Certificates (RECs). We prefer to do onsite power projects where possible, but in many cases, offsite power is the better option due to factors such as location, budget, and space constraints. We rely heavily on RECs today to meet our renewable energy goal, but are actively engaging utilities and renewable energy providers to expand both our onsite and offsite renewable energy activities.

From FY12 through FY16, Cisco increased our total onsite solar PV capacity from 200 kW to 2.7 MW. Collectively these systems produce on average 1.7 million kWh of electricity, avoiding more than 1200 metric tonne CO_2e each year over the projected 25-year life of the systems. Our newest system, completed in FY15, is a 966-kW solar PV carport system at our Boxborough, Massachusetts, campus. We installed 5 arrays, making up 3168 solar panels. The output for this system is more than 359,000 kWh per year. Our other onsite solar systems are located at our data centers in Allen, Texas; RTP, North Carolina; and Bangalore, India.

We continue to maintain our 425 kW cogeneration system at our Bedfont Lakes campus in the U.K. Operating at peak efficiency, this system avoids approximately 850 metric tonne CO_2e per year and saves over US$47,000 in electricity costs annually.

We have also installed 9 solar hot water systems at our campus in Bangalore, India. These systems collectively produce on average 8500 liters of hot water every day, which satisfies approximately 67 percent of our hot water demands at the campus.

Purchasing Renewable Electricity

Purchasing electricity generated from renewable or other low-carbon sources is a big part of our GHG reduction strategy. Cisco's global renewable electricity purchases are summarized in Table 28. We have purchased renewable electricity primarily in the United States and Europe since FY06 by buying Renewable Energy Certificates (RECs) and entering into green power contracts with various electricity suppliers. In FY16, we purchased 1157 GWh of Green-e Certified RECs and green power in the U.S., 68 GWh of green power in Europe, and 84 GWh of international RECs (I-RECs) in India. The percent of electricity purchased from renewable energy sources for various regions is shown in Table 29.

Utility providers currently are enabling better access to renewable energy to customers. At Cisco, we take full advantage of these types of opportunities and also commit to taking simple measures that provide easy access to new renewable energy. Here are some of our accomplishments in FY16:

- Purchased 100 percent of the electricity used at our facilities via renewable energy sources in the United States and many European countries, including Denmark, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Spain, Switzerland, and the United Kingdom.
- Enrolled in Duke Energy's Green Rider program in North Carolina to purchase about 10 percent (21.5 MWh) of the electricity used at our RTP campus from two local solar projects.
- Enrolled in Austin Energy's Green Choice program to purchase 100 percent of the electricity used at our facilities in Austin, Texas, from local wind power systems.

To further our engagement with green power providers, Cisco works with both the WWF's Corporate Renewable Buyers' Principles and Rocky Mountain Institute's Business Renewables Center. Cisco also participates in the EPA's Green Power Partnership. In the July 2016 EPA green power rankings, Cisco was listed fourth among the National Top 100, fourth among Fortune 500 companies, and third in the Top 30 Tech and Telecommunications companies. This EPA ranking is updated quarterly.

Table 28. Renewable Energy

KPI	FY07 Baseline Year	FY12	FY13	FY14	FY15	FY16
Electricity from renewable sources, GWh	110	552	523	583	1170	1263
Percent progress against reduction goal	10.7%	37.7%	34.4%	37.1%	71.9%	77.1%
Goal: Use electricity generated from renewable sources for at least 25 percent of our electricity every year through FY17						

Table 29. Electricity Usage from Renewable Sources

Region	FY07 Baseline Year	FY12	FY13	FY14	FY15	FY16
EMEAR (Europe, Middle East, Africa, and Russia)	31.4%	61.8%	70.9%	63.9%	54.5%	44.3%
United States	9.5%	43.6%	39.1%	43.8%	96.9%	100.0%
Global	10.7%	37.7%	34.4%	37.1%	71.9%	77.1%

Scope 3

Scope 3 emissions cover a broad range of activities, including our supply chain, logistics, product use, and product end of life. Table 22 shows the public commitments we have made to reduce our Scope 3 emissions. Additional Scope 3 emissions information is available in our response to Question 14 of the 2016 CDP Investor Survey.

Scope 3 GHG Emissions Reduction Strategy

Our Scope 3 emissions reduction efforts are focused on reducing business-air-travel and supply chain operations emissions. Our overall strategy to accomplish these objectives is to:

- Use Cisco network technologies to reduce our air travel, supported by business processes, management practices, information systems, and standardized assessment methodologies.
- Collaborate with supply chain partners to optimize transport and materials in the manufacturing of our products, and increase energy efficiency in our Tier 1 virtual factories.

Scope 3 Supply Chain

Cisco shows its commitment to continual improvement in environmental impact disclosure and performance through our long-standing partnering with CDP and as a member of the CDP Supply Chain Program.

In FY15, in an effort to build upon the knowledge gained from our Scope 3 supply chain GHG emission inventory that was developed using the data reported through CDP, Cisco's Supply Chain GHG Reduction Program was launched to formalize and execute on a "top-down" approach to reducing GHG emissions. The mission of the program is to reduce Cisco's supply chain GHG emissions in order to reduce environmental impact while delivering additional supply chain benefits and customer satisfaction.

The Supply Chain GHG Reduction Program (Figure 19) provides the framework to:

- Prioritize opportunities based on supplier data collected via CDP.
- Embed emissions accounting and responsibilities in our processes and tools.
- Execute projects that deliver Scope 3 supply chain GHG emissions reductions.
- Report on GHG emissions avoidance and other benefits.

Our Story

The Details

Accelerating Global
Problem Solving

Summary of Our
Priorities

Governance

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Environment

GRI Index

Figure 19. Governing Model for Supply Chain GHG Reduction Program

Collect CDP Data
from Suppliers

Estimate Supply
Chain Carbon
Inventory

Material Analysis:
Establish Supply
Chain Emmisions
Reduction
Priorities

Align Priorities
to Supply Chain
Emissions Reduction
Program Roadmap
& Initiatives

Execute
Supply Chain
Emissions Reduction
Program Initiatives

Align &
Reward Suppliers

Within the overarching reduction program there are a number of separate initiatives; each focuses on a specific area of supply chain GHG emissions prioritized by the CDP-based Scope 3 carbon footprint. These are reported individually in their respective Scope 3 cradle-to-gate categories.

FY16 accomplishments of the Supply Chain GHG Reduction Program include:

- Continued refinement of a playbook for centralized management, functional ownership, and reporting of Scope 3 supply chain GHG emissions consistent with the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition); and the Corporate Value Chain (Scope 3) Accounting and Reporting Standard.
- Designed and launched the Responsible Supply Chain Design program, which seeks to identify and optimize global transport emissions impacts in our manufacturing partner network.
- Completed the pilot implementation of the Cisco Energy Manager™ monitoring system at one of our manufacturing partner's sites. With this project, Cisco explored how such data can inform energy-based decision making, drive energy efficiency, and reduce the carbon footprint associated with the production of our products.
- Developed our first long-term Scope 3 supply chain GHG emissions goal to avoid one million cumulative metric tonne CO_2e between FY12 and FY20 through strategies and projects implemented with our manufacturing partners, logistics service providers, and component suppliers.

Figure 20. Supply Chain GHG Reduction Program Roadmap
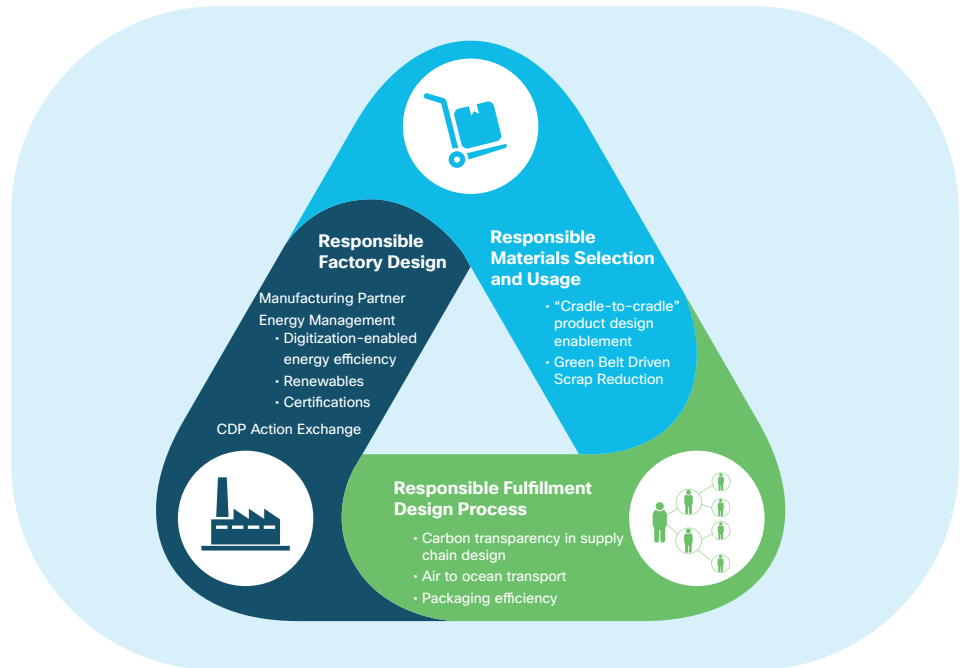
By the end of FY16, 92 percent of our key component suppliers had reported goals to reduce their GHG emissions to CDP, up from 89 percent in FY15. All of our key manufacturing partners and logistics providers have set such goals, and all are able to provide data on GHG emissions related to Cisco products.

Cisco's FY20 supply chain carbon goal is our first quantitative emissions goal to encompass Scope 3 supply chain activities that Cisco directs or influences, such as sourcing strategies, product fulfillment model designs, manufacturing-related energy use, and transport mode optimization executed by third parties. The goal and its respective target areas were developed through a study that supplemented product life-cycle assessments and CDP-based supplier emissions data. Benchmarking, supplier engagement, and internal case studies assisted in further prioritizing reduction areas and in establishing measurable reduction formulas to report current and estimated future targeted action. Table 30 shows our progress toward our reduction goal as of the end of FY16.

Table 30. Progress Toward 2020 Scope 3 Supply Chain GHG Reduction Goal					
KPI	FY12 Baseline Year*	FY13*	FY14*	FY15**	FY16***
GHG emissions avoided from Scope 3 supply chain GHG emissions, metric tonne CO_2e	5358	62,368	136,715	247,272	391,399
Percent progress against reduction goal Goal: Avoid one million metric tonne CO_2e by FY20	0.5%	6.2%	13.7%	24.7%	39.1%

* External verification for limited assurance against the ISO 14064-3: Greenhouse gases – Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions planned for Q1FY18.
** Externally verified for limited assurance against the ISO 14064-3: Greenhouse gases – Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions in Q1FY16.
*** Externally verified for limited assurance against the ISO 14064-3: Greenhouse gases – Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions in Q1FY17.

For more information on the Supply Chain GHG Reduction Program and a detailed breakdown of emissions savings by GHG Protocol category and initiative, go to the Scope 3 Cradle-to-Gate Emissions, Scope 3 Transportation & Distribution and Scope 3 Purchased Goods and Services sections in this chapter.

Challenges to reducing GHG emissions on the scale of our outsourced supply chain are complex. Obtaining Cisco-specific emissions data to both prioritize new initiatives and manage existing ones continues to be one of our biggest challenges despite continued investment in this area. Additionally, navigating the extent to which emissions data influences supply chain business decision making continues to evolve. Remarkable parallels to risk and quality management have been confirmed, and are expected to align to our future progress.

Case Study: Energy Reduction Pilot

From manufacturing to logistics, the connected supply chain is linked by many pieces of equipment and vehicles that are constantly in motion. The energy reduction pilot program Cisco launched in FY15 is modeling the economic and environmental benefits of web-enabled connectivity in a factory setting. With the installation of thousands of sensors in a manufacturing partner's plant in Malaysia to monitor energy consumption, Cisco began exploring how big data can inform decision making and drive energy efficiency to reduce the carbon footprint associated with the production of our products. Access to these deep insights enhances agility in our manufacturing and enables us to be much more efficient and cost-effective in how we use and manage resources.

The transformation to a connected, outsourced supply chain is a journey, and Cisco is seeing promising initial results. The benefits go beyond immediate economic and environmental IoT benefits: The big win is in understanding and acting on the story this data is telling us. With the success of this pilot, we are looking to expand the program globally in FY17 by sharing best practices and establishing goals for technological adoption. As we continue to navigate the digital journey in our own supply chain, Cisco's progress is not only a step forward in embracing a holistic sustainability mindset but also a roadmap for our customers that are looking to solve these same challenges.

Key GRI G4 Indicators

GRI G4-EN30: Significant environmental impacts of transporting products and other goods and materials for the organization's operations, and transporting members of the workforce.

Scope 3 Business Air Travel

Travel reduction to meet our first five-year goal was aided by budget reductions due to the economic downturn beginning in late 2008 (Table 31). Since then, Cisco has been entering new markets that require developing new and expanded business relationships, which has caused an increase in business travel. In FY17, we need to elevate the discussion so we can better use our remote collaboration technologies for these new opportunities.

We experienced our first reductions in air-travel emissions, measured on an annual basis, starting in FY08. As the economy recovered from the 2008–2009 downturn and our travel increased, we still met our FY12 reduction goal.

We do not apply different emissions factors across the timeframe in which we report because our focus is to reduce travel through the use of ICT. If we varied the emissions factors, other aspects, such as the effect of a modernizing air fleet, could create the appearance of reduced travel.

To date, we have not adopted different emissions factors for different classes of air service, for two reasons. First, our focus is on using remote collaboration technologies to avoid travel. Reporting reduced emissions because a larger percentage of employees flew economy class this year compared with last year moves the focus away from the goal of travel substitution. Second, we are unsure how to characterize emissions factors for different classes of air travel for a single company. Even though Cisco is a large company, it is likely that scheduled air service has not been changed by our reduction in air travel, even reductions measured in hundreds of thousands of flights per year. Of course, as more companies adopt collaborative network technologies, the number of plane flights could decrease. Currently, we have chosen not to complicate what is inherently a conceptual reduction by not considering the class of air travel in selecting emissions factors.

Each year, an independent third party provides a limited-assurance review of both our Scope 3 air-travel emissions data and our calculations. In our FY13 CSR report, in response to a comment during the external assurance process, we updated the emissions factors used in the calculation to the latest DEFRA emissions factors and applied them to all years reported, including our base year.

Reducing GHG Emissions from Scope 3 Business Air Travel

To replace physical travel and meet our business-air-travel reduction goal, we rely on Cisco remote collaboration technologies, including Cisco TelePresence® videoconferencing, Cisco WebEx® desktop conferencing, Cisco Unified Communications, and Cisco Jabber® collaboration software.

Table 31. Scope 3 Air-Travel Greenhouse Gas Emissions

KPI	FY07 Baseline Year	FY12	FY13	FY14	FY15	FY16	Comments
Total Scope 3 air-travel GHG emissions, metric tonne CO_2e	199,104	125,605	139,530	157,794	191,573	**	All emissions recalculated, starting with our 2013 CSR report, using DEFRA 2014 emissions factors (Ricardo-AEA/Carbon Smart); radiative forcing not included.
Percent Scope 3 air-travel emissions from primary data	98%	98%	98%	98%	98%	**	Primary air-travel data adjusted to represent 100% of Cisco business air travel.
Percent progress against reduction goal Goal: Reduce total Cisco business-air-travel Scope 3 emissions worldwide by 40% absolute by FY17 (FY07 baseline)	base year	–37%	–30%	–21%	–4%*	**	FY12 was the goal year for our first 5-year goal of a 25% reduction.

* If air travel from the approximately 5000-employee NDS acquisition that closed at the end of our FY12 is excluded, the FY15 value is –7%.
** To be updated later once data is available, no later than January 31, 2017.

Our rollout of Cisco remote collaboration technologies across the company continues, but the rate of adoption has matured. Therefore, we are no longer trending adoption metrics that we have included in our previous CSR reports. These technologies include:

- Immersive Cisco TelePresence videoconferencing: We have more than 1500 Cisco TelePresence rooms deployed in our offices worldwide.
- Personal Cisco TelePresence videoconferencing: Hardware-based (for example, DX80 and MX300) personal video totals more than 8000 units. Software-based (Cisco Jabber) videoconferencing is available to all Cisco employees using Cisco assigned laptops.
- Cisco Connected Workplace videoconferencing: Cisco Connected Workplace is Cisco's shared office space solution. Many small, flexible-use rooms for one to two people have smaller videoconferencing units installed, totaling more than 400 units worldwide.
- Cisco WebEx desktop conferencing: WebEx is available to all Cisco employees using Cisco assigned laptops. Cisco TelePresence and Cisco WebEx now interoperate. For example, WebEx users can see and hear—and can be seen and heard in—Cisco TelePresence rooms, expanding the types of remote collaboration enabled by Cisco technology.

Use of WebEx is pervasive at Cisco. Essentially all Cisco employees using Cisco assigned laptops have a WebEx account. Hosting and attending WebEx meetings with other employees or with our customers, our partners, and other stakeholders is as common as using the telephone.

We use Cisco TelePresence, Cisco Jabber, and Cisco WebEx for virtual company meetings, executive operational reviews, and department "all hands" meetings, thereby expanding the types of interactions that can be conducted remotely. Additionally, about one-third of our annual global ISO 14001 site audits are performed using Cisco remote collaboration solutions. This real-world experience guides product development and helps with the rollout of supporting management practices.

The net effect of our adoption of collaborative technologies has been a reduction in travel, carbon emissions, and travel costs, plus an increase in employee productivity and work-life balance. At the same time, we maintained and grew the customer relationships we need for continued revenue growth.

However, replacing business air travel with remote collaboration requires more than just installing technology. We also had to adapt business processes, management practices, and culture to take full advantage of these network technologies. As experience with remote collaboration technologies increased, both within Cisco and among our customers and partners, remote interactions have progressed from being the exception of a few years ago to now being a standard practice within Cisco. We anticipate they will be expected behavior worldwide in the near future.

Scope 3 Business Air Travel: Avoided GHG Emissions
The Transport Substitution chapter of the draft GHG Protocol ICT Sector Supplement distinguishes between emissions reductions and avoided emissions. Emissions reductions are actual, measured, absolute changes to emissions. Avoided emissions project what might have happened if an action hadn't been done. Cisco focuses on emissions reductions, but we receive inquiries about avoided emissions, so a brief discussion is provided.

It is difficult to project with certainty what might have happened to Cisco air-travel emissions without the widespread adoption of our collaborative technologies. To estimate avoided emissions, Cisco has compared changes in our actual air-travel emissions against changes in revenue and headcount. Revenue and headcount are two factors thought to correlate with changes to the amount of air travel. Our data indicate that, from FY04 to FY06 and before the acquisition of WebEx and the introduction of Cisco TelePresence, changes to GHG emissions were roughly proportional to changes in revenue or headcount. The revenue side of this observation is consistent with the fact that about two-thirds of Cisco's air-travel emissions were originally from our sales and service organizations, both of which are "high-touch" business functions. The more products sold, the more customers Cisco serves, and the greater the potential for business travel. In addition, in the past, if someone was hired, it was likely she or he would become a traveler.

Scope 3 Employee Commuting
Flexible Work Practices
Cisco makes our collaboration tools (Cisco TelePresence, Cisco WebEx, and Cisco Jabber) widely available to our employees, who often use them for their daily business activities. Several additional Cisco network technologies also permit flexible working environments (e.g., working from home or remotely), including Cisco Virtual Office and Cisco OfficeExtend. Cisco Virtual Office provides wired and wireless voice, data, and video service for an employee's home or for small commercial offices, using Cisco ISR integrated services routers and IP

phones. Cisco OfficeExtend is an even simpler solution—a remote wireless access point in the employee's home that provides the same highly secure communications to a wireless local-area network (WLAN) controller at the connected Cisco campus.

Over 25,000 Cisco employees use Cisco Virtual Office to effectively work remotely. Many employees also use Cisco's AnyConnect Secure Mobility Client to connect to our enterprise network, enabling them to work from any device, at any time, in any location. Although telecommuting or working remotely does not directly reduce air travel, it helps our employees become more proficient in using collaborative technologies, especially important for a 24/7 global company. Our employees can then use these skills to reduce air travel when possible.

Transportation Services

We provide a variety of transportation services to our employees and contractors to help them commute to and from work, move around our campus locations and adjoining communities, and receive vehicle services while parked. These services yield benefits to the employees in terms of time and cost of commute, to Cisco in terms of employee productivity and satisfaction, and to the environment with more carbon-efficient modes of transportation and fewer vehicle miles.

Cisco encourages the use of mass transit by providing employees with information about public transportation options in their area, incentive programs that lower the cost of mass transit, and shuttle services at 7 of our locations in the U.S., India, and China. We also offer transit shuttle services at 9 of our locations, making it easier for mass transit commuters to get from stations to our locations. In FY16, over 750 employees took advantage of our mass transit incentive program, and our commuter and transit shuttle services provided over 850,000 rides either to or from work.

In FY16, we launched a carpooling program for our San Jose and San Francisco locations. Since the program's launch, over 3000 users have signed up to participate either as riders or drivers. Our employees have avoided driving over 400,000 miles, reducing carbon emissions from commuting by over 145 metric tonne CO_2.

We also provide a number of onsite services for employee vehicles on our campuses, including electric vehicle (EV) charging, refueling, car washing, and oil changes. These services reduce employee commuting time and stress. We now offer electric vehicle charging at 18 locations across the U.S. and Europe, saving over 700 metric tonne CO_2 in FY16.[4] By the end of FY16, we had over 200 stations with more than 350 charging ports available for use by Cisco employees and guests in the following locations:

• San Jose, California	• Diegem, Belgium
• Pleasanton, California	• Kortrijk, Belgium
• Research Triangle Park, North Carolina	• Lysaker, Norway
• Lawrenceville, Georgia	• Amsterdam, Netherlands
• Richardson, Texas	• Vimercate, Italy
• Boxborough, Massachusetts	• Madrid, Spain
• Malvern, Pennsylvania	• Stockholm, Sweden
• Bedfont Lakes, United Kingdom	• Eschborn, Germany
• Green Park, United Kingdom	• Ecublens, Switzerland

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[4] Cisco includes the electricity used to charge employee EVs in our Scope 2 emissions.

Scope 3 Life Cycle Emissions

Life-cycle assessment (LCA) techniques (specifically carbon footprinting) help us understand where the largest impact of our products lies so we can focus our attention on the areas where we can make the most difference.

We use the five product life cycle stages defined by the GHG Protocol in its 2011 Product Life Cycle Accounting and Reporting Standard, which itself is based on the ISO 14040 series standards:

- Material acquisition and pre-processing
- Production
- Distribution and storage
- Use
- End of life

We are committed to shaping our industry in this area through two avenues:

- Internal research to develop our capabilities
- Industry engagement

Our LCA work has focused on our most common products, including IP phones, standalone switches, and routers, which cover a substantial portion of our product line. We have also assessed Cisco TelePresence videoconferencing to determine the net benefit from using ICT as a substitute for travel. For many of our product families, we have determined that the use phase accounts for between 80 and 90 percent[5] of the carbon life cycle impact as shown in Figure 21.

Because power is higher relative to weight, the use phase can account for more than 90 percent of life cycle emissions for larger core routers and switches. For lower-power devices—like endpoint devices that might have a shorter lifetime, that can be turned off, and whose use is compatible with idle or standby modes—the percentage of emissions from the use phase is lower but still the largest contributor.

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[5] Global emissions factors can vary by a factor of three, which impacts use-phase emissions. This analysis used the global average electricity emissions factor. Larger grid emissions factors increase the percentage of overall emissions in the use phase.

Figure 21. Breakdown of GHG Emissions by Life Cycle Phase for Select Product Categories

IP Phone

Transport **0.2%** End of Life **-0.2%**
Manufacturing **19.5%**
Use **80.5%**

Chassis-Based Switch

Transport **1.0%** End of Life **-0.4%**
Manufacturing **6.0%**
Use **93.4%**

Small Access Router

Transport **1.45%** End of Life **-0.2%**
Manufacturing **5.95%**
Use **92.8%**

Large Chassis Router

Transport **3.2%** End of Life **-0.2%**
Manufacturing **4.0%**
Use **93%**

Mid-Level Ethernet Switch

Transport **3%** End of Life **-0.5%**
Manufacturing **8.5%**
Use **89%**
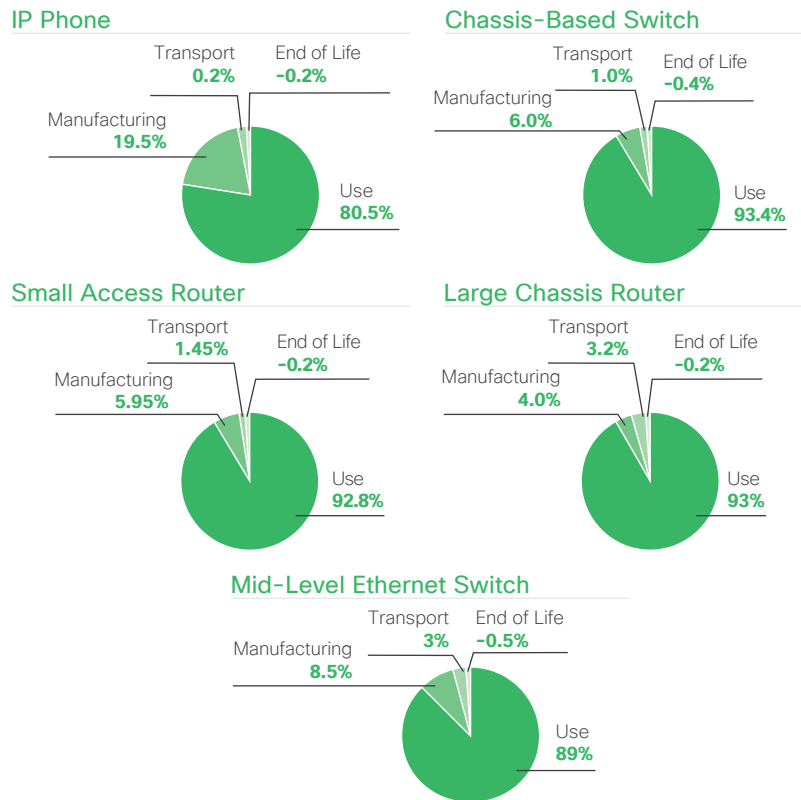
Note: Negative EOL values indicate material credits associated with recycling and reuse of materials.

In FY12, we improved our capability to perform LCAs, developing tools to automate the analysis of product materials and standardizing life cycle models. Since then, we have focused on specific areas within our LCA analysis to further improve data availability and accuracy in the materials and manufacturing phases. Figure 22 shows the manufacturing phase carbon footprint of a Cisco IP phone. Collecting accurate data to support LCA modeling is most difficult for the largest impact areas identified in the manufacturing phase: integrated circuits, bare printed circuit boards, displays, and assembly and test processes. To address this challenge, we are working with industry peers and suppliers to collect more data and improve calculations.

Figure 22. IP Phone Manufacturing Phase Impacts
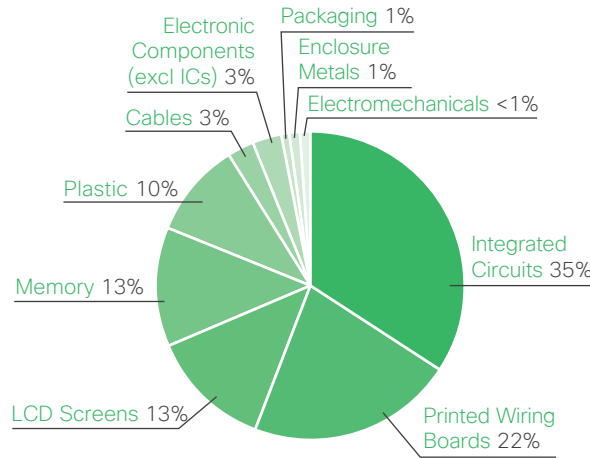
We participate in several ICT industry efforts working toward a common approach to assessing environmental impacts of products, including:

- GHG Protocol Scope 3, Product Accounting and Reporting, and ICT Sector Supplement standards. Over the last three years, Cisco has contributed to the development of these standards, which form the basis for accurate accounting.
- European Telecommunications Standards Institute (ETSI) LCA of telecommunication equipment and service, DTS/EE-00014.
- International Electronics Manufacturers Initiative (iNEMI) Eco-Impact Evaluator Project (completed in FY13) to develop a simplified LCA tool for ICT products. (Cisco was co-editor.)
- High-Density Packaging Users Group (HDPUG) PWB Environmental Life Cycle Analysis project focusing on developing a model for the manufacturing of bare circuit boards.
- Sponsorship of Stanford University civil engineering annual class projects.

These efforts build and share knowledge, apply life cycle concepts to our product design and operations, build engagement with academia, and support the ICT sector in working toward practical and useful methodologies to assess the GHG emissions impact of our products.

Scope 3 Cradle-to-Gate Emissions

Cisco recognizes its responsibility to help reduce GHG emissions, and has done so with initiatives focusing on Cisco's own facilities, employee business travel, and our supply chain.

As in previous years, CDP continues to serve as a foundation for supplier engagement, emissions reporting, prioritization, and goal setting. CDP data is collected from both product-level suppliers ("supply chain") and operational-level suppliers ("corporate procurement"). For more information about our supplier engagement process and reporting performance, refer to:

- FY16 letter requesting our suppliers to report to CDP. (See Appendix.)
- FY16 CDP supplier reporting status shown in Table 32.

Table 32. Supply Chain Partners Reporting to CDP*

KPI	FY12	FY13	FY14	FY15	FY16	Comments
Contract manufacturing, by percent of spend	100%	100%	100%	100%	**%**	Tier 1 partner. Goal: 100%
Approved Vendor List (AVL) components, by percent of spend	80%	86%	87%	87%	**%**	Tier 2 partner. Goal: 80%
Global transportation, by percent of spend	93%	98%	95%	96%	**%**	Tier 1 partner. Goal: 90%

* Cisco's top-level metric for supply chain reporting to CDP is based on total Cisco spend within each
   supplier category.
** To be updated later once data is available, no later than January 31, 2017.

In previous years, Cisco reported goals of 100 percent of key suppliers reporting annual
GHG emissions to CDP, and 75 percent of key suppliers setting GHG reduction goals. Key
suppliers are considered annually based on their business relationship with Cisco. Both CDP
and Cisco recognized this as a leading practice and very ambitious goal. In FY16, we met
our goal of 100 percent of key[6] suppliers reporting to CDP in both contract manufacturing
and logistics service provider categories. Ninety-two percent of our key component suppliers
are now reporting to CDP. We view this as a major accomplishment to advance supply chain
transparency and drive carbon emission reductions. Challenges cited by suppliers that
have yet to report to CDP included merger and acquisitions activity, lack of resources and
expertise, and lack of executive sponsorship for public GHG reporting. Cisco will continue its
commitment to engaging our suppliers in reporting and reducing their GHG emissions.

Detailed accounts of our Scope 3 carbon inventory results can be found in response to
Questions 14 of our 2016 CDP Climate Change response.

As described in the Scope 3 Supply Chain section, Cisco's Supply Chain GHG Reduction
Program seeks to address our Scope 3 carbon inventory by reducing Cisco's supply chain
GHG emissions. In FY16, three "sub-programs" contributed to the results of the Supply Chain
GHG Reduction Program, executing on multiple strategies set forth by the program. Their
categorization against the GHG Protocol and links to their FY16 performance are as follows:

- Pack It Green 2.0: Scope 3 Transportation & Distribution and Scope 3 Purchased
  Goods and Services
- Mode Shift: Scope 3 Transportation & Distribution
- Responsible Supply Chain Design: Scope 3 Transportation & Distribution

The combined results from these programs can be found in Table 30.

Scope 3 Transportation and Distribution
Mode Shift, Pack It Green 2.0, and Responsible Supply Chain Design have led to
transportation emissions reductions.

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[6] "Key" suppliers are suppliers with whom Cisco has direct relationships and a reasonable ability to
   influence behavior.
[7] As calculated using U.K. DEFRA factor for air freight, including a multiplier of 1.9 to account for
   radiative forcing.

The Mode Shift initiative optimizes our global, virtual factory-to-factory freight movement of goods, specifically shifting transportation modes from air to ocean whenever practical, while still meeting customer expectations on lead time. In FY16 Mode Shift avoided 128,239 cumulative metric tonne[7] of CO_2e emissions.

In FY16, we launched the Responsible Supply Chain Design initiative aimed at creating a "responsibly designed" supply chain network in a way that the net movement of a product during its life cycle—starting with the component shipments from suppliers and continuing through the finished product shipments to end customers—is optimized from a logistics carbon emissions standpoint.

As a key step to support this initiative, we integrated carbon emissions into the network design and sourcing processes by enabling the system as well as process capabilities. To achieve this, Cisco embedded the carbon emissions calculations capability in the "Network Design" modeling tools and incorporated carbon emissions reporting into the network design and sourcing process workflows and deliverables, including playbooks, gate reviews, and executive presentations.

By enabling these capabilities, each time a new contract manufacturing network design sourcing decision is considered, the modeling tools provide executive-level decision makers with the logistics carbon emissions impact, which is then considered beside traditional supply chain variables like cost, resiliency, and lead time.

In FY16, around 8456 metric tonne CO2e were avoided through the Responsible Supply Chain Design initiative.

Scope 3 Purchased Goods and Services
Pack It Green 2.0 was founded on the principles of material and waste reduction in the interest of customer satisfaction. In a fully outsourced model, the emissions reductions resulting from these activities fall under Scope 3 Purchased Goods and Services.

Scope 3 Product Use Phase (Product Energy Efficiency)
As global energy use has risen, so have GHG emissions. While the ICT industry accounts for about two percent of the world's GHG emissions from energy, we expect ICT energy consumption to grow faster than GDP.[8] Product energy efficiency is an important focus for Cisco because of the number and type of energy-consuming products that we sell each year. While some of these products are replacements, others are additive, contributing to the growth in emissions from ICT equipment. Throughout their life cycle, our products consume the largest proportion of energy, and release the most GHG emissions, during the use phase. Energy efficiency has emerged as a key design criterion in our products in light of our growing awareness of climate change issues.

Customers and regulators have rising expectations of products to minimize energy costs and GHG emissions. Every year the number of inquiries related to environmental sustainability we receive from analysts, customers, shareholders, and non-governmental organizations (NGOs) rises. Cisco tracks applicable energy-use regulations and certification programs to review compliance needs as requested by our customers. For these reasons, improving product energy efficiency represents more than just a regulatory requirement for Cisco—it is a significant opportunity for us to help customers save on energy costs, reduce global energy demand, and lower GHG emissions, in addition to making our products more competitive.

Key GRI G4 Indicators

GRI G4-EN7: Reductions in energy requirements of products and services.

GRI G4-EN27: Extent of impact mitigation of environmental impacts of products and services.

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[8] Jonathan Koomey, Growth in Data Center Electricity Use 2005 to 2010, Analytics Press, August 2011, www.analyticspress.com/datacenters.html; and Gartner 2007, http://www.gartner.com/newsroom/id/503867.

Advocacy and Standards Development

Cisco engages with governments, regulatory agencies, and standards-setting bodies in key jurisdictions to monitor and influence the development of emerging product energy-efficiency requirements and standards, particularly around climate change. We believe that these activities, when done properly, bring clarity and consistency to the global marketplace and create predictable requirements that enable companies to focus on the environmental issues that are most relevant to their business. Specifically, we believe that product energy-efficiency standards can promote innovation by being performance based; by taking into account product functionality; and by relying on objective criteria, real-world data, and system-level efficiency.

Since 2008, we have been working closely with the EPA to define ENERGY STAR standards for relevant products. In 2013 the EPA released the Version 1.0 ENERGY STAR specification for small network equipment; its objective was to differentiate more efficient products across six types of networking equipment. We are qualifying in-scope products with this and other existing ENERGY STAR specification programs. To date, this includes set-top boxes,[9] enterprise servers, IP phones, and small network equipment (SNE). We are engaged in the development of an ENERGY STAR specification for large network equipment (LNE), which will cover a significant portion of our routing and switching products. A list of Cisco ENERGY STAR-qualified products is available on the ENERGY STAR program website.

Although ENERGY STAR is a useful means to promote product energy efficiency improvements, we believe that an approach that addresses product energy efficiency across an entire product system is a better way to measure and promote energy efficiency. ENERGY STAR standards generally apply to a single point of power supply conversion at the front end of the total system. In contrast, the Alliance for Telecommunications Industry Solutions (ATIS) Telecommunications Energy Efficiency Ratio (TEER) measurement method covers all power conversion and power distribution from the front end of the system to the data wire plug, including application-specific integrated circuits (ASICs). Table 33 highlights several illustrative examples of energy efficiency initiatives and organizations that Cisco participates in.

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[9] As of the end of FY15 Cisco no longer sells set-top boxes. This division and associated products were part of a divestiture.

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Table 33. Energy-Efficiency-Related Initiatives and Organizations

Organization	Area/Issue of Engagement
European Commission Joint Research Center, ICT Codes of Conduct	Cisco is a signatory and active member of the EU Code of Conduct on Energy Consumption of Broadband Communication Equipment. The goal of this effort is to reduce energy consumption of broadband communication equipment without hampering the fast technological developments and the service provided.
Alliance for Telecommunications Industry Solutions (ATIS)	Cisco is an active member of ATIS and engages with other member organizations to develop standards relevant to the telecommunications industry. In 2010, Cisco took a lead role in the development of the ATIS Telecommunications Energy Efficiency Ratio (TEER) standard for the measurement of product energy efficiency.
Minimum Energy Performance Standards (MEPS) (Australia and Korea)	Cisco supports efforts that focus on the development of energy performance requirements and limit the maximum power consumption of product standby modes.
European Telecommunications Standards Institute (ETSI)	Cisco is engaged with ETSI in the development of standards for energy efficiency.
Electronic Industry Citizenship Coalition (EICC)	Cisco is a founding member of the EICC, sits on the EICC board, and contributes to the development and revision of the EICC Code of Conduct.
The Green Grid (TGG)	The Green Grid is a global consortium of companies dedicated to resource efficiency in business computing ecosystems. Cisco participates on a broad range of issue topics, including data center management, liquid cooling technology, power usage effectiveness (PUE), water usage effectiveness (WUE), and energy usage effectiveness (EUE).
International Telecommunication Union (ITU) (worldwide)	Cisco is a major contributor to the ITU-T SG5 Lead Study Group on ICT and climate change. Cisco presented to ITU the ATIS TEER methodology, which was then incorporated into Measure L's energy-efficiency metrics and measurement for telecommunications equipment, creating the opportunity for a single worldwide metric.
Ministry of Economy, Trade and Industry (METI) (Japan)	Cisco supports efforts that focus on the development of a minimum energy efficiency requirement for networking router and switch product groups.
U.S. Department of Energy (DOE), Environmental Protection Agency (EPA)	Cisco has been actively working with the EPA for more than seven years to define ENERGY STAR standards for networking equipment: SNE, LNE, telephony equipment, and servers. Cisco also has actively worked with Lawrence Berkeley National Laboratory, the EPA/DOE technical arm, Navigant, the National Resources Defense Council (NRDC), and Ecova 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.
Telecom Regulatory Authority of India (TRAI)	TRAI is an Indian government regulatory organization for the telecommunications industry. In 2011 it released recommendations and guidance on energy efficiency metrics and measurement. Cisco provided extensive document reviews and recommendations on how to align with existing and widely adopted ATIS/ANCI and ITU-R relevant documents.

Improving Product Energy Efficiency

To achieve the projected—and required—product performance specifications for the next 5 to 10 years, Cisco products will require an architecture that has "energy scalability"—meaning it can provide energy-efficient service for variable traffic types, traffic demands, customer usage, and installs. In order to achieve this, Cisco has four primary product energy efficiency engineering initiatives underway. These are:

- Power initiative: We are improving general product efficiency, from plug to port, with a goal to achieve a 6- to 7-percent increase in total system power efficiency by 2020. As an example, in 2015 a switch using 25 to 30 kW has a total system power efficiency of 82 percent; by 2020 we want system power efficiency to be in the 88- to 90-percent range for a switch using 100 kW. Based on current designs we are expecting to reach this goal for products to be shipped in CY19. We have since increased our engineering goal to a total system power efficiency of 92 percent by CY20.
- Thermal initiative: We are exploring alternative methods of cooling (air flow, liquid, and refrigerant cooling) to reduce operating temperatures and facility cooling requirements.
- High-speed interconnects initiative: High-speed silicon-to-silicon or optics-to-silicon interconnects are an integral part of high-speed data and the control plane. These interconnects consume a significant portion of the total system power. We are exploring ways to increase the interconnect speed, driving the gigabits per second per watt consumed (Gbps/W) metric as high as possible to increase performance and reduce energy use.
- Customer facilities initiative: We are working with customers to reduce the amount of energy required to operate their IT facilities by using power solutions that increase the efficiency of overhead power, avoid step-down transformers, and provide integrated cooling strategies.

Figure 23: Total System Power Efficiency* (Percent Improvement)
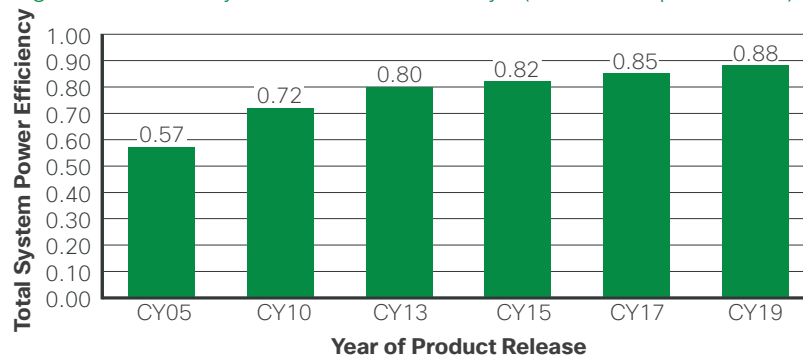
Figure 24. Example of Board-Level Energy Consumption by Function
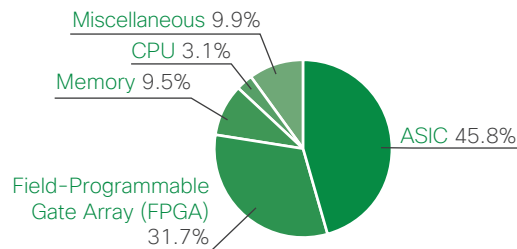
When we evaluate product energy efficiency, we consider the power performance of the entire system. We measure the efficiency loss as electricity passes through each component (or function). This can include, for example, the external power supply, front-end line card, point of load, and ASICs. Over the past 10 years we have aggressively reduced our product energy consumption while increasing performance. For example, in our products with release dates from CY05 to CY17, we have increased circuit card power from 500W to 1350W and gone from 8 kW to 28 kW chassis using conventional fan tray cooling methods. These improvements have resulted in a total available power increase of 2.5 times while increasing our total system power efficiency by 47 percent over the same period (Figure 23).

We are projecting a 4.25-percent increase in total system power efficiency from 2017 products to products available in 2019. Our vision is to develop common power designs and specifications across Cisco technologies to continue the improvement of system power efficiency with each product generation.

As part of this system power efficiency approach, we are working to reduce energy demand for ASIC chips found in most Cisco products. ASICs are designed for a particular application in a particular product and account for a significant percentage of board-level energy consumption (Figure 24). For lower-cost, higher-volume products, we use off-the-shelf OEM-designed ASIC chips. For our enterprise and data center switches, Cisco Nexus® and Cisco Catalyst® switches, we design our own ASIC chips.

We are developing energy savings approaches for our ASIC chips that include:

- Feature-based energy management: ASIC chips are often developed to be rich in features and capability so they can be used in many products. We are developing new ASIC chips that are configurable to the specific features within the product. As an example, such a chip would not draw the power needed to manage 48 ports when it is placed in a 24-port switch.
- Voltage scaling: To compensate for the performance variation inherent in manufactured products, we are scaling, or adjusting, the energy consumed by ASICs to achieve performance standards and minimize energy consumption. We are adjusting the ASIC chip energy requirements (up and down) to compensate for any manufacturing variation in performance.
- Adaptive power management: This enables an ASIC to actively manage the energy it requires based on the load of work it is processing.

Our ASIC power reduction techniques have increased the cumulative Gbps/W performance of our products by 71 percent from 2005 to 2015 (Figure 25). We are projecting an additional 63-percent cumulative Gbps/W performance increase from 2015 to 2018.

In 2009, Cisco was co-editor for several standards, including ATIS TEER standards and Energy Efficiency of Telecommunications Equipment: Methodology for Measurement and Reporting standards, and specifically those regarding:

- Servers and server blades (ATIS-0600015.01.2009)
- Transport and network systems (ATIS-0600015.02.2009)
- Router and Ethernet switch products (ATIS-0600015.03.2009)

These ATIS TEER standards created a framework for measuring product energy usage that takes into account product functionality and uses real-world loads to determine energy efficiency across the entire product. This is important because it allows companies like Cisco to compare energy-usage design improvements from product generation to generation, and it helps consumers make more informed purchasing decisions.

These ATIS TEER standards have been incorporated into the Network Equipment Building System (NEBS) design guidelines applied to telecommunications equipment in the United States. NEBS is the most common set of safety, spatial, and environmental design guidelines applied to telecommunications equipment, and compliance with these guidelines is an industry (but not a legal) requirement. All Cisco products that have entered the market since 2011 have gone through ATIS TEER testing.

We have used the ATIS TEER standard to develop energy profiles for representative models and products within the following product families:

- Cisco ASR 9000 Series Aggregation Services Routers
- Cisco ASR 5000 Series Aggregation Services Routers for Mobile Packet Solutions
- Cisco Catalyst 1900 Series, 2800 Series, 2900 Series, 3800 Series, 4500 Series, 6000 Series, and 6500 Series Switches
- Cisco CRS-1 and CRS-3 Carrier Routing Systems
- Cisco Network Convergence System (NCS) 6008 Routers
- Cisco ONS 15454 Series, NCS 2000 Series, and NCS 4016 Multiservice Provisioning Platforms
- Cisco Nexus 7000 Series Switches

The products tested make up more than 90 percent of Cisco products that are in ATIS TEER scope. Figure 26 presents system performance improvements, in Gbps/W consumed, for a sample of our core router and switching products (CRS-1, CRS-3, NCS, Nexus 7000) for which first-, second-, third-, and fourth-generation energy performance was measured using the ATIS TEER standard. The results show that in these products, there was a 38-fold increase in normalized bits-per-watt performance between the four generations of products, with only a 2.5-fold increase in power usage.

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Figure 25. ASIC Performance, Gbps/W (Core Routing ASICs)
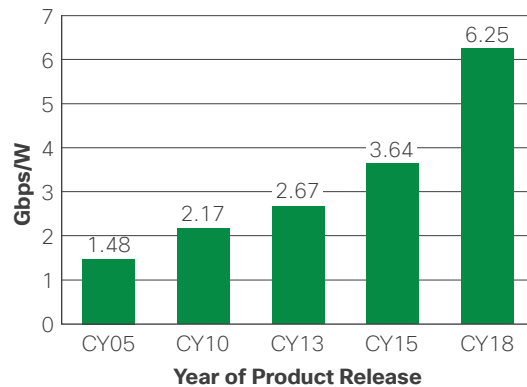
Figure 26. System Performance Improvements, Gbps/W
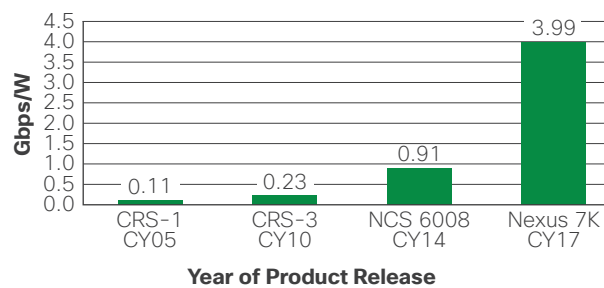
Scope 3 Product End of Life

The last product life cycle phase defined in the GHG Protocol Product Life Cycle Accounting and Reporting Standard is end-of-life (EOL) management. There are minimal emissions associated with this life cycle phase for Cisco products, and most of them are connected to the transport of the returned product and the recycling process. The largest impact of recycling on GHG emissions is reducing upstream emissions. For more details, see the Product Takeback, Reuse, and Recycling section.

As Cisco introduces initiatives to increase the return of used or EOL products, we have planned a study on the relative environmental impact of earlier or later product retirement. Energy efficiency usually improves with each new product generation, so earlier product retirement may be able to decrease overall emissions since the use-phase emissions dominate the product life cycle. However, creating new products introduces other environmental impacts. A similar dynamic exists in the automotive industry. For example, is it better to retire a functional 30-mpg car for a new 40-mpg car? We will consider the results of LCA to inform our approach in this area.

Enabling Effect

We are making progress in managing the GHG emissions in our own operations, in our supply chain, and at other phases of the product life cycle. Our products and services also offer opportunities through the so-called "enabling effect."[10]

The enabling effect happens when ICT sector products and services can be used to achieve reductions in GHG emissions in other industry sectors. For example, high-definition videoconferencing (ICT sector) can be used in place of face-to-face interaction to avoid air travel (transportation sector), and energy monitoring and control of IP-enabled devices (ICT sector) can be used to reduce energy consumption in buildings (real estate and industrial sectors).

The enabling effect of Cisco's equipment was identified as a Tier 1 environment-related issue (Table 16) during our sustainability materiality assessment. We believe it is an area in which we can have significant positive environmental impact through the avoidance of emissions.

Although the use of ICT products consumes energy, there is substantial opportunity to use them to reduce global energy-related GHG emissions and make the world more energy efficient.

In FY09, Cisco sponsored and contributed to the SMART 2020 report, which still guides industry strategy today. This report identified opportunities for the ICT sector to develop and apply network technologies to reducing total GHG emissions by 15 percent. This would represent a substantial positive impact considering that the ICT sector was projected to be responsible for only 3 percent of global emissions in 2020. Potential reductions are concentrated in the areas of transportation, buildings, power/energy, and industry. Innovative applications of network technologies promote change through our solutions, our products, and our operations.

Cisco offers products and solutions in four areas that help our customers reduce their emissions and be more sustainable:

- Energy management: Cisco Asset Manager, built on our JouleX platform, leverages the IoT to track and manage energy consumption across a business and around the world.
- Remote collaboration: Cisco TelePresence videoconferencing, Cisco WebEx desktop conferencing, Cisco Spark ™, Cisco Unified Communications, and Cisco Jabber and Jabber Guest allow employees to meet with each other and with customers and partners around the world without the productivity loss, work-life impact, or GHG emissions of physical travel.
- Teleworking and mobility: Cisco Virtual Office and Cisco OfficeExtend provide highly secure wired and wireless voice, data, and video service for employee homes (or any small commercial office). In addition to saving time, employees avoid GHG emissions from commuting. More than a third of Cisco employees have installed Cisco's teleworking solutions in their homes.
- Cloud and data center: Cisco data center server, switch, and router products enable energy-efficient provisioning of connectivity and compute in the cloud, where the future growth of consumer, government, and business IT use will be centered.

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[10] See the Smart 2020 report published by GeSI for a more detail explanation:
http://gesi.org/files/Reports/Smart%202020%20report%20in%20English.pdf

Water Use

Water scarcity is a serious issue affecting over one billion people around the world. Even though technology companies like Cisco do not directly use significant amounts of water, we understand the importance of reducing water consumption as much as we can in our operations and in our supply chain to help protect this limited resource for future generations. Key objectives of Cisco's water management program for all sites are to:

- Identify and implement site-level water conservation opportunities for our operations, focusing on water-scarce and water-stressed locations.
- Work with local governments, water utilities, owners of our leased buildings, and other partners to incorporate best practices into our operations.

Water-Energy Nexus

Our environmental sustainability materiality assessment determined that operational water use (office building potable water, sanitation, landscaping, and cooling towers) is not a significant impact area for our business. However, because the production of electrical power is one of the largest users of fresh water, the greatest opportunity for Cisco to reduce our impact on water resources globally is by continuing to make our products and operations more energy efficient.

The U.S. Geological Survey estimates in their latest 2010 water report that 19 gallons of water are used on average to produce one kilowatt hour of electricity in the United States. Considering this, the energy savings we are achieving through our energy and GHG reduction efforts are having a big impact on reducing water usage. We estimate that our FY16 energy reduction projects (Table 27), which avoided 30 GWh of energy usage, also avoided 2.1 million cubic meters (m3) of water usage in FY16. Since FY12, we estimate that our energy reduction projects have avoided the use of over 13.7 million m^3 of water. To put this into perspective, the avoided water usage we achieved from our energy projects in FY16 alone exceeded Cisco's total FY16 water usage at its operations.

Water Usage

We have been collecting and tracking water usage data for our major campus locations since FY07 (Table 34). In FY16, we were able to collect water data for 74 percent of our real estate portfolio. We have made great improvements in our ability to track water consumption, but this continues to be a challenge given the size and geographic dispersion of our operations and the fact that many of our locations are shared buildings without water sub-meters. We continue to investigate all possible causes of our year-on-year increase in water use.

Cisco primarily uses water to operate our lab and data center cooling systems, for landscaping and irrigation, and in our restrooms, breakrooms, cafeterias, and kitchens. We reduce our water consumption in these areas as much as possible and also use reclaimed water instead of potable water in applications such as landscaping and in cooling towers.

In FY16, Cisco used 36 m3 of water per employee, which is less water consumption per employee than the average person uses each year in the United States.[11] However, water consumption is still an important area of focus for Cisco because some of our facilities are located in regions where water rights and usage are a concern, including our headquarters in San Jose, California, which is moving into a fifth year of drought.

Key GRI G4 Indicators

GRI G4-EN8: Total water withdrawal by source.

GRI G4-EN9: Water sources significantly affected by withdrawal of water.

GRI G4 EN10: Percentage and total volume of water recycled and reused.

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[11] The average person in the U.S. uses 80–100 gal/day, or 0.302833–0.378541 m3/day.
Source: http://water.usgs.gov/edu/qa-home-percapital.html.

We use the World Business Council for Sustainable Development (WBCSD) water tool to identify areas with water scarcity or water stress issues. Through the tool we identified that one of our sites is located in a water-scarce country and two sites are in water-stressed countries. We will continue to monitor these sites for changes in water availability and will develop specialized water management strategies accordingly.

Table 34. Water Use						
Title	FY12	FY13	FY14	FY15	FY16	Comments
Total water use, m^3 (thousand)	1864	1969	2021	2179	1979	Includes potable water and recycled irrigation.*
Real estate portfolio covered by water reporting	71%	68%	72%	73%	74%	

* See Cisco's current and previous CDP water responses at www.cdp.net.

Water Conservation

We have implemented numerous water conservation projects over the past few years at many of our facilities that are still conserving water today and will continue to do so for many years to come:

- Using irrigation controllers throughout the San Jose main campus.
- Using recycled water for irrigation.
- Installing variable-frequency drives in our cooling towers.
- Installing two-way valves for toilets, waterless urinals, sink aerators, low-flow showerheads, and pre-rinse spray valves for kitchen sinks.
- Replacing water fountains and turf with native planter beds that require little water, and installing drip irrigation lines to improve irrigation efficiency.
- Using a water harvesting system at our Bangalore, India, campus to capture rainwater for filtering and use.

We will continue to monitor our water-stressed and water-scarce locations, including our San Jose campus, to determine if there are additional water conservation opportunities and strategies that could be implemented in FY17.

Biodiversity and Land Use

Key GRI G4 Indicators

GRI G4-EN11: Operational sites owned by, leased by, managed in, or adjacent to protected areas and areas of high biodiversity value outside protected areas.

GRI G4-EN12: Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.

GRI G4-EN13: Habitats protected or restored.

GRI G4-EN14: Total number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.

GRI G4-EN26: Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the organization's discharges of water and runoff.

Biodiversity is the variability among living organisms from all sources and the ecological complexes they are a part of. All organizations impact biodiversity directly through their own activities or indirectly through their supply chain. Cisco's primary impact on biodiversity is the land we use for our facilities. We mitigate this impact by reducing the demand for physical office space through employee telework programs and other support solutions such as Cisco Connected Workplace, Cisco Virtual Office, Cisco OfficeExtend, and Cisco AnyConnect Secure Mobility Client.

Cisco Connected Workplace and our collaboration technologies reduce the demand for office space by more efficiently using existing space and enabling employees to work remotely while remaining productive. Cisco Connected Workplace layouts can accommodate approximately 30 percent more employees than a traditional office layout, substantially reducing space and land requirements and therefore reducing associated environmental impacts. We are in the process of converting many of our buildings into Cisco Connected Workplaces. We expect to have reduced our facility footprint by more than one million square feet after the planned conversion is complete in FY18.

We use environmental impact assessments to evaluate the biodiversity and land-use impacts of our sites and generate annual biodiversity summary reports for all land and property we own. Table 35 shows the percentage of our portfolio with biodiversity assessments in place. For example, some of the buildings we own in San Jose, California, are located near a protected area for the American Cliff Swallow, which is a bird species on the Least Concern category of the International Union for Conservation of Nature (IUCN) Red List. To protect their habitat during nesting season, we close our balconies on those buildings; we then remove the mud nesting locations on our buildings after nesting season is over.

We have also undertaken efforts to protect the habitat of Blanding's Turtle (IUCN Endangered Species) and the Eastern Box Turtle (IUCN Vulnerable Species) on 60 acres of the land we own in Boxborough, Massachusetts.

These efforts include:

- Establishing two conservation areas of 49 and 60 acres.
- Constructing three turtle tunnels under the highway to provide a safe passage for migration. Installing turtle curbing around the site to prevent migrating turtles from entering the roadway and parking areas.
- Enhancing 16 acres of turtle nesting habitat within the conservation area.
- Funding a 2-year construction phase turtle monitoring plan and a 2-year Blanding's Turtle conservation research project.
- Restricting future development on approximately 50 acres of our land.

Table 35. Biodiversity and Land Use

KPI	FY12	FY13	FY14	FY15	FY16	Comments
Percent of real estate portfolio with biodiversity assessment	61%	61%	60%	61%	58%	Includes IUCN Red List and national conservation list species with habitats in areas affected by operations. See Cisco's current and previous CDP Water and Climate responses.
Total real estate footprint square footage (millions)	22.7	23.3	23.0	22.1	22.1	Reducing our square footage minimizes our physical impact.
Percentage Cisco Connected Workplace	19.5%	29.6%	31.0%	36.9%	45.8%	Converting our workspaces to Cisco Connected Workplaces allows us to use our space more effectively, allowing us to further reduce our real estate footprint.

Non-GHG Emissions

Because most of our production is outsourced to supply chain partners, our global operations primarily consist of standard office activities and research labs. This limits our non-GHG emissions to volatile organic compounds (VOCs) from cleaning products, nitrous oxides (NOx) and sulfur oxides (SOx) from onsite fuel combustion (from vehicle engines, boilers, or emergency generators), and the subsequent development of ozone from the photochemical reaction of NOx. Table 36 summarizes our relevant non-GHG-related airborne emissions: VOCs, NOx, SOx, and particulate matter.

We comply with California Air Resources Board requests and do not use mechanical equipment, such as gasoline-powered lawn mowers, after 11 a.m. on designated Spare the Air days when air quality is poor in the San Francisco Bay Area.

In accordance with the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer, we also have worked with our supply chain partners to phase out the use of ozone-depleting substances (ODSs).

Table 36. Non-GHG Emissions

KPI	FY12	FY13	FY14	FY15	FY16
Volatile organic compound (VOC) emissions*	Negligible	Negligible	Negligible	Negligible	Negligible
NOx, metric tonne	381	341	270	212	207
SOx, metric tonne	1.11	1.00	0.88	0.72	0.72
Particulate matter	Negligible	Negligible	Negligible	Negligible	Negligible

* Quantities of VOC-based chemicals deployed are minimal and are not required to be monitored.

Effluents (Liquid)

We seek to locate our operations in areas where we can successfully serve our customers while limiting our negative environmental impacts. Effluent spills, such as chemical, oil, and fuel spills, can have significant negative impacts on the surrounding environment, potentially affecting soil, water, air, biodiversity, and human health as well as negative impacts to our business. Cisco takes this and other environmental health and safety issues very seriously. Cisco has had no significant releases to an environmental receptor over the reporting year. Table 37 tracks liquid spills and discharges from Cisco facilities.

Table 37. Effluent Spills and Discharges					
KPI	FY12	FY13	FY14	FY15	FY16
Spills and discharges	None	None	None	None	None

Waste from Operations and Product End of Life (EOL)

Product EOL (Takeback, Reuse, and Recycling)

Our trade-in and takeback programs are designed to bring back the products that Cisco or our acquired companies have sold to channel partners and end-user customers. Of products sent to our e-scrap recyclers, nearly 100 percent are recycled, and all commodity fractions go to downstream recyclers to be made into new products. During FY16, we also refurbished, resold, reused, or recycled over 12,609 metric tonne of products returned to us (Table 38).

Table 38. Product Trade-In and Returns						
KPI	FY12	FY13	FY14	FY15	FY16	Comments
Product return, metric tonne	13,324	12,539	12,180	11,718	12,609	
Refurbish, resell, and reuse rate, percent	25%	25%	23%	25%	19%	
Returned material sent to landfill, percent	0.43%	0.33%	0.30%	0.27%	0.28%	Landfill material consists only of non-electronic waste materials, such as broken pallets, wet cardboard, and shrink wrap, accompanying Cisco product returned by customers for recycling.

Key GRI G4 Indicators

GRI G4-EN28: Percentage of products sold and their packaging materials that are reclaimed by category.

Information on our compliance with product recycling regulations, (e.g., WEEE) can be found online. Products are labeled with a crossed-out "wheelie bin" symbol to encourage end users to reuse or recycle electronics instead of disposing of them in the trash.

We have nine different programs in operation to support our product trade-in, takeback, and recycling efforts aimed at customers, suppliers, partners, and internal users (Table 39). A flow diagram of the programs listed in Table 39 is shown in Figure 27.

We are using circular economy principles to drive increased product returns for resale or recycling; study leasing and as-a-service models to facilitate return and reuse; implement IoT technologies for improved asset tracking, maintenance, and operations; and improve product and packaging design. For more information on Cisco's approach to the circular economy see the Environmental Strategy section at the start of this chapter.

Customer Programs

The Cisco Technology Migration Program (TMP) and the Exceptional Pick-Up Program (EPUP) enable customers to return unwanted equipment. These programs are the single largest flow of materials back to Cisco, and they provide the newest and best-quality used equipment for refurbishment and reuse.

Table 39. Cisco Takeback, Reuse, and Recycling Programs

Category	Material Stream	
Customer programs	• Cisco Technical Migration Program (TMP) • Cisco Takeback and Recycle Program	• Exceptional Pick-Up Program (EPUP)
Programs for companies producing or repairing Cisco products	• Manufacturing Scrap/Reuse Program	• Global Scrap Program
Internal programs for Cisco	• eBin/Lab Scrap Program • Cisco Data Center Server Recycling Program	• Non-Genuine Brand Program • E-scrap events

Figure 27. Reverse Logistics Material Sources and Flow of Materials for Reuse and Recycling
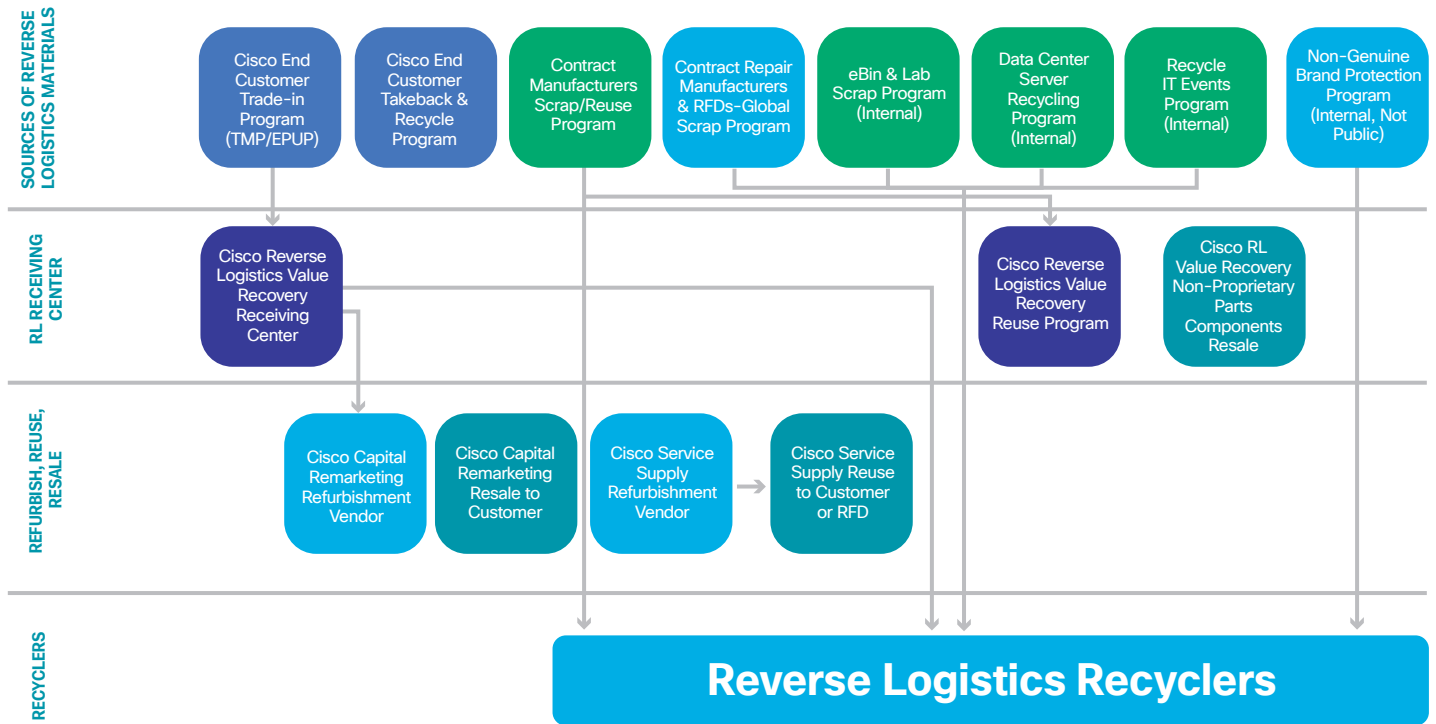
Trade-in materials are routed to our returns warehouse for refurbishment, resale, or reuse by Cisco Capital® Refresh, Cisco Service Supply, or our Cisco internal labs.

Reuse is always our first priority. In FY16, Cisco reused over US$344 million of Cisco equipment, calculated at standard cost (COGS). Any item that is not reusable goes to one of our authorized recyclers.

The Cisco Takeback and Recycle Program (TB&R) is focused on Cisco branded items that do not qualify for either the TMP or EPUP. The TB&R program also accepts equipment from other manufacturers that has been replaced by newly purchased Cisco items. The equipment is typically old and has no reuse value, or it is damaged. These materials go to the closest Cisco approved recycling site. Currently, there are 43 approved recycling locations (Figure 28). The number and location of Cisco authorized recyclers continue to expand based on the growth in our business and the requirements of local regulations.

Engaging with our takeback and recycling programs is easy and straightforward: Customers go to the web portal[12] to select the program that applies to them, and then submit a pick-up request form. Cisco's contracted third-party recycler then contacts the customer to arrange the pick-up and work out the logistics for returning the materials to the appropriate location.

Figure 28. Cisco Reverse Logistics Locations

Programs for Companies Producing or Repairing Cisco Products
The Cisco Manufacturing Scrap/Reuse Program takes excess, obsolete, or damaged materials from our contract manufacturers, manufacturing partners, original equipment manufacturers (OEMs), original design manufacturers (ODMs), and proprietary component suppliers.

Our contracted repair manufacturers and distribution depots use the Global Scrap Program for their excess, obsolete, or damaged materials. Both of these programs are a valuable source of reusable product.

Internal Programs for Cisco
The largest of Cisco's internal programs is the eBin/Lab Scrap Program. The eBin program began at our San Jose campus, where 185 labs produce a large amount of e-scrap, and now includes all Cisco labs and offices worldwide. The eBins are green plastic rolling bins where materials are collected in the labs for recycling. Smaller labs may have only one eBin; large labs may have more than a dozen. Each eBin has an owner, and when the eBin is full, the owner visits our recycling web portal and fills out a pick-up request, which is fulfilled by a Cisco authorized recycler.

The Cisco Data Center Server Recycling Program serves data centers in 11 countries. When a data center no longer needs a server, it is offered to other Cisco data centers for possible reuse. When one of these servers reaches the end of its useful life, it is recycled, and all parts are shredded. Some products are not reused because they have, or have had, sensitive data residing in their memory.

[12] Cisco.com registration required.

The Non-Genuine Materials Program handles items that we occasionally receive in equipment returns that are non-genuine Cisco products. Non-genuine items also come to Cisco through law enforcement actions that seize counterfeit Cisco equipment. When non-genuine equipment is found, we use a special witnessed protocol whereby the collected materials are properly destroyed.

We also hold an annual Recycle IT Day for our employees. Cisco employees and contractors can bring in their e-scrap from home and Cisco pays to have the materials recycled properly. Any Cisco office location can host a recycling day event. In April 2016, we held our 21st Recycle IT Day event, with 143 Cisco sites around the world participating and more than 238 metric tonne of used electronics collected. Since Cisco started holding these events, our employees and contractors have helped recycle over 2664 metric tonne of used electronics.

E-Scrap Recyclers

We currently have four contracted e-scrap recyclers. Each recycler has several company-owned facilities and several subcontracted recyclers to provide global recycling coverage. Cisco's contracted recyclers are certified to one or more e-scrap-specific recycling standards, such as R2, R2 Rios, and eStewards. Our contracts require recyclers to enforce our strict recycling processes with any of their subcontractors doing Cisco work. We approve every prospective recycling company and every recycling location before sending any Cisco equipment for processing. Additionally, our recycling process described earlier is formally documented and is part of the contract with each of our recyclers.

Each contracted recycler provides Cisco with monthly reports showing all cases opened and processed on a lot-by-lot basis. When each lot is processed, the report includes a mass balance showing the weight as received and the weights of each fractional commodity adding up to the gross weight received.

We hold quarterly business reviews with each e-scrap recycler to review the past quarter's results and to go over all action items that were to be worked on during the quarter and the focus areas for the next quarter. We also conduct random site audits of the recycling facilities.

E-Scrap Recycling Process

After being weighed, each load of e-scrap is dismantled and sorted into "commodity fractions." This separates the steel, aluminum, cardboard, plastic, wire/cable, and printed circuit boards. Printed circuit boards are then shredded and sorted further before going to a specialized smelter where as many as 19 metals are harvested from the boards. These harvested metals are sold on the global metals markets. All materials, including any batteries or packaging materials, are sent to downstream recyclers to eventually be sold on the global materials markets and used as raw materials to make new products.

Additional information regarding our trade-in, takeback, and recycling programs is available on our product recycling web portal.

Product Packaging EOL

We have not adopted a packaging takeback program, as the environmental impact, including transportation and emissions, from a packaging takeback program outweighs the potential benefits when compared with using local recycling. Instead, we design our packaging to be separable and recyclable so it can be directed to local packaging material recycling programs. (See the Packaging section.) Information on Cisco's compliance with environmental packaging regulations can be found at our WEEE compliance information page.

Key GRI G4 Indicators

GRI G4-EN23: Total weight of waste by type and disposal method.

GRI G4-EN25: Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.

Solid Waste from Operations (Trash)

Cisco's Waste Reduction and Recycling Program uses the principles of reduce, reuse, and recycle for our operations. The program is a key component of our ISO 14001 certification and global environmental policy.

Municipal and regional recycling practices vary. What is easily recycled in one region may not be as easily recycled in another. The ability of our facilities to recycle operational waste often depends on the recycling facilities in place in that region. All our facilities take steps to reduce their operational waste and recycle materials that can be recycled locally.

In FY16, Cisco recycled approximately 75 percent of all the waste that it generated at its facilities. Through our waste and recycling operations, we have avoided 22,000 metric tonne CO_2e which would have been produced had that material been sent to a landfill instead of a recycling or composting facility.

Table 40 shows our solid waste metrics. Note that operational waste recycling performance depends on both Cisco performance and the availability of supporting services by local waste hauling and disposal vendors. Figure 29 shows examples of how we reduce waste, increase reuse, and increase recycling rates on our campuses.

Figure 29. Solid Waste Reduction Initiatives

Reduce waste
- Using online learning and communications technologies to reduce paper use
- Making product information available online to reduce paper use
- Using compost made of landscape waste at our San Jose campus

Reuse materials
- Managing an internal Repo Depot program, which allows us to reuse lab and testing equipment
- Reusing incoming pallets with outgoing shipments wherever possible
- Collecting PC equipment for reuse by our vendor
- Donating surplus used office supplies to local schools

Recycle items
- Batteries
- CDs
- Beverage containers
- Wood and pallets
- Cardboard
- Mixed paper
- Packaging materials
- Toner cartridges
- Compost
- Polyurethane foam
- Landscape waste
- Mobile phones
- Food waste
- Construction waste

Table 40. Solid Waste from Operations (Trash)						
KPI	FY12	FY13	FY14	FY15	FY16	Comments
Total operational waste generated, metric tonne	4359	4953	6932	5308	6411	
Percent real estate portfolio covered by waste reporting	58%	55%	56%	57%	63%	Includes major campus locations in the United States, India, and China.
Total operational waste recycled, metric tonne	2954	3673	5454	3964	4784	
Operational waste recycled, percent	68%	74%	79%	75%	75%	

Figure 30 shows our trash recycling rates for solid wastes for our major North America campus locations. Our San Jose headquarters led the way by diverting 85 percent of all waste streams in FY16, including a food waste separation program that diverted approximately 784 metric tonne of food waste from local landfills to be turned into compost. A breakdown of our waste stream for the San Jose site in Figure 31 illustrates our key sources of operational waste, the complexity of proper waste stream segregation, and the need for local recycling services. Our Boxborough location diverted 84 percent of all waste streams in FY16.

The lower recycling rate at our RTP campus in FY14 was primarily due to our recycling vendors modifying their method of calculating total recycled material, which lowered the amount of recycled material compared to prior years. Data for FY12 to the present have been updated with this new calculation method. Years prior to FY12 were not able to be updated. The RTP recycling program was monitored closely in FY16, which enabled a 7-percent increase in the recycling rate over FY15. We will continue to monitor the recycling program at RTP and our other major campus locations to verify whether we are meeting our year-on-year improvement goal for recycling rates.

Figure 30. Recycling Rates for Solid Waste from Major North America Operations (Trash)
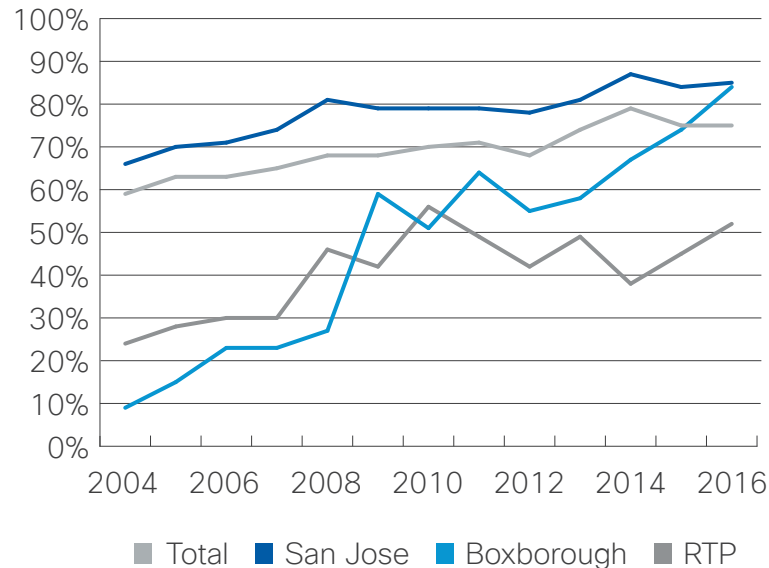
Figure 31. Breakdown of Solid Waste Streams (Trash) at San Jose, California,
Headquarters Campus

Recycled Construction Waste 5.12%

Kitchen oil 0.15%

Total Trash 14.70%

Surplus Donation 17.33%

Compost 19.57%

Landscape Waste 21.11%

Wood 4.44%

Cardboard 7.44%

Special Projects 0.81%

Confidential Paper 4.73%

Mixed Recycling 1.51%

Media 0.01%

Cans & Bottles 0.16%

Foam 0.88%

Mixed Paper 2.06%
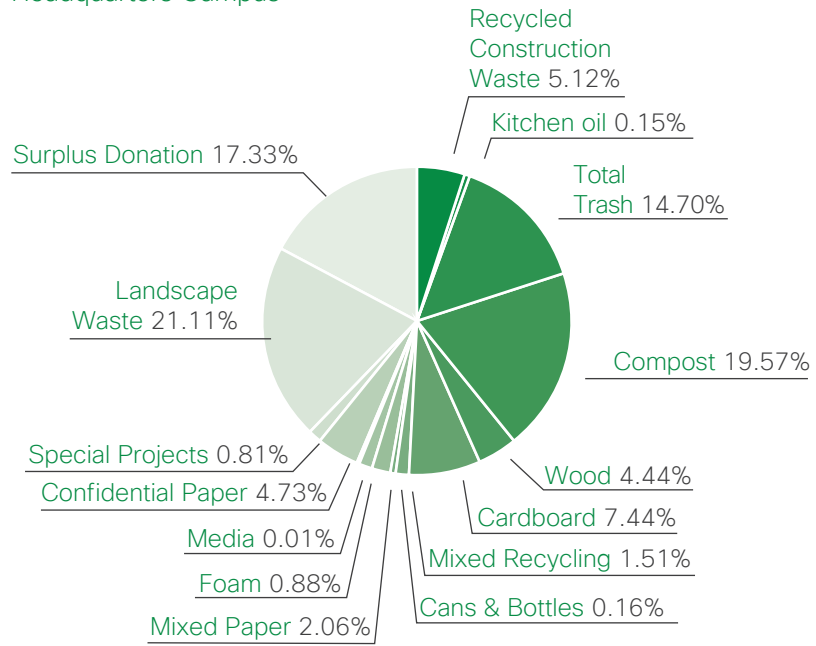
Appendix
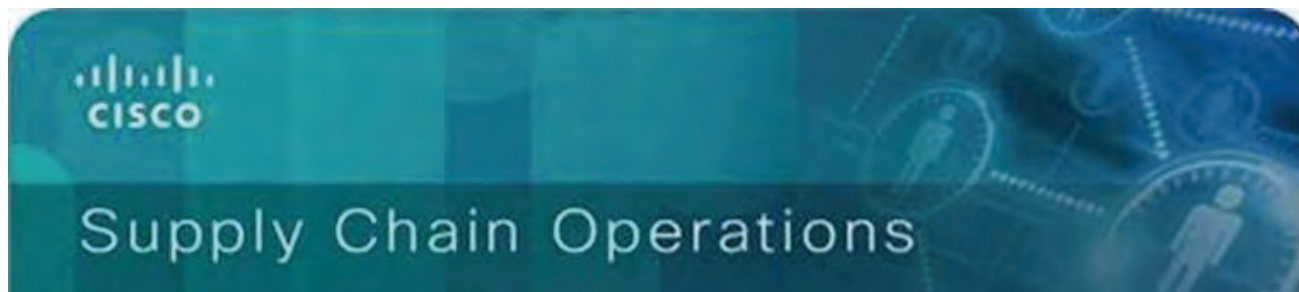
April 14, 2016

Dear Valued Business Partners and Suppliers:

Cisco, our stakeholders, and our customers are concerned about GHG emissions from Cisco's products and operations, as well as from the operations of our business partners and suppliers. For the seventh year in a row Cisco invites you, our partners and suppliers, to report your GHG emissions to CDP.

Cisco is committed to reducing greenhouse gas (GHG) emissions. In 2012, we met our public commitment to reduce Cisco's worldwide Scope 1 and 2 GHG emissions from our operations, and our Scope 3 business-air-travel GHG emissions by 25 percent absolute (against a 2007 baseline). In 2013, we announced a new set of five-year, GHG-related goals to be completed by 2017 (Reference 1 of this letter).

Companies can be invited to report to CDP in two ways:

- Many large, publicly traded companies are invited directly by CDP to respond to CDP's Investor-led *Climate Change questionnaire*. If your company has already received such an invitation in February, Cisco requests that your organization respond by the requested deadline (end of June).
- Through CDP's Supply Chain program, of which Cisco is a member, Cisco will be requesting our suppliers to report to CDP (by the end of July). The supply chain request includes the same questions as CDP *Climate Change questionnaire* plus questions from a separate, CDP *Supply Chain Module*. If your company already responds to the CDP *Climate Change*, only a response to the *Supply Chain Module* needs to be submitted in July.

Cisco is requesting that our partners and suppliers respond to the CDP survey, making your response publicly available via the option provided for this purpose in CDP's Online Response System (ORS).

It is Cisco's objective for all suppliers and partners to complete the following five steps:

1. Report to CDP annually, responding at a minimum to the questions highlighted in Reference 2 of this letter for all supplier facilities worldwide.

2. Make the CDP *Climate Change* response publicly available via the option provided for this purpose in CDP's ORS.

3. Demonstrate third-party review of your GHG emissions per Reference 3 of this letter.

4. Set a GHG emissions reduction goal (absolute reduction goals are preferred).

5. Request that your suppliers and business partners also report to CDP using the same process described in this letter.

Supplier compliance to Cisco's requirement to report GHG emissions to CDP is included in Cisco's supplier scorecards. Please refer to separate communication concerning Cisco's supplier scoring procedures.

By the middle of April, if you have not received an invitation from CDP to respond to CDP's survey, please contact CDP at respond@cdp.net. The CDP Supply Chain questionnaire and supporting information, including instructions for ORS, are provided as Reference 4 of this letter.

Do not send your emissions information to Cisco. Report your GHG emissions directly to CDP via ORS. Cisco will obtain your reporting status and emissions information via an analytics package offered by CDP.

Please forward this request to the appropriate party within your company. If you have any questions about Cisco's or your company's carbon reporting, please contact us at cisco-cdp-questions@cisco.com.

Best regards,

Jeff Gallinat
SVP, Supply Chain Operations

Kathleen Shaver
Director, Supply Chain Operations

REFERENCES:

1. Cisco Announces New Greenhouse Gas Reduction Goals (blog):
   http://blogs.cisco.com/csr/cisco-announces-new-greenhouse-gas-reduction-goals/

2. CDP 2016 Investor Survey (with Supplier Module questions).
   The questions that must be answered to meet Cisco scorecard requirements per Step 1 are highlighted in the following Cisco markup of CDP's questionnaire:
   https://www-1.compliance2product.com/c2p/getAttachment.
   do?code=5kslyNohU9BPPcN9cvOi9IcALEj96WZo4C1GmdFMJcDB RrFIiPQfy4xPfcceez5h
   Highlighted questions were selected to support the identification of potential Cisco-supplier energy and GHG emissions reduction opportunities:
   Companies are encouraged to answer all CDP survey questions.

3. CDP verification guidance
   https://www.cdp.net/en-US/Respond/Pages/verification-standards.aspx

4. CDP Supply Chain Module and Supply Chain Responder Information Pack can be downloaded from
   https://www.cdp.net/Documents/Guidance/2016/CDP-2016-Supply-Chain-Module-Reporting-Guidance.pdf

5. CDP reports summarizing Investor and Supply Chain responses are available from the following web page
   https://www.cdp.net/en/research
   Reports that include Cisco's reporting and performance are shown below:
   a. CDP Global Climate Change Report 2015: The A List
      https://www.cdp.net/en/research/global-reports/global-climate-change-report-2015
   b. CDP Climate Change Report 2015: US edition based on the S&P 500 Index
      https://www.cdp.net/en/reports/archive

GRI Index

This table covers the GRI G4 indicators found in Cisco's 2016 Corporate Social Responsibility Report, 2016 Annual Report, and company websites.

GRI-G4 Guideline		Location
General Standard Disclosures		
Strategy and Analysis		
G4-1	Statement from the most senior decision-maker of the organization	Our Story/Message from Chuck Robbins
G4-2	Description of key impacts, risks, and opportunities	Governance/CSR Materiality Assessment
Organizational Profile		
G4-3	Name of the organization	Cisco Systems, Inc.
G4-4	Primary brands, products, and/or services	Cisco Products and Services
G4-5	Location of organization's headquarters	Cisco Systems, Inc. Corporate Headquarters 170 West Tasman Drive San Jose, CA 95134 USA
G4-6	Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report	Cisco Corporate Overview
G4-7	Nature of ownership and legal form	2016 Annual Report
G4-8	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries)	Cisco Corporate Overview, 2016 Annual Report
G4-9	Scale of the reporting organization	Cisco Corporate Overview, 2016 Annual Report
G4-10	Total workforce by employment type, employment contract, and region, broken down by gender	Society/Inclusion and Collaboration
G4-11	Percentage of employees covered by collective bargaining agreements	Cisco employees are global and each country carries with it local employment laws and norms. Due to data privacy legislation in many countries, we do not have an exact percentage of employees who are represented by trade unions.
G4-12	Describe the organization's supply chain	Governance/Supply Chain Management
G4-13	Significant changes during the reporting period regarding size, structure, or ownership	2016 Annual Report
G4-14	Explanation of whether and how the precautionary approach or principle is addressed by the organization	Cisco's CDP 2016 Submission, Cisco's Corporate Environmental Policy, Environment/Energy and GHG Emissions
G4-15	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses	Governance/CSR Governance and Priorities Governance/CSR Stakeholder Engagement and Global Forums
G4-16	Memberships in associations and/or advocacy organizations in which the organization: - Has positions in governance bodies; - Participates in projects or committees; - Provides substantive funding beyond routine membership dues; or - Views membership as strategic Memberships in associations (such as industry associations) and/or national/international advocacy organizations	Governance/CSR Stakeholder Engagement and Global Forums Governance/EICC Membership Governance/Industry Leadership: Partnering for Progress Governance/Promoting Security Awareness Society/Building Knowledge and the Digital Foundation

GRI-G4 Guideline		Location
General Standard Disclosures		
Identified Material Aspects and Boundaries		
G4-17	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures	Cisco Corporate Overview
G4-18	Process for defining report content	Introduction Governance/CSR Materiality Assessment Governance/CSR Stakeholder Engagement and Global Forums
G4-19	List all the material aspects identified in the process for defining report content	Our Story Governance/CSR Materiality Assessment
G4-20	Aspect Boundary within the organization of material aspects	Unless stated otherwise for specific issues covered in the report, boundaries are consistent with those defined in G4-17
G4-21	State any specific limitations on the scope or boundary of the report	Limitations are noted where applicable within the sections
G4-22	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement	No major changes: any adjustments are explained within the report
G4-23	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report	No major changes: any adjustments are explained within the report
Stakeholder Engagement		
G4-24	List of stakeholder groups engaged by the organization	Governance/CSR Stakeholder Engagement and Global Forums; Also as noted throughout the report linked to specific issues
G4-25	Basis for identification and selection of stakeholders with whom to engage	Governance/Governance and CSR Priorities Governance/CSR Stakeholder Engagement and Global Forums
G4-26	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group	Governance/Governance and CSR Priorities Governance/CSR Stakeholder Engagement and Global Forums
G4-27	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting	Our Story Governance/Governance and CSR Priorities Governance/CSR Materiality Assessment
Report Profile		
G4-28	Reporting period for information provided	Introduction
G4-29	Date of most recent previous report	Cisco Fiscal Year 2015
G4-30	Reporting cycle	Annual, Cisco Fiscal Year 2016
G4-31	Contact point for questions regarding the report or its contents	csr_report@cisco.com
G4-32	Table identifying the location of the Standard Disclosures in the report	This GRI Index table
G4-33	Policy and current practice with regard to seeking external assurance for the report	Introduction/Assurance

GRI-G4 Guideline		Location
General Standard Disclosures		
Governance		
G4-34	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight	Governance/Risk Management at Cisco Governance/CSR Governance and Priorities Investor Relations: Corporate Governance
G4-35	Report the process for delegating authority for economic, environmental and social topics from the highest governance body to senior executives and other employees	Governance/Risk Management at Cisco Governance/CSR Governance and Priorities Governance/ Ethics, Investor Relations: Corporate Governance
G4-36	Report executive-level positions with responsibility for economic, environmental and social topics, and whether post holders report directly to the highest governance body	Governance/Risk Management at Cisco Investor Relations: Corporate Governance
G4-37	Report processes for consultation between stakeholders and the highest governance body on economic, environmental and social topics	Governance/Risk Management at Cisco Investor Relations: Corporate Governance
G4-38	For organizations that have a unitary board structure, state the number and gender of members of the highest governance body that are independent and/or non-executive members	Investor relations: Corporate governance
G4-39	Indicate whether the Chair of the highest governance body is also an executive officer	Governance/CSR Governance and Priorities Investor relations: Corporate governance
G4-40	Process for determining the composition, qualifications, and expertise of the members of the highest governance body and its committees, including any consideration of gender and other indicators of diversity	Governance/CSR Governance and Priorities Society/Developing our People Investor relations: Corporate Governance
G4-41	Processes in place for the highest governance body to ensure conflicts of interest are avoided	Governance/Risk Management at Cisco Governance/Ethics Investor Relations: Corporate Governance
G4-42	Report the highest governance body's and senior executives' roles in the development, approval, and updating of strategies, policies, and goals related to economic, environmental and social impacts	Governance/CSR Governance and Priorities
G4-43	Report measures taken to develop and enhance the highest governance body's collective knowledge of economic, environmental and social topics	Governance/CSR Governance and Priorities
G4-44	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance	Governance/Risk Management at Cisco Governance/CSR Governance and Priorities
G4-45	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles	Governance/CSR Governance and Priorities
G4-46	Report the highest governance body's role in reviewing the effectiveness of the organization's risk management processes for economic, environmental and social topics	Governance/Risk Management at Cisco Governance/CSR Governance and Priorities Governance/CSR Stakeholder Engagement and Global Forums
G4-47	Report the frequency of the highest governance body's review of economic, environmental and social impacts, risks, and opportunities	Governance/Risk Management at Cisco Governance/CSR Governance and Priorities Governance/CSR Stakeholder Engagement and Global Forums

GRI-G4 Guideline		Location
General Standard Disclosures		
Governance		
G4-48	Report the highest committee or position that formally reviews and approves the organization's sustainability report and ensures that all material aspects are covered	Governance/Risk Management at Cisco Governance/CSR Governance and Priorities Governance/CSR Stakeholder Engagement and Global Forums
G4-49	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body	Governance/Reporting a Concern
G4-50	Report the nature and total number of critical concerns that were communicated to the highest governance body and the mechanism(s) used to address them	Governance/Reporting a Concern
G4-51	Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organization's performance (including social and environmental performance)	Cisco's 2016 Proxy Statement Investor Relations: Corporate Governance
G4-52	Report the process for determining remuneration	Cisco's 2016 Proxy Statement Investor Relations: Compensation and Management Development Committee Charter
G4-53	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body	Investor Relations: Compensation and Management Development Committee Charter
G4-54	Report the ratio of the annual total compensation for the organization's highest-paid individual to the median annual total compensation for all employees in each country of significant operation	This information is not publicly disclosed
G4-55	Report the median percentage increase of the annual total compensation for the organization's highest-paid individual to that of all employees in each country of significant operation	This information is not publicly disclosed
Ethics and Integrity		
G4-56	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation	Message from Chuck Code of Business Conduct Supplier Code of Conduct Financial Officer Code of Ethics
G4-57	Report the internal and external mechanisms for seeking advice on ethical and lawful behavior	Governance/Ethics
G4-58	Report the internal and external mechanisms for reporting concerns about unethical or unlawful behavior	Governance/Ethics
Specific Standard Disclosures		
Economic		
Aspect: Economic Performance		
G4-DMA	Generic Disclosures on Management Approach	Message from Chuck Robbins 2016 Annual Report/Letter to Shareholders
G4-EC1	Direct economic value generated and distributed	2016 Annual Report
G4-EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change	Cisco's CDP 2016 Submission Cisco's Corporate Environmental Policy
G4-EC3	Coverage of the organization's defined benefit plan obligations	2016 Annual Report
G4-EC4	Financial assistance received from government	Cisco does not receive financial government support

GRI-G4 Guideline		Location
General Standard Disclosures		
Aspect: Market Presence		
G4-DMA	Generic Disclosures on Management Approach	2016 Annual Report
G4-EC5	Ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation	Society/Rewarding our People We provide levels of compensation that are generally above local minimum wage requirements
G4-EC6	Proportion of senior management hired from the local community at significant locations of operation	Society/Inclusion and Collaboration Cisco recruits staff from markets local to our operations and has structured leadership development programs around the world to build strong local leadership teams
Aspect: Indirect Economic Impacts		
G4-DMA	Generic Disclosures on Management Approach	Governance/CSR Materiality Assessment Society
G4-EC7	Development and impact of infrastructure investments and services supported	Society/Social investment
G4-EC8	Significant indirect economic impacts, including the extent of impacts	Society/Social investment Society/Building Skills and Entrepreneurship
Aspect: Procurement Practices		
G4-DMA	Generic Disclosures on Management Approach	Governance/CSR Materiality Assessment Governance/Supply Chain Management
G4-EC9	Proportion of spending on local suppliers at significant locations of operation	The manufacture of our products is entirely outsourced, however, many goods and services purchased for our operations are provided by local suppliers worldwide. We will review the need to report our spend on local suppliers at a company-wide level in the future.
Environmental		
Aspect: Materials		
G4-DMA	Generic Disclosures on Management Approach	Environment/Environmental Sustainability Materiality Assessment Environment/Policy Environment/Organization
G4-EN1	Materials used by weight or volume	Environment/Materials
G4-EN2	Percentage of materials used that are recycled input materials	Environment/Recycled Content
Aspect: Energy		
G4-DMA	Generic Disclosures on Management Approach	Environment/Energy and Scope 1 and 2 GHG Emissions
G4-EN3	Energy consumption within the organization	Environment/Energy and Scope 1 and 2 GHG Emissions
G4-EN4	Energy consumption outside of the organization	Environment/Energy and Scope 1 and 2 GHG Emissions
G4-EN5	Energy intensity	Environment/Energy and Scope 1 and 2 GHG Emissions
G4-EN6	Reduction of energy consumption	Environment/Scope 1 and 2 GHG Emissions Reduction Strategy
G4-EN7	Reductions in energy requirements of products and services	Environment/Scope 3 Product Use Phase (Product Energy Efficiency)

GRI-G4 Guideline		Location
General Standard Disclosures		
Aspect: Water		
G4-DMA	Generic Disclosures on Management Approach	Environment/Environmental Sustainability Materiality Assessment Environment/Water Use
G4-EN8	Total water withdrawal by source	Environment/Water use
G4-EN9	Water sources significantly affected by withdrawal of water	Environment/Water use
G4-EN10	Percentage and total volume of water recycled and reused	Environment/Water use
Aspect: Biodiversity		
G4-DMA	Generic Disclosures on Management Approach	Environment/Environmental Sustainability Materiality Assessment Environment/Biodiversity and Land Use
G4-EN11	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Environment/Biodiversity and Land Use
G4-EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	Environment/Biodiversity and Land Use
G4-EN13	Habitats protected or restored	Environment/Biodiversity and Land Use
G4-EN14	Total number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk	Environment/Biodiversity and Land Use
Aspect: Emissions		
G4-DMA	Generic Disclosures on Management Approach	Environment/Environmental Sustainability Materiality Assessment Environment/Energy and GHG Emissions
G4-EN15	Direct greenhouse gas (GHG) emissions (Scope 1)	Environment/Energy and Scope 1 and 2 GHG Emissions
G4-EN16	Energy indirect greenhouse gas (GHG) emissions (Scope 2)	Environment/Energy and Scope 1 and 2 GHG Emissions
G4-EN17	Other indirect greenhouse gas (GHG) emissions (Scope 3)	Environment/Scope 3
G4-EN18	Greenhouse gas (GHG) emissions intensity	Environment/Energy and Scope 1 and 2 GHG Emissions
G4-EN19	Reduction of greenhouse gas (GHG) emissions	Environment/Scope 1 and 2 GHG Emissions Reduction Strategy
G4-EN20	Emissions of ozone-depleting substances (ODS)	Environment/Non-GHG Emissions
G4-EN21	NOX, SOX, and other significant air emissions	Environment/Non-GHG Emissions
Aspect: Effluents and Waste		
G4-DMA	Generic Disclosures on Management Approach	Environment/Environmental Sustainability Materiality Assessment Environment/Waste from Operations and Product End of Life (EOL)
G4-EN22	Total water discharge by quality and destination	Environment/Effluents (Liquid)
G4-EN23	Total weight of waste by type and disposal method	Environment/Solid Waste from Operations (Trash)
G4-EN24	Total number and volume of significant spills	Environment/Effluents (Liquid)
G4-EN25	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally	Environment/Solid Waste from Operations (Trash)
G4-EN26	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the organization's discharges of water and runoff	Environment/Biodiversity and Land Use

GRI-G4 Guideline		Location
General Standard Disclosures		
Aspect: Products and Services		
G4-DMA	Generic Disclosures on Management Approach	Environment/Sustainability Materiality Assessment Environment/Energy and GHG Emissions Environment/Waste
G4-EN27	Extent of impact mitigation of environmental impacts of products and services	Environment/Scope 3 Product Use Phase (Product Energy Efficiency)
G4-EN28	Percentage of products sold and their packaging materials that are reclaimed by category	Environment/Waste from Operations and Product End of Life (EOL)
Aspect: Compliance		
G4-DMA	Generic Disclosures on Management Approach	Environment/Environmental Sustainability
G4-EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	Environment/Regulatory Fines
Aspect: Transport		
G4-DMA	Generic Disclosures on Management Approach	Environment/Scope 3
G4-EN30	Significant environmental impacts of transporting products and other goods and materials for the organization's operations, and transporting members of the workforce	Environment/Packaging Material and Distribution Optimization
Aspect: Overall		
G4-DMA	Generic Disclosures on Management Approach	Environment/Sustainability Materiality Assessment Environment/Energy and GHG Emissions
G4-EN31	Total environmental protection expenditures and investments by type	Environment/Scope 1 and 2 GHG Emissions Reduction Strategy
Aspect: Supplier Environmental Assessment		
G4-DMA	Generic Disclosures on Management Approach	Environment/Environmental Sustainability Governance/Embedding Sustainability in Supply Chain Operations
G4-EN32	Percentage of new suppliers that were screened using environmental criteria	Environment/Promoting Transparency in the Supply Chain Governance/Embedding Sustainability in Supply Chain Operations
G4-EN33	Significant actual and potential negative environmental impacts in the supply chain and actions taken	Environment/Supplier Audit Findings
Aspect: Environmental Grievance Mechanisms		
G4-DMA	Generic Disclosures on Management Approach	Environment/Regulatory Fines
G4-EN34	Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms	Environment/Regulatory Fines
Social		
Social: Labor Practices and Decent Work		
Aspect: Employment		
G4-DMA	Generic Disclosures on Management Approach	Governance/CSR Materiality Assessment Society/Inclusion and Collaboration Society/Rewarding our People
G4-LA1	Total number and rates of new employee hires and employee turnover by age group, gender and region	This aspect is tracked and managed locally For related information on employee diversity go to: Society/Inclusion and Collaboration
G4-LA2	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation	2016 Annual Report Society/Rewarding Our People
G4-LA3	Return to work and retention rates after parental leave, by gender	We will review the need to report on a company-wide level in future CSR materiality assessments

GRI-G4 Guideline		Location
General Standard Disclosures		
Aspect: Labor/Management Relations		
G4-DMA	Generic Disclosures on Management Approach	Society/Inclusion and collaboration
G4-LA4	Minimum notice periods regarding operational changes, including whether these are specified in collective agreements	Cisco complies with applicable local laws and regulations, as well as agreements with employee groups or representatives, regarding operational changes.
Aspect: Occupational Health and Safety		
G4-DMA	Generic Disclosures on Management Approach	Governance/CSR Materiality Assessment Society/A Safe and Healthy Workplace
G4-LA5	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and saftey programs	This aspect is tracked and managed locally We will review the need to report on a company-wide level in future CSR materiality assessments
G4-LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	Society/Occupational Health and Safety
G4-LA7	Workers with high incidence or high risk of diseases related to their occupation	Society/Occupational Health and Safety
G4-LA8	Health and safety topics covered in formal agreements with trade unions	This aspect is tracked and managed locally We will review the need to report on a company-wide level in future CSR materiality assessments
Aspect: Training and Education		
G4-DMA	Generic Disclosures on Management Approach	Governance/CSR Materiality Assessment Society/Developing Our People
G4-LA9	Average hours of training per year per employee by gender, and by employee category	Society/Developing Our People
G4-LA10	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	Society/Developing Our People
G4-LA11	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	Society/Developing Our People
Aspect: Diversity and Equal Opportunity		
G4-DMA	Generic Disclosures on Management Approach	Governance/CSR Materiality Assessment Society/Developing Our People Society/Inclusion and Collaboration
G4-LA12	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	Society/Inclusion and Collaboration
Aspect: Equal Remuneration for Women and Men		
G4-DMA	Generic Disclosures on Management Approach	Society/Rewarding Our People
G4-LA13	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation	This information is not publicly disclosed

GRI-G4 Guideline		Location
General Standard Disclosures		
Aspect: Supplier Assessment for Labor Practices		
G4–DMA	Generic Disclosures on Management Approach	Governance/CSR Materiality Assessment Governance/Supply Chain Management Embedding Sustainability in Supply Chain Operations
G4–LA14	Percentage of new suppliers that were screened using labor practices criteria	Supply Chain Management/Embedding Sustainability in Supply Chain Operations All Cisco key suppliers must acknowledge their commitment to the EICC Supplier Code of Conduct. Audits are undertaken to assess performance, in addition to related criteria being part of a supplier scorecard.
G4–LA15	Significant actual and potential negative impacts for labor practices in the supply chain and actions taken	Society/Supplier Audit Findings
Aspect: Labor Practices Grievance Mechanisms		
G4–DMA	Generic Disclosures on Management Approach	Governance/CSR Materiality Assessment, Governance/Ethics Society/Human rights
G4–LA16	Number of grievances about labor practices filed, addressed, and resolved through formal grievance mechanisms	This is confidential information that Cisco does not disclose. Cisco encourages and expects its employees to share concerns and provides numerous methods to do so. Cisco's global Code of Business Conduct describes how to raise concerns. Employee concerns are tracked at both regional and corporate levels. Also see Governance/Ethics.
Social: Human Rights		
Aspect: Investment		
G4–DMA	Generic Disclosures on Management Approach	Governance/CSR Materiality Assessment Society/Human rights Supply Chain/Embedding Sustainability in Core Business Practices
G4–HR1	Total number and percentage of significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	All Cisco key suppliers must all acknowledge their commitment to the EICC Supplier Code of Conduct and must comply with all applicable national, European and international rules relating to ethical and responsible standards of behavior, including those dealing with human rights. Audits are undertaken to assess performance, in addition to related criteria being part of a supplier scorecard
G4–HR2	Total hours of employee training on human rights policies or procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	Society/Human Rights
Aspect: Non-Discrimination		
G4–DMA	Generic Disclosures on Management Approach	Governance/Ethics Society/Inclusion and Collaboration
G4–HR3	Total number of incidents of discrimination and corrective actions taken	This is confidential information that Cisco does not disclose. Cisco encourages and expects its employees to share concerns and provides numerous methods to do so. Cisco's global Code of Business Conduct describes how to raise concerns. Employee concerns are tracked at both regional and corporate levels

GRI-G4 Guideline		Location
General Standard Disclosures		
Aspect: Freedom of Association and Collective Bargaining		
G4-DMA	Generic Disclosures on Management Approach	Governance/CSR Materiality Assessment Governance/Embedding Sustainability in Supply Chain Operations Governance/Working with Suppliers to Build Capacity Society/Human rights
G4-HR4	Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights	We meet applicable laws, regulations, and standards where we do business These issues are also covered in our Supplier Code of Conduct and supply chain auditing
Aspect: Child Labor		
G4-DMA	Generic Disclosures on Management Approach	Governance/CSR Materiality Assessment Governance/Embedding Sustainability in Core Business Practices Governance/Working with Suppliers to Build Capacity Society/Ethical Conduct
G4-HR5	Operations and suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor	These issues are covered in our Supplier Code of Conduct and supply chain auditing Society/Ethical Conduct
Aspect: Forced Or Compulsory Labor		
G4-DMA	Generic Disclosures on Management Approach	Governance/ CSR Materiality Assessment Governance/Embedding Sustainability in Core Business Practices Governance/Working with Suppliers to Build Capacity Society/Ethical Conduct
G4-HR6	Operations and suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor	Society/Supplier Audit Findings Society/Ethical Conduct
Aspect: Security Practices		
G4-DMA	Generic Disclosures on Management Approach	Governance/Supply Chain Management Society/Human Rights
G4-HR7	Percentage of security personnel trained in the organization's human rights policies or procedures that are relevant to operations	Cisco site security is provided by third party providers, which are subject to our Supplier Code of Conduct. Product manufacturing is entirely outsourced.
Aspect: Indigenous Rights		
G4-DMA	Generic Disclosures on Management Approach	Society/Human Rights
G4-HR8	Total number of incidents of violations involving rights of indigenous peoples and actions taken	Not material—Cisco's operations do not uniquely impact indigenous people We will review the need to report on a company-wide level in future CSR materiality assessments

GRI-G4 Guideline		Location
General Standard Disclosures		
Aspect: Assessment		
G4-DMA	Generic Disclosures on Management Approach	Governance/CSR Materiality Assessment Society/Human Rights
G4-HR9	Total number and percentage of operations that have been subject to human rights reviews or impact assessments	Society/Our Approach Human Rights training has been rolled out to employees in business functions most likely to have direct engagement with human-rights-related business decisions. All Cisco key suppliers must acknowledge their commitment to the EICC Supplier Code of Conduct. Audits are undertaken to assess performance, in addition to related criteria being part of a supplier scorecard
Aspect: Supplier Human Rights Assessment		
G4-DMA	Generic Disclosures on Management Approach	Governance/CSR Materiality Assessment Governance/Embedding Sustainability in Supply Chain Operations Society/Human Rights
G4-HR10	Percentage of new suppliers that were screened using human rights criteria	Governance/Embedding Sustainability in Supply Chain Operations Society/Human rights All Cisco key suppliers must acknowledge their commitment to the EICC Supplier Code of Conduct. Audits are undertaken to assess performance, in addition to related criteria being part of a supplier scorecard.
G4-HR11	Significant actual and potential negative human rights impacts in the supply chain and actions taken	Governance/Embedding Sustainability in Core Business Practices Governance/Advancing Transparency Governance/Supplier Scorecard Society/Supplier Audit Findings Society/Audit Performance
Aspect: Human Rights Grievance Mechanisms		
G4-DMA	Generic Disclosures on Management Approach	Governance/Ethics
G4-HR12	Number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms	Governance/Ethics Society/Human rights/Supplier Audit Findings Society/Human Rights/Audit Performance
Social: Society		
Aspect: Local Communities		
G4-DMA	Generic Disclosures on Management Approach	Governance/CSR Materiality Assessment Society/Employee engagement Society/Social Investment
G4-SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs	Society/Performance Summary, Society/Employee Engagement, Society/Social Investment
G4-SO2	Operations with significant actual and potential negative impacts on local communities	Due to the nature of Cisco's operations, this aspect was not assessed as material. We will review the need to report on a company-wide level in future CSR materiality assessments.

GRI-G4 Guideline		Location
General Standard Disclosures		
Aspect: Anti-Corruption		
G4-DMA	Generic Disclosures on Management Approach	Governance/CSR Materiality Assessment Governance/Ethics Global Anti-Corruption Overview
G4-SO3	Total number and percentage of operations assessed for risks related to corruption and the significant risks identified	Governance/Ethics
G4-SO4	Communication and training on anti-corruption policies and procedures	Governance/Ethics Training Global Anti-Corruption Overview
G4-SO5	Confirmed incidents of corruption and actions taken	Governance/Reporting a Concern Global Anti-Corruption Overview
Aspect: Public Policy		
G4-DMA	Generic Disclosures on Management Approach	Governance/Public Policy and Political Support
G4-SO6	Total value of political contributions by country and recipient/beneficiary	Governance/Public Policy and Political Support
Aspect: Anti-Competitive Behavior		
G4-DMA	Generic Disclosures on Management Approach	2016 Annual Report
G4-SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes	2016 Annual Report
Aspect: Compliance		
G4-DMA	Generic Disclosures on Management Approach	2016 Annual Report
G4-SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	2016 Annual Report
Aspect: Supplier Assessment for Impacts on Society		
G4-DMA	Generic Disclosures on Management Approach	Governance/ Managing Sustainability in the Supply Chain
G4-SO9	Percentage of new suppliers that were screened using criteria for impacts on society	Governance/Embedding Sustainability in Supply Chain Operations All Cisco key suppliers must acknowledge their commitment to the EICC Supplier Code of Conduct. Audits are undertaken to assess performance, in addition to related criteria being part of a supplier scorecard.
G4-SO10	Significant actual and potential negative impacts on society in the supply chain and actions taken	Governance/Working with Suppliers to Build Capacity Society/Supplier Audit Findings Society/Audit Performance
Aspect: Grievance Mechanisms for Impacts on Society		
G4-DMA	Generic Disclosures on Management Approach	Governance/Ethics Governance/CSR Governance and Priorities
G4-SO11	Number of grievances about impacts on society filed, addressed, and resolved through formal grievance mechanisms	Due to the nature of Cisco's operations, this aspect was not assessed as material We will review the need to report on a company-wide level in future CSR materiality assessments

GRI-G4 Guideline		Location
General Standard Disclosures		
Social: Product Responsibility		
Aspect: Customer Health and Safety		
G4-DMA	Generic Disclosures on Management Approach	Governance/Supply Chain Management Society/Human Rights in Our Supply Chain Society/Digital Rights: Product Use
G4-PR1	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement	Governance/Supply Chain Management Environment/Life-Cycle Assessments Environment/Hazardous Materials
G4-PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcomes	Governance/Supplier Audit Findings Society/Digital Rights: Product Use
Aspect: Product and Service Labeling		
G4-DMA	Generic Disclosures on Management Approach	Environment/Environmental Sustainability
G4-PR3	Type of product and service information required by the organization's procedures for product and service information and labeling, and percentage of significant product and service categories subject to such information requirements	We meet all applicable laws, regulations, and standards related to product labelling
G4-PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes	Cisco has received no fines, penalties, or grievances greater than US$10,000 reporting threshold in the past five years.
G4-PR5	Results of surveys measuring customer satisfaction	Governance/CSR Stakeholder Engagement and Global Forums
Aspect: Marketing Communications		
G4-DMA	Generic Disclosures on Management Approach	Code of Business Conduct
G4-PR6	Sale of banned or disputed products	Marketing communications are regulated by national and international law and are also subject to voluntary codes. Cisco's marketing communications are also governed by our Code of Business Conduct and by additional guidelines and best practices.
G4-PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcomes	2016 Annual Report – Legal Proceeding Disclosures
Aspect: Customer Privacy		
G4-DMA	Generic Disclosures on Management Approach	Society/Digital Rights
G4-PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	2016 Annual Report – Legal Proceeding Disclosures
Aspect: Compliance		
G4-DMA	Generic Disclosures on Management Approach	Governance/Ethics
G4-PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	2016 Annual Report – Legal Proceeding Disclosures