Our Story

We are accelerating global problem solving to make the impossible possible.

Cisco technology and people are accelerating global problem solving in ways that have never been attempted before. From solving customers’ business challenges to tackling the toughest social and environmental issues of our time, we are helping to make the impossible possible.
In this report

2 Our Story
5 Message from Chuck Robbins
23 The Details
24 Governance

64 Society
66 Building digital skills and entrepreneurship
74 Strategic social investments
84 Human rights
91 Responsible sourcing and manufacturing

30 People
32 Ethics and integrity
35 Team development
44 Health and wellness
49 Inclusion and collaboration
60 Employee community impact

106 Planet
109 Environmental sustainability
121 Energy and GHG emissions
147 Material use
156 Non-material topics
163 Appendix I

164 GRI Index
176 UN SDGs
About this report

We use our Corporate Social Responsibility (CSR) Report to share how we are managing and measuring progress against our CSR goals, as well as to respond to a broad set of stakeholder expectations and inquiries we receive throughout the year.

This report covers fiscal year results for the period ended July 28, 2018. Data includes all our operations around the world, unless otherwise stated. Some data has been rounded. Monetary figures are in U.S. dollars unless otherwise noted.

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

In addition, the Cisco Foundation, which provides cash grants to our nonprofit partners, is audited annually.

For more information on Cisco’s CSR activities, visit csr.cisco.com.
A message from Chuck Robbins

We believe in the possible.

That’s something we have said at Cisco for more than 30 years. We focus on driving incredible innovation for our customers to help them harness the power of technology to drive growth. At the same time, we consistently strive to make the world a better place by using our technology and innovation to bring about positive change and improve lives.

As our world grows more complex and interconnected, social responsibility is not only a competitive differentiator or a business imperative—it is simply the right thing to do. The world faces challenges that no one community, city, or country can solve on their own, and it is increasingly becoming the responsibility of businesses like Cisco to help everyone around the world have access to opportunity and possibilities.

We are deeply focused on bridging gaps in each of these areas. In FY18, we made a 5-year, $50 million commitment to address the homelessness crisis in Santa Clara County; responded to the many natural disasters not just across the United States, but across the globe; and we educated almost 1.9 million students around the world in IT skills through Cisco Networking Academy.

We are also focused on building a thriving workforce that embraces diversity across the spectrum at every level by using technology to better recruit, hire, and develop diverse talent. Through actions like solar power purchase agreements in India and a commitment at the World Economic Forum to help enable the circular economy, we continue to reduce our environmental impact. You can learn more about these initiatives—and how we hold ourselves accountable to the universal principles embodied in the United Nations Global Compact—in the pages that follow.

I truly believe that when we apply the strength of our business—our technology, resources, and expertise—to the issues that people face around the world, there is so much that we can achieve. There is an incredible power that can be achieved through connections, and together we can build the bridge to possible.

Sincerely,

Chuck Robbins
Chairman and CEO

“It is increasingly becoming the responsibility of businesses like Cisco to help everyone around the world have access to opportunity and possibilities.”
What we made possible in FY18

**Giving**
- $383 million in cash and in-kind contributions from Cisco and the Cisco Foundation

**Circular economy**
- 100% product return
  - Cisco pledge as part of PACE* hosted by World Economic Forum, Davos

**Homelessness**
- $50 million
  - to Destination: Home to address Homelessness in the Bay Area

**Recognition**
- #1 Barron’s Most Sustainable U.S. Company List

**Digital Workforce**
- 1.87 million
  - Cisco Networking Academy students enrolled worldwide in IT skills education

**Entrepreneurship**
- 40%
  - of our Bangalore campus in India powered by two solar power purchase agreements

**Renewable energy**
- 1.87 million
  - of our Bangalore campus in India powered by two solar power purchase agreements

**Supply chain excellence**
- #3 Gartner Supply Chain Top 25 in 2018

**GHG reduction**
- 45%
  - reduction in Cisco Scope 1 and 2 GHG emissions worldwide since FY07

**Diversity**
- 29%
  - of new hires were women—leading to record female representation of 25 percent
More than 30 years ago, Cisco pioneered the technology that connects everything. Today, our intent-based technologies are constantly learning and adapting to provide customers with a highly secure, intelligent platform for their digital businesses.

The technological connections we create go well beyond our products and solutions. Across our CSR focus areas of People, Society, and Planet, Cisco is using the power of our technology and the ingenuity of our employees to accelerate global problem solving and advance social and environmental benefits. This work is focused on issues most relevant to our business and where we can have the greatest impact.

We cannot solve the world’s problems on our own, but we do have an important role to play. As we continue to connect everything, everywhere, Cisco is building bridges that transform global challenges into infinite possibilities.

Our focus areas and priorities
With input from internal and external stakeholders, we developed this list of priorities that impact our employees, society and the planet, and on which Cisco can make an impact.

**People**
- Attracting, keeping, and sharing great talent
- Inclusion and collaboration
- Employee community impact

**Society**
- Strategic social investments
- Building digital skills and entrepreneurship
- Human rights
- Responsible sourcing and manufacturing

**Planet**
- Energy and GHG emissions
- Material use and waste
The bridge to 1 billion

We have a long legacy of doing amazing things with technology—with the ultimate goal of driving positive business outcomes, empowering people, and helping to better society at large. In fact, it is how Cisco began—with two people driven by a desire to connect.

That promise to connect is reflected in our name—short for San Francisco—and our logo, inspired by the iconic Golden Gate Bridge. Cisco's new brand campaign and tagline is "The bridge to possible," which honors this past while pointing to our future.

Look across our company, and you will find more "bridges," from our people who are building the next era of connections to programs like Cisco Networking Academy, which is empowering the next generation of technology professionals with the skills to go out and change the world.

This belief in what is possible led us to our ambitious goal, announced in 2016, to positively impact 1 billion people with digital solutions by 2025. In the 2 years since that announcement, we have focused on the programs having the greatest potential for impact, and the investments and partnerships best aligned with our business strategy.

As of the end of FY18, we have positively impacted a cumulative 445 million people worldwide. This impact takes many forms. Our 2018 Corporate Social Responsibility (CSR) report chronicles the social, environmental, and business benefits we have made possible over the past year.

Having a goal to impact 1 billion people has been a rallying point for our employees who have both individually and collectively been engaged in efforts to bridge new possibilities across the world. From teaching technology courses at a refugee school, to starting a nonprofit that advocates for orphans, to developing technology that can save lives in fires and avalanches, our employees are proof that everyone has the potential to be a bridge and problem solver.

"At our core, we have always been about solving problems, connecting people, and striving for positive outcomes."

Tae Yoo,
Senior Vice President, Corporate Affairs and CSR

FY16–FY18 numbers updated December 2018 to reflect Cisco’s social impact grants and signature programs such as Networking Academy.
What is possible for our people?

Our People are our Bridge Builders. Everything we do at Cisco starts with our people and how they support our business, customers, and communities around the world. Our People Deal describes the culture Cisco embraces to attract the best and brightest in our industry. As with all deals, there are two sides—what our people can expect from Cisco and what we ask in return.

These three pillars make up our unique experience at Cisco:

**We connect everything**—people, process, data, and things—and we use those connections to help change our world for the better. And we are doing it faster than ever before, in ways we believe no one else can.

**We innovate everywhere** to create fresh ideas and possibilities. We take bold risks to shape the future because we understand every failure is a success, if we learn from it.

We support one another and work together to create shared success that will **benefit everyone**. The future of Cisco, the growth of our customers and partners, and the lives of people around the world—they are all connected.

“We introduced Our People Deal to create the culture we want our employees to experience—a culture that will help us move quickly; be agile, innovative, and collaborative; and attract and retain the best people.”

- Fran Katsoudas, Executive Vice President and Chief People Officer
Inclusion is the bridge that connects diverse perspectives, challenges the status quo, and unlocks the full potential of our people. Amid this age of digital transformation, we believe inclusion, diversity, and collaboration make us more innovative, more agile, and ultimately more successful. This commitment starts at the top. Based on gender and ethnicity, our executive leadership team is 58 percent diverse—making Cisco’s one of the most diverse executive teams in our industry.

We are welcoming more perspectives than ever into the Cisco family through new strategies to recruit, retain, and develop individual contributors and leaders. We are also proud to take a leadership role in national and global collaborations to drive equity and create fully diverse and inclusive organizations, and to take a stand against injustice in our communities.

Our actions include:

- Diverse Talent Accelerators—A suite of tools that help us minimize bias in candidate searches and interviews
- The Multiplier Effect—A pledge created by Cisco, but open to anyone, through which leaders can commit to sponsoring a diverse individual to the next level in their career
- Commitment to Pay Parity—We continually review our compensation system to ensure we pay our people fairly and equitably
- Inclusion & Collaboration Community—Through more than 243 Employee Resource Organization chapters and Inclusion Leadership Teams in every region and function, Cisco employees have countless opportunities to connect with others and celebrate their diverse interests and culture.

Possible: 
Building from every perspective 

29,000 members of our Inclusion & Collaboration Community—16 percent growth since FY17
29% record hiring rate for women
58% diverse executive leadership team
Agility and speed are critical in today’s complex and hyperconnected world. To thrive, companies must understand and securely harness the power of their connections, find patterns and intelligence in data, and anticipate and respond to market shifts. This dynamic extends to the way we attract, keep, and grow talent across Cisco. We recognize employee needs are constantly changing and their skills’ lifespans are shorter than ever.

Once people join the Cisco team, they must have the needed resources to refresh their skills and grow in their careers. Increasing our people’s knowledge and capacity benefits both our employees and business, and we are continually looking for new ways to do so. That is why we have partnered with Degreed, a new learning platform to expand the training and development content available to our people.

Degreed integrates with Cisco’s existing training and development tools to build upon them. Employees can access and organize external articles, videos, and courses in a single place. This enables them to customize their own paths, allowing them to remain lifelong learners and stay on the cutting edge of their own personal development. Degreed also will provide us with insights into the training topics and formats our employees most prefer.

Our employee community impact

#3
Cisco 2018 Best Workplaces for Giving Back
Fortune magazine

$21.4 million employee donations to charities and Cisco matching gifts

424,000 employee volunteer hours

2.5X more likely an employee will stay at Cisco if they volunteer in programs like Time2Give, which gives employees five days per year to volunteer
What is possible for society?

With intent-based networking, Cisco has not only changed the building blocks for networks, but also created a new platform for innovation. This enables us to bridge new expanses through our products and keep people and things securely connected.

We are applying these same resources to make a positive impact on society and our business. This includes the help we provide social enterprises and nonprofits to accelerate early-stage, technology-based solutions for pressing global challenges. At the same time, we help countries meet industry demand for a digitally skilled workforce.

The opportunities and challenges we manage within our own business also extend to our global supply chain, which we view as an extension of our business. For this reason, we are committed to ensure the same responsible business standards and ethical behaviors we expect of ourselves are upheld by the hundreds of suppliers who source and manufacture our products.
Success can lead to unintended consequences. For technology companies headquartered in California’s Silicon Valley, one consequence of the technology boom is a shortage of affordable housing throughout the region. As a result, Santa Clara County, where Cisco is headquartered, is one of the wealthiest counties in the United States, yet has the nation’s third-highest rate of chronic homelessness.

Cisco has a corporate responsibility to address this problem, and in 2018 we made a 5-year, $50 million commitment to Destination: Home. Created in 2008, this incredible organization is a public-private partnership that drives and aligns resources to create permanent housing and sustainable support systems built for the long term. The organization is improving how systems work together to end homelessness, as well as protect individuals and families at risk of becoming homeless.

Our contribution to the program helps Destination: Home facilitate the acquisition of land, and construction of supportive housing; pioneer technology to improve services for the homeless; and explore other evidence-based innovations to prevent homelessness from occurring in the first place.

“There has been unparalleled financial success in the tech community, particularly here in Santa Clara County,” says Cisco CEO Chuck Robbins. “But there is an increasing divide between that success and those who are struggling in our community. In Silicon Valley and at Cisco, we invent things people never dreamed possible, and we can do the same for a problem like homelessness.”
There are few situations where connectivity is more critical than in the aftermath of a natural disaster. These events are growing in number and intensity worldwide, and can have a significant impact on our employees, customers, and communities, as well as our business operations. Cisco technology and a band of Cisco employees and volunteers get our clients and communities up and running so they can connect with loved ones and the resources needed for survival.

Such was the case in 2017 when Hurricane Maria left some 3.4 million residents of Puerto Rico without electricity and disabled nearly all communications. Restoring communication quickly was critical, not only for emergency personnel, but also for local people desperately trying to locate loved ones. Cisco’s Tactical Operations (TacOps) team arrived equipped to help, working with our nonprofit partner NetHope to restore connectivity to the island as quickly as possible. TacOps is a skilled team that mobilizes rapidly to respond to disasters worldwide when catastrophes knock out communications. TacOps also manages Cisco’s Disaster Incident Response Team, consisting of 350 trained Cisco volunteers who pitch in to help with relief efforts. During FY18, TacOps responded to wildfires in California, Guatemala’s Volcán de Fuego eruption, Hurricanes Harvey and Irma, and more.

Our team in Puerto Rico supported the installation of 37 Wi-Fi sites across the island, working alongside NetHope for nearly three months. Together, we connected NetHope-member NGOs and more than 250,000 residents through public Wi-Fi hotspots, emergency operations centers, city halls, hospitals, and clinics. Lessons learned from Maria, such as the value of cloud-based network technologies like Meraki, are helping to provide a blueprint for response to future disasters.

**Five steps to restoring communications**

How TacOps responds in a crisis

1. **Survey the situation.** Determine where equipment is most needed
2. **Develop a plan.** Customize technologies to fit the incident at hand
3. **Head into action.** Engineers can set up equipment in as little as 15 minutes
4. **Learn and improve.** Grow the network to connect more people
5. **Hand off and head home.** Help with the transition to normal operations

Possible:

Connecting when it matters most

There are few situations where connectivity is more critical than in the aftermath of a natural disaster. These events are growing in number and intensity worldwide, and can have a significant impact on our employees, customers, and communities, as well as our business operations. Cisco technology and a band of Cisco employees and volunteers get our clients and communities up and running so they can connect with loved ones and the resources needed for survival.

### Cash and product donations

- **$2 million** for relief efforts in Puerto Rico
- **$1.25 million** for relief efforts for Hurricane Harvey

Cisco, partnering with NetHope, applied technology and expertise to get secure networks up and running after Hurricane Maria—restoring hope and community in the process.
Technology proficiency can be the key to a lifetime of opportunity for individuals in a rapidly digitizing world. Likewise, a workforce with skills and passion for the latest networking technologies is critical to the long-term success of Cisco, our partners, and our customers. Those needs are the driving force behind Cisco Networking Academy, which has provided critical training to millions of students worldwide for more than 20 years, educating a generation of learners on the transformative power of the network.

One inspiring beneficiary of this program is Soso Luningo, who grew up in a poor village in the Eastern Cape province of South Africa. She was a quick learner and, as a student, became the only person in her village to qualify for computer lessons. Luningo jumped at the opportunity, despite naysayers who told her technology education was not meant for girls. As a result, Luningo completed her bachelor’s degree and all four courses of the Cisco Certified Network Associate (CCNA) curriculum. Luningo got a job where she was the only woman in her company’s entire IT department—and was soon promoted. And then promoted again.

Luninga then returned to her university as the instructor for Cisco Networking Academy, where she helped other students, especially women, make themselves heard. Today Luningo is a Networking Academy program manager in South Africa, enabling thousands of underprivileged students benefit from the program. Each year, hundreds of thousands of women enroll in Cisco Networking Academy. Like Luningo, many of them go on to not only change their own lives, but also to inspire others to do the same.

Learn more about Cisco Networking Academy, including our progress toward enrolling 2 million students annually by 2020, here.
Possible:

Inspiring problem solvers from an early age

Cisco Networking Academy has empowered millions of students in high school and beyond. Yet emerging research tells us we may be missing an opportunity to engage students even earlier on STEM topics and the power of technology for social good.

That is why we created Global Problem Solvers: The Series (GPS: The Series), a new animated web series geared toward middle schoolers. GPS: The Series features a diverse team of teens from around the globe who use technology to solve real-world problems. The mission of the program is to inspire students to become global problem solvers: citizens ready to thrive in an increasingly connected and digital future by innovating like technologists, thinking like entrepreneurs, and acting as social change agents.

The animated characters in GPS: The Series—and students who participate in the program—focus on social, economic, and environmental problems around the world. During the first season, they give a village in Malawi access to clean water. In the second, they figure out how kids can continue learning when schools are closed after a hurricane hits the U.S. Gulf Coast. Each episode tackles a different stage of social entrepreneurship, from articulating a problem to marketing a product. The series, along with supporting materials for teachers, including storyboards, scripts, and worksheets, is available for free in English, French, Hindi, and Spanish.

As technology rapidly changes the way we work, live, play, and learn, we hope tools like GPS: The Series will help prepare a new generation to thrive in our increasingly interconnected and digital world.

“Students are highly engaged. They are taking on goals. This really sparks the passion in students, particularly those who do not always demonstrate that passion in traditional assignments.”

– Edgar Ochoa, social studies teacher, Roosevelt Elementary School District Phoenix, Arizona

Meet the Global Problem Solvers from GPS: The Series.
As we enable our customers to embrace and capture new opportunities driven by digital transformation, we also recognize our responsibility to ensure that transformation does not come at a societal cost. For this reason, we believe innovation must advance hand-in-hand with thoughtful policies and practices that respect the human rights of all people.

We developed a set of human rights position statements in FY18 that articulate Cisco’s point of view on technologies we expect to impact society and our business, including:

- Encryption
- Data Localization and Sovereignty
- Surveillance by Governments
- Internet of Things
- Big Data Analytics
- Artificial Intelligence

These disruptive technologies have the potential to address humanity’s most pressing challenges while also bringing new and unforeseen human rights risks. As an example of how artificial intelligence can be applied in the human rights arena, Talos, Cisco’s threat intelligence group, took on a new type of challenge by entering a Fake News Challenge last year. The Challenge asked participants to develop an algorithm using AI to evaluate news stories and identify misleading articles. The Talos solution was more accurate than any other team’s, earning the Fake News Challenge’s top prize.

Machine learning models like the one Talos developed could be applied in real-world situations such as helping human fact-checkers do their work more effectively. As AI continues to evolve, Talos remains committed to “forcing the bad guys to innovate.”
What is possible for the planet?

Cisco was part of the technological revolution that built the modern world. Now, we intend to build the bridges that will set us on a sustainable course to preserve the planet for future generations. This effort starts with our own operations and our global supply chain and extends to solutions we offer our customers to improve their own operations and products. As we deploy equipment around the world, we provide world-class services and repair to sustain our customers’ networks and extend product life. We also provide product refurbishment to like-new condition, and best-in-class recycling when a product has reached the end of its useful life. The potential of Cisco technology to connect people and ideas across distances, however, is perhaps our greatest opportunity to contribute to a sustainable future. Cisco technology, for example, can avoid emissions generated from transportation by making remote collaboration among individuals seamless. And we can help cities leverage the Internet of Things to reduce their environmental impacts.

We have changed the world many times over with our products and solutions. By seeking to build a sustainable business modeled after the Earth’s natural cycles, we plan to change the world once again.
The world’s population and economies are growing rapidly, drawing upon a shared pool of finite natural resources. Each year, we are using more resources than our planet can regenerate, which means our business and society must adapt.

A circular economy gradually decouples economic activity from the consumption of finite resources, designing waste out of the system and transitioning to renewable resources. In so doing, this model builds long-term resilience and presents a trillion-dollar opportunity with huge potential for innovation, job creation, and economic growth.

Nearly a decade ago, Cisco became a founding member of the Ellen MacArthur Foundation, allowing us to partner with like-minded companies to address this challenge. Now, we are building upon this work with the introduction of a new, enterprisewide program to support a circular economy inside our business and beyond.

Our holistic approach extends from how we design, build, and deliver products and solutions, to how we value the assets we have and turn those assets into new products. We have published a new goal to decrease the use of virgin plastic by 20 percent by 2025, using FY18 as our baseline year, and we are working to incorporate circular design principles into all new Cisco products by 2025. We are also applying Cisco technology to support our customers through their own circular transformations. Find more information on Cisco’s Circular Economy program here.
Possible:
Reducing our carbon footprint

Electricity is the largest contributor to GHG emissions within our operations, which means powering our business using clean power is a priority. During 2017, Cisco announced our third, five-year goals to further reduce our GHG emissions and increase the proportion of our electricity coming from renewable sources.

In previous years, we have installed solar capacity at Cisco sites in India, Massachusetts, and Texas and made our first offsite power purchase agreement (PPA) of 20 megawatts in Blythe, California. In FY18, two new solar PPAs covering our operations in India are continuing to make progress toward our GHG and renewable energy goals. Cisco’s Bangalore campus—the second-largest in the world—is now using solar power generated at two offsite solar installations. The PPAs will collectively deliver 85,000 megawatt-hours of clean, renewable electricity every year to the local electric grid where our Bangalore campus is located, providing nearly 40 percent of the campus’ electricity needs. The PPAs will also benefit the community, supporting jobs in India’s emerging renewables market and adding clean power to the national electric grid.

70,000 metric tonne
GHG emissions reduction from power purchase agreements (PPAs) and on-site solar installations in Bangalore
Equivalent to taking 15,000 cars off the road

Less carbon in the supply chain
Ensuring responsible manufacturing practices within our extended operations of global partners is an important component of reducing our environmental impact. We set a goal in FY16 to avoid 1 million metric tonne cumulative of GHG emissions in our supply chain from FY12 to FY20. As of the end of FY18, we have achieved 90 percent of our goal.

Message from Chuck Robbins

Our Story
Governance  People  Society  Planet  GRI Index  UN SDGs

International Standard for Business and Environment Performance
"Corporate Responsibility at Cisco: An Overview""
As researchers and innovators, we know finding big solutions often require starting small. By asking questions and conducting experiments, we arrive at answers with broad applicability.

That is exactly what is happening at Cisco’s campus at Research Triangle Park (RTP) in North Carolina. RTP is a growing campus in a regional innovation hub, surrounded by leading research universities and clean technology ventures. This makes RTP a perfect place to tackle sustainability issues within Cisco’s real estate operations, including energy, water, and waste.

Recently, we have developed a comprehensive green strategy for our RTP site, with goals to achieve 100 percent renewable energy, water neutrality, and zero waste by FY20. We are partway there, given that our U.S. facilities’ electricity is already 100 percent powered by renewables. To achieve our waste goal, we will explore adding capabilities like campus composting, waste sorting, and substitution of single-use items with reusable ones. To reduce water use, we plan to conduct water audits and invest in a variety of water efficiency and restoration projects.

RTP will continue to serve as a model for innovation. This pilot may serve as a launching pad to create similar strategies across our global operations in the future.

**Possible:**
Taking bold new steps

---

**Research Triangle Park 2020 campus goals**

- 100% renewable energy
- Water neutral
- Zero waste
Accelerating our progress

People
Empowering our people and teams to thrive in a digital workforce

Goal:
Achieve 80 percent employee engagement, measured by volunteer service and donations to charitable causes, by 2020

Progress:
Engagement increased due to social media-driven campaigns and benefits like Time2Give.

Society
Scaling inclusive social and economic impact in countries around the world

Goal:
Positively impact 1 billion people through our social impact grants and signature programs by 2025

Progress:
The life-changing work of new and established partners is helping us make rapid progress.

Planet
Advancing environmentally sustainable growth in a digital world

Goal:
Reduce total Cisco Scope 1 and 2 GHG emissions worldwide by 60 percent absolute by FY22 (FY07 baseline)

Progress:
We are investing in energy efficiency and renewables to meet this FY22 goal.

Message from Chuck Robbins
Empowering our people and teams to thrive in a digital workforce

Society
Scaling inclusive social and economic impact in countries around the world

Goal:
Reach 2 million Cisco Networking Academy students per year by 2020

Progress:
We grew the number of academies and expanded into new educational settings.

Our Story
Goal:
Positively impact 1 billion people through our social impact grants and signature programs by 2025

Progress:
The life-changing work of new and established partners is helping us make rapid progress.

Goal:
Use electricity generated from renewable sources for at least 85 percent of our global electricity by FY22

Progress:
Efforts such as new offshore solar contracts are helping us make progress.

Goal:
Avoid 1 million metric tonne cumulative of GHG emissions in our supply chain from FY12 to FY20

Progress:
We have significantly avoided carbon emissions from supply chain materials, energy, and logistics.

Goal:
Improve large rack-mounted-equipment system power efficiency—as measured from the input power from the facility to the board-mounted ASICs, memory and other chip devices—from 77% to 87% by 2022 using (FY16 baseline)

Progress:
Innovative power-delivery techniques and power switching devices will help us reach this FY22 goal.

Just announced (September 2018): We will decrease use of virgin plastic by 20 percent by FY25, using FY18 as our base year.
We have never been a company that waits for others to lead. As you have just read in Our Story, we are using the power of our business and the networks we have enabled to accelerate global problem solving for people, society, and the planet. We have set ambitious goals to focus our actions in these areas and are making meaningful progress.

We invite you to learn more about the strides Cisco made during FY18 in The Details, which delves more deeply into the programs and strategies that are helping us reach our goals.

Businesses, governments, technologists, and innovators everywhere dream of using technology to make a better world. Cisco aims to build the bridges that help them get there.

Between aspiration and action, there is a bridge.
Aligning our business priorities with pressing global challenges

CSR Pillars

- People
- Society
- Planet
“Our Story” shares some of our biggest accomplishments toward addressing global challenges and accelerating global problem solving over the past year. Here in “The Details,” we transition to a format tailored to analysts and investors, who are typically seeking more information on our strategy, goals, and year-over-year progress across our three CSR pillars: People, Society, and Planet.

CSR at Cisco
Cisco pioneered the technology that connects everything and has now developed intent-based technologies that are constantly learning and adapting to provide customers with a highly secure, intelligent platform for their digital businesses. Through our technology, the passion and expertise of our people, and our network of partners, we are making connections to help accelerate global problem solving and advance positive social and environmental impact.

Corporate social responsibility (CSR) is integrated into Cisco’s business strategy and functions. It’s core to our purpose, our culture, and how we invest our resources.

Across our focus areas of People, Society, and Planet, we are prioritizing issues aligned with Cisco’s business strategy and where we can make the greatest positive impact. To do this successfully, we must have the trust of all our stakeholders. This includes our employees, customers, investors, partners, and suppliers, as well as the governmental and nongovernmental organizations with whom we work and the communities in which we operate.

Corporate governance
A commitment to ethical conduct—and to the governance structures that ensure we walk the talk—helps us earn and maintain our stakeholders’ trust. More information about corporate governance at Cisco, including our enterprise risk management (ERM) program, can be found in our 2018 Annual Report.

CSR governance
Cisco Corporate Affairs champions our companywide commitment to CSR performance and transparency. This team conducts reporting activities—aligned with the Global Reporting Initiative (GRI) standards—and engages with internal and external stakeholders to assess, prioritize, and monitor CSR issues.

The team establishes corporate CSR strategy, drives processes for CSR governance, and provides guidance and coordination across business functions.

CSR priorities are owned by the business functions, including Corporate Affairs, and are integrated into ongoing business strategy and planning. Business functions set CSR goals, implement plans, and measure performance. Where a CSR priority requires multiple functions to engage, we establish cross-functional teams to implement our strategy and plans. As an example, our Human Rights Working Group includes experts from Collaboration Engineering, Corporate Affairs, Corporate Communications, Government Affairs, Inclusion and Collaboration, Investor Relations, Marketing, Security and Trust, and Supply Chain Operations. The group is sponsored by Mark Chandler—Executive Vice President, Chief Legal Officer, and Chief Compliance Officer.

Figure 1. CSR Business Process
CSR governance and management

**Board of Directors**
Oversees Cisco’s governance, risk management, and controls

**Chairman and CEO**
Oversees all business activities

**Corporate CSR**
Champions Cisco’s companywide commitment to CSR performance and transparency

**Board committees**
- Acquisitions
- Audit
- Compensation and management
- Finance
- Nominations and governance

**Business functions and cross functional groups**
Conduct due diligence and implement policies and programs for specific CSR priorities

**Governance, risk and controls**
Champions enterprise risk management (ERM); works across the business to identify, assess, and manage risks

**Governance**
People
Society
Planet
GRI Index
UN SDGs

**Employees**
Annual recertification to code of business conduct

**Supply chain and partners**
Ongoing enforcement of supplier code of conduct
Reporting and materiality

For our CSR Report, Cisco reports in accordance with the Core GRI standards. As appropriate, we align with other requirements. For example, the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and the Task Force on Climate-related Financial Disclosures (TCFD) have released their respective guidance on integrating Environment, Society, and Governance (ESG) into ERM processes and disclosure, and we are working to align with these frameworks.

Cisco also recognizes the importance of the UN Sustainable Development Goals (SDGs), a set of global aspirations necessary to shift the world toward greater sustainability and resilience. Our CSR programs and strategies, many of which have been in place for more than a decade, support several of the SDGs. The alignment of Cisco’s programs with the SDGs is highlighted in our UNSDG Index here. Our CSR approach continues to focus on leveraging our technology, people, and partners to advance positive social and environmental impact.

Every two years, Cisco undertakes a comprehensive CSR materiality assessment that considers both internal and external stakeholder views and assesses impacts on our focus areas of People, Society, and Planet. This assessment methodology follows GRI’s recommended process and principles, and addresses ESG topics that have an impact on society, the environment, and our business. CSR priorities may be broken down into multiple CSR topics, depending on how they are managed and reported within the business. Tier I and II CSR topics take priority as they have significant impact to society, the environment, and our business, and therefore receive the greatest amount of investment as well as senior executive sponsorship. Lower-tier CSR topics are those in which impact is limited and where the management of the topic is incorporated into the responsible business function and its processes.

Inputs to the process include CSR inquiries from customers and investors, employee surveys, industry benchmarking, and listening to key technology and CSR leaders and influencers. In years in which we do not conduct a comprehensive assessment, as was the case for FY18, we do a CSR materiality refresh with internal stakeholders, focused on validating our CSR priorities in terms of business risks and opportunities. Results are provided each year to Cisco Governance Risk and Controls and inform enterprise risk management activities.

Figure 3.

Our focus areas and priorities

**People**
- Attracting, keeping, and sharing great talent
- Inclusion and collaboration
- Employee community impact

**Society**
- Building skills and entrepreneurship
- Strategic social investments
- Human rights
- Responsible sourcing and manufacturing

**Planet**
- Energy and greenhouse gas emissions
- Material use and waste
Stakeholder engagement and management

Bridging what is possible means building connections and trust with our key stakeholders through regular dialogue. Outside views help us identify and prioritize emerging issues, better align our business to society’s and the planet’s needs, share the findings of our research, and evolve our CSR strategy and programs. We also encourage our stakeholders to provide feedback on our performance and transparency.

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. Since 2002, we have been a strategic partner of the World Economic Forum (WEF), and our engagement with the WEF influences our CSR strategy and helps us learn from others and share best practices.

At the 2018 meeting in Davos, Switzerland, we joined 10 other companies in launching SkillSET, a portal of training libraries where users can get access to materials on everything from business skills to cybersecurity. This new platform, which is available free of charge to users, will help fill gaps in skills that will be needed in the digital economy and aims to reach 1 million people by 2021.

“It is important for all of us to recognize that without the talent we need, none of us would be successful. The SkillSET initiative brings together the capabilities and strengths of all our companies to help educate the high-skilled workers needed for jobs now and into the future. It is our obligation to make sure people with jobs across every industry are given the means to learn new skills and remain competitive.”

- Chuck Robbins, Chairman and CEO
Public policy and political support

Creating positive change through our business requires us to maintain strong relationships with the governments of the countries and territories in which we operate. Cisco engages with governments at the global, national, and local levels to help shape public policy and regulations that support the technology sector and help governments meet their goals. Cisco’s Government Affairs team develops and influences pro-technology public policies and regulations. The team is composed of former public officials, both elected and appointed, as well as seasoned government affairs professionals. Further details can be found on our Cisco Public Policy Engagements website and our High Tech Policy blog. Current policy priorities include:

- **Advancing smart cybersecurity policies**
  Effective policies for cybersecurity risk management are foundational to Cisco’s efforts to securely connect consumers, businesses, and governments. In an interconnected world, smart policies will protect security in a dynamic threat environment while fueling economic growth and innovation.

- **Protecting free trade**
  Cisco advocates for policies that open markets for technology products and services, lower prices, increase choice, and promote innovation. Promoting and enforcing trade agreements is important to encouraging innovation and investment that spur economic growth and competitiveness.

- **Investing in people and knowledge**
  Cisco supports immigration policies that promote innovation by accelerating economic growth, encouraging hiring, and creating a highly skilled workforce. Reforming the immigration system in the U.S. will enable businesses to compete more effectively in the global marketplace.

- **Preparing wireless networks for the next generation**
  Policies that promote network investment foster networks that can keep pace with rising consumer demand for data. For wireless, governments control access to a key input—radio spectrum—and therefore must make spectrum available for growth and new technologies.

- **Preserving an open Internet**
  Cisco has always supported an open Internet. Ensuring regulations are developed in a way that incentivizes network investment is essential to allowing continued innovation and flexibility to develop new business models.

• **Protecting innovation**
  A strong, balanced patent system is important to protect innovators while at the same time reducing incentives for harmful litigation based on poor-quality patents.

• **Promoting investment**
  Cisco advocates for national tax policies that promote investment, encourage job creation, and incentivize innovation while also being consistent with existing global approaches to taxation.

• **Securely connecting the future**
  As society increasingly becomes more connected and devices more intelligent, we need to harness the power of intuitive networks—powered by machine learning and artificial intelligence—to provide visibility and control over devices that may be unable to protect themselves against attack.

Cisco does not make political contributions to candidates for U.S. federal or state elected office, nor does Cisco make contributions to political parties or other committees for the purpose of influencing the election of candidates to federal, state, or local public office. 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. Cisco’s Board of Directors reviews the company’s political contributions on at least an annual basis.
People

Empowering our people and teams to thrive in a digital workforce

In this section

- Ethics and integrity
- Team development
- Health and wellness
- Inclusion and collaboration
- Employee community impact
2018 People dashboard

Goal:
Achieve 80 percent employee engagement, measured by volunteer service and donations to charitable causes, by 2020.

Progress:
Engagement increased due to benefits like Time2Give, year-round matching at $10,000 per employee and improved platforms for giving and volunteering.

Key performance metrics

- 23,843 responses to Real Deal Surveys—132 percent of our goal
- 99.7% of employees completed Code of Business Conduct Certification
- 14% safety incidents per 100 U.S. FTE employees*
- 29% lost work days per 100 U.S. FTE employees*

*2018 vs. 2017

Highlights

- Introduced new ethics and compliance training for employees on open-source and third-party software infringement, as well as on the new General Data Protection Regulation (GDPR) mandate. Read more
- Shared 2,500 employee social posts during the #WeAreCisco #LoveWhereYouWork campaign. Read more
- Added functionality to the Team Space platform, including making it available in Chinese, English, French, Portuguese, and Spanish. Read more
- Modified our Real Deal survey to better understand how employees feel about Cisco’s strategy and culture—and better determine which factors make people want to stay with us. Read more
- Rolled out Degreed, a new learning experience platform that allows employees to access Cisco-endorsed curricula or discover content meeting their own interests. Read more
- Offered a suite of new and ongoing programs for leaders at all levels, from Aspiring Leader Journey to the Senior Leader Program. Read more
- Provided new offerings combining wellness and technology, including Vida, a health coaching app for employees and families, and Cisco Mind Set, a mindfulness and workplace resiliency program. Read more
- Unveiled new employee benefits, including increased global minimum time off for new parents, and Emergency Time Off—additional time away during unexpected situations. Read more
- Launched Diverse Talent Accelerators, a suite of tools to help us find and attract diverse talent. Read more
- Expanded our employee donation matching program to match gifts up to $10,000 at any time of year. Read more
Ethics and integrity

Cisco’s success is built on a culture of integrity. Customers, investors, and partners rely on our trustworthiness in the marketplace, and that trustworthiness starts within the company. This means we continually strive to achieve the highest standards of ethical conduct in all our business dealings and among our employees, suppliers, and business partners. We are committed to maintaining an environment where everyone is expected to act ethically. Our people must feel free to voice concerns without fear of retaliation and with confidence those concerns will be taken seriously.
Code of Business Conduct

Our Code of Business Conduct (COBC) reinforces our core values and defines our expectations of ethical behavior. The COBC is available in 16 languages and helps guide employee behavior and decisions in an engaging and interactive manner. It includes an ethics decision tree, videos, FAQs, and links to additional policies and resources. All regular employees are required to certify compliance with the COBC each year, subject to applicable laws.

Employees must also complete relevant compliance and ethics trainings, including annual trainings on anti-corruption. We provide additional targeted trainings throughout the year and supplement them with functional and regional initiatives.

In FY18, we fine-tuned training content to provide more clarity on open-source and third-party software infringement. We also invested in the development and delivery of trainings related to Data Protection and Privacy compliance to address the EU’s General Data Protection Regulation (GDPR) mandate.

Our training materials are available in multiple formats to promote accessibility, and campaigns are reinforced with other resources, such as discussion forums, videos, and websites. Cisco’s Global Compliance Enablement team continues to focus on key areas such as conflicts of interest, anti-bribery, and anti-corruption. With recent developments in business intelligence, we are using predictive analytics to be more proactive in risk mitigation in order to, for example, identify high-risk business transactions.

Sharing concerns

To maintain the highest ethical standards, it is critical we cultivate an environment where employees and others can report concerns about suspected unethical behavior safely, promptly, and confidentially, subject to applicable law.

We provide several ways for employees to share their concerns or ask questions:

• Speak directly to their manager, their Human Resources representative, or a member of the Legal team.

• Contact the Ethics Office by email at ethics@cisco.com, through our web form, by calling our global EthicsLine (available 24 hours a day in more than 150 languages), or by fax or mail.

• Contact Cisco’s General Counsel or the Audit Committee of the Board of Directors.
We handle all inquiries promptly and investigate to the full extent necessary. Violations of the COBC are subject to disciplinary action up to and including termination of employment. We do not tolerate retaliation against individuals raising good faith reports of misconduct or allegations of policy violation.

In FY18, the Ethics Office received 1,240 inquiries (see Figure 6). We believe this level of engagement demonstrates the effectiveness of our ethics training programs and policies, as well as an awareness of Cisco’s commitment to business integrity. This also demonstrates employees know how to raise concerns and feel comfortable doing so.

For full transparency and integrity, the Ethics Office reports all cases to the Audit Committee of the Board of Directors, to the Executive Compliance Committee, and to our independent auditors. As a publicly traded company, we are also obligated to publicly disclose to the U.S. Securities and Exchange Commission any violations that could be material to our business or financial condition.

We expect these same considerations to apply to our suppliers and their employees. The Supplier Code of Conduct requires our suppliers to have mechanisms in place to allow workers to file, track, and resolve formal grievances. We also work through industry coalitions to offer people in our extended workforce alternative mechanisms to call attention to Code-related issues. Learn more about how we manage ethics and standards in our supply chain discussion here.
Team development

Our purpose is to build bridges between hope and possibility. This work begins with our people—connecting everything, benefiting everyone, and innovating everywhere. At Cisco, each person is unique, but we bring our talents together to work as a team and make a difference. When we combine our talents, great things happen.
Creating a winning culture

**Talent recruitment and retention**

Building top-performing teams begins with recruiting the best talent. We are positioning ourselves for the digital revolution by seeking people with skills in emerging areas that are not traditionally associated with Cisco, like artificial intelligence, machine learning, and cloud engineering. We do this by putting our own technology to work. Tools such as data analytics and automation are helping us map global talent flows and develop customized strategies for our major locations worldwide.

When it comes to engaging with prospective employees, we use Cisco collaboration technologies like Webex Teams and Telepresence to communicate with candidates throughout the interview process. Digital engagement through our cisco.com/careers site, @WeAreCisco social media profiles, the Life at Cisco blog, and video content creates a technology-driven candidate experience, helping prospects see what Cisco makes possible.

Diversity is an integral part of our recruiting strategy. In every candidate search, we make an up-front commitment to create a diverse candidate slate, using technology to craft job postings that neutralize bias. We also strive to create diverse interview panels, as research shows such panels are more effective in maintaining the interest of minority candidates. As part of our efforts to increase representation, Cisco has committed to interviewing at least one qualified woman for every open position at the VP level and above.

To continue to develop our diverse hiring practices, Talent Attraction has partnered with Cisco's Office of Inclusion & Collaboration and Legal to create the Talent Acquisition Diversity Communication Guide. We are also exploring ways to apply technology, automation, and intelligence to our hiring process, including identifying diverse Cisco alumni and contacting them about potential opportunities. Cisco continues to recruit diverse early-career employees at special events such as the Grace Hopper Celebration of Women in Computing, the Society for Hispanic Professional Engineers, and the National Society for Black Professionals.

As Cisco competes for the same talent pool as other major technology companies, talent attraction and retention will remain areas in which we must continually improve our game. We believe Cisco’s offer to prospective employees is a compelling one: the opportunity to work as an innovative team on fast-paced projects shaping the future of business; geographic flexibility and internal mobility; and above all, a culture of teamwork and innovation.

#WeAreCisco

Research suggests the first thing a job seeker does before applying—and the last thing they do before accepting a job—is talk to an employee at the company they are interested in. With more than 70,000 team members worldwide, Cisco employees are not hard to find. But for people who do not know one of us personally and want to know what working here is like, social media is the next best thing.

Prospective employees can get the inside perspective they seek by following the @WeAreCisco social media accounts or browsing the #WeAreCisco hashtag on Instagram, Twitter, or LinkedIn. Social media brings us together as a global employee tribe and allows us to connect, exchange ideas, and talk about why we love where we work.

When an employee's @WeAreCisco post creates a reaction, we may ask the individual to write a post for the Life at Cisco blog, making further connections with existing and future talent. For example, one employee who competed on “The Amazing Race” described what the competition has in common with her job at Cisco. Another shared how Cisco’s celebration of May the 4th (Be With You) Star Wars day—affirmed her sense of belonging in Cisco’s proudly unique culture. Across all of our social channels, the @WeAreCisco message reaches millions of people each month.

Social media also helps our talent brand team engage and retain current employees. Each year, this team runs a contest using two hashtags: #WeAreCisco and #LoveWhereYouWork. Employees are challenged to post using these hashtags on their own social accounts for a chance to win prizes, like coffee with a Cisco executive.
Our People Deal

Working for Cisco means committing to “Our People Deal,” a partnership we are committed to every single day of the year. We call it a “deal” because culture is a two-way street, a relationship of give and take. Employees expect us to give them the resources and support they need to succeed. In turn, we ask our people to take bold risks, innovate, and collaborate with others, always with our customers in mind. Our People Deal includes six Guiding Principles:

**Give your best.** Show a desire to be at your best, and connect with others to share quickly with whomever needs it. Open your mind to ideas from everywhere and anywhere. And use those ideas to build on the possibilities to pour a little drop of love into our customers’ worlds.

**Take accountability.** Whatever comes your way, understand it and be personally accountable for its success. Assume the answer is “yes” and that you do not need to wait in line for permission. Check the data, but do not let that slow down taking responsibility. And deliver.

**Give your ego the day off.** It is the best solution our customers need, not the best-protected Cisco turf, so support that solution, whatever the background of the person or team who came up with it. Have the debate and have a backbone. Make your point, then commit to what has been agreed and deliver it with agility and grace.

**Take difference to heart.** We become bigger as individuals and more powerful as a collective when we respect and value what makes us so special: our unique, personal differences. Inclusion will always beat exclusion.

**Give something of yourself.** A simple smile or “hi” every day is worth its weight in gold, so do not hide it away. Show care and consideration to your colleagues, our customers, our communities, our partners, and the world we all share. Be worthy of trust. Be an inspiration. Be delightful to everyone—even if you do not like them.

**Take a bold step.** Whatever your position, show leadership and courage when it comes to innovating and disrupting. If it does not feel safe, be secure in the knowledge that shooting for the stars will always be a part of who we are. Together we can figure out how to get there, so let’s dream big.
Listening to employees
Making the voice of our people heard, collectively, is critical to keeping Cisco’s culture strong. We believe in listening harder and smarter to understand what is going on at the company level and what is happening within our direct teams. We do this through a range of listening activities and a powerful listening strategy that continues to evolve.

Team Space
Our power lies in our people and thus in our teams. That is why we empower our people to speak openly about their roles, likes, and dislikes, and raise questions about Cisco’s outlook and future. When our employees feel comfortable raising issues, sharing new ideas, and exploring ways to work harder, Cisco has a unique opportunity to harness that listening and insight into actionable change.

Team Space is a platform enabling employees to keep in touch on a regular basis. It is a collaboration and development platform, but it is also much more. On Team Space, employees highlight their unique qualities and skills, track weekly ups and downs, and let teammates and their leaders know how to best work with and manage them. Blending technology and human touch, Team Space is a powerful tool that helps our team members feel heard. It has two key features:

- The StandOut Assessment, which helps team members understand and reveal their strengths to others—and play to those strengths every day. The platform lets employees and managers glean insights into their teammates’ abilities and serves up regular tips on how best to work together. By the end of FY18, 88 percent of Cisco employees had completed a StandOut Assessment.
- Weekly Check-Ins allow employees to share their priorities for the coming week and talk with their managers about what they loved—and loathed—about the previous week. It is a powerful tool to let managers see the forest and the trees of their employees’ experience. Weekly Check-Ins enable leaders to guide their teams to work on what is most important. They also give managers a sense of where team members need coaching and how to help them develop their strengths.

With a year’s worth of data on how Team Space is used by Cisco employees, we now have insights to help teams operate more effectively. We have learned, for example, that consistent, meaningful attention makes a difference. When leaders and team members connect weekly, performance increases twice as much as when those conversations happen every other week.

We are pleased with usage rates as employees get accustomed to the platform. Team Space continues to evolve, based on ideas from users and enhancements that further align with our business needs.

Engagement Pulse
An additional outlet for our people to freely share their experiences of working with their leaders is Engagement Pulse, an eight-question, on-demand survey within Team Space. Covering topics such as “I am enthusiastic about the mission of my company” and “In my team I am surrounded by people who share my values,” Engagement Pulse encourages employees to speak openly and enables team leaders to listen and find ways to better lead. Through real-time data and insight, Engagement Pulse surveys allow leaders to truly own their teams’ engagement.
The surveys produce an assessment of team “health” at Cisco. Healthy teams at Cisco have most of their members highly invested in all three components of engagement: company, team, and individual, while unhealthy teams demonstrate a deficiency in one or more of the three. Leaders who can more readily pinpoint the needs of their team know where to focus their efforts to increase engagement.

Leaders are expected to share the results of Engagement Pulse surveys with their teams. These debrief discussions are not just about numbers; rather, they are an opportunity to start a conversation about how to build on strengths and improve. After each Engagement Pulse, teams are encouraged to identify actions they can take in the coming quarter, with the goal of seeing improvement in the next survey.

Real Deal survey

Another way we listen is through the Real Deal Survey. This 16-question survey helps us uncover Cisco employees’ perspective on strategy, culture, and leadership. Each question is strategically aligned with Our People Deal and its pillars of Connect Everything, Innovate Everywhere, and Benefit Everyone.

The survey is distributed to 25 percent of Cisco’s employees each quarter, across all functions, regions, and lengths of service, giving each employee an opportunity to provide their input once a year. We share the results of the Real Deal survey with all employees every quarter through an online infographic and present data to our executive leadership team and functional leaders. Findings provide actionable insights for executive and functional leaders to enrich the employee experience.

Across the four Real Deal surveys conducted in FY18, we received 23,843 responses, exceeding our goal of 18,000. These surveys revealed:

- A majority of “positive promoters,” meaning employees who say working in their function makes them feel satisfied, appreciative, and/or happy
- Satisfaction with opportunities to innovate, like hackathons and innovation challenges
- Requests for more resources to aid in career and skill growth
- Calls for more efficient tools and processes to maximize productivity

We are also using attrition data to identify survey responses that help predict whether people will remain with or leave Cisco. Using a layered analysis approach that combines survey items we know are related to retention and attrition, such as perceptions of teammates and team leaders, with responses to open-ended survey questions, we can provide leaders with rich details describing the types of experiences that keep people invested at Cisco.

A new Real Deal dashboard enables us to quickly analyze survey results for the ELT and other leaders. In addition, a new comparative analysis tool, known as CODA, compares survey results of any two groups. With these improved analytic capabilities, we can get intelligence to our leaders more quickly, so they can make informed decisions to improve the employee experience.
Getting real with surveys

Several changes to the Real Deal survey methodology in FY18 allowed us to gather even deeper insights. A new open-ended question format with variable wording meant that employees across business units saw slightly different versions of the survey. This helped each business focus on issues that were most relevant to them. Rather than gathering input only about the culture at Cisco overall, this format allowed us to zero in on the day-to-day experiences that make up life in each function.

Below is an example of how a survey question has been updated. When an employee takes the survey, the text in brackets is replaced with the appropriate words for their business unit.

**Before**
“If you could talk live with Chuck and the ELT, what would you tell them about life at Cisco?”

**After**
“If you could talk live with <Your Functional Leader>, what would you tell them about life in <Function>?”

Other opportunities for listening

We are always looking for new and clever ways to empower Cisco employees to share their thoughts and opinions. Our monthly TV talk-show-style, all-hands meeting, The Cisco Beat, continues to be a vital two-way communication channel. At the Beat, every employee hears company news firsthand and has an opportunity to voice questions and concerns directly to leadership.

Frequently during these meetings, we openly discuss business and world events affecting employees and ways they can give back to help important causes. In 2018, for example, when employees told us they wanted to support families immigrating to the United States from the Texas-Mexico border, we created a U.S. Immigrant Support Fund, with employee contributions matched by the Cisco Foundation. And to help employees understand and empathize with the plight of refugees, Cisco worked with Mercy Corps to host two-hour training sessions that simulate the refugee experience.

Innovative text analytics technologies using natural language processing help us better interpret feedback from employees during Cisco Beat and other forums. Even if we are not able to address every question live, we can capture sentiments, share them with our leaders, and use them to focus on areas in our strategy that need more clarity. We can also harness data from social channels, collaboration tools, and company events to gain understanding of employee sentiment.

These data have revealed valuable insights about our people’s experiences at Cisco. For example, 67 percent of employees were positive when asked about an important moment that happened at work. Comments reflected the joy that comes from partnering with talented and devoted colleagues to solve difficult customer needs. Employees also report being happy with the launch of our new brand campaign, The Network. Intuitive. They are glad to see cross-functional collaboration and innovation around our core network and switching groups. In addition, they are supportive of our executive leadership team’s unity in response to presidential executive orders regarding immigration.

Another way Cisco people are fostering culture and connecting with leaders is Our People Deal Movement, a group of more than 200 people who meet every six weeks to learn from each other and serve as role models for Cisco’s culture and principles. Out of the larger group, 15 ambassadors were chosen to participate in a year-long program during which they speak plainly with our senior leadership team about how we can improve our culture to help drive business success, including attending Cisco’s annual Executive Summit. Under the sponsorship of Fran Katsoudas, Chief People Officer, and Irving Tan, Chief Operations Officer, ambassadors will make recommendations on how to continue to improve our culture, based on what people on the front lines actually think and feel.
Helping our people learn and lead

We want to make sure we are giving our people every opportunity possible to learn, develop, and grow professionally and personally. New technologies and business models are disrupting our organization and industry, shortening the lifespan of skill sets and making it essential for our employees to continually learn. We combat this partially by providing a large suite of professional courses for people to increase their skills and learn the inner workings of Cisco and our industry. More than 19,500 people participated in these courses in the last year alone. Looking ahead, we are building a culture of constant learning and thoughtfulness around career paths, and ensuring our people bring the most engaged, highest-performing, and valuable versions of themselves to work every day.

Degreed

This shift is underpinned by Degreed, a learning experience platform that unites existing internal learnings systems with external learnings like TED Talks. Degreed uses machine learning to provide highly personalized and curated content recommendations, allowing users to select from Cisco-endorsed curricula or create individual development plans. It is one place where Cisco employees can discover, consume, organize, share, and track all relevant learnings, no matter where they take place. This format forces us away from a training model that is highly prescriptive and job-focused and toward a multifaceted culture of learning centered around curiosity, empowerment, and active participation. We call it “learning at the edge.” From a business perspective, Degreed provides the focus, clarity, and resources required to develop the core skills needed in our business—both today and tomorrow—based on how we know job families, functions, and roles are evolving. It also provides intelligence and insights into organizational learning trends, emerging skill areas, and employee interests. Degreed will be available to all Cisco employees at the end of calendar year 2018.

Talent marketplace

One of our ongoing goals at Cisco is to make sure we have the right people, with the right skills, on the right teams. It is easier to achieve this goal when employees are as interested in development as we are. Some employees may want to just test the waters in another department, or they may want to work with a different team on an interesting or innovative project. The Talent Marketplace enables employees to test-drive a specific role through a “stretch assignment.” Stretch assignments allow our people to work with other teams, have new experiences, and develop new skills, without having to completely change jobs. Using the Talent Marketplace, employees can apply for assignments with other teams, as well as trying job swaps and time swaps. People might work on a one-time project or take on a stretch assignment lasting for five months. Or they might offer their special knowledge or talents to another team for eight hours a week for a year. Anyone at Cisco can post an assignment or apply to an open assignment on Talent Marketplace.

92%

of Talent Marketplace assignments are cross-functional

Coaching

Coaching is a great way for Cisco employees of all experience levels to receive one-on-one, executive-level career and life coaching to help them achieve business and personal goals.

Each employee begins by filling out a StandOut Debrief, which helps our Coaching team pair them with the right coach to match their career aspirations and personality traits. The StandOut Debrief results in a StandOut Assessment employees can share in Team Space. Through high-touch, personalized
sessions, each employee speaks virtually or in person with their coach to go over new methods of working, better learning habits, and more to ensure each employee is aligned to work toward leader and team outcomes.

The Power of Teams

Putting the power of communication and growth into the hands of our teams, we introduced The Power of Teams: a guided, discussion-based, team learning experience available to teams who are ready to take their performance to the next level. Consisting of self-led or facilitator-led options, this learning experience challenges teams with activities to build better engagement on both the team and individual levels. By understanding and practicing what the best teams at Cisco do to succeed, the program helps identify where each team can grow.

Programs for leaders

Leaders are crucial to not only our individual contributors’ growth but to Cisco’s growth as a whole. Knowing this, we have set up a broad suite of leadership development programs to help leaders actively engage in proper learnings and continue to enhance their skills to become the best leaders they can be.

A new suite of leadership development programs and experiences targets all levels of leadership, from new to more experienced. It includes simulations, virtual sessions, one-on-ones, and more.

Table 1.
Cisco Leadership Programs

<table>
<thead>
<tr>
<th>What is it?</th>
<th>Experienced Leader Program</th>
<th>Senior Leader Program (SLP)</th>
<th>New Leader Program</th>
<th>Team Leader Experience</th>
<th>Aspiring Leader Journey</th>
<th>Leader Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who is it for?</td>
<td>Cisco leaders with 2+ years of experience in people leader roles or technical leaders</td>
<td>Individuals who have been leading for 5 or more years, senior technical leaders, and enterprise leaders</td>
<td>Newly promoted team leaders and new-to-Cisco leaders</td>
<td>Experienced, new, and aspiring leaders</td>
<td>Potential team leaders</td>
<td>Current Cisco leaders</td>
</tr>
<tr>
<td>How long does it last?</td>
<td>4 days, in person</td>
<td>8 weeks, held in two stages</td>
<td>2 days, in person</td>
<td>1 day, consisting of 3 rounds of increasing difficulty</td>
<td>Self-paced content designed to last 8 weeks</td>
<td>1 day</td>
</tr>
<tr>
<td>What is covered?</td>
<td>Building superior talent, fostering innovation, and developing successful business models</td>
<td>Becoming innovators, catalysts for change, and stewards of talent</td>
<td>Facilitating transitions into leadership roles, clarifying what Cisco expects of leaders</td>
<td>Developing strategic decision-making skills around real-life leadership challenges</td>
<td>Understanding the challenges Cisco leaders face, identifying what leaders pay attention to, and learning how effective leaders handle difficult situations</td>
<td>Discussing priorities and strategies for the year ahead</td>
</tr>
</tbody>
</table>
Rewarding great work

We want our people to share in our mutual success. Cisco provides compensation, benefits, and long-term savings packages that are market competitive, differentiated (as appropriate), and personalized. In FY18, our total compensation included salaries, benefits, bonuses, commissions, stock awards, and retirement benefits.

We focus on ensuring everyone who works for Cisco is paid fairly for the job. We track wages globally based on gender, and on both gender and ethnicity in the United States. If we find gaps, we fix them. We have also started offering managers deeper insight into market rates. These insights help them make better pay decisions and have more transparent conversations with employees about how their pay compares to similar jobs in the same location.

We reward our people in other ways, too. A culture of recognition is central to the employee experience and to Cisco’s success. Our Connected Recognition program means any employee can nominate an individual or team for a monetary award to recognize outstanding work and say “thank you” on a regular basis. In FY18, 234,000 Connected Recognition awards were given, with 87 percent of employees receiving an award. Employees can give their peers awards of up to $50 without approval and can receive rewards with higher value—up to $2,000—with a manager’s approval. In addition, 109,000 “bravos,” or nonmonetary congratulations, were given to employees who received an award.

234,000
Connected Recognition rewards exchanged between employees
Health and wellness

Creating a safe, supportive, and healthy work environment is part of Our People Deal. This includes giving employees the resources they need to stay well and care for others at home. We do this through a focus on safety in the workplace; health benefits that address physical, social and emotional needs; and flexible hours and technology that enable people to integrate work and home life.
Wellness benefits

At Cisco, we care deeply for one another and the world around us. We look out for each other as part of our day-to-day, even—and especially—amid the buzz of business. We know balancing life’s responsibilities and joys is personal to every individual. Our approach is not “one size fits all,” but rather “one size fits one.” We want to support our employees and their loved ones during life’s triumphs and challenges, and we design our global benefits to do just that.

Comprehensive benefits, including medical, dental, and vision plans; disability coverage; and life insurance help employees stay healthy and secure their families’ well-being. However, we do not stop there—we meet employees where they are. Our LifeConnections health and fitness centers at our major campuses make it convenient for people to prioritize health and wellness. The centers feature health clinics, fitness areas, and personal coaches to assist employees and their families deal with stress, weight management, and more.

On an ongoing basis, we organize on-campus health events where employees can take the time to invest in their health and well-being. During FY18, we hosted 19 Health + Savings events at our largest U.S. campuses, where more than 5,000 employees received wellness education, health screenings, and flu shots. According to our post-event survey, 95 percent of attendees said the event helped them answer their benefit enrollment questions, and 88 percent said their experience at the event encouraged them to engage in Cisco’s wellness programs.

Embedding wellness into our culture is a global effort. Some of our solutions around the world include:

- A series of Health Weeks in six Latin American countries covered topics such as resilience, stress management, nutrition, cancer prevention and detection, cardiac care, diabetes prevention, ergonomics, and first aid.
- More than 7,000 employees and family members across Bangalore, Chennai, Pune, and Mumbai participated in a three-day health event in India, and employees from seven countries took part in a regional “step challenge.” Through this challenge, employees collectively took 63 million steps—burning a combined 3 million calories.
- In our Europe, Middle East, Africa, and Russia (EMEAR) region, Cisco teamed up with well-being expert Jessie Pavelka on a program that encompasses the four elements of health: food, exercise, mindfulness, and connection to others. Across the region, more than 3,000 Cisco employees have attended events in person and via Webex on wellness topics.

We recently put the power of technology to work to bring personal wellness coaching into the hands of every Cisco employee in the U.S. Vida Health offers a customized, tech-enabled personal health coach for employees and their families. Participants choose their coach based on background and the style of coaching they prefer. Through the app they can connect when and how they want with their coach, even between sessions for support and check-ins through in-app messaging. Within two months of Vida’s launch, more than 1,600 Cisco employees and family members had engaged with the program.

Another new offering for U.S. employees is Cisco Mind Set, a mindfulness program to help employees sharpen their mental edge. The innovative, five-session course is designed to enhance concentration, resiliency, and creative thinking. Participants learn simple cognitive strategies and engage in mental training exercises to optimize their work performance. More than 900 employees have participated in Cisco Mind Set since its launch in October 2017, reporting improvements in focus, efficiency, stress management, and multitasking.

Cisco LifeConnections Centers

Where

- San Jose, California
- Research Triangle Park, North Carolina
- Bangalore, India

What

- Health clinics
- Fitness facilities
- Experts on exercise, diet, mental health, and more
Keeping healthy can also mean having someone to talk to who can offer advice and support. Our global Expert Medical Opinion program offers peace of mind in the face of a major medical decision. A simple phone call connects employees and eligible family members, including spouses, domestic partners, children, parents, and parents-in-law, to a leading physician in the specialty they need for a free expert second opinion. Similarly, our global Employee Assistance Program helps employees and families better manage life transitions, work-related stress, and other personal challenges. The free, confidential services cover assessment, referral, and intervention assistance for major life events and financial and legal issues, and offer support through difficult challenges such as stress, abuse, or addiction.

Mental health challenges are common, but often marked by stigma, making it hard for many people to speak up about their struggles. We are committed to making Cisco an open, supportive environment. In FY18, CEO Chuck Robbins reinforced this commitment with an email to all worldwide employees. He wrote:

“Each of us has a role to play in ensuring that those suffering feel less afraid to ask for support in the moments they need it most. No one needs to go it alone. I encourage everyone to talk openly and extend compassion. It may be as simple as recognizing when others are going through a difficult time and allowing them to take any needed time for themselves. It may be listening and encouraging someone to seek help or seeking help for yourself. I want you all to know we are here to support you with the help you need.”

The email included links to resources available to employees to address mental health concerns on behalf of themselves or their loved ones. The email caused an outpouring of emotion among Cisco employees, leading to hundreds of stories being shared on Cisco Employee Connection, our intranet site. It was a meaningful expression of Cisco’s inclusive culture and our genuine care for one another across all of life’s moments. Building upon this momentum, in FY19 Cisco will roll out a comprehensive, cross-functional mental health strategy to support employees by:

• Addressing the stigma
• Implementing a global Cisco standard of coverage with wellness program integration
• Enhancing our crisis response support
• Scaling telehealth therapy leveraging Cisco collaborative technology

These efforts will be delivered in multiple phases, with the most immediate focus on tackling the stigma surrounding mental illness.
Supporting those who care for others

The birth or adoption of a child is one of life’s most significant events. To foster an inclusive environment and culture that celebrates diverse backgrounds and families, we have made meaningful changes to how we support parents. The time an employee receives to care for a newly born or adopted child is now based on the role they will play as caregiver (main or supporting), rather than gender. This gives our employees freedom in deciding how they will care for their child—regardless of the paths they take to parenthood.

Within Canada, Mexico, the Netherlands, Poland, Switzerland, and the U.S, as well as the Asia Pacific, Japan, and Greater China region, main caregivers now receive 13 consecutive weeks of paid bonding leave. For birth moms, this time is in addition to their own pregnancy disability leave, which varies by country. Cisco parents who support their spouse or partner while bonding with their new child will receive four weeks of paid time off, which can be taken consecutively or in weekly increments. And for the first time, employees can take three paid days off to welcome or celebrate each new grandchild within their first year of birth or adoption. We will continue to roll out this global initiative in all countries where Cisco operates.

For those just starting to grow their families, Cisco offers support for fertility services, surrogacy, and adoption assistance, with specific offerings varying by country. We also provide free resources to parents, including healthy pregnancy programs, breastfeeding support and spaces for new mothers, and webinars and workshops on parenting topics.

Cisco continues to help employees put their families first as their children grow, and as other family members age. We offer a host of childcare programs, services, and support, including state-of-the-art child learning and care centers conveniently located and run by globally recognized childcare partners at our largest campuses in San Jose, Bangalore, and the U.K.

In the U.S., we also provide discount programs and priority access to our partner childcare centers, and CareLinx helps employees locate in-home caregivers for adult family members. When regular care arrangements fall through, Cisco also provides nationwide backup child and elder care. Employees can have a caregiver come to their home or use a drop-in childcare center, and Cisco helps cover the cost.

During FY18, we introduced Rethink, a global program to support parents of children with autism, Down Syndrome, ADHD, and other developmental disabilities. The Rethink online platform offers evidence-based education and family support to all employees globally. Families can connect with experts about approaches to their specific challenges. Every employee is eligible for seven hours of free coaching with Rethink each year, in addition to the therapy services covered by our medical plans. We also provide coverage for applied behavioral therapy and other treatments to help children with special needs in each of our medical plans.
Flexibility at work and away

We do our best at work when we take the occasional time away. Cisco provides annual paid time off so employees can travel, take care of life matters, volunteer, recover from illness, or simply relax and recharge. Employees also receive five days of paid time off through the Time2Give benefit, which they can use to volunteer with an organization they care about (read more on here). As an added treat from Cisco, every employee gets their birthday as a paid day off.

We also have our employees’ backs when the unexpected happens. Whether dealing with a death, illness, or even a natural disaster, we are making it easier for our employees to attend to significant life events without worrying about work. During FY18 we were pleased to introduce Emergency Time Off (ETO), offering all employees around the world time off at full pay to deal with a sudden, unexpected circumstance that requires their immediate and undivided attention—without having to dip into their regular paid time off. Cisco has also expanded the definition of family for this leave. Instead of the traditional idea of family being those immediately related to you, ETO recognizes family as the people you rely on and the people who rely on you, so employees can be there for the important loved ones in their lives, no matter who they are.

Even when not taking time off, flexibility matters. We give our people the choice over how, where, and when they work, depending on their job function and management approval. Within our offices, employees can choose to work from many different spaces, from open collaboration areas and eCafés to workstations and audio privacy rooms. Cisco’s own technologies make this possible. Our products support flexible working, including high-speed wireless access, a wide variety of TelePresence® video devices, and social software platforms that drive community connections. For employees recovering at home from an illness, injury, or other major life event, we connect them to Cisco technology through a new program called Connected Touch, allowing them use Cisco’s DX80 collaborative device to connect easily with colleagues from the comfort of home.

Safety on the job

Ensuring our people are safe at work is a foundational priority. Cisco works continuously to increase employee awareness of our safety programs and provide training and promotions to empower employees to take responsibility for their safety. We base our occupational health and safety programs on global regulatory and industry standards that help manage and reduce specific hazards. For example, our Global Ergonomics Program provides adjustable furniture in our workplaces so employees can customize their spaces to their individual needs and preferences. This helps them remain comfortable and productive and reduces ergonomic risks in our offices.

We implemented a new tool in FY18 designed to standardize and simplify safety data collection and management. This includes improvements to incident reporting, risk assessment, compliance auditing, and other related compliance activities. As a result, we expect the total number of injury reports to increase as employee awareness of our health and safety programs grows in FY19. However, we do not anticipate an increase in incident severity.

An important component of safety is emergency preparedness. More than 3,700 of our people are part of 114 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 an emergency. If a disaster occurs, we inform employees and others through the Cisco Employee Connection website. Individuals in some countries can sign up for our Emergency Notification System, which allows users to indicate whether they are safe or need help.

Figure 12.
Safety performance

<table>
<thead>
<tr>
<th>Incidents</th>
<th>Lost Work Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.24</td>
<td>0.95</td>
</tr>
</tbody>
</table>

Both below industry averages
Inclusion and collaboration

Diversity, inclusion, and collaboration are fundamental to who we are, how we create the best teams, and how we will succeed in this age of digital transformation. Our vision for the future is to create exponential value for Cisco, our employees, customers, partners, and communities through the intersection of diversity, inclusion, collaboration, and technology.
Inclusion and collaboration

We are the most diverse Cisco since 1998. We are delivering on our vision of accelerating full-spectrum diversity—inclusive of gender, generation, race, ethnicity, orientation, ability, nationality, religion, veteran status, background, culture, experience, strengths, and perspectives. It starts at the top, where 42 percent of our Executive Leadership Team (ELT) is women, and 58 percent is diverse in terms of gender or ethnicity, making Cisco an industry leader in top leadership diversity.

We are proud of the 30-plus industry distinctions and inclusive leadership awards we received over the past year. Cisco is one of only 11 other companies to have been recognized on the Legends list by Great Place to Work. We know our leaders make the difference when it comes to inclusion and collaboration; 12 of our executives received individual inclusive leadership awards from across the industry.

Figure 13. Cisco’s Executive Leadership Team

58% of Cisco’s Executive Leadership Team is diverse in terms of gender or ethnicity
Accelerating diverse talent

To find, attract, develop, promote, and retain diverse top talent and inclusive leaders, we are innovating solutions to address our most critical business challenges and opportunities. Accelerating diversity is a top priority across our global enterprise, and it starts with the ways we find and attract extraordinary talent. In FY18, we completed the pilot and launch of an innovative suite of solutions we call Diverse Talent Accelerators (DTA). DTA enables us to mirror the markets where we do business at every level in every function, and track our progress to realize our bold diversity aspirations. These tools help us identify the best places to find top talent, benchmark and optimize diversity goals, create job advertisements that appeal to a wide range of candidates, and find and assemble diverse interview panels to increase the odds of hiring diverse top talent.

After the implementation of DTA, Meraki nearly closed its gender gap, with women representation up 24 percent and ethnic diversity increased in nearly every category—up 30 percent overall.

In FY18, we had record representation of women across Cisco—25 percent. This was due in part to a record hiring rate for women of 29 percent. We have also set new record representation for African American/Black (3.6 percent),

Diverse talent accelerators

An integrated suite of intelligent solutions that transforms how we find, attract, and accelerate talent.
Hispanic/Latino (5.4 percent), and two or more races (not Hispanic or Latino) (1.2 percent). The representation for these ethnicities has increased consistently every year since 2014, contributing to making Cisco our most diverse since 1998. The improvement in representation for these ethnicities has been broad-based, improving representations in both technical and nontechnical roles, and is being driven by record-level hiring for these ethnicities, with African American/Black at 4.5 percent, Hispanic/Latino at 5.6 percent, and people of two or more races (not Hispanic or Latino) at 2.2 percent.

Cisco is now above baseline share for technical, nontechnical, and leadership roles for women. This growth has been fueled by strong hiring and a drop in attrition. Our increase in diversity has also resulted in Hispanic/Latino, Asian, American Indian/Alaska Native and Native Hawaiian/Pacific Islander hires to be above baseline share.

The Multiplier Effect

The Multiplier Effect continues to leverage the power of sponsorship to change the equation for diversity. It is a personal commitment that encourages leaders at all levels to sponsor at least one extraordinary diverse candidate for career advancement and to challenge their peers to do the same. Individuals who take the pledge gain access to a sponsorship guide with suggestions for finding and supporting a sponsee. As of FY18, 42 percent of our ELT and 36 percent of our VPs have taken the pledge.

Cisco LifeChanger

Our collaboration technology helps remove barriers to inclusion by creating seamless connections between people no matter who they are, what device they are using, or where in the world they happen to be. To break down barriers to employment within our own company, Cisco launched the LifeChanger program in 2015 to increase opportunities for people with disabilities. LifeChanger combines novel applications of Cisco’s voice, video, and collaboration technology with process improvements to transcend location, accommodation, and mobility issues. The result: people with disabilities can seamlessly join and contribute to teams.

The program began with a pilot in San Jose, California, and has led to employment for approximately 100 people with disabilities in Belgium, Brazil, India, Poland, and other countries. The new hires have been highly successful: in India, LifeChanger hires were 120 percent more productive than their peers.

Cisco is a “Great Place to Work”

For 21 years in a row, Cisco has been ranked on Fortune’s 100 Best Companies to Work For list. As a result, we have been recognized on the Legends list by Great Place to Work, an honor only 11 other companies can claim. We were also included on area-specific 2017 Great Place to Work lists for the following countries and regions:

- Europe
- Hong Kong
- Ireland
- Italy
- Latin America
- Mexico
- Poland
- Portugal
- San Francisco Bay Area
- Singapore
- Spain

“There’s always someone who had an influence on your career journey. Pay it forward. Take what you’ve received and give it to someone else in your own way.”

Sonar Thekdi, Vice President of Engineering Business Operations — Sponsor, The Multiplier Effect

“Organizations should ensure that people of all physical and cognitive abilities have the opportunity to have not just a job, but a career.”

Shari Slate, Vice President, Chief Inclusion and Collaboration Officer
Developing diverse talent

Next generation leaders

Cisco is committed to developing our next generation of leaders. Our mid- to senior-level employees participate in Cisco’s Next Generation Leaders (NGL) program to develop leadership skills through the lens of diversity. It is a six-month journey for managers and their employees to learn about one another—and how to best work together—by embracing different perspectives, unlocking talent, and fostering disruptive thinking.

NGL cohorts are available for our African American/Black, Hispanic/Latino, Asian/Pacific Rim, and many more communities. Early success with the training among our Asian/Pacific Rim employees based in the U.S. yielded a 90 percent employee retention rate and a promotion rate 74 percent higher than that of nonparticipants. Our research shows our African American/Black participants’ odds of receiving a promotion increases threefold compared to nonparticipants.

Programs for female leaders

Cisco continues to develop our next generation of female leaders for the company globally. Our DARE program encourages and inspires women who are just starting out in their careers—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. We make sure participants are aware of the range of tools and resources at their disposal as they define and navigate a path at Cisco to match their personal strengths and long-term career ambitions. Our data shows both programs increased women’s odds of promotion—50 percent for DARE and over 90 percent for JUMP. Participants in these programs combined had a 94 percent retention rate.

As these programs mature, we are seeing phenomenal growth in year-over-year participation, growing talent retention rates, and increasing the likelihood of promotion for those who participate. In FY18, more than 60 percent of the women who were promoted to management had attended at least one of our targeted programs, contributing to a significant 6 percent increase in women in director and manager roles.

1,300+ employees participated in strategic partner conferences and programs

We partner with 20 world-class organizations that help us attract, develop, and retain our talent. These include organizations such as:

- The Hispanic IT Executive Council (HITEC) which supports emerging Hispanic leaders in technical roles
- The Anita Borg Institute and its annual Grace Hopper conference, the largest gathering of women in computing from around the globe, where we meet and interview potential job candidates
- The Executive Leadership Council (ELC), which helps to build an inclusive leadership pipeline of highly qualified African American corporate leaders
- The Diversity Women’s Business Leadership Conference, which develops female leaders and allows attendees to make strong connections with their contemporaries who share similar work experiences, challenges, and concerns.
The future of fairness

Taking a stand for social justice

Benefitting everyone—a cornerstone of Our People Deal—starts with fairness and equality for everyone. Cisco is expanding on our long-term commitment to inclusion and social justice for our people inside and outside the workplace.

Over the past few years, social injustices have continued to unfold, from travel bans based on nationality to unequal law enforcement and sexual harassment. As people continue to be unfairly targeted for their race, orientation, beliefs, and other factors, Cisco employees look to leadership to take a stand on issues that matter to all of us, and to be mindful of the diverse concerns of a diverse global workplace. Employees expect their employers to be a voice for equality and justice in a chaotic world. In FY18, Cisco employees and leaders took stands on a range of important issues:

• As a member of the cross-industry Business Roundtable, Cisco CEO Chuck Robbins helped prepare a statement urging the White House to end the policy of separating unaccompanied minors from their parents at the U.S. border, calling the practice “cruel and contrary to American values.” He also reiterated the importance of inclusion and diversity as a way to connect perspectives, spark new ideas, explore new possibilities, tap into the power of digital transformation, and inspire innovation in his letter included in the first-ever Business Roundtable CEO Report on Diversity and Inclusion.

• Cisco supports the United Nations Standards of Conduct for Business: Tackling Discrimination against Lesbian, Gay, Bi, Trans, and Intersex People as a best practice for companies working to ensure human rights for all people. The standards reflect Cisco’s commitment to an inclusive environment for our customers, partners, and employees in the workplace and beyond. For the 15th consecutive year, Cisco achieved a perfect score on the 2018 Human Rights Campaign’s Corporate Equality Index, recognizing Cisco as one of the best places to work for the LGBT community.

• We listen when employees share concerns about social justice issues and act to influence change to support them. We also encourage employees to act by matching contributions to organizations working to make positive change. When employees told us they wanted to rally behind the #MeToo movement, Cisco created the Empower Change Together Fund to facilitate donations and matching funds to the Time’s Up Now legal defense fund. When our employees expressed heartbreak over discriminatory actions and rhetoric, we encouraged matched donations to the Fighting Racism and Discrimination Fund, which includes organizations focused on social justice.

• Cisco has always been committed to paying our people fairly and equitably. We are a founding signer of the White House Equal Pay Pledge and the Parity.org pledge, and we are leading the charge to make fair pay a reality for all employees through the Employers for Pay Equity Consortium.

In 2017, CEO Chuck Robbins joined forces with over 400 other CEOs to sign the CEO Action for Diversity and Inclusion™ Pledge, to create fully diverse and inclusive organizations. In FY18, we started to build a framework for a more conscious culture.

As part of our commitment, we are also expanding our unconscious bias education and evolving our focus to be on interrupting bias. The delivery will be through easy-to-consume microlearnings designed to drive new behaviors that raise awareness, change mindsets, create a common language around bias, and articulate the importance of interrupting bias and encouraging inclusion. Our curriculum is designed to address the information, attitudes, and stereotypes that affect the way we process information subconsciously.

Stepping up our work on inclusion

Our commitment to fair pay

Cisco has always been committed to paying our people fairly and equitably. We are a founding signer of the White House Equal Pay Pledge and the Parity.org pledge, and we are leading the charge to make fair pay a reality for all employees through the Employers for Pay Equity Consortium.

Three years ago, we built an innovative and inclusive framework that uses powerful analytics to review and test the overall health of our compensation system. Our reviews look at all factors that influence an equitable talent environment, from new hire offers to individual rewards, so we can continue to design and deliver fair, inclusive, and competitive pay for our people. These analyses have revealed a healthy compensation system overall. In FY18, we identified minor disparities within approximately 0.5 percent of our global employee population. We have given pay adjustments in an effort to close those minor gaps. The funds required to address these gaps represent a small fraction—less than 0.02 percent—of our global base payroll.
Supporting diverse employee communities

Cisco’s Inclusion and Collaboration Community (ICC) is a global platform for diverse groups to connect, innovate, and excel, both in person and online. ICC has grown approximately 16 percent since FY17, from 25,000 to more than 29,000 active members worldwide. These individuals participate in:

- Employee Resource Organizations (EROs)
- ICC Networks
- Virtual Groups
- Inclusion Leadership Teams (ILTs)
- Flagship diversity experiences

Cisco has ILTs within every region and function. They give us new insight into how we make our systems, policies, and practices relevant within every part of our business. Our ILTs have been instrumental in co-designing solutions to accelerate diversity, including forming Mentor Rings and the highly successful Courageous Conversations forums.

With the development of a new ICC Portal, we can now track the contributions of our EROs and ICC Networks, and have the foundation needed to track ROI in terms of development, retention, and promotion. Preliminary findings reveal that globally, being an ICC member significantly improves the likelihood an employee will be promoted. Within the United States, the likelihood for promotion increases by 65 percent.

Notable actions in FY18 within EROs and other ICC groups include:

- Cisco’s Women of Impact (WOI) conference, a flagship event for the development and advancement of professional women, began in San Jose with 250 attendees. In FY18, the event had more than 15,000 attendees across the world. WOI included 24 hours of global content and in-person sessions in over 110 sites and 51 countries worldwide.

- Our VETS ERO provides free access to cybertraining and certification for veterans and military spouses. Cisco Services Academy also offers a Veterans Talent Incubation Program (VTIP) for former military service members who wish to transition into a technology career. The VTIP program started in 2017 and has been extremely successful, leading to 66 veterans hired by Cisco.

- Advocating for LGBT equality, our PRIDE ERO community asked for support for Coming Out Day in our Bedfont Lakes, U.K. office. The group received approval to fly the LGBT pride flag for a week at the campus. And for the first time, PRIDE also sought and gained approval to raise a transgender flag to honor Transgender Day.
Cisco has published workforce diversity statistics in our CSR Report since 2005.
Our diversity summary data is listed below and is based on FY18 data. Additional data can be found on Cisco.com.

**Overall workforce**

**Global by gender**
- Male: 75%
- Female: 25%

**U.S. by gender**
- Male: 73%
- Female: 27%

**U.S. by ethnicity**
- White/Caucasian: 53%
- Asian: 37%
- Hispanic/Latino: 5.4%
- African American/Black: 3.6%
- Two or More Races (Not Hispanic or Latino): 1.2%
- American Indian or Alaska Native: 0.3%
- Native Hawaiian/Other Pacific Islander: 0.2%

**Technical workforce**

**Global by gender**
- Male: 84%
- Female: 16%

**U.S. by ethnicity**
- White/Caucasian: 62%
- Asian: 23%
- Hispanic/Latino: 7.3%
- African American/Black: 5.1%
- Two or More Races (Not Hispanic or Latino): 1.7%
- American Indian or Alaska Native: 0.3%
- Native Hawaiian/Other Pacific Islander: 0.2%

**Nontechnical workforce**

**Global by gender**
- Male: 58%
- Female: 42%
Figure 17. Workforce snapshot (cont.’d)

**Vice Presidents**

- **Global VPs by gender**
  - Male: 78%
  - Female: 22%

- **U.S. VPs by gender**
  - Male: 78%
  - Female: 22%

- **U.S. VPs by ethnicity**
  - White/Caucasian: 72%
  - Asian: 21%
  - Hispanic/Latino: 4.1%
  - African American/Black: 1.7%
  - Two or More Races (Not Hispanic or Latino): 0.7%
  - American Indian or Alaska Native: 0.7%

**Executive Leadership Team**

- **Global ELT membership by gender**
  - Male: 58%
  - Female: 42%

- **ELT membership by ethnicity**
  - White/Caucasian: 58%
  - Asian: 17%
  - Hispanic/Latino: 17%
  - Two or More Races (Not Hispanic or Latino): 8.3%

*As of December 2018*
Leadership and people managers

Global managers by gender

- Male: 80%
- Female: 20%

U.S. managers by gender

- Male: 77%
- Female: 23%

U.S. managers by ethnicity

- White/Caucasian: 61%
- Asian: 31%
- Hispanic/Latino: 4.7%
- African American/Black: 2.3%
- Two or More Races (Not Hispanic or Latino): 0.8%
- American Indian or Alaska Native: 0.2%
- Native Hawaiian/Other Pacific Islander: 0.1%

Hiring

Global by gender

- Male: 71%
- Female: 29%

U.S. by ethnicity

- White/Caucasian: 47%
- Asian: 40%
- Hispanic/Latino: 5.6%
- African American/Black: 4.5%
- Two or More Races (Not Hispanic or Latino): 2.2%
- American Indian or Alaska Native: 0.3%
- Native Hawaiian/Other Pacific Islander: 0.3%

1People managers, directors, and senior directors.
Figure 17. Workforce snapshot (cont.’d)

Cisco Board

Board membership by gender

Male 73%
Female 27%

Board membership by ethnicity

White/Caucasian 91%
Asian 9.0%

Cisco Board Members

Carol A. Bartz
M. Michele Burns
Michael D. Capellas
Mark Garrett
Dr. John L. Hennessy
Dr. Kristina M. Johnson
Roderick C. McGeary
Chuck Robbins
Arun Sarin, KBE
Brenton L. Saunders
Steven M. West
Making a difference in our communities, locally and globally, is an important part of our culture. We empower our employees to accelerate social change by participating in Cisco-led community initiatives, such as Cisco Citizen Networks, our Be the Bridge annual giving campaign, and Global Service Month volunteering. We also encourage employees to support causes that matter most to them, which we enable through our Time2Give benefit and donation matching.
We are proud to see the many ways our employees are sharing their time and talents, from building homes in Romania and working with migrant families in China to judging school science fairs. Our goal is to achieve 80 percent employee engagement—measured by donations or volunteer time—by 2020.

Cisco #3
2018 Best Workplaces for Giving Back

Fortune

46% of employees donated time or money, totaling 58% of our employee engagement goal of achieving 80% employee engagement by 2020.
Fueling the pipeline

Our Cisco Citizen Networks drive employee engagement and volunteerism in cities and regions around the world where we have an employee presence. We have over 50 chapters across 27 countries. Chapters plan volunteer projects and develop relationships with local nonprofits and nongovernmental organizations, with each initiative tailored to the specific needs of the local community. Engaging volunteers locally gives employees the opportunity to learn more about the challenges their communities face. This shapes their perspectives and the perspectives of Cisco leadership, as well as informing how Cisco technologies can be developed and deployed to advance social good.

Supporting diverse women in STEM

A particular focus area for Cisco is inspiring more people, particularly girls and women across underrepresented populations, to pursue science, technology, engineering and math (STEM) education and careers. Every April, we support Girls in ICT Day, a global event organized by the United Nations International Telecommunication Union. Cisco has been participating in this initiative from the beginning, motivating thousands of young women from around the world to learn about the opportunities the technology sector holds for their future. On or around Girls in ICT Day, employee volunteers from the Cisco Global Mentoring Initiative mentor young women and teach them about Cisco technology. In 2016, we made a commitment to the Million Women Mentors initiative to have our employees mentor 5,000 female students in the U.S. by 2020, a goal we have already reached and exceeded through our Girls in ICT Day and Girls Power Tech programs.

Figure 19.

Girls Power Tech 2018

700 employee volunteers

4,600 students reached

101 Cisco offices

52 participating countries
Time2Give

Volunteering helps Cisco employees gain new perspectives, develop leadership and other skills, and work better in teams. We support our employees in volunteering for the causes, issues, and nonprofits that align with Cisco’s community priorities, as well as those reflecting their own passions and interests.

That support is demonstrated through Time2Give, which offers full-time Cisco employees five days off per year to volunteer for a community cause they care about. Where and how employees volunteer 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. Volunteer service benefits communities and may also help employees feel more engaged; those who volunteer are 2.5 times more likely to stay at Cisco and 30 percent more likely to be promoted than those who do not.

Donation matching

Cisco has a long tradition of matching employees’ donations to charitable organizations, as well as offering a match of $10 per hour to organizations where our people volunteer. Previously, we matched employee gifts up to $1,000, except during our Be the Bridge campaign in November and December, during which we matched gifts up to $10,000 for each employee.

In FY18, we expanded this program and now match gifts up to $10,000 at any time of year. This change not only increases the impact we and our employees can make, but it also allows people to give on their timetable, not Cisco’s. In 2018, for example, this allowed employees celebrating Ramadan in May and June to maximize their holiday giving. We continued our commitment to support those affected by disasters with special matching campaigns to responding organizations. Employees donating to disaster response organizations can receive an additional $10,000 match while a campaign is active. In FY18, employee donations powered by matching funds from the Cisco Foundation totaled $1.9 million for disaster relief.
Society

Scaling inclusive social and economic impact in countries around the world

In this section

- Building digital skills and entrepreneurship
- Strategic social investments
- Human rights
- Responsible sourcing and manufacturing

Photo: Ezra Millstein for Mercy Corps
2018 Society dashboard

**Goal:**
Positively impact 1 billion people through our social impact grants and signature programs by 2025!

**Progress:**
The life-changing work of new and established partners is helping us make rapid progress.

---

**Goal:**
Reach 2 million Cisco Networking Academy students per year by 2020²

**Progress:**
We grew the number of academies and expanded into new educational settings.

---

**Key Performance Metrics**

- **$383 million** in cash and in-kind contributions by Cisco and the Cisco Foundation
- **9.26 million** students have participated in Networking Academy courses since 1997
- **87%** of employees have completed Keep Cisco Safe data security training
- **209 million people** impacted by our social impact grants and signature programs such as Networking Academy in FY18 (54 million increase over previous year)
- **1.7 million** malware samples reviewed by our threat intelligence team per day
- **87K+** military personnel have participated in Cisco Networking Academy since 1998
- **84%** of identified smelters and refiners in our supply chain have been audited or are active in the Responsible Minerals Assurance Process
- **60** supplier facilities audited through a third-party auditor

---

Footnotes:

1. FY16-FY18 numbers updated December 2018 to include signature programs such as Networking Academy.
2. Goal was adjusted from 2021 to 2020 during FY18.
Building digital skills and entrepreneurship

We lead several ongoing programs through which Cisco is partnering with educational institutions and social change agents to co-develop curriculum, experiences, and engagement models that help build skills in digitization and entrepreneurship.
Cisco Networking Academy

Twenty years ago, Cisco donated networking equipment to a local school. It sat unused at first, because no one was trained on how to use the equipment. As we trained the school staff to build their network, Cisco Networking Academy was born. And after seeing the impact this training had on the school’s students and teachers, we were inspired by a new mission to harness the potential of technology to change the world.

Today, Cisco Networking Academy is one of the largest and longest-running education and employment CSR programs around the world. Designed with the most demanding IT jobs in the market in mind, Cisco Networking Academy provides a comprehensive learning experience, including:

- An online interactive curriculum with a focus on networking, security, and emerging technologies such as IoT
- Network simulation software and programming environments
- Access to physical and virtual lab equipment for the most effective hands-on technical training

From the start, students are encouraged to develop problem solving skills, work in teams, and apply user-centric design techniques to create solutions, just as they would in the workplace. Courses are taught in classrooms using a blended learning style, localized in the most popular and in-demand languages around the world. Networking Academy courses are delivered online through netacad.com, a global cloud-based learning and collaboration platform. Networking Academy students also have access to career resources and connections to employers seeking information and communications technology (ICT) talent through the Talent Bridge program.

We partner with governments and educational institutions around the world to establish local academies and initiatives that promote workforce readiness and socioeconomic development. Courses are delivered in collaboration with 11,400 schools, community colleges, universities, and organizations that support underserved communities such as rural populations, veterans, prisoners, and people with diverse abilities. Netacad.com conforms to web content accessibility guidelines based on WCAG2.0 for users with vision and hearing disabilities—giving more people tools to thrive in the digital economy.
Learning portfolio updates

Cisco Networking Academy focuses on the latest networking, security, and emerging technologies, while promoting business and entrepreneurial skills. In FY18, we added seven new courses and workshops providing foundational skills in network programmability and programming, as well as job readiness skills in cybersecurity for students of all levels, particularly those wanting to pursue a career in this thriving industry.

The emerging technologies workshops are designed to prepare students and instructors for the networking transition driven by digital transformation in the market. The security portfolio is designed based on the National Initiative for Cybersecurity Education (NICE) framework, which is meant to upskill the workforce to address the global cybersecurity skills shortage.

Much of the Networking Academy curricula is developed in-house; however, we also work with third-party organizations like the Open Education and Development Group and Network Development Group to create industry-relevant content that prepares learners for the needs of today’s workforce. In addition, we partner with employers and other organizations to deliver mentorships, internships, and other hands-on experiences to help students prepare for and obtain new jobs.

Dream Team

The program also emphasizes unique learning experiences through hackathons and other real-world opportunities. Since 2011, a select group of college and university students enrolled in Networking Academy are nominated by their instructors to provide support for Cisco Live, Cisco’s largest customer-focused event, as well as the National Basketball Association, the British Open, and other major events. By configuring and troubleshooting equipment, providing help desk assistance, and honing teamwork and leadership skills, the students—known as the Networking Academy Dream Team—get hands-on experience with the latest networking technology. Since the inception of the Dream Team program in 2011, 585 students have participated. In FY18, 132 Dream Team participants supported 18 events around the globe.

“Being a part of the Dream Team teaches you so much more than how to build a network or install a router. It taught me organization, teamwork, and the value of good coworkers.”
- Zöe Rose, Academy Student, Manitoba, Canada
Strategic Social Investments
Human Rights
Responsible Sourcing and Manufacturing

Talent Bridge

The Networking Academy Talent Bridge employment program, including a comprehensive set of activities such as the Dream Team, Job Matching Engine, LinkedIn campaigns, Virtual Job Fairs, and Webinars, connects qualified Networking Academy students and alumni with Cisco and partner employers. The program has successfully connected more than 6,400 students to entry-level jobs since 2016. In FY18, we introduced the Talent Bridge Matching Engine, which automates the process of connecting Networking Academy students to jobs with Cisco and Cisco partners. The Matching Engine is available globally in 15 languages and matches students to job opportunities based on education, certifications, experience, and location.

Partnership updates

We continued to expand our global network of public–private partnerships with governments, academic institutions, and nonprofit organizations in FY18. In Latin America, Cisco Peru has been given the distinction “Aliados por la Educación” for its partnership with the Ministry of Education. For 2 years Cisco Networking Academy curriculum has been part of the Digital Literacy Program, reaching 2001 high schools across the country and more than 600,000 students. The partnership is expected to continue to expand and reach other regions in Peru. In addition, we continued to grow

“I’m looking for the best and brightest, and I’ve got a platform with Cisco Networking Academy that gives me access to the up-and-comers. This is an amazing pool of candidates.”

- John Grindley, Director of Strategy, Straight Up Technologies, Cisco partner

Figure 22.
Talent Bridge matching engine

200 employers posted
10,000+ entry-level jobs
6,400+ students connected to jobs in

10,000 students registered
85 countries

GRI 103-1, 103-2, 103-3, 413-1
our relationship with Junior Achievement International in Latin America, expanding into Colombia with more than 8,400 students introduced to the Networking Academy program during FY18.

In collaboration with Trident Academy of Technology in India, we hosted the first Networking Academy Learnathon, during which more than 10,000 students in Telangana, Andhra Pradesh, and Odisha completed the Cybersecurity Essentials course in two weeks. In China, partnerships with the Ministry of Education’s University Computer Curriculum Steering Committee and Guangdong Department of Education have allowed us to provide Networking Academy curriculum to tens of thousands of students. Finally, we began a new partnership with European Schoolnet, based in Belgium, to train school ICT administrators to optimize and secure their schools’ networks.

**Continuous improvement**

Improving the Networking Academy experience is an important focus. We continue to evolve the ways we gain insights, evaluating the entire impact spectrum from early indicators to outcomes, including:

- Course registration and completion
- Student and instructor satisfaction
- New jobs obtained
- Additional job and educational opportunities

In addition, employer feedback on potential skills gaps among Networking Academy alumni helps feed curriculum improvements.

Our goal is to help our instructors and students achieve successful outcomes. To support us in this effort, we gather feedback from annual conferences and surveys of instructors and students. In addition, the Academy Advisory Board, representing students, instructors, partners, and alumni, formally gathers requirements and assesses future needs.

Cisco Networking Academy has achieved successful student outcomes for more than 20 years by balancing agility with expertise—staying abreast of what’s next in technology while maintaining elements of our program that have proven effective. This approach allows us to continue reaching new and returning students, recruiting new instructors, and scaling with the help of our strategic partners worldwide.

---

**Getting women plugged into IT careers**

The statistics on the gender gap in STEM are well known. Not only are women outnumbered in computing jobs, the percentage of women in these jobs has decreased over the past 25 years. We are helping encourage women to enroll in Cisco Networking Academy and pursue technology careers in general through efforts like Women Rock-IT. The program includes virtual broadcasts featuring women who have launched successful careers in tech. Since 2014, Women Rock-IT has featured 41 speakers and 22 live TV broadcasts, prompting more than 420,000 viewers to enroll in technology courses (85 percent of whom are new to Networking Academy).
Cisco Networking Academy

Since 1997
9.26 million students

In FY18
180 countries
1.87 million learners
11,400 academies
28% female learners
24,700 instructors
$320 million in-kind contributions from Cisco

By 2020
2 million students enrolled annually

Student Impact
91% obtained a job or educational opportunity
93% use course skills learned in their daily lives
86% learned skills that can help them in current or future job
83% increased their value in FY18

Instructor Impact
97.2% say Networking Academy helped them become a better educator
85.2% say Networking Academy helped them broaden their career

Highest female enrollment around the world

<table>
<thead>
<tr>
<th>Country</th>
<th>Female Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>35%</td>
</tr>
<tr>
<td>Morocco</td>
<td>35%</td>
</tr>
<tr>
<td>China</td>
<td>37%</td>
</tr>
<tr>
<td>Ukraine</td>
<td>37%</td>
</tr>
<tr>
<td>Jordan</td>
<td>40%</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>40%</td>
</tr>
<tr>
<td>Oman</td>
<td>68%</td>
</tr>
<tr>
<td>United Arab Emirates</td>
<td>53%</td>
</tr>
<tr>
<td>Tunisia</td>
<td>41%</td>
</tr>
<tr>
<td>Palestine</td>
<td>42%</td>
</tr>
<tr>
<td>Myanmar (Burma)</td>
<td>43%</td>
</tr>
<tr>
<td>Nigeria</td>
<td>44%</td>
</tr>
<tr>
<td>Peru</td>
<td>46%</td>
</tr>
</tbody>
</table>

1Goal was adjusted from 2021 to 2020 during FY18.
2Student outcome survey of participants completing Cisco Certified Network Associate curriculum or higher.
3Instructor Survey of participants actively teaching in FY18.
Training and career support for veterans and active military personnel

As a proud supporter of the U.S. military and veterans, we have extended our technology training programs to help these individuals excel in their roles within the military and pursue new career paths once they have completed military service.

Launched in 2011, Cisco’s Veterans Program supports transitioning U.S. military personnel, veterans, and military spouses in connecting to ICT education and employment. In FY18, Cisco reached 6,577 transitioning military, veterans, and spouses through these programs. Military personnel and veterans can also enroll in a Networking Academy program, providing a gateway to entry-level jobs and certifications in the ICT field. Additionally, the AFA’s Cyber Patriot program continues its rapid expansion in the United States with over 7,200 students participating in learning key elements of cybersecurity.

Veterans interested in a career in cybersecurity can access free training and certification through CyberVetsUSA, an industry-led, skills-to-jobs initiative currently offered in Virginia, Maryland, and North Carolina. This is a collaborative effort led by Cisco, bringing together multiple IT industry partners to address the ICT workforce shortage in targeted regions. Those who aspire to roles at Cisco may also participate in the Veterans Talent Incubation Program (VTIP), a pipeline for service members and veterans to obtain CCNA certification and to find jobs as Cisco Customer Support Engineers or Network Consulting Engineers. Since 2016, Cisco has hired more than 60 veterans from the VTIP program. In addition, in 2018 Cisco launched the Talent Bridge for Veterans Matching Engine which connects qualified military talent to Cisco’s partner ecosystem, further building a bridge to employment possibilities for those transitioning out of the military.

The program’s second annual grand prize of $100,000 went to CareNX Innovations, whose new system, Feton, uses IoT technology to detect a fetus’s heartbeat. Lack of access to healthcare facilities contributes to complications that lead to more than half a million stillbirths per year. By making this test widely accessible, Feton can change this statistic and save lives.

At the 2018 Cisco Live event, we invited two past Global Problem Solver Challenge prize winners, along with one Rice Business Plan Competition winner of the Cisco Global Problem Solver Prize (see next page), a chance to gain exposure and earn additional funding. Liberty Mechatronics, Neopenda, and dot Learn shared their ideas about oil filtration, neonatal health, and online education, respectively, with event attendees and social media followers, who voted to give dot Learn a $25,000 prize. In addition, industry analysts at the event had a chance to meet one to one with our challenge winners to learn how their unique technology-based solutions are positively impacting our world.
Rice Business Plan Competition

In collaboration with Rice University, we award one of the largest nondilutive prizes (funding that does not require giving up any equity in the company) in the Rice Business Plan Competition (RBPC), the world’s largest intercollegiate startup competition. The annual competition invites 42 university teams, chosen from nearly 400 applications, to compete for more than $2 million in prizes.

One of those prizes is the $100,000 Cisco Global Problem Solver Prize, which recognizes technologies, products, and services with social impact. In 2018, we awarded this prize to Lunula Health, a team that has developed a process to accurately measure blood hemoglobin levels by analyzing digital images of fingernail beds taken on a smartphone. This process can be used to detect anemia, eliminating the need for costly and invasive blood tests.

The RBPC is open to students from all universities, regardless of location. Since inception, more than 200 former competitors have gone on to successfully launch or sell their ventures. Past competitors have raised over $1.9 billion in funding and more than 90 have been awarded federal grants to continue their work.

Digital Economy Initiative

We believe educational institutions and organizations focused on emerging entrepreneurs can be powerful catalysts for local economic development. In FY17, we launched the Digital Economy Initiative, a pilot grant program rooted in the belief that public universities can accelerate an inclusive digital economy in their region by collaborating with local industries, government agencies, NGOs, and community colleges. This community-based collaboration has the potential to build skills for the future, incubate innovation, and foster entrepreneurship, whether through the creation of new businesses or identification of fresh approaches within existing organizations.

We developed this public university grant-making initiative based on previous collaborations with Arizona State University (ASU) and other grant programs. Supported by Cisco managed funds at the Silicon Valley Community Foundation, in FY18 we issued six 1- to 3-year grants to public U.S. universities to catalyze development of IoT and digital skills, foster entrepreneurial mindsets, and align programming or curriculum with local industry opportunities. Pilot grant recipients include:

- California State University Fullerton
- Florida International University
- Georgia State University
- University of Michigan
- West Virginia University
- Youngstown State University

Many grantees are using funds to expand IoT education, develop new certificate programs, and increase participation in STEM by women. For example, Georgia State launched a cross-disciplinary program for students to help create technology solutions to real problems and prepare them for digital professions. To inspire higher participation in IT by women and minority populations, they include outreach and summer programming for local high school students. We plan to evaluate these university pilot programs to determine how to proceed with this initiative.

Harambe Entrepreneur Alliance

Cisco is a founding sponsor of the Harambe Entrepreneur Alliance. This nonprofit supports high-impact social and business ventures across Africa through an ecosystem of more than 200 young, innovative African entrepreneurs known as “Harambeans.” Harambeans are visionaries for transforming the region and have pledged “to work together as one” to unlock the full and often untapped potential of Africa.

Collaborating with private- and public-sector groups, Harambe supports the aspirations of young African leaders through mentors, feasibility study grants, scholarships, pro bono legal services, and access to angel and venture capital. Collectively, Harambeans have launched a series of tech-enabled enterprises, with more than $300 million in funding raised from a variety of investors. Harambe-backed startups have created more than 2,000 jobs and are valued at more than $1 billion.
Strategic social investments

Today’s pace of technological advancement is unprecedented. New technologies are driving global innovation and transforming how we live and work. Digitization is enabling countries and businesses to maintain global competitiveness, increase GDP, foster innovation, and create new jobs.
As this transformation occurs, skills, resources, and access to new technologies can be unevenly distributed. To help communities thrive, we must harness the power of digitization to create economic opportunity for all, and Cisco has an important role to play. Through strategic investments of our financial and human capital, our products and solutions, as well as our signature programs such as Networking Academy, we are partnering to drive an inclusive digital economy—positively impacting 1 billion people by 2025.

Socioeconomic research

Cisco’s original research, in partnership with leading research and advisory companies and world-renowned academic institutions, on topics related to the digital revolution is a key input to our social investment strategy. Research insights enable us to better understand how strategic investments can help build the skills needed in the future and ensure the relevance of our key social investments, such as Cisco Networking Academy program, and focus areas including critical human needs, educational opportunity, and economic empowerment.

Beyond guiding our own decision making, research provides a basis for informed decisions by heads of state, universities, educators, and nonprofit leaders to set the direction for social investments and program development.

For example, our research is designed to help states and nations:

- Set the talent agenda for future growth by predicting the digital skills needed and the most effective ways to address skills gaps and job displacement
- Pinpoint the supply and demand of skilled labor in specific regions;
- Holistically assess a region’s digital readiness and understand key interventions for a region to move up in their digital journey
- Rethink education systems to deliver graduates with the digital skills necessary for the jobs of the future and
- Realize the benefits of digitization for all socioeconomic groups

We have presented research findings at the World Economic Forum, International Society for Technology in Education conferences, Cisco Networking Academy partner conferences, Cisco Live, and other venues.

Recent research

Cisco published two key pieces of research in FY18. The first study, created in partnership with Gartner, was an exploration of how to effectively define and measure a region’s digital readiness. A holistic framework was created to measure a country’s digital readiness based on seven components:

Figure 25. Digital readiness framework

"Many of today’s jobs will be replaced by automation. That is the nature of how technology is transforming our lives. Cisco recognizes our responsibility to aid in this transition."

- Irving Tan, Senior Vice President, Operations
These stages were correlated with a country's GDP per capita, demonstrating the economic value of digital readiness. Different interventions are recommended depending on a region's stage of digital readiness. For example, countries beginning their digital journeys (the Activate Stage), benefit primarily from improvements in basic human needs and human capital development, especially growing foundational IT knowledge.

Within this research, localized studies in the U.S. and Australia revealed differences in digital readiness across states and territories. Scores reveal which states and countries are most digitally ready and which are less so, presenting opportunities for local government, industry, educational institutions, and community organizations to work together to increase digital readiness.
The second research study was developed in collaboration with Oxford Economics and examined how technologies such as automation, IoT, and artificial intelligence will affect the U.S. labor market over the next 10 years. Our analysis predicts significant transformation ahead, resulting in 6.5 million job moves by 2027 either through displacement or disruption. The study predicts a balance between displacement of workers due to automation and an increase in spending power due to labor-saving innovations. It also identifies the jobs and industries at risk, forecasts the new jobs that will appear, and identifies the workforce skills needed to be ready for the future.

In line with historical trends over the last 20 years, the employment forecast is a balancing of the “displacement effect” caused by technology countered by a top-down “income effect” as industry harnesses the power of technology to improve productivity. Additionally, the research found that the future labor market will require not only more technological skills, but also “human skills,” including negotiation, persuasion, and social perceptiveness. Workers who possess human skills will find ways to use and work creatively with technology, rather than compete against it.

**Figure 27.**

2027 Employment Forecast by Occupational Group
(% change in FTE employment)

**Figure 28.**

“Human” skills shortfall
(Proportion of required “human” skills that are lacking in workers moving into relevant jobs by 2027)
Our investment framework

Insights gained through our research also help Cisco make informed investments that harness the power of digitization to reach as many people as possible. As a critical part of our goal to positively impact 1 billion people by 2025, Cisco and the Cisco Foundation invest in nonprofit organizations that leverage scalable technology solutions to help underserved communities around the world.

Through the strategic use of technology, social innovators can magnify the impact of their work. As we do for our customers, we help our nonprofit partners leverage technology to:

- Streamline and automate processes for efficiency, cost savings, and productivity
- Scale to reach more people, particularly vulnerable populations, who have not yet benefitted from the digital economy
- Unlock the power of data for faster and better-quality decisions

We discover organizations and individuals pursuing the best ideas to solve social problems with digital solutions, and we help make these concepts a reality and further their impact by providing cash grants, expertise, and Cisco technology donations.

Our focus areas are:

- Critical Human Needs and Disaster Relief
- Educational Opportunity
- Economic Empowerment

Our approach for cash grant investments is to invest in early-stage solutions that use technology to address social challenges. We focus on early-stage solutions because that is where funding support is most needed and where we can provide the most value with catalytic impact. We provide seed funding for blueprint ideations and experimentation, as well as proof-of-concept pilots. Once validated, we support replication and scale of the solution.

The goal is a solution that grows to reach multiple geographies and sectors, scales to reach more people, demonstrates social impact, and achieves financial sustainability.

Our investments take place in four stages:

1. **Blueprint**
   Design a new, technology-based solution that does not currently exist, or digitize an existing solution.

2. **Validate**
   Pilot-test solutions in order to measure initial results and prove the solution.

3. **Scale**
   Scale to more people, replicate to multiple geographies globally, continue ideation and iteration of the original solution, and measure social impact. Because the biggest need for funding is at Stages 1 and 2, our nonprofit partners often report an increase in other sources of funding once their solutions advance to stage 3—the point when the solution has been proven and traditional funders are willing to invest.

4. **Transition**
   At the point that a solution has advanced to Stage 4, it has successfully replicated and scaled, demonstrated social impact, and is financially sustainable.

More than financial investment

Constant throughout our engagement with nonprofits is our advisory support and technical expertise. As nonprofits transition from startup to established and sustainable organizations, we provide guidance on a variety of issues, including:

- Governance and operational structure
- Business planning and strategy development
- Impact evaluation
- Financial sustainability planning
How we measure impact

The breadth of our programs’ impact depends on what problems the programs are designed to solve. Here are examples of what we might measure:

**Critical Human Needs and Disaster Relief**
Number of people who have access to clean drinking water

**Educational Opportunity**
Number of students who reached proficiency in science, technology, engineering, and math (STEM).

**Economic Empowerment**
Percent of people who obtain jobs, job retention, change in income

**Measurement and evaluation**

With an ambitious goal to positively impact 1 billion people by 2025, we want the solutions we fund not only to reach many people, but also to result in deep social impact.

We work closely with our nonprofit partners to measure program effectiveness so we understand the value and social return of our investments, and our nonprofit partners understand how to improve their offerings and demonstrate impact. We evaluate impact by measuring programs’ breadth, and we also measure depth where possible.

To measure breadth of impact, all grantees report on the number of people reached by the funded program over a 12-month period and cumulative total from program inception to date. Depth of social impact is measured according to a standard set of metrics for each of our three investment portfolios (Critical Human Needs and Disaster Relief, Educational Opportunity, and Economic Empowerment).

We also require grantees to validate that at least 65 percent of participants in the funded programs are from underserved population groups, as well to provide organization- and grant-level metrics, such as client satisfaction and retention. Grantees provide quarterly reports to detail their progress against agreed-upon grant deliverables and metrics, and many retain outside organizations to independently validate their work.
### Social investment focus area:

**Critical human needs and disaster relief**

Our Critical Human Needs and Disaster Relief portfolio focuses on increasing access to affordable housing, food security, and clean drinking water. We also invest in technology-based interventions to improve the speed, efficiency, and effectiveness of humanitarian aid, and provide emergency support following natural disasters.

Our support also includes leveraging some of our most important assets: our products and technological expertise. Cisco is one of the only corporations with a disaster response team having such advanced technology capabilities, as well as highly trained and skilled personnel who can deploy to the field. Established in 2003, Cisco’s Tactical Operations (TacOps) team is critical to our disaster response capabilities, providing emergency communications when traditional communications are degraded or destroyed.

TacOps is comprised of an eight-person, full-time, dedicated disaster response team, supported by 350 trained employee-volunteers known as the Disaster Incident Response Team (DIRT). Volunteers are given time away from their normal Cisco jobs to join TacOps deployments. This expertise, along with world-leading technology, puts us in a unique position to provide support in emergencies. By responding during the acute phase of an emergency or natural disaster, TacOps enables agencies to get communications up and running faster than government or local providers can. Security is also important during disaster; TacOps networks leverage advanced security technologies such as Cisco Umbrella, Next Generation Firewall, and Meraki, blocking hundreds of thousands of cyberthreats per month.

In times of crisis, our customers are often some of the first to reach out to the TacOps team. TacOps works directly with Cisco account teams, bringing our extensive field experience to the table to help design solutions that meet their customers’ needs, ranging from using TacOps solutions in times of crisis to helping customers build their own deployable communications solutions. For example, when responding to the California wildfires, we provided emergency connectivity to nonprofit partners as well as helping customers establish network connectivity out in the field.

“Connectivity is a critical life-line for people, especially in times of disaster.”

- Matt Altman, Cisco Tactical Operations, Technical Leader
Critical human needs and disaster relief (cont’d.)

Table 2. Social investment focus area: critical human needs and disaster relief

<table>
<thead>
<tr>
<th>Partner</th>
<th>Situation</th>
<th>Investment</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 31 people are forcibly displaced every minute&lt;br&gt;• Natural disasters, human conflict, and forced displacements increasing in scale and frequency&lt;br&gt;• Connectivity is a critical lifeline for humanitarian and relief organizations, and affected populations, when communications are disrupted by a crisis.</td>
<td>• 5 major disaster campaigns launched (match limit set between $250K-$1M)&lt;br&gt;• $4 million+ in support through employee giving to nonprofit partners, Cisco Foundation matches, cash grants from the company and Foundation, product grants, and TacOps deployments</td>
<td>• TacOps responded to 12 disasters globally with emergency connectivity in FY18; 50+ since 2005&lt;br&gt;• In response to Hurricane Maria, 250K residents were connected by 70+ NetHope networks, enabling them to contact loved ones and access critical services&lt;br&gt;• Connectivity and hope provided to affected communities, aid organizations, and service agencies.</td>
<td>• 1.3 million people reached in FY18, the first year of our partnership&lt;br&gt;• Goal to reach 11 million people by 2022&lt;br&gt;• Partnership includes expansion of the Signpost platform, which has scaled to seven countries and has reached more than 840,000 refugees</td>
</tr>
</tbody>
</table>

We have strategic engagements with a number of nonprofit organizations and NGOs—such as the American Red Cross, NetHope, CARE, Mercy Corps, and the UN World Food Programme—to help increase preparedness and provide immediate assistance in the wake of natural disasters. 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 matches up to $10,000 per employee for every disaster campaign, which is in addition to the $10,000 in donations that can be matched per employee every year. We also participate in the American Red Cross Annual Disaster Giving Program (ADGP).

Mercy Corps is a leading disaster and humanitarian relief NGO active in more than 40 countries. With needs increasing and aid funding decreasing, technology’s role in helping organizations communicate securely, make rapid decisions, use data, and share findings efficiently is more important than ever.

• 134 million people need humanitarian assistance worldwide<br>• Out of the 68.5 million people around the world have been forcibly displaced from their homes, 25.4 million have become refugees, fleeing their homeland in search of safety, security and a better life for their families.<br>• Connectivity is a critical lifeline for humanitarian and relief organizations, and affected populations, when communications are disrupted by a crisis.<br>• $10 million over 5 years to integrate technology into humanitarian and development assistance programs, enabling faster and more efficient aid<br>• Cash grants, donations of Cisco technology, technical expertise, and advisory support<br>• Extended work on Signpost platform, which provides refugees and crisis-affected populations with critical information such as legal options and asylum-seeking procedures
Social investment focus area:

**Educational opportunity**

We are committed to building a digital foundation to improve education in our society. Programs in our education investment portfolio are designed to:

- Expand reach
- Improve outcomes
- Increase student engagement in STEM
- Improve the professional development of teachers worldwide

In addition to our Networking Academy® program, our education investment portfolio supports the creation and deployment of innovative technology-enabled education delivery models. The focus is to improve both teaching and learning using Internet technology and digitization.

**Table 3. Social investment focus area: educational opportunity**

<table>
<thead>
<tr>
<th>Partner</th>
<th>Situation</th>
<th>Investment</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>New Teacher Center</strong> (NTC)’s mission is to improve student learning by accelerating the effectiveness of new teachers, experienced teachers, and school leaders. NTC works with school districts to select and train exemplary teachers to provide mentorship to beginning teachers. These mentors spend 10 days per year in face-to-face training sessions and participate in weekly forums to continue their own skill building.</td>
<td>• 1.5 million new teachers entering U.S. classrooms in next decade • New teachers often placed in challenging classrooms and districts, leading to attrition • Teacher quality is important school-based factor affecting student achievement</td>
<td>• Funding support and product donations since 2009 • Enabled NTC to create Formative Assessment System, an online platform allowing mentors and coaches to gather data connecting teacher performance and student learning • Supported creation of Learning Zone, an online mentoring platform allowing NTC to extend its programs’ reach</td>
<td>• NTC has grown to serve 14,000 teachers • 1.8 million students impacted across 500 U.S. school districts in FY18 • NTC’s approach leads to 31 percent increase in teacher retention • Five additional months of student learning</td>
</tr>
</tbody>
</table>

**Science Buddies** dedicates itself to helping students from all backgrounds build literacy in science and technology so they can become productive, engaged 21st-century citizens. The organization creates cost-effective resources, available online, that students and teachers can use to explore their interests in science.

| | • Students face unequal access to resources to build their STEM literacy • Homework assignments such as science fair projects present challenges for low-income students • Evolving school curricula requires teachers to continually update lesson plans | • Cash grants and product donations • Supported STEM-related content targeting girls and underserved populations • Helped launch Topic Selection Wizard, an online tool that helps students identify low-cost science project ideas • Recent grant will help Science Buddies build curriculum aligned with Next Generation Science Standards | • Doubled reach to approximately 18 million students between FY11 and FY18 • 54 percent of student users were female, based on FY18 reporting • 38 percent were from underrepresented ethnic groups • 49,000 teachers registered on platform |
Social investment focus area:

**Economic empowerment**

Our economic empowerment programs connect underserved people to skills, meaningful employment, financial products and services, and opportunities they need to thrive and develop careers in the digital economy. Our investments have also helped people open savings accounts and secure loans to start small businesses.

**Table 4. Social investment focus area: economic empowerment**

<table>
<thead>
<tr>
<th>Partner</th>
<th>Situation</th>
<th>Investment</th>
<th>Impact</th>
</tr>
</thead>
</table>
| **Living Goods** empowers a network of women, known as Community Health Promoters (CHPs), to improve the health of families in their communities by distributing essential goods and health education to those who need them, all enabled by mobile technology. CHPs focus on areas that precipitate the majority of child deaths but can be addressed at a low cost: complications from malaria, diarrhea, and pneumonia. They also provide pre- and post-natal health education and services. CHPs earn a living from the products they sell, thus providing an important source of income to better meet their families’ needs. | - Millions of children die every year due to lack of access to affordable health products  
- Challenges in health sector in emerging economies:  
  - Keeping vital medicines in stock  
  - Compensating and retaining community health workers | - Initial early-stage support to help Living Goods design a mobile technology platform and refine the platform and apps based on feedback  
- Current multiyear partnership to enable Living Goods to:  
  - Use digitization to better recruit CHPs  
  - Reach more people  
  - Optimize business operations  
  - Use predictive algorithms to tailor interventions to emerging health risks  
  - Track performance and impact | - 6 million people reached in FY18  
- Child mortality reduced by 27 percent at an average cost of just $2 per person per year  
- Goal to reach 25 million people via 34K CHPs across four countries by 2021 |
| **Opportunity International (OI)** is a global nonprofit that offers financial products, services, and training to help people transform their lives and participate in their local economies. OI provides cost-effective and easy-to-use banking services in remote areas, including mobile banking, ATMs, vans, point-of-sale devices, and satellite branches. Their clients are primarily poor women, farmers, and rural youth who, thanks to OI, achieve increases in productivity and incomes, allowing them to invest in education, food, housing, health, and small businesses. | - 1 in 3 people worldwide does not have access to a bank account  
- However, a majority of these individuals have access to a mobile phone  
- Mobile financial services allow people to access financial products and services and contribute to economic growth | - Initial early-stage support to help OI develop and test mobile banking products  
- Current multiyear support including cash grants, donations of Cisco technology, and expertise to enable OI to:  
  - Improve efficiency in business operations  
  - Scale to connect more people to financial services  
  - Design and offer new digital financial products and services  
  - Better target specific client populations (for example, women, elderly, ultra-poor)  
  - Enhance impact evaluation | - 11 million people gained access to financial services  
- 2 million jobs created  
- Goal of creating 3 million jobs and positively impacting 20 million people by 2020 |
Human rights

Technology is advancing more rapidly than ever before, opening up new opportunities for communication and innovation. With those opportunities, however, come increased risks of technology being used for discrimination, misinformation, and bias. As people and businesses use and share increasing amounts of information across a growing number of platforms, the freedom of individuals to disclose—or conceal—personal information with whomever they choose is under threat.
This reality has profound implications both for Cisco’s business and for our customers. We can best reconcile the opportunities and challenges of the digital age by being proactive and vigilant regarding potential risks and misuses of our products, technology, and solutions.

Industry norms and policies for managing emerging issues related to digital rights and human rights are still being established. It is critical for Cisco to be part of the dialogue surrounding these issues. We seek a future in which people are served by technology, and not the reverse. This means we are increasingly integrating human rights and ethics-based decision-making into all aspects of our work. As new frameworks emerge, Cisco is committed to serving as the digital foundation for keeping data up to date, private, and secure across the network, in the cloud, within IoT solutions, and anywhere else it may exist.

Managing human rights

Human rights position statements

Respect for human rights is a cornerstone of how Cisco conducts business. Our human rights program extends across the full Cisco value chain. This includes:

- Advocating, upholding, and defending freedom of expression
- Protecting the right to data privacy and security through participation in Internet governance and global product standards organizations
- Designing privacy into our products, services, and processes
- Being an inclusive employer that respects diversity
- Respecting the working conditions, welfare, and human rights of workers in our supply chain

“Cisco strongly supports free expression and open communication on the Internet. We are proud to have played a leading role in helping to make Internet technology ubiquitous, allowing billions of people in nearly every nation around the world to access information previously unavailable or inaccessible.”

- Mark Chandler, Executive Vice President, General Counsel and Chief Compliance Officer

A critical aspect of our approach is the evolving intersection of human rights with a variety of disruptive technologies shaping our future. During FY18, we partnered with BSR, a global nonprofit organization, to review the landscape of disruptive technologies relevant to Cisco and the impact they have on human rights as diverse as nondiscrimination, privacy, freedom of expression, child rights, and access to public services. With input from senior leaders in Cisco’s Security and Trust organization, and members of Cisco business functions including IoT, collaboration, engineering, government affairs, legal, and privacy, we developed a series of position statements to express Cisco’s point of view on human rights issues arising from these disruptive technologies.

Several of these issues, such as encryption and localization, have direct implications for data security. Cisco’s full position statements on each issue are available. These position statements will help us set priorities and inform ongoing work such as product development, sales, employee training, policy, and advocacy. The statements are a foundation for a more holistic approach to human rights that considers the entire value chain of our products and solutions from design to application. As disruptive technologies continue to evolve in new and unpredictable ways, we will continually evaluate how we implement our human rights principles, conduct business, and address risks and opportunities in a collaborative, transparent, and ethical manner.

Policy and governance

Protecting human rights, including digital rights, begins within our business. Human rights issues are overseen at the highest levels within Cisco, and we offer training to keep employees current on issues at the intersection of human rights and technology.

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 8 International Labour Organization (ILO) Core Standards
- The UN Global Compact

Disruptive technologies and human rights

In partnership with BSR, Cisco developed position statements on the following issues:

- Encryption
- Data Localization and Sovereignty
- Surveillance by Governments
- Internet of Things
- Big Data Analytics
- Artificial Intelligence
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 use a formal, company-wide governance structure to implement our commitment to human rights. Mark Chandler, Executive Vice President, General Counsel and Chief Compliance Officer, is the executive sponsor of human rights at Cisco. Our Human Rights Working Group (HRWG) includes experts from across the global business, including supply chain, security and privacy, inclusion and collaboration, government affairs, community relations, marketing and communications, investor relations, and corporate affairs.

The HRWG proactively identifies and responds to the company’s most significant human rights risks, opportunities, and impacts across our business operations, products, sales and services, and supply chain. According to HRWG’s charter, the group’s purpose is to:

- Be a place where external stakeholder perspectives are fed back into the company for review and consideration
- Inform our human rights strategy and track progress on an ongoing basis
- Act as champions for human rights in their respective functions and with external stakeholders
- Review and inform our human rights policy
- Communicate our progress via the annual CSR Report, stakeholder engagement, and the Cisco Audit Committee as needed

Employee training and awareness

To help our employees understand the relationship between technology and human rights, we require all 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, to undergo training. This training empowers employees to incorporate human rights and data privacy considerations beginning with the earliest stages of the product design, sales, and data life cycle. We offer this training biannually to full-time employees and to new employees as they join. As of FY18, 97 percent of required employees completed this training. In FY19, we will launch new training, updated to encompass the latest developments in technology.

We also offer a range of training and awareness programs specific to data security and privacy. Data privacy and security are included in our Code of Business Conduct and required trainings, and resources are available to all our employees and contractors. Approximately one-third of Cisco employees are certified in the Security Ninja training program, an application security program covering information security, data protection and privacy policies, secure development, and value chain security.

Figure 31.
Beyond dedicated training programs, a cross-functional education and awareness team works with our subject matter experts to cascade and integrate new security and data privacy practices throughout the company. This team hosted informational sessions in 2018 that reached hundreds of global workers. For the past 10 years, Cisco has held a series of internal security conferences around the globe where sales, marketing, services, and engineering experts strengthen our security community by presenting to each other on their areas of expertise. We also promote training and awareness through our corporate internal website, as well as digital signage and posters.

The Keep Cisco Safe program is a collection of online activities available to all Cisco employees. It uses gamification techniques to educate employees on data protection, data privacy, and security tasks and policies. Training includes actions employees can take to build safe practices into both their work and home lives.

Phishing for safety

Many security threats originate from “phishing” emails, which are designed to trick users into revealing personal information. We test and raise awareness of phishing techniques by sending internal test phishing emails to our employees.

1. Email employees at varying intervals. In FY18, we focused our efforts on high-risk employees, including new and early-in-career employees, and people who handle system administration tasks that give them access to global permissions for other users.

2. Include suspicious hyperlinks or attachments. If employees click or open attachments, they are taken to online educational content explaining how phishing works.

3. Track and follow up. We monitor which employees fall for phishing tricks, and follow up with subsequent email messages to test whether their cybersecurity knowledge improves after reading educational content.

Security at Cisco

- **31,651** employees certified in the Security Ninja Program
- **292** Security Advocates across multiple functions
- **92** dedicated Incident Responders around the globe
- **45** Penetration Testers dedicated to attacking Cisco’s products and solutions
- **65,855** internal test phishing emails sent last year
- **200,000** safety tasks completed

Providing secure products and solutions

The disruptive technologies shaping our future are highly relevant across Cisco’s value chain, including through the use of our products, services, and technologies by our customers. Cisco is the leader in securing the connections, platforms, people, and applications where data is processed. We are aware our products could potentially be used to compromise human rights, such as to access personal information or to conduct illegal surveillance. This knowledge strengthens our commitment to ensuring our products and solutions are secure from the start. We partner with other technology providers in the service provider, data center, enterprise, cloud, and IoT market sectors to support customers’ digital rights, data privacy, and security needs.

Security and privacy by design

Increased connectivity means increased complexity. We build security into every level of our solutions and services, creating a chain of trust in systems and their individual components. Our Secure Development Lifecycle (SDL) process has been in place for more than 10 years. Compliant with ISO 27034, the SDL provides a solid foundation to address constantly evolving security threats. By embedding privacy engineering into the SDL, we enable greater fairness, accountability, and transparency in how our products, services, and solutions process personal information. We also give our customers and end users the necessary controls to manage their privacy obligations.

We adhere to global specifications for our Information Security Management System (ISMS), achieving ISO 27001 certification across our entire services business. This certification means our security policies and procedures have been independently verified, giving our customers peace of mind that we are protecting their data.
Moving forward, we will continue to take a “human rights by design” approach to disruptive technologies such as Artificial Intelligence (AI), machine learning, and IoT by assessing the potential human rights risks and opportunities of new products and reviewing the long-term impacts of existing products. As with all innovative efforts, we will raise awareness with best practices and guidance on how to integrate human rights considerations into the product and service design, development, and operational processes.

Our engineers design products and services in ways that avoid vulnerabilities, and then test them to proactively identify security issues before attackers might. Penetration testers uncover vulnerabilities so we can resolve them before anyone else can exploit them. When we learn of a security vulnerability in a product or service, we respond by validating it, fixing it, and informing our customers. Cisco does not work with any government, including the U.S. government, to weaken our products. 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. Every six months, Cisco publicly releases a Transparency Report regarding requests or demands for customer data we receive from law enforcement and national security agencies around the world.

Talos, our industry-leading threat intelligence team, collects information about existing and developing threats, reviewing 1.7 million malware samples per day. All Cisco security products use Talos threat intelligence, providing fast and effective security solutions. Our own Computer Security Incident Response Team (CSIRT) constantly monitors network and attack traffic for security incidents within Cisco.

In FY18, Cisco announced our intent to acquire Duo Security, the leading provider of unified access security and multifactor authentication delivered through the cloud. Duo helps protect organizations against cyber breaches by making security easy and effective based on the trustworthiness of users and devices. The Duo cloud-based software solution verifies the identity of users and the health of their devices before granting them access to applications—helping users more easily and securely connect to any application on any networked device.

**Creating secure networks**

Data security involves not just the design of products, but the interconnections of complex networks, including those based in the cloud. Security informs the entire value chain, from design, production, operations, and use to end-of-life. Through our Value Chain Security Program, we manage security risk from start to finish—whether the impact is technical, operational, or human. Our Trust Anchor and Secure Boot technologies validate our software and check that code is authentic and unmodified, while products such as Cisco Umbrella secures user data and applications in the cloud.

Cisco is further enhancing network security with our Network Intuitive, intent-based networking that uses machine learning to recognize intent and mitigate security threats. The Network Intuitive constantly learns, adapts, automates, and protects to optimize the network and defend against threats. Customers can detect threats in encrypted traffic, creating security while maintaining data privacy. With the Network Intuitive, we continue our focus in the areas of cloud and IoT via research, acquisition, and innovation.

**A growing security portfolio**

In FY18, Cisco announced our intent to acquire Duo Security, the leading provider of unified access security and multifactor authentication delivered through the cloud. Duo helps protect organizations against cyber breaches by making security easy and effective based on the trustworthiness of users and devices. The Duo cloud-based software solution verifies the identity of users and the health of their devices before granting them access to applications—helping users more easily and securely connect to any application on any networked device.
Engaging on important issues

The issues we face related to data privacy and human rights are complex and multifaceted—and, often, misunderstood. Yet the stakes couldn’t be higher. Cisco is committed to meeting and exceeding new regulations regarding data privacy and security, and helping our peers, customers, and members of the public do the same. When we are all better informed on these critical issues, we are all better off.

Industry collaboration

Cisco is working to grow the community of organizations that promote and defend human rights through a free and open Internet. We are becoming increasingly vocal in policy, diplomatic, and standards-setting channels about our support for open and global product standards, and we participate in multistakeholder approaches to Internet governance.

Cisco regularly collaborates with stakeholders on human rights issues to measure the ongoing effectiveness of our work and gauge expectations. Collaborations include the following:

- Advocating for legislation promoting stronger digital security and privacy. Cisco joined other leading technology companies in FY18 in publishing amicus briefs calling for greater controls on government demands for data managed by third parties.
- Participating in the Internet Engineering Task Force, the Internet Governance Forum, Institute of Electrical and Electronic Engineers Standards Association, the International Telecommunications Union, the World Wide Web Consortium, and other groups.
- Driving ethical sourcing practices as a member of the Responsible Business Alliance.
- Supporting 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.

Responding to European data privacy regulations

As a global organization, Cisco may transfer customer information from one country to a Cisco subsidiary, third party, or business partner in another part of the world. We safeguard and enable the global transfer of information in a number of ways. In Europe, the Binding Corporate Rules (BCRs) protect the data privacy, fundamental rights, and freedoms of individuals for transfers of personal information protected under European law. Cisco has received approval of our BCRs by the Dutch, Polish, Spanish, and other relevant European data privacy regulators. Supporting the BCRs, our new Global Personal Data Protection and Privacy Policy outlines Cisco’s commitment to personal data and privacy, and the principles governing this commitment.

Cisco ready for General Data Protection Regulation (GDPR)

The much-anticipated General Data Protection Regulation (GDPR) went into effect in 2018. Cisco used the new legal obligations of GDPR as an opportunity to increase our thought leadership on data privacy and protection. We used the May 25, 2018 enforcement date for GDPR to raise awareness of data privacy as a business opportunity and explain what’s next for businesses on their data privacy journeys beyond GDPR. We were an early adopter of GDPR through the Cisco Data Protection Program, and developed a suite of resources to help others prepare for the new regulation, including:

- Cisco’s View on GDPR
- GDPR Readiness Infographic
- GDPR Blog Posts
- Understanding GDPR Video Series
- Cisco Data Protection and Privacy
Industry and user awareness

We believe when it comes to data privacy, knowledge is power. Through clear and transparent communications and training, we can help our customers and other users comply with emerging regulations, take control of their personal data, and play a more active role to prevent breaches and improper use.

Cisco’s Trust Center provides straightforward information to help our customers and others manage data security and privacy. Our security advisories and alerts report threat outbreaks and vulnerability activities. We also share information and research about cybersecurity and threats through the Cisco Security blog. In FY18, we introduced Privacy Data Sheets to share more information about how Cisco is responding to global regulations and customer requirements. Privacy data sheets describe how personal data or personally identifiable information is processed by specific Cisco solutions. In addition, we regularly publish infographics on topics ranging from how customer data privacy concerns impact sales to how to prevent phishing attacks.

Cisco also produces the Privacy Sigma Riders podcast, which explores the intersections between cybersecurity, data protection, and data privacy. The podcast is hosted by Cisco Chief Privacy Officer Michelle Dennedy, one of the world’s foremost experts on data privacy, in conversation with guest experts and innovators.

We highlighted the business value of good data privacy with the Cisco 2018 Privacy Maturity Benchmark Study, created in conjunction with Cisco’s Annual Cybersecurity Benchmark Study. This survey was completed by thousands of security professionals across the world and across industries, and revealed the financial benefits of good data privacy processes, including shorter delays in sales cycles. We also leveraged Cisco’s sponsorship and participation in the National Cybersecurity Alliance’s Data Privacy Day to share practical tips on keeping information secure. Internally, we updated our policies to meet or exceed the GDPR requirements and added more global data protection officers to our ranks.

“At Cisco, we remain focused on the security, trust, privacy, and resilience of our customers, and that means securing their data and that of our employees.”

- Michelle Dennedy, Vice President and Chief Privacy Officer
Responsible sourcing and manufacturing

Cisco’s sourcing and manufacturing are entirely outsourced to a global network of hundreds of suppliers and partners. These suppliers provide 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.
Supplier relationships

The complexity of our supply chain means that relationships with our suppliers and insights into our supply chain operations are critically important to our business success and impact. As an extension of our own workforce and operations, it is not surprising that many of the same challenges and opportunities we face as a business extend to our supply chain. For example, circular economy principles present a major opportunity for us to make better use of resources throughout our value chain. The application of these principles considers issues such as designing products for recycling and repair, using recycled materials, ensuring product takeback is safe and secure, and working across our industry to increase acceptance of refurbished products.

As we incorporate these considerations into our business, we must ensure our suppliers have the technological capabilities to adapt them. And our suppliers’ employees—our extended workforce—must be equipped with the skills to succeed in the factories of the future. Cisco is helping our suppliers make this transition while promoting greater diversity among our supply base and protecting human rights. We believe technology is the bridge that can help us resolve both resource and capabilities divides. Through digitization, we continue to automate processes for greater efficiency, quality, cost savings, and more sustainable business practices.

“Moving from #4 to #3 in Gartner’s Top 25 Supply Chains list was a solid accomplishment. I am proud of our team for everything we have achieved throughout this past year, but I am even more proud that we have been represented on the list for more than a decade. I think that speaks to the way we run our supply chain, and how we are focused on consistent execution so that the foundational elements of our supply chain are operating optimally.”

- John Kern, Senior Vice President, Supply Chain Operations
Cisco Supply Chain

Figure 34.

- **14** countries
- **44** locations
- **104,000+** components
- **2,200+** orders daily
- **527,000+** units repaired
- **60,000+** extended workforce
- **38,000+** orderable items
- **385,000+** items shipped daily
- **500+** suppliers
- **20,000+** virtual teams

**Component suppliers**
A large group of suppliers contracted to provide parts to our manufacturing partners according to our specifications.

**Manufacturing partners**
A select group of suppliers that produce finished Cisco products.

**Logistics service providers**
Suppliers who transport components and finished products.

**Software suppliers**
Suppliers who support non-hardware-oriented products and services as Cisco’s business model evolves.

**Repair Partners**
Suppliers who operate repair sites and complete service repairs.

---

**Message from Chuck Robbins**

---

**Our Story**

---

**The Details**

---

**Building Digital Skills and Entrepreneurship**

---

**Strategic Social Investments**

---

**Human Rights**

---

**Responsible Sourcing and Manufacturing**

---

GRI 102-9, 103-1
Supplier engagement

Cisco’s commitment to promote and foster a culture of integrity extends to our supply chain. Our Supplier Ethics Policy details how suppliers must conduct business as part of the Cisco ecosystem, including Cisco’s policy on matters such as insider trading, lobbying, and protection of intellectual property.

A foundational element of our Supplier Ethics Policy is the Responsible Business Alliance (RBA) (formerly Electronics Industry Citizenship Coalition) Supplier Code of Conduct (the Code). The Code sets baseline expectations in the areas of labor, health and safety, environment, ethics and management systems. The RBA updates its own code every 3 years to stay current with ever-changing expectations. When a new RBA Code of Conduct is released, we notify all relevant suppliers of the change. To meet the requirements of RBA membership, we also follow RBA’s process for supplier engagement.

Ethics and standards

Our Supplier Ethics Policy requires Cisco suppliers and their employees to conduct themselves with the highest standards of honesty, fairness, and personal integrity. As part of the supplier qualification process, suppliers must acknowledge that subcontractors, and any other parties they engage to provide services to Cisco, will act in accordance with the Supplier Ethics Policy. We also require our suppliers’ suppliers to adhere to the supplier code of conduct.
Human rights in our supply chain

Respecting human rights in our supply chain is an expectation of our customers, employees, and other stakeholders, and a means by which we reflect our corporate values. Cisco conducted the first Human Rights Impact Assessment (HRIA) of our supply chain in FY17. The goal of this assessment was to identify impacts and opportunities, determine how they can be managed, and understand how we perform against the UN Guiding Principles (UNGPs) on Business and Human Rights.

The study concluded our current supply chain assessment and audit process identifies actual and potential human rights impacts with a high degree of thoroughness and conforms to a majority of the expectations of the UNGPs. The assessment informed the 3-year roadmap for our priority areas (see sidebar). We recognize these issues are constantly evolving but also systemic, and will require several years of focus to address. Learn how Cisco respects human rights within our business and for our customers.

Another important step in identifying and respecting the rights of the most vulnerable workers in our supply chain is conducting audits. Our supply chain auditing process is discussed in detail here.

Cisco expectations of suppliers

Our latest supplier expectations include:

- Comply with Cisco’s Supplier Code of Conduct
- Ensure a conflict-free supply chain
- Partner on Cisco’s Circular Economy objectives and circular design principles
- Meet materials compliance requirements as detailed in the Cisco Controlled Substances Specification
- Manage subtier performance improvements, including conducting site audits of high-risk supplier facilities and reporting supplier diversity efforts within their own supply chains
- Set sustainability targets via CDP and report publicly on how they manage their most significant impacts
- Participate as a full member of RBA, including sharing audit reports via the RBA-ONLINE database
- Proactively mitigate business continuity risks
- Comply with the Master Security Specification
- Engage with stakeholders and analysts with respect to rankings and research inquiries
- Use technology and worker interviews to gather real-time insights of factory audit data to identify code-related training and improvement opportunities
Responsible minerals sourcing

Our products and components use a wide variety of materials, including tantalum, tin, tungsten, and gold (3TG), which are often referred to as conflict minerals. We are committed to sourcing all raw materials ethically, which aligns with our values and helps us to meet the expectations and requirements of our customers, government regulators, and other stakeholders. Yet responsible sourcing of minerals is a global issue, and one we cannot solve alone. To maximize our impact, we work closely with the Responsible Minerals Initiative (RMI; formerly the Conflict-Free Sourcing Initiative) to drive cross-industry engagement and solutions on the ethical sourcing of raw materials. Cisco’s commitments are captured in our Conflict Minerals Policy.

In 2017, 84 percent of the identified smelters and refiners of 3TG in our supply chain for current products on the market had been audited by or were active in the Responsible Minerals Assurance Process (RMAP), which assesses smelters’ management systems for responsible mineral sourcing. For more information, see Table 5

Cisco does not buy 3TG directly from smelters or refiners. Therefore, we must collaborate with our suppliers to conduct our due diligence for responsible mineral sourcing. We survey our suppliers using the RMI’s Conflict Minerals Reporting Template (CMRT), review the smelters they report, and request them to work through their supply chains to shift sourcing to smelters conformant with RMAP. Suppliers’ conformance to these requirements is included in supplier scorecards created for our central sourcing teams to help drive more educated decision-making and improve performance.

As a contributor to RMI’s blockchain working group, we are exploring opportunities to leverage blockchain technology to provide enhanced transparency and trust into provenance data from mines through smelters and refiners. In addition, we are currently leading a pilot with one of the top gold producers and another leading technology company to test future industry standards, key assumptions, and process digitization, and plan to share the results with the RMI working group. Results of the study may also inform the use of blockchain within Cisco’s supply chain more broadly.

---

### Table 5: Smelters and Refiners Active in Responsible Materials Assurance Process (RMAP) ¹

<table>
<thead>
<tr>
<th>Conflict Mineral</th>
<th>Previous percentage validated or active 2016</th>
<th>Number conformant or active 2017</th>
<th>Current percentage conformant or active 2017</th>
<th>Total smelters or refiners, by conflict mineral 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gold</td>
<td>75%</td>
<td>107</td>
<td>73%</td>
<td>146</td>
</tr>
<tr>
<td>Tantalum</td>
<td>100%</td>
<td>41</td>
<td>98%</td>
<td>42</td>
</tr>
<tr>
<td>Tin</td>
<td>91%</td>
<td>72</td>
<td>91%</td>
<td>79</td>
</tr>
<tr>
<td>Tungsten</td>
<td>91%</td>
<td>43</td>
<td>93%</td>
<td>46</td>
</tr>
</tbody>
</table>

¹The most recent assessment of smelters and refiners active in RMAP was conducted in 2017.
### Supplier awards

We incentivize suppliers through two annual awards. The Excellence in Sustainability Supplier Award and Excellence in Supplier Diversity Award recognize exceptional performance by our supply chain partners and acknowledge mutual achievements.

The Excellence in Sustainability Supplier Award recognizes the suppliers and partners that have distinguished themselves as visionaries and collaborators in the social and environmental sustainability space. The 2018 winner, DW Morgan has digitized and fully optimized its shipping routes, and engages proactively on logistics-related projects. Cisco and DW Morgan partnered on an initiative to introduce reusable pallet coverings, which prevented 125,250 pounds of plastic stretch-wrap from reaching landfills in 1 year.

The Excellence in Supplier Diversity award recognizes certified diverse suppliers that have demonstrated exemplary performance through outstanding quality, value, and service to Cisco, and exhibit a leading commitment to advancing their own supplier diversity and inclusion initiatives. The most recent winner is Trans-Expedite, a woman-owned minority business certified with the Women’s Business Enterprise National Council. Trans-Expedite is exemplary in their contribution to the local community through job creation and stimulation of purchasing power.

<table>
<thead>
<tr>
<th>Photo at right: (left to right): Jeff Gallinat (Cisco), Rick Moya (Trans-Expedit), Mike Strohacker (Trans-Expedit) Lisa Brady (Cisco), and Jeff Purnell (Cisco)</th>
<th>Excellence in Sustainability Supplier Award and Excellence in Supplier Diversity Award recognize exceptional performance by our supply chain partners and acknowledge mutual achievements. The Excellence in Sustainability Supplier Award recognizes the suppliers and partners that have distinguished themselves as visionaries and collaborators in the social and environmental sustainability space. The 2018 winner, DW Morgan has digitized and fully optimized its shipping routes, and engages proactively on logistics-related projects. Cisco and DW Morgan partnered on an initiative to introduce reusable pallet coverings, which prevented 125,250 pounds of plastic stretch-wrap from reaching landfills in 1 year. The Excellence in Supplier Diversity award recognizes certified diverse suppliers that have demonstrated exemplary performance through outstanding quality, value, and service to Cisco, and exhibit a leading commitment to advancing their own supplier diversity and inclusion initiatives. The most recent winner is Trans-Expedit, a woman-owned minority business certified with the Women’s Business Enterprise National Council. Trans-Expedit is exemplary in their contribution to the local community through job creation and stimulation of purchasing power.</th>
</tr>
</thead>
</table>
Supplier assessments and screening

To drive improvements across our industry, we believe it is imperative not only to continually evaluate our suppliers, but also to help all companies in our supply chain progress through leadership, support, and education. We do this through self-assessments, audits, and corrective action plans, including capability-building.

**Self-assessments**

We require key suppliers to complete an annual self-assessment questionnaire. We then undertake a second risk-based assessment of all suppliers, which considers factors such as geographical criteria, regional audit performance, product type, workforce data, and sourcing strategy.

Active participation in the self-assessment process is positively reflected in each supplier’s scorecard. We also use scorecards to assess key suppliers’ performance at least once per year as part of our regular business reviews. Supplier responsibility represents between 5 and 10 percent of a supplier’s total score. Scorecard criteria are tailored to each type of supplier. To help suppliers see the bigger picture of what we want to accomplish, we require greater sharing of supplier responsibility and risk mitigation efforts. The sustainability portion of the scorecard includes:

- Annual RBA Self-Assessment Questionnaire and Validated Audit Program (VAP) audit sharing through the RBA-ONLINE database
- Conflict minerals due diligence disclosure
- GHG reporting through the CDP with emissions reduction targets and third-party validated response
- Engagement with next-tier suppliers on supply chain emissions reduction
- Acknowledgement of the Cisco Controlled Substances Specification, including compliance with environmental regulations such as the European Union (EU) Restriction of Hazardous Substances (RoHS) Directive
- Acknowledgment of the Cisco Packaging Specification for electronic manufacturing service and original design manufacturer suppliers

We continue to integrate social and environmental responsibility into our relationships with and our assessment of suppliers in several ways. Cisco’s Supply Chain Sustainability Team works to embed supplier responsibility metrics into operating practices across supply chain functions. We also consider supplier responsibility when evaluating and onboarding new suppliers and during key stages of strategic planning, risk management, and performance evaluation.

**Audits**

Cisco’s comprehensive supplier auditing program, based on the RBA’s Validated Audit Process (VAP), helps suppliers build capacity and improve their performance. Every 2 years, we commit to auditing 25 percent of suppliers who are deemed high risk, including manufacturing facilities and component suppliers. We prioritize high-risk supplier facilities for site audits using the risk assessment tool described here. Auditors use the RBA’s standard protocols and audit tools to review documentation, conduct site tours, and assess how suppliers monitor their own suppliers. We share our audit findings with other RBA member companies through the RBA-ONLINE platform. RBA audits are valid for 2 years.

During the year, 60 supplier facilities were covered through RBA audits. Of these, 47 were audits of component supplier facilities and 13 were of our contract manufacturing partners. The percentage of audit elements resulting in a finding was 9.5 percent compared to 11.7 percent in FY17. This decrease is attributable to the fact many Tier 1 factories were re-audited in FY18, and re-audits typically produce fewer findings for these mature facilities.
Key suppliers use the RBA-ONLINE audit sharing database, which allows us to focus more resources on assessing and improving the working conditions of higher-risk suppliers or suppliers in lower tiers in the supply chain. Using the RBA’s standard Validated Assessment Process (VAP) allows suppliers to make better use of their resources as well. VAP assessments are completed by independent third-party auditors who are specifically trained in social and environmental auditing. Once an audit is complete, it can be shared online with multiple customers, giving suppliers more time to spend addressing any issues.

Our internal risk assessment framework exceeds industry guidelines, going beyond traditional self-assessments to use a combination of publicly available indices, geographic information, and past audit findings to assess unique risks. For example, certain commodities or regions may have a higher likelihood of a specific Code violation. This, in turn, enables us to understand regional variations in risks and better deploy targeted capacity-building.

While labor practices and health and safety standards make up the largest portion of our audit findings, environmental findings in our suppliers’ factories are a key dimension of the Supplier Code of Conduct and are included in our audits.

<table>
<thead>
<tr>
<th>Manufacturing partner facilities</th>
<th>FY13</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component supplier facilities</td>
<td>30</td>
<td>22</td>
<td>29</td>
<td>37</td>
<td>49</td>
<td>47</td>
</tr>
<tr>
<td>Total</td>
<td>52</td>
<td>34</td>
<td>46</td>
<td>55</td>
<td>53</td>
<td>60</td>
</tr>
</tbody>
</table>

Corrective action plans

Our goal is to help our suppliers and the electronics industry build their capacity and increase compliance with international standards. However, when standards are consistently not met, we may discontinue a supplier relationship. To help support suppliers in making improvements and addressing specific audit findings, we direct them to use the RBA Learning Academy. Internally, we provide supplier-facing employees around the globe with training on Supplier Code of Conduct fundamentals and guidance on how to embed responsible business practices into their roles.

In recent years, the Chinese government has strengthened its environmental legal system as well as environmental law enforcement, forcing many Chinese businesses to reduce capacity, relocate, or even close to meet new regulations. In response, Cisco has found ways to predict and mitigate the potential risk to our suppliers and Cisco supply chain operation in mainland China.

We use a database platform from the Institute of Public and Environmental Affairs, a Chinese NGO, to identify the existing and historical environmental issues for our suppliers in mainland China. Cisco is working closely with these suppliers to remediate existing issues and make sure they comply with the local environmental law; we also encourage our manufacturing partners to work with their downstream suppliers to build up a green supply chain using our sourcing power.
Helping suppliers improve

- Cisco uses audits to identify potential problems.
- Suppliers produce corrective action plans and evidence that they have implemented their plans.
- Suppliers must address priority issues within 30 days and all other findings within 180 days.
- For issues such as the monitoring of working hours, suppliers provide long-term improvement plans.
- Cisco works closely with suppliers until performance improves. We conduct follow-up audits if needed.

100% of priority and major findings in FY18 were downgraded or closed within the RBA-prescribed timeframe.¹

¹ Excludes some working hours findings and other findings that require long-term improvement plans.
Table 7. Categorization of Audit Findings in FY18

<table>
<thead>
<tr>
<th></th>
<th>Total component suppliers</th>
<th>Total contract manufacturers</th>
<th>Findings identified as priority</th>
<th>Findings identified as major</th>
<th>Findings identified as minor</th>
<th>Total number of audit elements</th>
<th>Percent of audit elements resulting in findings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Labor</strong></td>
<td></td>
<td></td>
<td>16</td>
<td>125</td>
<td>98</td>
<td>1640</td>
<td>14.57%</td>
</tr>
<tr>
<td>Freely chosen employment</td>
<td>23</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Young workers</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>19</td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Working hours</td>
<td>105</td>
<td>36</td>
<td>9</td>
<td>65</td>
<td>67</td>
<td>656</td>
<td>2.29%</td>
</tr>
<tr>
<td>Wages and benefits</td>
<td>20</td>
<td>17</td>
<td>1</td>
<td>26</td>
<td>11</td>
<td>114</td>
<td></td>
</tr>
<tr>
<td>Humane treatment</td>
<td>0</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Nondiscrimination</td>
<td>11</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Freedom of association</td>
<td>7</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Ethics</strong></td>
<td></td>
<td></td>
<td>0</td>
<td>5</td>
<td>10</td>
<td>656</td>
<td>2.29%</td>
</tr>
<tr>
<td>Business integrity</td>
<td>3</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>No improper advantage</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Disclosure of information</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td></td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Intellectual property</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Fair business, advertising, and competition</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Protection of identity and nonretaliation</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Responsible sourcing of minerals</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Privacy</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Health and Safety</strong></td>
<td></td>
<td></td>
<td>5</td>
<td>143</td>
<td>55</td>
<td>1804</td>
<td>11.25%</td>
</tr>
<tr>
<td>Occupational safety</td>
<td>34</td>
<td>10</td>
<td>5</td>
<td>35</td>
<td>9</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Emergency preparedness</td>
<td>18</td>
<td>11</td>
<td>2</td>
<td>18</td>
<td>20</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Occupational injury and illness</td>
<td>18</td>
<td>2</td>
<td>0</td>
<td>11</td>
<td>9</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Industrial hygiene</td>
<td>11</td>
<td>5</td>
<td>0</td>
<td>14</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Physically demanding work</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Machine safeguarding</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Food, sanitation, and housing</td>
<td>30</td>
<td>9</td>
<td>0</td>
<td>20</td>
<td>10</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Health and safety communication</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
Table 7. Categorization of Audit Findings in FY18 (continued)

<table>
<thead>
<tr>
<th></th>
<th>Total component suppliers</th>
<th>Total contract manufacturers</th>
<th>Findings identified as priority</th>
<th>Findings identified as major</th>
<th>Findings identified as minor</th>
<th>Total number of audit elements</th>
<th>Percent of audit elements resulting in findings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Environment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental permits and reporting</td>
<td>8</td>
<td>1</td>
<td>0</td>
<td>9</td>
<td>14</td>
<td>984</td>
<td>7.72%</td>
</tr>
<tr>
<td>Pollution prevention and resource reduction</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hazardous substances</td>
<td>23</td>
<td>6</td>
<td>0</td>
<td>22</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wastewater and solid waste</td>
<td>9</td>
<td>1</td>
<td>0</td>
<td>7</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air emissions</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Materials restrictions</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stormwater management</td>
<td>12</td>
<td>2</td>
<td>0</td>
<td>13</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy consumption and greenhouse gas emissions</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Management System</strong></td>
<td></td>
<td></td>
<td>0</td>
<td>35</td>
<td>31</td>
<td>1230</td>
<td>5.37%</td>
</tr>
<tr>
<td>Company commitment</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management accountability and responsibility</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legal and customer requirements</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk assessment and risk management</td>
<td>12</td>
<td>3</td>
<td>0</td>
<td>8</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improvement objectives</td>
<td>6</td>
<td>3</td>
<td>0</td>
<td>7</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Worker feedback and participation</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audits and assessments</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrective action process</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Documentation and records</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supplier responsibility</td>
<td>16</td>
<td>8</td>
<td>0</td>
<td>13</td>
<td>11</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 8. Audit Findings by Country

<table>
<thead>
<tr>
<th>Location/Category</th>
<th>Labor</th>
<th>Environment</th>
<th>Ethics</th>
<th>H&amp;S</th>
<th>Management system</th>
<th>Total</th>
<th>Number of initial audits</th>
<th>Number of closure audits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>China</td>
<td>168</td>
<td>58</td>
<td>8</td>
<td>148</td>
<td>36</td>
<td>418</td>
<td>36</td>
<td>15</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>14</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>17</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Korea, Republic of</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>8</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Malaysia</td>
<td>10</td>
<td>7</td>
<td>6</td>
<td>15</td>
<td>13</td>
<td>51</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Mexico</td>
<td>16</td>
<td>4</td>
<td>0</td>
<td>17</td>
<td>5</td>
<td>42</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Philippines</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>8</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Taiwan</td>
<td>11</td>
<td>4</td>
<td>0</td>
<td>7</td>
<td>3</td>
<td>25</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Thailand</td>
<td>8</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>17</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>United States</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>9</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Vietnam</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>239</td>
<td>76</td>
<td>15</td>
<td>203</td>
<td>66</td>
<td>599</td>
<td>60</td>
<td>22</td>
</tr>
</tbody>
</table>
Supplier Diversity

Cisco’s Supplier Diversity Program strives to provide equal opportunity within the communities we serve. We work to connect opportunities to engage and amplify Cisco’s engagement with diverse-owned businesses. In countries where supplier diversity is a requirement, we look to meet all public procurement guidelines. Supplier diversity is also a mandate from many of our customers, who use their requirements as a means to better reflect the communities in which we jointly operate. But maintaining a diverse supply base is more than compliance; it also helps us incorporate wide-ranging perspectives that mirror our global customer and employee base.

We award billions of dollars of contracts for suppliers every year and actively solicit diverse businesses to supply us with goods, services, and components for our products, as well as selling Cisco’s finished products. To help us identify and engage with diverse-owned suppliers in the U.S., we actively participate in several professional organizations, including both the National Minority Supplier Development Council and the Women’s Business Enterprise National Council. In the U.S., we follow the federal government’s criteria for diverse-owned businesses: those headquartered in the U.S. and at least 51 percent owned by U.S. citizens who fall under one of the following historically disadvantaged groups:

- Small Business
- Women-Owned Business
- Minority-Owned Business
- Veteran-Owned Business
- Service-Disabled Veteran-Owned Business
- Disabled Veteran-Owned Business
- Historically Underutilized Business (HUB) Zone

We are focused not only on supplier diversity, but also the diversity of our total workforce, which includes our contingent workers. Cisco recently began measuring the diversity of our contingent workforce in the U.S., specifically for preferred suppliers with more than 50 individuals at Cisco. Contingent workforce diversity reporting is a component of the supplier’s scorecard. We will continue to request these metrics from our preferred suppliers. While it is no simple task for a large global organization to elevate supplier diversity among competing procurement priorities, we recognize doing so will lead to our longer-term vitality, based on industry research showing diverse suppliers regularly meet or exceed customer expectations. Several new initiatives helped us continue to prioritize diversity by increasing opportunities with diverse suppliers.

**Executive sponsorship program**

Beginning in FY18, Cisco Global Procurement Services and Supply Chain Operations launched an executive sponsorship program for Cisco’s top U.S. diverse suppliers. Through this program, 26 U.S.-based Cisco executives paired with 26 suppliers and committed to meet at least quarterly for 18 months. The Cisco sponsors work to build structured relationships with their diverse suppliers, as well as helping suppliers better understand Cisco’s culture, business function strategies, and priorities so they can more effectively compete for work.

The program goes beyond helping suppliers win business with Cisco. Sponsors also encourage diverse suppliers to reduce their risk by ensuring no more than 30 percent of their revenue comes from Cisco. To date, 50 percent of sponsored suppliers reduced their reliance on Cisco while growing their own businesses—a win for all parties. The initiative aligns with our Multiplier Effect Pledge—a call for all Cisco leaders to sponsor one diverse individual to the next level in their career.
Sourcing opportunities

To choose a diverse supplier, category managers must first be aware these suppliers are available. Cisco’s procurement tools and integrated processes help us do exactly this. When users in the U.S. search for contingent labor suppliers, they receive a list of preferred suppliers. Now, 99 percent of these lists include at least one diverse supplier. By widening our focus from spend tracking with diverse suppliers to increasing the opportunities for these suppliers, we can create a stronger pipeline for long-term diverse supplier spend.

Global expansion

We recognize diversity means different things in different parts of the world. Knowing women face professional barriers everywhere, we are taking steps to expand our supplier diversity program globally with a focus on women-owned businesses. To achieve this, we have partnered with WEConnect International, an organization that builds capacity among women business owners and connects corporate buyers with these women-owned supplier businesses. Cisco is in the process of identifying and engaging with businesses in India and the UK, where Cisco has high levels of spend. In FY19, we will roll out a registration portal to increase their visibility for business opportunities with Cisco. Much like our U.S. diverse supplier dashboard, we expect this increased visibility will translate into increased spend with these businesses.

Supplier Day Diversity Award

Our Supplier Day Diversity Award (distinct from the Excellence in Supplier Diversity Award), recognizes suppliers who share and reflect Cisco’s commitment to inclusion and diversity while delivering high customer satisfaction. The 2018 winner of this award was Mirror Show Management, which helps design environments for trade shows and Cisco Live!. A woman-owned business, the company is involved with various community organizations that support education and empowerment of women.
Planet

Advancing environmentally sustainable growth in a digital world.

In this section

- Environmental sustainability
- Energy and GHG emissions
- Material use
- Nonmaterial topics
2018 Planet dashboard

**Goal:** Reduce total Cisco Scope 1 and 2 GHG emissions worldwide by 60 percent absolute by FY22 (FY07 baseline)

**Progress:** We are investing in energy efficiency and renewables to meet this goal.

**Goal:** Use electricity generated from renewable sources for at least 85 percent of our global electricity by FY22

**Progress:** Efforts such as new off-site solar contracts are helping us make progress.

**Goal:** Decrease use of virgin plastic by 20 percent by FY25 (FY18 baseline)

**Goal:** Improve large rack-mounted-equipment system power efficiency—as measured from the input power from the facility to the board-mounted ASICs, memory and other chip devices—from 77 percent to 87 percent by FY22 (FY16 baseline)

**Progress:** Innovative power-delivery techniques and power switching devices will help us reach this FY22 goal.

**Goal:** Avoid 1 million metric tonne cumulative of GHG emissions in our supply chain from FY12 to FY20

**Progress:** We have significantly avoided carbon emissions from supply chain materials, energy, and logistics.
Completed two offsite solar contracts that will provide approximately 40 percent of our Bangalore, India, campus electricity needs. Read more

Developed a new circular economy strategy that encompasses Cisco’s circular operations, consumption, design, solutions, and industry leadership. Read more

Joined industry peers in signing the Platform for Accelerating the Circular Economy (PACE)’s Capital Equipment Pledge. Cisco committed to 100 percent product return. Read more

Received industry recognition for our sustainability efforts, including #1 on Barron’s Most Sustainable Companies 2018 and #9 in the Wall Street Journal’s Management Top 250, which measures performance against a range of factors, including social responsibility. Read more

Completed 145 energy efficiency projects in FY18 in Cisco buildings around the world that avoid approximately 32.4 GWh of energy consumption and 10,300 metric tonne CO₂e. Read more

Announced a product power goal to improve large rack-mounted-equipment system power efficiency. Read more

Set a goal to achieve 85 percent renewable energy. Read more

Reduced consumption of single-use items such as paper cups within our offices; as of FY18, one-quarter of our office was paper cup-free based on square footage. Read more
Environmental sustainability

Our approach to environmental sustainability begins with the areas where we have the greatest potential for impact—reducing our energy use and using resources more efficiently. With careful oversight of key issues, engagement of our employees, and partnerships across our industry, we can operate our business in a way that respects the planet.
Environmental sustainability at-a-glance

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. The actions, commitments, and performance updates described in this chapter constitute Cisco’s environmental policy and programs and build on the core values outlined in our Corporate Environmental Policy overview.

Energy and greenhouse gas emissions

Our GHG reduction goals are concentrated in four areas: operations, supply chain (extended operations), products, and solutions.

**Operations**

In FY18, we made progress toward the 5-year goals we set in FY17:

- Reduce total Cisco Scope 1 and 2 GHG emissions worldwide by 60 percent absolute by FY22 (FY07 baseline)
- Use electricity generated from renewable sources for at least 85 percent of our global electricity by FY22

These goals are based on the work of scientists contributing to IPCC reporting and The 3% Solution report. In FY18, our Scope 1 and 2, and Scope 3 product power efficiency goals were listed on the Science Based Targets Initiative website with a status of “target set.”

Cisco completed two off-site solar contracts, providing approximately 40 percent of our Bangalore, India, campus electricity needs. This is a significant achievement given the carbon intensity of the Indian energy portfolio and local energy reliability issues.

**Extended operations (supply chain)**

To have a direct stake in supplier GHG reduction, we emphasize supplier tracking and reporting of GHG emissions. See Figure 42 on p. 135 for data on the GHG reporting performance of our manufacturing partners, component suppliers, logistics providers and recycling vendors. Each year we ask our suppliers to report to CDP to build more transparency into our supply chain.

---

1The 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.
In FY16, we set a goal to avoid 1 million metric tonne cumulative of GHG emissions in our supply chain from FY12 to FY20. At the end of FY18, we had avoided 910,582 metric tonne of carbon emissions, or 91 percent of our FY20 goal. For more information, see Table 20.

**Products**

We continue to improve product power consumption from plug to port. We do this by optimizing facility input voltage and improving power conversion from bus to board to point of load, as well as through the energy efficiency of our ASICs, which are major consumers of power in our products.

In FY18, we announced a new science-based goal to improve large rack-mounted-equipment system power efficiency—as measured from the input power from the facility to the board-mounted ASICs, memory and other chip devices—from 77 percent to 87 percent by FY22 (FY16 baseline).

**Solutions**

Cisco offers technology solutions that help us—and our customers—be more sustainable and transition to the circular economy:

- **Internet of Things (IoT):** Cisco IoT solutions help customers connect devices securely and gain digital insights to drive resource efficiency. For example, solutions for Smart+Connected Communities, Digital Buildings, and Connected Manufacturing enable energy efficiency, waste reduction, predictive maintenance, and more.

- **Remote collaboration:** Cisco TelePresence® video conferencing, Cisco Webex® desktop conferencing, Cisco Webex Teams™, Cisco Unified Communications, and Cisco Jabber® enable 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 teleworker homes (or small commercial offices). Employees can save time and avoid the GHG emissions generated from commuting. More than a third of our employees use our teleworking solutions.

- **Cloud and data center:** Consumer, government, and business IT use is increasingly being centered in the cloud. Cisco data center server, switch, and router products enable energy-efficient cloud compute and connectivity provisioning.

In addition to the examples above, Cisco is leveraging emerging technologies to develop new comprehensive services and solutions that will enable circular value creation for customers.

**Circular economy**

As a business, we rely on natural resources throughout the lifespan of our products—to make and ship hardware, and for our customers to access the network we provide. Our customers rely on the same pool of natural resources—whether it is for the products they sell or for the systems they run.

- **Circular operations**
  Reduce or use renewable and recovered inputs throughout our operations.

- **Circular design**
  Design for hardware circularity, repair, and reuse; use recycled and ‘closed loop’ material inputs; and direct used materials to become new inputs for production.

- **Circular consumption**
  Cycle refurbished and remanufactured product for multiple uses, leverage partners, and deploy as-a-service models. This area includes Cisco’s trade-in as well as takeback and recycling programs.

- **Circular solutions**
  Shape and pioneer solutions and services to enable circular economy value creation for customers.

- **Ecosystem leadership**
  Advance the circular economy through industry innovation, collaboration, and public policy.
The circular economy looks beyond the current take-make-use-dispose model and aims to redefine growth, focusing on positive societal benefits. It entails gradually decoupling economic activity from the consumption of finite resources and designing waste out of the system. Underpinned by a transition to renewable energy sources, the circular model builds long-term resilience, generates business and economic opportunities, and provides environmental and societal benefits.

At Cisco, we are focused on accelerating the adoption of circularity. This means thinking differently about the way we do business, design and build products and solutions, and recycle and reuse assets. It also informs how we use our technology to support our customers through their own business transformations.

Employee engagement

Environmental sustainability has become increasingly important to our employees. We are committed to providing employees with tools that allow them to collaborate and solve environmental problems, both in the office and in their communities. We encourage employees to be global problem solvers and come up with innovative ways to improve reusability and recyclability. One success story is the India Green Team, an employee-led effort that transformed Cisco’s India sites into a disposable-cup-free zone. Other efforts include:

- **Annual shutdown:** Cisco requires employees in North America, and encourages other employees worldwide, to take time off at the end of December. The shutdown gives us an opportunity to power down facilities and unused equipment during a time when much of our workforce is already taking time off. Over the 10-day shutdown, beginning in December 2017, Cisco avoided approximately $570,000 in energy costs and 2,700 metric tonne CO₂e of GHG emissions. Employees working in buildings in India, Hong Kong, Germany, and Ireland reduced their electricity consumption by 40 percent or more during the shutdown and 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 to recycle Cisco products. Learn more in our discussion of Cisco’s internal product end-of-life programs.

The Capital Equipment Pledge

At the World Economic Forum Annual Meeting in 2018, as a member of the Platform for Accelerating the Circular Economy (PACE), Cisco announced its commitment to the Capital Equipment Pledge to direct used materials to become new inputs for production. Cisco’s pledge is:

**100% Product Return**
- Provide product return pickup and transport at no cost for any customer worldwide upon request
- Establish alternative commercial models that promote product return, including purchase trade-in, return credit, leasing, and product-as-a-service
- Offer comprehensive warranty, replacement, service, and repair for all products to extend useful product lifetime and minimize obsolescence
- Repurpose returned product, subsystems, components, and commodities, including a limited amount of closed-loop return to new product manufacturing
Earth Aware: Every April we host a month-long employee volunteerism and awareness campaign. We plan activities, events, and volunteer opportunities to encourage employees to take action in environmentally responsible behaviors at work and at home. Hundreds of employees around the world take part. As a result of the Earth Aware campaign, there has been an increase in formally planned sustainability-related volunteerism events and activities across Cisco. For more information, see the Cisco blog post about the events.

SustainX: Earth Aware culminates in the Cisco SustainX event, a thought leadership forum hosted on Cisco's campuses. Employees from around the world come together to learn about Cisco's sustainability practices and how they can help make a difference.

Product teardown events: Teardown events increase awareness of the complexity and variety of materials that go into making Cisco products and spark innovative solutions for increasing equipment reusability. At these events, employees physically break apart used Cisco equipment and collaborate on how to increase its reusability or recyclability.

Cisco Green: This is a hub on our internal social media site that enables employees to learn about Cisco's environmental sustainability activities and provides links to programs, information, and other tools.

Cisco GreenHouse: In 2016, we launched an interactive sustainability web platform for employees. Cisco GreenHouse connects passionate employees with like-minded peers all over the world who want to find ways to lead more sustainable lives. By the end of FY18, more than 2,104 employees had joined the site and 14,900 actions had been taken.

Cisco Green Team Network

The Cisco Green Team Network (GTN) is an employee-led global “green team” with local chapters. These green teams are comprised of employee volunteers who educate fellow employees and advance sustainable change. The Cisco GTN envisions a more environmentally sustainable business and world, empowering our employees to drive social and environmental change in the office and their homes. They approach this by raising awareness regarding environmental issues and connecting employees with resources to drive action in their local buildings. In various ways, the Cisco GTN encourages others to have fun and connect while making Cisco a greener workplace. By the end of FY18, there were 11 Cisco GTN chapters worldwide with over 1,000 members. Since Cisco GTN was established, the team has accomplished the following:

- Successful elimination of paper cups from select Cisco buildings in India, Europe, and the U.S.
- Establishment of a community garden in San Jose, California
- Development of an urban farm at our Diegem, Belgium, site
- Design and installation of shadow boxes above the landfill, recycling, and composting receptacles in San Jose cafeterias to help employees quickly and easily sort their waste
- Receipt of Cisco’s Excellence in Environmental Stewardship award in December 2017

We engage employees on more than environmental responsibility. For more information about employee engagement at Cisco, see:

- Employee Community Impact
- #WeAreCisco
- Case Study: Engaging Employees in GHG Reductions
Employee training

We offer numerous ways to help employees incorporate environmental design principles into our products and solutions. For example, videos on demand show how we can reduce 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 engage employees who have a significant role in defining product requirements or developing our products and packaging. In previous years Cisco has held live learning sessions with internal and external experts covering topics that inspire and promote expansion of new and existing best practices and Design for Environment (DfE) principles.

To further embed environmental practices into our business operations, we offer employee training on our business management system, which includes our Environment Management System (EMS) and environmental policies. We also offer training to our IT and engineering employees on how they can reduce energy use within Cisco’s labs and data centers.

CSR materiality assessment: environment

Environmental topics are included in the CSR Materiality Assessment process as described in our CSR Governance. Additional inputs inform the prioritization of environmental topics, including results of life-cycle assessments (LCAs), input from stakeholders, and assessments by independent consultancies.

In FY18, stakeholder feedback confirmed our priorities continue to be:

• Energy and GHG emissions, with a focus on product energy efficiency, energy consumption in operations, and transport emissions from product logistics
• Material use and waste, with a focus on increasing product returns for reuse, remanufacturing for resale, or recycling

Table 9 shows the environmental topics we assess and manage, and how they relate to our environmental priorities. The top environment-related topics, Tier 1 and 2, are governed by dedicated programs and investment. Tier 3 topics receive due diligence as part of normal company operations. For FY18 reporting, Tier 1 and 2 topic headings have been simplified to more accurately capture the relevant disclosure categories.

<table>
<thead>
<tr>
<th>Tier</th>
<th>Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Energy/GHG</td>
</tr>
<tr>
<td>2</td>
<td>Material use and waste</td>
</tr>
<tr>
<td>3</td>
<td>Biodiversity, Land use, Non-GHG airborne emissions, Water pollution (liquid effluents), Water use</td>
</tr>
</tbody>
</table>

In FY18, we continued to see increasing customer interest in environmental sustainability, as reflected in requests for proposals, surveys, and other customer inquiries. Cisco invited approximately 5,000 customers across all regions and market segments to complete an online survey on environmental sustainability. Customer feedback from this FY18 survey confirmed the priority of our environmental sustainability issues. The top three issues identified by this customer listening survey were:

• Product energy efficiency
• Product materials selection
• Product takeback and recycling

Details about our performance and actions in all these areas follow in the relevant sections.
Environmental policy

Cisco believes the most effective leadership is by example. We will continue to improve our environmental impact assessment, reporting, and initiatives. We also help drive sustainability best practices among our supply chain and business partners, including requiring suppliers with whom we have a significant business relationship to report their impacts to CDP.

We use a set of governing principles as we develop our environmental policies:

- Integrate environmental responsibility throughout our business while meeting customer expectations with respect to product function, delivery, quality, service, and EOL management
- Work with our suppliers to integrate environmental responsibility into their operations, through our Supplier Code of Conduct, and all life-cycle phases of our products
- Use the disclosures from the Global Reporting Initiative (GRI) Standards to guide our environmental impact assessment, reporting, and initiatives
- Provide complete, accurate, and public environmental reporting for our stakeholders
- Require all Cisco employees (mergers and acquisitions included) to complete an annual Code of Business Conduct (CoBC) certification and act in a manner consistent with our CSR objectives
- Share our environmental policies and practices in our annual CSR report

We maintain the following governance processes:

- Seek stakeholder engagement and analysis on our CSR materiality assessment, our reporting, and the results of our initiatives
- Maintain ISO 14001 certification for sites with significant potential for environmental impact
- Use our CSR business process to govern reporting, stakeholder engagement, feedback, prioritization, goal setting, initiative implementation, and performance measurement

Cisco’s Sustainability Executive Team (SET) sponsors our environmental initiatives and reviews our environmental strategy and performance. SET is organized around specific tracks; each is sponsored by an executive from the lead business function and co-sponsored by the executive who chairs SET. Current tracks include:

- **Energy and GHG**: Tracking GHG emissions; reducing overall energy usage through product and facility innovation; sourcing renewable energy; and integrating our carbon reduction strategies into supply chain operations
- **Circular economy**: Increasing customers’ return of used equipment for reuse, repair, and hardware replacement for life extension from our global network of service depots, remanufacturing for resale, or recycling; new go-to-market leasing or hardware-as-a-service business models; using IoT technology to improve energy management in factories producing Cisco products; and designing products to use fewer materials and last longer through maintenance and upgrades.
- **Employee engagement**: Providing volunteer opportunities, awareness events, and educational tools for employees to use both at home and in their communities

We continue to improve our environmental impact assessment, reporting, and initiatives.
Governance

Key executives, along with business functions covered by our Environmental Management System (EMS), 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. Our Senior Vice President, Operations, is the executive sponsor of SET and is the official conduit to the Executive Leadership Team (ELT), our CEO, and the Board of Directors.
- The CSR Integration and Sustainability team within Corporate Affairs and the larger Human Resources organization is responsible for Cisco’s overall sustainability strategy. The team coordinates funding, resources, organization, scheduling, 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 oversight of risk management at Cisco, including risks associated with CSR and sustainability. Our enterprise risk management (ERM) program identifies, assesses, governs, and manages risks—and Cisco’s response to those risks—across the company. When top risks are identified, owners are assigned and specific mitigation work plans and scorecards are developed.

Regulatory fines

Cisco has incurred no significant fines—defined as more than $10,000—in any of the last five years, and was not subject to nonmonetary sanctions for noncompliance with environmental laws and regulations. Cisco is not aware of any formal grievance filed about environmental impacts.

Environmental Management System

Cisco’s ISO 14001 EMS is a global framework relying on individual accountability, management responsibility, measurement of key performance indicators, and a continuous improvement philosophy to meet business and environment goals. The EMS is certified by TUV SUD America Inc. to the international EMS standard ISO 14001:2015. A copy of our EMS certification is available for download.

Cisco sites for ISO 14001 certification are selected based on a set of criteria including:
- Facility size and lab area
- Building headcount capacity or persons housed
- Primary facility function

These criteria focus on sites that can make the greatest contribution to reducing negative environmental impacts and enhancing positive impacts. Once a site has been selected for certification, we evaluate its associated 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. Using this information, we calculate an environmental score to further help us prioritize facilities and issues. Each site aligns with Cisco’s corporate sustainability priorities, in addition to site-specific goals.

In FY17, Cisco successfully upgraded our certification to the new ISO 14001:2015 standard with no major nonconformances and 10 Positive Comments. During FY18, Cisco added ISO 14001 certification for new sites in Alpharetta, Georgia; and Columbia, Maryland, both sites of acquisitions in previous years (Figure 40).

Scope and implementation

Cisco’s ISO 14001 certified sites are audited by an independent third party, TUV SUD America Inc. Sites that were part of an acquisition are included in the scope of our corporate environmental policy and associated environmental initiatives and thus may become 14001 certified and audited. Table 10 shows our ISO 14001 certification key performance indicators (KPIs).

<table>
<thead>
<tr>
<th>KPI</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Cisco sites with ISO 14001 certification</td>
<td>28</td>
<td>28</td>
<td>26</td>
<td>30</td>
<td>32</td>
</tr>
<tr>
<td>Percent of real estate portfolio with ISO 14001 certification</td>
<td>93%</td>
<td>94%</td>
<td>&gt;90%¹</td>
<td>&gt;90%¹</td>
<td>&gt;90%¹</td>
</tr>
</tbody>
</table>

¹We have met our goal of certifying a high percentage of our real estate portfolio. We will maintain >90 percent coverage of sites that meet the certification criteria.
Figure 40. Cisco ISO 14001 certified site locations
Our EMS helps us identify the most significant environmental impacts, evaluate their risks at each Cisco site, and set relevant corporate and local objectives. All ISO 14001-certified sites have environment aspect teams. Each site’s team reports on goals, initiatives, and metrics to measure our environmental performance. Local initiatives are aligned to corporate-level programs where possible. Table 11 lists the number of aspect teams per region.

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

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

Internal EMS audits provide 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 depend on criteria such as site size, operational activities at the site, and the results of previous audits. In a typical 3-year period, every site will receive one on-site audit and one virtual audit.

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 our internal and external audits in FY18, Cisco received 33 Positive Comments on our ISO 14001 certified EMS. The Positive Comments were primarily tied to improving Cisco environmental performance, enhancing our employee engagement and awareness, and aligning our operational management with sustainability in mind.

All numeric claims made in this chapter are subject to a multiday, detailed, bottom-up audit conducted by our internal ISO 14001 audit team and part of the annual ISO 14001 internal audit plan. Verification is key to reporting valid data and helps us actively identify needed corrective actions. All environmental claims made in the 2017 CSR report were successfully audited and verified through Cisco’s internal audit process. Cisco’s environment-related claims in the 2018 CSR report will be audited in FY19.

### Precautionary principle

Consistent with the precautionary principle, we advocate a risk-based approach to our operations through our Enterprise Risk Management and Environment Management System processes. 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 use our own collaboration products to reduce GHG emissions in our operations, and help our customers leverage our solutions to do the same. The majority 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.

<table>
<thead>
<tr>
<th>Table 11. Environment aspect teams per region</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aspect Teams</strong></td>
</tr>
<tr>
<td>Waste reduction and recycling</td>
</tr>
<tr>
<td>E-scrap management1</td>
</tr>
<tr>
<td>Energy management2</td>
</tr>
<tr>
<td>Environmental awareness2</td>
</tr>
<tr>
<td>Wastewater management</td>
</tr>
<tr>
<td>Total per region</td>
</tr>
</tbody>
</table>

1These teams have site-specific activities and goals but also support a corporate-level/global goal.

2Used at smaller sites, these teams typically include activities around employee engagement, energy management, e-scrap management, waste reduction and recycling, and local “green” activities.
Life-cycle assessments

Cisco uses life-cycle assessments (LCAs) to estimate the GHG emissions associated with our products. This integrated approach helps us understand the environmental impacts of our materials, packaging, transportation modes, product power consumption, and recycling. We can then use what we learn as we make business decisions. LCAs also help us develop more energy-efficient manufacturing through comparing assembly and test scenarios.

To support our LCA work, we utilize external tools and data sources, including thinkstep GaBi 7.3 and other publicly available data sources, such as the International Energy Agency (IEA); the United Kingdom’s Department for Business, Energy, and Industrial Strategy; and the Greenhouse Gas Protocol (GHGP).

In FY19, we plan to join the Massachusetts Institute of Technology’s Product Attribute to Impact Algorithm (PAIA) program, which is a collaborative tool developed to efficiently perform an LCA. Much of the electronics industry uses the same components and materials in its products, and the PAIA tool aims to streamline LCAs by using shared industry standard LCA inputs.
Design for Environment

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

Cisco’s Design for Environment (DfE) approach focuses on the following areas:

• Energy efficiency (with a goal to improve system power efficiency of large rack-mounted equipment from 77 percent to 87 percent by 2022 (FY16 baseline))
• Reduction of hazardous materials
• Design for recyclability and upgradability
• Recycling marking on plastic components (ISO 11469, formerly 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 recycling
• Recycled content materials and materials with less environmental impact
• Standardized and modularized components and enclosures
• Design for disassembly, repair, and reuse, using easily separable components with similar materials to facilitate recycling and reusable components

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 FY18, we continued to update our DfE principles to align with Cisco’s commitment to the circular economy, as well as evolving customer requirements and industry and regulatory trends. More information on our circular design priorities can be found in the Circular Economy section.

Goal:
Decrease use of virgin plastics by 20 percent by FY25. (FY18)¹

¹The plastics included in this goal make up the majority of Cisco’s use, however, it excludes plastics contained in commodity components sourced from suppliers (such as printed circuit boards). Most of these electronic components require the electrical insulating property provided by plastics.
Energy and GHG emissions

Reducing our energy use and GHG emissions is a critical environmental issue. We are making progress through energy efficiency initiatives across Cisco, investments in renewable energy, and improvements to the efficiency of our products.
Goals

Energy and GHG emissions is the most material environmental issue for Cisco. The way Cisco manages its GHG emissions and electricity from renewables is critical to many stakeholders, including employees, investors, and external reporting organizations, such as the Dow Jones Sustainability Index, Corporate Knights, and CDP. In addition, research has shown a company’s sustainability practices are a key factor for employee recruitment and retention. Cisco has been committed to reducing our GHG emissions for more than a decade.

FY18 was our first full year working toward our FY22 goals; a brief discussion regarding progress toward these goals is below and in the Energy and Scope 1 and 2 GHG Emissions section. During FY18 we established a Scope 3 use phase product power efficiency goal. Our in-progress Scope 1, 2, and 3 product power efficiency goals are listed on the Science Based Targets Initiative website with a status of “target set.” Table 12 provides a summary of our GHG emissions goals since 2006.

To achieve these goals, we will:

- Invest more than $45 million between FY18 and FY22 in the areas of energy efficiency and renewable energy
- Implement more than 300 energy efficiency and on-site renewable energy projects across our real estate portfolio
- Increase renewable energy procurement through utility green power programs, power purchase agreements (PPAs), and renewable energy certificates
- Improve product power efficiency through engineering innovations

Goal: 87%
Improve large rack-mounted-equipment system power efficiency—as measured from the input power from the facility to the board-mounted ASICs, memory and other chip devices—from 77 percent to 87 percent by FY22 (FY16 baseline)

Goal: 60%
Reduce total Cisco Scope 1 and 2 GHG emissions worldwide by 60 percent absolute by F22 (FY07 baseline)

Goal: 1 million metric tonne cumulative of GHG emissions avoided in our supply chain from FY12 to FY20

Goal: 85%
Use electricity generated from renewable sources for at least 85 percent of our global electricity by FY22
We form our GHG emission reduction goals based on internal best practices and expert opinion, including recommendations from the IPCC, the U.S. EPA, the IEA, and The 3% Solution report¹ from the World Wildlife Fund (WWF) and CDP. Since 2013, Cisco has been setting and achieving science-based targets that exceed the rate of decarbonization required to keep global average temperature increase below 2°C compared to preindustrial temperatures, as described in the Fifth Assessment Report of the IPCC. Our FY22 GHG reduction goal of 60 percent (FY07 baseline) equates to a 4 percent reduction per year. For reference, this reduction is nearly three times greater than the yearly emissions reduction of 1.35 percent recommended for our industry by the Sectoral Decarbonization Approach to science-based target setting².

Our goals are set as 5-year commitments because multiyear goals allow for large investments, which have a potential for big payoffs. We believe we demonstrate a best-practice approach to goal setting by:

- Committing to realistic multiyear goals, befitting the scale of the problem
- Using consistent and precise wording of goals, with clear measurement methodology
- Participating in consistent and transparent reporting from year to year
- Implementing third-party assurance for all goal-related reporting
- Setting goals based on IPCC findings and science-based reduction recommendations

### Table 12. Cisco GHG emissions goals¹

<table>
<thead>
<tr>
<th>Date</th>
<th>Goal Established</th>
<th>GHG emission reduction goal description</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 2018</td>
<td>Improve large rack-mounted-equipment system power efficiency—as measured from the input power from the facility to the board-mounted ASICs, memory and other chip devices—from 77 percent to 87 percent by FY22 (FY16 baseline).</td>
<td></td>
</tr>
</tbody>
</table>
| July 2017  | 1. Reduce total Cisco Scope 1 and 2 GHG emissions worldwide by 60 percent absolute by FY22 (FY07 baseline).  
            | 2. Use electricity generated from renewable sources for at least 85 percent of our global electricity by FY22.                                                                                                                            |
| June 2016  | Avoid 1 million metric tonne cumulative of GHG emissions in our supply chain from FY12 to FY20.                                                                                                                                             |
| February 2013 | 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).                                                                                                          |
| 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). |
| September 2006 | Clinton Global Initiative (CGI) commitment to reduce GHG emissions from all Cisco business air travel worldwide by 10 percent absolute by FY09 (FY06 baseline).                                                                                   |

¹All goals undergo external verification for limited assurance against the ISO 14064-3

¹The 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.

²According to the Sectoral Decarbonization Approach (SDA) sector definitions (version 1, released May 2015), Cisco is classified in the “Services/Commercial Buildings” sector. Calculation is based on the most recent SDA target calculation tool (version 8, released 27 February 2017).
Performance

We have been recognized in the past year for our sustainability efforts by CDP (see Table 13 below), Barron’s, Corporate Knights Global 100, and the EPA. 2018 represents our 14th year disclosing with CDP. For the 2018 reporting year, Cisco achieved an A rating by CDP and was listed on their 2018 Climate A List based on information submitted to CDP in July 2018\(^1\). 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 13 shows Cisco’s participation and performance in CDP over the last 14 years. We take pride in our consistently high CDP rankings and consider them evidence of our long-term commitment to improving GHG emissions disclosure and performance.

Cisco maintained our position on both the Dow Jones Sustainability (DJSI) World and North American Indices in September 2018 based on information submitted to DJSI in May/June 2018. The DJSI series, a globally recognized benchmark, rates companies based on their economic, environmental, and social dimensions. We have been on the World Index for 12 of the last 13 years and have been on the North American Index every year since its inception in 2006 (13 years).

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 23, 2018, we were ranked sixth among the top 30 tech and telecommunications companies, seventh on the national top 100 list, and sixth on the Fortune 500 partners list.

For more information on the CSR awards Cisco received in 2018 and year prior, please visit our CSR Awards page.

**Table 13. CDP performance history**

<table>
<thead>
<tr>
<th>CDP Year/Cisco fiscal year</th>
<th>CDP Score(^1)</th>
<th>A List</th>
<th>CDLI(^2)</th>
<th>CPLI(^3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018/FY17</td>
<td>A‡</td>
<td>✓</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>2017/FY16</td>
<td>A‡</td>
<td>✓</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>2016/FY15</td>
<td>A‡</td>
<td>✓</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>2015/FY14</td>
<td>100/A</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>2014/FY13</td>
<td>100/A</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>2013/FY12</td>
<td>100/A</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>2012/FY11</td>
<td>96/B</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>2011/FY10</td>
<td>98/A</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>2010/FY09 (CDP6)</td>
<td>92/A</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>2009/FY08 (CDP5)</td>
<td>88/+</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>2008/FY07 (CDP4)</td>
<td>98/+</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>2007/FY06 (CDP3)</td>
<td>70/+</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>2006/FY05 (CDP2)</td>
<td>70/+</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>2005/FY04 (CDP1)</td>
<td>Responded/†</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

\(^1\)Disclosure/Performance  
\(^2\)Carbon Disclosure Leadership Index  
\(^3\)Carbon Performance Leadership Index  
†Performance scoring began with CDP 2010.

\#Starting with CDP 2016, a single letter grade represents disclosure and performance.  
\#In 2015 performance leadership was officially transitioned to the ‘A List’.

Key Sustainability Rankings

#1  
Barron’s Most Sustainable Companies 2018

#5  
Newsweek Green Ranking 2018

#7  
Corporate Knights 100 Most Sustainable Corporations 2018

#9  
Wall Street Journal Management Top 250 2018

16
disclosure, performance, and A List CDP awards since 2005—more than any company
Energy and Scope 1 and 2 GHG emissions

Our Scope 2 emissions result almost exclusively from electricity use and represent 94 percent of our Scope 1 and 2 emissions. As a result, implementing projects to reduce our electricity use is a major part of our energy and GHG reduction strategy. In FY18, our Scope 1 and 2 GHG emissions were 45 percent lower than our FY07 baseline on an absolute basis. See Table 14 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. We report Scope 1 and 2 emissions based on our operations over which we have operational control. Scope 1 and 2 calculations are based on site-specific data for fuel consumed and utilities purchased, applying published emissions factors and global warming potentials (GWPs). See Table 16 for details. The EPA Center for Corporate Climate Leadership provides additional program guidance. All GHG emissions reported in this section include the seven GHGs covered by the GHG Protocol: CO₂, CH₄, N₂O, 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. We report market- and location-based Scope 2 emissions in accordance with the GHG Protocol’s 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. See our FY18 Inventory Assurance Statement.

Indirect energy or electricity represents 90 percent of our energy consumption (Table 15). Through the projects described in this section, we have effectively plateaued our level of energy consumption for the last several years. We do expect our energy use will rise over time; 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 74 percent below the world average (See Table 16). 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- and no-carbon electricity is less readily available.

### Table 14: Summary of Scope 1 and 2 GHG emissions

<table>
<thead>
<tr>
<th>KPI</th>
<th>FY07 Baseline Year</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total GHG emissions: Scope 1, metric tonne CO₂e</td>
<td>48,311</td>
<td>49,721</td>
<td>45,562</td>
<td>53,123</td>
<td>41,926</td>
<td>41,171</td>
<td>*Location-based&quot; is used consistent with GHG Protocol and does not include renewable energy purchases.</td>
</tr>
<tr>
<td>Total GHG emissions: Scope 2 (location-based), metric tonne CO₂e</td>
<td>448,950</td>
<td>704,756</td>
<td>731,103</td>
<td>731,662</td>
<td>744,929</td>
<td>666,708</td>
<td></td>
</tr>
<tr>
<td>Total GHG emissions: Scope 2 (market-based), metric tonne CO₂e</td>
<td>402,422</td>
<td>497,581</td>
<td>318,890</td>
<td>247,933</td>
<td>223,558</td>
<td>205,141</td>
<td></td>
</tr>
<tr>
<td>Scope 1 and 2 emissions (location-based) intensity, metric tonne CO₂e per million dollars of revenue</td>
<td>14.2</td>
<td>16.0</td>
<td>15.8</td>
<td>15.9</td>
<td>16.0</td>
<td>14.4</td>
<td></td>
</tr>
<tr>
<td>Scope 2 emissions from primary data, percent</td>
<td>96.4%</td>
<td>97.1%</td>
<td>98.2%</td>
<td>98.1%</td>
<td>98.0%</td>
<td>98.2%</td>
<td></td>
</tr>
<tr>
<td>Total GHG emissions: Scope 1 and 2 (market-based), metric tonne CO₂e</td>
<td>450,733</td>
<td>547,302</td>
<td>364,452</td>
<td>301,057</td>
<td>265,484</td>
<td>246,312</td>
<td></td>
</tr>
<tr>
<td>Percent progress against FY22 reduction goal</td>
<td>Base year</td>
<td>+20.9%</td>
<td>-19.1%</td>
<td>-33.2%</td>
<td>-41.1%</td>
<td>-45.4%</td>
<td></td>
</tr>
<tr>
<td>Goal: Reduce total Cisco Scope 1 and 2 GHG emissions worldwide by 60 percent absolute by FY22 (FY07 baseline)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. 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 had material impacts on Cisco’s current and Scope 2 figures calculated prior to 2015.
3. Results are based on Scope 2 GHG Protocol methodology released in 2015. Cisco’s current GHG reduction goal was announced in September 2017.
### Table 15. Summary of Scope 1 and 2 energy usage

<table>
<thead>
<tr>
<th>KPI</th>
<th>FY07 Baseline Year</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy usage, GWh</td>
<td>1,239</td>
<td>1,791</td>
<td>1,826</td>
<td>1,850</td>
<td>1,831</td>
<td>1,815</td>
<td>Electricity is the only indirect energy source used by Cisco—we do not purchase any heating, cooling, or steam.</td>
</tr>
<tr>
<td>Indirect energy usage, GWh</td>
<td>1,025</td>
<td>1,573</td>
<td>1,636</td>
<td>1,641</td>
<td>1,656</td>
<td>1,637</td>
<td>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.</td>
</tr>
<tr>
<td>Direct energy usage, GWh</td>
<td>213</td>
<td>218</td>
<td>189</td>
<td>209</td>
<td>176</td>
<td>178</td>
<td></td>
</tr>
<tr>
<td>Electricity usage, GWh</td>
<td>1,025</td>
<td>1,573</td>
<td>1,636</td>
<td>1,641</td>
<td>1,656</td>
<td>1,637</td>
<td></td>
</tr>
<tr>
<td>Natural gas usage, GWh</td>
<td>135</td>
<td>103</td>
<td>82</td>
<td>94</td>
<td>90</td>
<td>90</td>
<td>Stationary diesel is typically used for backup power generation.</td>
</tr>
<tr>
<td>Stationary diesel usage, GWh</td>
<td>18</td>
<td>40</td>
<td>37</td>
<td>33</td>
<td>15</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Propane usage, GWh</td>
<td>0.8</td>
<td>0.1</td>
<td>0.2</td>
<td>0.2</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Transportation fuel usage (combined gasoline and diesel fuel), GWh</td>
<td>59</td>
<td>76</td>
<td>70</td>
<td>73</td>
<td>68</td>
<td>65</td>
<td>Transportation fuel includes regular gasoline and diesel fuel used in Cisco’s fleet.</td>
</tr>
<tr>
<td>Energy use per unit of revenue, GWh of energy consumed per billion dollars in revenue</td>
<td>35.5</td>
<td>38.0</td>
<td>37.1</td>
<td>37.6</td>
<td>37.2</td>
<td>36.8</td>
<td></td>
</tr>
</tbody>
</table>

### Table 16. Electricity emissions factors

<table>
<thead>
<tr>
<th>KPI</th>
<th>FY07 Baseline Year</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>IEA world average emission factor, g CO\textsubscript{2}e per kWh</td>
<td>507.1</td>
<td>536.0</td>
<td>536.0</td>
<td>536.0</td>
<td>506.0</td>
<td>489.6</td>
<td>Latest factors used for our current FY18 report from IEA, RE-DISS, and EPA GHG Emissions Factors Hub. Prior years used the latest factors available at time of prior-year reporting. See footnotes for emission factor and GWP sources.1</td>
</tr>
<tr>
<td>Cisco global average electricity emission factor (location-based), g CO\textsubscript{2}e per kWh</td>
<td>437.9</td>
<td>448.0</td>
<td>446.6</td>
<td>448.2</td>
<td>447.1</td>
<td>407.9</td>
<td></td>
</tr>
<tr>
<td>Cisco major data center average electricity emission factor (location-based), g CO\textsubscript{2}e per kWh</td>
<td>394.7</td>
<td>447.9</td>
<td>421.0</td>
<td>419.4</td>
<td>419.5</td>
<td>353.9</td>
<td></td>
</tr>
<tr>
<td>Cisco global average electricity emission factor (market-based), g CO\textsubscript{2}e per kWh</td>
<td>392.5</td>
<td>316.3</td>
<td>194.8</td>
<td>152.8</td>
<td>134.5</td>
<td>125.5</td>
<td></td>
</tr>
</tbody>
</table>

1Cisco used emission factors from the following databases for its FY18 GHG inventory: 2018 International Energy Agency (IEA) Electricity Information Database 2016 IEA factors, 2017 EU Residual Mix Factors from RE-DISS, Center for Corporate Climate Leadership GHG Emission Factors Hub (modified March 9 2018), 2018 country-specific emission factors for Australia, Brazil, Canada, India, United Kingdom provided from those countries’ governments. 100-year GWPs from IPCC Fourth Assessment Report (AR4), 2007.
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:

- Use our real estate space more efficiently through Cisco Connected Workplace
- Increase the energy efficiency of our real estate operations
- Generate low-carbon electricity from on-site systems and purchase renewable energy
- Engage our stakeholders, including employees, on our sustainability strategy

Cisco Connected Workplace

The most efficient workplace is the one you do not have to build. We continue to optimize our real estate portfolio while reducing energy use and GHG emissions by implementing Cisco Connected Workplace (CCW). This solution integrates workspace design, policy, and technology to transform the workplace experience. Our activity-based workspaces can accommodate approximately 30 percent more employees than a traditional office layout, substantially reducing space and land requirements and therefore the associated environmental impacts.

Our new buildings and renovation projects must meet CCW design specifications, which include energy efficiency requirements such as standards for LED lighting and efficient air conditioning. We have changed our workplace occupancy model from individual to group assignment; this gives our employees flexibility and choice while increasing the utilization of our assets. In addition, with our flexible work policy and mobile technology solutions, employees can work from any Cisco office, as well as from home, a customer site, or even a coffee shop. CCW successfully integrates our technology into our flexible workplace.

At the end of FY18, 65 percent of our total office space was compliant to our CCW design. Also by the end of FY18, we completed a multiyear, multimillion-dollar renovation of our headquarters in San Jose that reduced our square footage by 30 percent while providing a better workplace experience for our employees. Over the past 5 years, Cisco has reduced our real estate portfolio by 7.3 million square feet, while the number of persons housed in our real estate footprint has only decreased by 3 percent. We estimate this gross reduction in square footage has allowed us to avoid approximately 166 million kWh of energy use and 67,400 metric tonne of GHG emissions annually.

Energy efficiency program: EnergyOps

Our Global Energy Management and Sustainability (GEMS) team leads all energy and sustainability initiatives across our 22 million square feet of global real estate. The team currently manages more than $40 million, 5-year global EnergyOps program to implement hundreds of efficiency and renewable energy projects every year through FY22. This team includes Cisco employees and contracted energy managers who 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 on-site 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

In FY18 the GEMS team enabled Cisco to avoid approximately 32.4 GWh of energy consumption and 10,300 metric tonne CO₂e by investing $9.9 million to implement 145 energy efficiency projects, not including our renewable energy purchasing or on-site renewable energy generation. We estimate the energy efficiency and on-site renewable energy projects we have implemented since FY14 have avoided approximately 173.5 GWh of energy and 80,800 metric tonne CO₂e. This program has also allowed us to make our operations more efficient and increase the amount of renewable electricity we buy, directly contributing to the achievement of the FY17 sustainability goals we set in FY13 and the funding of our FY22 goals. See our Goals section for details.

Table 17 shows the energy savings associated with the GHG reduction projects we implemented between FY14 and FY18. Projects the GEMS team implemented globally in FY18 include:

- Increasing lighting efficiency by updating lighting controls and using LED technologies
- Installing variable frequency drives and premium efficiency motors and pumps in our HVAC systems
- Installing solar window film to reduce heat gain and improve occupant comfort
- Installing waterside economization and dry cooler technologies to improve free cooling utilization
- Improving insulation of heating and cooling piping, valves, and pumps

### 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 greatest opportunity to reduce Cisco’s GHG emissions and energy costs. We can do this by focusing on efficiency in the design of our labs and practicing smart approaches to utilization and power management.

Our Global Lab Specification includes efficiency standards for new, high-density labs and retrofits. For instance, airflow management is mandatory in the state of California per Title 24. We require it in all new labs globally and recommend it for renovation projects. EnergyOps projects, as well as projects initiated by lab managers also help us improve existing airflow management, ventilation, cooling, and other building infrastructure systems.

We are also mindful of our equipment usage, powering down or removing unused, unneeded equipment. Smart power distribution units (PDUs) monitor our lab equipment, and virtual machines help us 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 number of people who can use the equipment.

### Table 17. Energy and GHG emissions reduction projects

<table>
<thead>
<tr>
<th>KPI</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of projects implemented</td>
<td>96</td>
<td>165</td>
<td>103</td>
<td>103</td>
<td>145</td>
</tr>
<tr>
<td>Annual energy avoided, GWh/yr</td>
<td>22.7</td>
<td>47.1</td>
<td>31.2</td>
<td>40.1</td>
<td>32.4</td>
</tr>
<tr>
<td>Total estimated annual CO₂e savings, metric tonne CO₂e/yr</td>
<td>12,000</td>
<td>22,500</td>
<td>12,400</td>
<td>23,600</td>
<td>10,300</td>
</tr>
</tbody>
</table>

1These do not include renewable energy purchases.
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, users remove unused or old equipment, thereby saving space, power, and cooling in the move.

Building efficiency: Data centers

Our data center efficiency strategy also focuses on design, utilization, and power management. Our 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.

We also retrofit our data center spaces with more energy-efficient technologies. Examples of efficiency retrofits we completed over the last several years include:

• Installing LED lights
• Replacing electric-resistance heaters with more efficient heat pumps in our backup generators
• Applying coil optimization technologies to improve cooling system efficiency
• Retrofitting existing Computer Room Air Handling 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

Much like our labs, PDUs in our data centers monitor power and control our equipment use. Data Center Infrastructure Management (DCIM) tools allow us to digitize the data center. This enables maximum resource allocation efficiency, helping us to bridge the gap between IT workloads and facilities, automatically collect IT and facility data, and better manage power, cooling, and physical space supply and demand. DCIM also provides predictive analytics to identify capacity trends and operational conditions requiring attention or preventive action. These tools help our teams make better decisions on whether we need to build new data centers.

We 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 July 2013, we have reduced our data center square footage by 20 percent.
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 2009.

By the end of FY18, 20 Cisco facilities had LEED certification, with 13 rated Gold or Platinum. These facilities represent over 2.7 million square feet of LEED-certified space, which is about 12.5 percent of Cisco’s global real estate portfolio.

We also incorporate principles of green building standards into the Cisco Connected Workplace, even if LEED certification is not planned. These standards make our spaces more comfortable for our occupants while reducing our buildings’ impact on the environment. Some of the principles we include are:

- Thoughtful building layouts that place enclosed spaces toward the core, allowing for natural light penetration and placement of people near the perimeter
- LED lighting, including task lighting for adjustable occupant lighting control
- Biophilic designs such as living walls and the use of natural materials

We are also able to donate furniture in several locations, including sites in San Jose and China. In these locations, we first check if the office furniture we are replacing can be used in another Cisco office. If not, we donate it to a local charity or recycle it.

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 2009.

By the end of FY18, 20 Cisco facilities had LEED certification, with 13 rated Gold or Platinum. These facilities represent over 2.7 million square feet of LEED-certified space, which is about 12.5 percent of Cisco’s global real estate portfolio.

We also incorporate principles of green building standards into the Cisco Connected Workplace, even if LEED certification is not planned. These standards make our spaces more comfortable for our occupants while reducing our buildings’ impact on the environment. Some of the principles we include are:

- Educational outreach through change management with design and sustainable practices
- Increased building occupancy and efficiency with the use of data and space policies
- Wellness focus with the provision of spaces for relaxing, socializing, and exercising
- Specification of low-emitting materials in construction

We are also able to donate furniture in several locations, including sites in San Jose and China. In these locations, we first check if the office furniture we are replacing can be used in another Cisco office. If not, we donate it to a local charity or recycle it.
On-site power: Solar and combined heat and power (CHP)

We prefer on-site power projects where possible, but off-site power is often the better option due to factors such as location, budget, and space constraints. While we do utilize unbundled RECs today to help meet our renewable energy goal, we continue to engage utilities and renewable energy providers to expand both our on-site and off-site renewable energy activities.

From FY12 through FY18, Cisco increased our total on-site solar PV capacity from 200 kW to 3 MW. Collectively, these systems produce an average 3.4 million kWh of electricity, avoiding 1,400 metric tonne CO$_2$e each year over the projected 25-year life of the systems. Our newest rooftop solar PV systems in Bangalore and Pune, India, increase our on-site solar PV capacity in India to over 1 MW. We also completed a 966-kW solar PV carport in 2015 at our Boxborough, Massachusetts, campus. We installed five arrays containing 3,168 solar panels. The output for this system is nearly 1 million kWh per year. Our other on-site solar systems are located at our data centers in Allen, Texas; RTP, North Carolina; and other campus buildings in 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$_2$e per year and saves over $510,000 in electricity costs annually. We have also installed nine solar hot water systems at our campus in Bangalore, India. These systems collectively produce an average of 8,500 liters of hot water every day, which satisfies approximately 67 percent of our hot water demands at the campus.

Renewables strategy

We identify and evaluate potential projects in the following order:
1. On-site power opportunities
2. Green power contracts with utilities
3. Off-site power opportunities
4. Renewable Energy Certificates (RECs)
Purchasing renewable electricity

Purchasing electricity generated from renewable or other low-carbon sources is a big part of our GHG reduction strategy. Our global renewable electricity purchases are summarized in Table 19. We have purchased renewable electricity primarily in the United States and Europe since FY06 by buying RECs and entering into green power contracts with various electricity suppliers. In FY18, we purchased 1,088 GWh of Green-e Certified RECs and green power in the U.S., 93 GWh of green power in Europe, and 134 GWh of international RECs (I-RECs) in India. The percent of electricity purchased from renewable energy sources for various regions is also shown in Table 19.

Utility providers are enabling better access to renewable energy. At Cisco, we take full advantage of these types of opportunities and also commit to taking simple measures to provide easy access to new renewable energy. We signed our second and third solar power purchase agreements (PPAs) in Karnataka, India in April 2018. Collectively, these agreements will deliver 85,000 MWh of clean, renewable electricity every year to the local electric grid where our Bangalore campus is located. These agreements will provide nearly 40 percent of the electricity we need to power our Bangalore campus and represent a big step towards achieving our FY22 GHG reduction and renewable energy goals.

Renewable PPA agreements not only allow us to receive solar-generated electricity bundled with the associated RECs, but also save us money and reduce volatility in our energy budget by locking in electricity prices over the term of the agreements. Furthermore, they create local jobs and add clean, renewable power to the Indian electric grid, which is critical considering around 75 percent of the power in India is generated from carbon-intensive coal-fired power plants. We completed our first PPA in 2017, which now provides solar power to our San Jose, California, headquarters.

Other accomplishments in FY18 include:

- Purchasing 100 percent of the electricity used at our facilities from renewable energy sources in the United States and many European countries, including Belgium, Denmark, France, Germany, Ireland, Italy, Luxembourg, Switzerland, and the United Kingdom.
- Continuing participation in Duke Energy’s Green Rider program to purchase about 10 percent of the electricity used at our RTP campus from 10 MW of solar projects located in North Carolina.
- Continuing participation 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 engage 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 and ranks consistently high in the EPA Green Power rankings.

Table 19. Renewable energy

<table>
<thead>
<tr>
<th>KPI</th>
<th>FY07 Baseline Year</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity from renewable sources, GWh</td>
<td>110</td>
<td>579</td>
<td>1,167</td>
<td>1,264</td>
<td>1,324</td>
<td>1,344</td>
</tr>
<tr>
<td>Percent progress against reduction goal</td>
<td>10.7%</td>
<td>36.8%</td>
<td>71.3%</td>
<td>77.0%</td>
<td>80.0%</td>
<td>82.1%</td>
</tr>
<tr>
<td>Goal: Use electricity generated from renewable sources for 85 percent of our global electricity by FY22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Region</th>
<th>FY07 Baseline Year</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMEAR (Europe, Middle East, Africa, and Russia)</td>
<td>31.4%</td>
<td>60.8%</td>
<td>48.1%</td>
<td>43.6%</td>
<td>59.2%</td>
<td>62.1%</td>
</tr>
<tr>
<td>India</td>
<td>0.0%</td>
<td>1.0%</td>
<td>1.6%</td>
<td>33.3%</td>
<td>45.3%</td>
<td>49.0%</td>
</tr>
<tr>
<td>United States</td>
<td>9.5%</td>
<td>43.8%</td>
<td>96.7%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
GRI 305-3

Scope 3

Scope 3 emissions cover a broad range of activities, including our supply chain, logistics, product use, and product end-of-life. Table 12 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 6.5 of the 2018 CDP Investor Survey.

Scope 3 GHG emissions reduction strategy

Our Scope 3 emissions reduction efforts are focused on reducing emissions related to our products’ energy efficiency and supply chain operations. Our overall strategy to accomplish these objectives is:

- Increase product power efficiency through continual engineering improvements
- Collaborate with supply chain partners to optimize transport and materials in the manufacturing of our products, and increase energy efficiency in our Tier 2 virtual factories

Scope 3 supply chain

To gain an accurate picture of the life cycle impacts of our products, we need to understand the impacts associated with our supplier GHG emissions. In 2016, we set a goal to avoid 1 million metric tonne of GHG emissions from our supply chain by FY20. This goal is our first quantitative emissions goal to encompass Scope 3 supply chain activities Cisco directs or influences, such as sourcing strategies, excess component management, product fulfillment model designs, manufacturing-related energy use, and transport mode optimization executed by third parties.

To build upon the knowledge gained from our Scope 3 supply chain GHG emission inventory (developed using the data reported through CDP), Cisco launched the Supply Chain GHG Reduction Program to formalize and execute on a top-down approach to reducing GHG emissions. The mission of the program is to reduce Cisco’s Scope 3 supply chain GHG emissions to reduce environmental impact while delivering additional supply chain benefits and customer satisfaction.

The Supply Chain GHG Reduction Program 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

Individual initiatives within the program focus on specific areas of supply chain GHG emissions prioritized by our CDP-based Scope 3 carbon footprint. The carbon footprint study supplemented product LCAs and CDP-based supplier emissions data to identify hot spots as targets for reduction. Using this study, our three primary areas of focus have been materials, energy, and logistics.

Table 20. Progress toward 2020 Scope 3 supply chain GHG reduction goal

<table>
<thead>
<tr>
<th>KPI</th>
<th>FY12 Base Year</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumulative GHG emissions avoided from Scope 3 supply chain GHG emissions, metric tonne CO₂e</td>
<td>8,958</td>
<td>213,331</td>
<td>337,975</td>
<td>500,170</td>
<td>711,980</td>
<td>910,582</td>
</tr>
<tr>
<td>Percent progress against reduction goal</td>
<td>0.9%</td>
<td>21.3%</td>
<td>33.8%</td>
<td>50.0%</td>
<td>71.2%</td>
<td>91.0%</td>
</tr>
</tbody>
</table>
In FY18, the Supply Chain GHG Reduction Program continued the momentum with employees and executives needed to drive change in the supply chain. The program consists of six tracks, each focused on a specific mission for reducing or avoiding supply chain emissions. Specific areas of reduction and details of achievements are reported individually in their respective Scope 3 cradle-to-gate categories.

Their categorization against the GHG Protocol and links to their FY18 performance are as follows:

- Make It Green: Scope 3 Transportation and Distribution and Scope 3 Purchased Goods and Services
- Mode Shift: Scope 3 Transportation and Distribution
- Responsible Supply Chain Design: Scope 3 Transportation and Distribution
- Services Green: Scope 3 Transportation and Distribution
- Component Scrap Management: Scope 3 Purchased Goods and Services
- Partner Energy Management: Scope 3 Purchased Goods and Services

Promoting transparency in the supply chain

CSR practices are embedded in 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. This chapter focuses on supply chain issues relating to the environment. Discussion of our Supplier Responsibility practices not related to the environment can be found in the Society section.

Improving transparency in the supply chain is critical to helping us address some of our most significant sustainability issues. 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 through CDP Supply Chain via Cisco’s supplier scorecarding process; for more information refer to the FY18 letter requesting our suppliers to report to CDP (Appendix I)
- Conduct site audits of high-risk supplier facilities
- Use worker interviews and support other RBA-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 need to understand the impacts associated with our supplier GHG emissions. As a member of the CDP Supply Chain Program, we request that all suppliers with whom we have a significant business relationship report their impacts to CDP. We then use specific metrics from their responses in our sustainability scorecard, shown in Figure 42.

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 or remedial actions through an annual self-assessment audit process. Using standardized RBA self-assessment tools makes this process efficient for suppliers serving multiple customers.
Figure 42. Cisco supplier CDP GHG reporting performance

Manufacturing partners

Component suppliers

Logistics

End-of-life

1 Report to CDP
2 Response to Public
3 3rd Party Assurance
4 Set Goal
5 Engage Suppliers
Active participation in the self-assessment process is positively reflected in each supplier’s scorecard. We make it clear 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.

**Supplier audit findings**

Environmental findings in our suppliers’ factories are a key dimension of the Supplier Code of Conduct. Cisco performs audits on our high-risk suppliers through the RBA Validated Audit Protocol (VAP).

There were no priority environment findings in FY18. We worked with our suppliers to ensure that major findings were closed and helped them establish environmental management systems to prevent similar findings from happening again. Table 21 details environment-related supplier audit findings. To learn more about our audit processes, see the Society chapter here.

We also use a database from the Institute of Public and Environmental Affairs to identify the existing and reported environmental pollution violations for our suppliers in mainland China. We are working closely with these suppliers to remediate the existing issues and make sure they comply with the local environmental law; we also encourage our manufacturing partners to work with their downstream suppliers.

**Scope 3 business air travel**

As shown in Table 12, Cisco closed its last travel goal in 2017. Please refer to our final report on this goal starting on page 108 of our 2017 CSR Report. We continue to report travel emissions as part of our Scope 3 CDP reporting. Our 2018 CDP submission is available here.

---

Table 21. Categorization of supplier environmental audit findings* in FY18

<table>
<thead>
<tr>
<th>Environment</th>
<th>Findings Identified as Priority</th>
<th>Findings Identified as Major</th>
<th>Findings Identified as Minor</th>
<th>Total Number of Audit Elements</th>
<th>% of Audit Elements Resulting in Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment</td>
<td>0</td>
<td>62</td>
<td>14</td>
<td>984</td>
<td>7.72%</td>
</tr>
<tr>
<td>Environmental permits and reporting</td>
<td>0</td>
<td>9</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Pollution prevention and resource reduction</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Hazardous substances</td>
<td>0</td>
<td>22</td>
<td>0</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Wastewater and solid waste</td>
<td>0</td>
<td>7</td>
<td>3</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Air emissions</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Materials restrictions</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Stormwater management (new in VAP 5.1)</td>
<td>0</td>
<td>13</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Energy consumption and GHG emissions</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

* 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 RBA 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 57 FY17 audits.
**Scope 3 employee commuting**

**Flexible work practices**
In addition to the collaboration tools we make widely available to our employees, several Cisco network technologies also permit flexible working environments (for example, working from home or remotely). These include 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.

25,000+
Cisco employees use Cisco Virtual Office to 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, which is especially important for a global technology 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 to help them commute to and from work, move around our campus locations and adjoining communities, and receive vehicle services while parked.

Cisco encourages our employees’ use of mass transit by providing campus shuttle services at eight of our locations globally, incentive programs that lower the cost of mass transit, and information about public transportation options in their area. We also offer transit shuttle services at eight of our locations, making it easier for mass transit commuters to get from public transport stations to our sites. In FY18, over 2,150 employees took advantage of our mass transit incentive program each month, and our commuter and transit shuttle services provided 991,000 rides either to or from work.

We launched a carpooling program for our San Francisco Bay Area locations in FY16. By the end of FY18, 6,200 users had signed up to participate either as riders or drivers, and matched users for 150,000 carpooling trips in FY18.

We offer electric vehicle (EV) charging at 43 locations across the North America, Latin America, Europe, China, and India, saving over 1,200 metric tonne CO₂ in FY18. By the end of FY18, we had over 283 stations with more than 492 charging ports available for use by Cisco employees and guests.

---

*Cisco includes the electricity used to charge employee EVs in our Scope 2 emissions.*
Cisco also maintains a fleet of company cars for our employees in Europe and has been working to reduce the GHG emissions associated with this fleet over the last 5 years. We have set a limit on the allowable CO₂ emissions of newly purchased vehicles, and promote EVs when possible. The current limit we set is 120 g/km for diesel cars, and 140 g/km for gasoline cars. We expect to further reduce these limits over time, as the automobile industry continues to release more fuel-efficient and less polluting vehicles.

In FY19, employees who select EVs for their company car will get a home charger installed free of charge, while we continue to increase the number of EV charging units at our Cisco offices. See table 22 for the percentage of EVs in Cisco’s fleet.

We also provide a number of on-site services for employees on our campuses, including refueling, car washing, oil changes, and bicycle storage. These and other concierge services reduce employee commuting time, employee stress, and vehicle miles. In FY18, our Booster refueling service was utilized by almost 7,200 employees, reducing their driving mileage by 58,750 miles and reducing the associated CO₂ emissions by 26 metric tonne.

### Cisco locations with EV charging

**U.S.**
- Irvine, California
- Pleasanton, California
- Rancho Cordova, California
- Santa Clara, California
- San Francisco, California
- San Jose, California
- Lawrenceville, Georgia
- Fulton, Maryland
- Boxborough, Massachusetts
- Charlotte, North Carolina
- Greensboro, North Carolina
- Research Triangle Park, North Carolina
- Malvern, Pennsylvania
- Richardson, Texas
- San Antonio, Texas

**Outside of U.S.**
- Toronto, Canada
- Hangzhou, China
- Hefei, China
- Suzhou, China
- San Jose, Costa Rica
- Prague, Czech Republic
- Espoo, Finland
- Paris, France
- Eschborn, Germany
- Bangalore, India
- Chennai, India
- Rome, Italy
- Vimercate, Italy
- Amsterdam, Netherlands
- Lysaker, Norway
- Krakow, Poland
- Bucharest, Romania
- Madrid, Spain
- Stockholm, Sweden
- Ecublens, Switzerland
- Bedford Lakes, United Kingdom
- Chanders Ford, United Kingdom
- Green Park, United Kingdom

### Table 22. Percentage EVs in Cisco company cars

<table>
<thead>
<tr>
<th>Year</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total fleet size</td>
<td>6,550</td>
<td>6,580</td>
<td>6,100</td>
<td>5,950</td>
<td>5,440</td>
</tr>
<tr>
<td>Number of electric vehicles</td>
<td>38</td>
<td>127</td>
<td>334</td>
<td>420</td>
<td>469</td>
</tr>
<tr>
<td>Percentage of electric vehicles</td>
<td>0.6%</td>
<td>1.9%</td>
<td>5.5%</td>
<td>7.1%</td>
<td>8.6%</td>
</tr>
</tbody>
</table>
Scope 3 life cycle emissions

LCA techniques (specifically, carbon footprinting) help us understand the largest impacts of our products so we can focus 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 product categories, including IP phones, standalone switches, servers, and routers, which cover a majority of our products. We have also assessed Cisco TelePresence videoconferencing to determine its net benefit as a substitute for travel. Use phase emissions generally account for more than 80 percent of product life cycle emissions¹. Use-phase emissions account for more than 90 percent of life-cycle emissions for larger routers and switches, because power is higher relative to weight. For lower-power devices, like endpoint devices that might have a shorter lifetime, can be turned off, and whose use is compatible with idle or standby modes, the percentage of emissions from the use phase is lower.

¹Global 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.
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 ways to further improve data availability and accuracy in the materials and manufacturing phases. Figure 45 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.

We have participated 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 3 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

Next year, we will join Massachusetts Institute of Technology’s (MIT’s) Product Attribute to Impact Algorithm (PAIA), which is an organization that aims to make electronics LCAs more standardized and accurate by creating a tool that uses ranges of industry data. In FY19, we will conduct at least two updated LCAs on our phones and servers to capture the changes in our products, such as use of recycled content in our phones.

These efforts build and share knowledge, apply life-cycle concepts to our product design and operations, build engagement with academics, 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**

As part of our commitment to reducing GHG emissions, we are focusing on our own facilities, employee business travel, and supply chain. CDP continues to serve as a foundation for supplier engagement, emissions reporting, prioritization, and goal setting. For more information about our supplier engagement process, please refer to the Promoting Transparency in the Supply Chain section of this chapter. Detailed accounts of our Scope 3 carbon inventory results can be found in response to Question C6.5 of our 2018 CDP Climate Change response.

**Transportation and Distribution Programs**

**FY18 emissions avoided**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Tonne</th>
</tr>
</thead>
<tbody>
<tr>
<td>Services Green CO₂e</td>
<td>20,800</td>
</tr>
<tr>
<td>Mode Shift Cumulative</td>
<td>90,774</td>
</tr>
<tr>
<td>Responsible Supply Chain Design</td>
<td>36,260</td>
</tr>
</tbody>
</table>
The Mode Shift initiative optimizes our global, virtual factory-to-factory freight movement of goods, shifting transportation modes from air to ocean whenever practical, while still meeting customer expectations on lead time.

The Responsible Supply Chain Design initiative created a supply chain network to optimize 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. Carbon emissions reporting is embedded in the “Network Design” modeling tools. 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 measured alongside traditional supply chain variables like cost, resiliency, and lead time.

Scope 3 purchased goods and services

In a fully outsourced model, the emissions reductions from material, waste, and energy reduction activities fall under Scope 3 Purchased Goods and Services. The Make It Green, Component Scrap Management, and Partner Energy Management programs have led to less waste and material use in our supply chain.

Aligned to the SET Circular Economy track, the Make It Green program is an initiative to limit the waste and costs associated with products and packaging while reducing carbon emissions and improving the customer experience. Formerly known as Pack It Green, the program has expanded beyond packaging optimization to include product fulfillment and the use of recycled materials in our products. Table 25 in the Materials section details the Make It Green program focus areas.

Through Make It Green, approximately 4,124 cumulative metric tonne of material (corrugated board, plastic, wood, CDs/DVDs, cables, and other materials) and 44,367 cumulative metric tonne of CO₂e were avoided in FY18. GHG emissions included those avoided from reduced material and freight weight reduction. In addition, these FY18 changes also saved an annualized $30 million in material and freight cost reductions.

The Component Scrap Management Program has grown into a formal initiative under our Circular Economy program. The objective of the program is to increase the internal reuse of excess and obsolete component inventories for other business units, services repairs, and refurbishing activities wherever possible and to increase the external resale of nonproprietary components on global commodity markets to extend the life of those components. In FY17 and FY18, the Component Scrap Management program avoided 3,550 metric tonne CO₂e through the resale of 2,972 kg of components into global commodity markets for reuse.

The Partner Energy Management program challenges our contract manufacturing sites to pursue verifiable energy saving targets through the digitization of factory activities. Successes to date have focused on Internet of Things (IoT) energy management systems, which use thousands of sensors to precisely measure and manage energy consumption across systems and equipment. Cisco realizes our outsourced operations require flexible goals, but we are confident the focus on energy management provides clear benefits—including more affordable energy, increased utilization of equipment, and increased awareness and capacity among factory workers.

Over the last year, we have engaged with suppliers at sites in China, Malaysia, and Mexico. Each site has taken its own approach in designing and completing energy reduction initiatives, but all have incorporated IoT functionality in some capacity. Furthermore, by leveraging Cisco’s program guidance documents, our partners have been able to obtain limited assurance verification for the energy savings across these sites in accordance with the International Performance Measurement and Verification Protocol Efficiency Valuation Organization 10000–1:2012 guidelines. In FY18, the Partner Energy Management initiative saved 6,975 MWh of energy in the factories, the equivalent of 4,368 metric tonne CO₂e.

Scope 3 product use phase

(product energy efficiency)

Improving product energy efficiency represents more than just a regulatory requirement for Cisco—it is an 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. While the ICT industry accounts for about 2 percent of the world’s GHG emissions from energy, we expect ICT energy consumption to grow.1

Throughout their life cycle, our products consume the largest proportion of energy, and release the most GHG emissions, during the use phase.

1Use phase emissions generally account for more than 80 percent of product life-cycle emissions. Use-phase emissions account for more than 90 percent of life-cycle emissions for larger routers and switches, because power is higher relative to weight.
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 nongovernmental organizations (NGOs) rises. We track applicable energy-use regulations and certification programs to review compliance needs as requested by our customers.

**Advocacy and standards development**

Cisco engages with governments, regulatory agencies, and standards development organizations to monitor and influence the development of emerging product energy-efficiency requirements and standards, particularly around climate change. We believe these activities, done properly, bring clarity and consistency to the global marketplace and create predictable requirements that enable companies to focus on the environmental issues most relevant to their business. Specifically, we believe 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 with the EPA to define ENERGY STAR requirements for relevant products. In 2013 the EPA released the Version 1.0 ENERGY STAR specification to differentiate more efficient products across multiple types of large networking equipment. We are qualifying some in-scope products with this and other existing ENERGY STAR specification programs. To date, the ENERGY STAR specification programs relevant to Cisco products include enterprise servers, IP phones, and small and large network equipment (SNE/LNE). 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 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).

Cisco has been a co-editor for several standards, including the 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 better 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.

Table 23 highlights several illustrative examples of energy efficiency initiatives and organizations Cisco participates in.
### Table 23. Energy-efficiency–related initiatives and organizations

<table>
<thead>
<tr>
<th>Organization</th>
<th>Area/Issue of Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>European Commission Joint Research Center, Codes of Conduct</td>
<td>Cisco is a signatory and active member of the EU Code of Conduct on Energy Consumption of Broadband Communication Equipment. Aspirational goals are provided in order to reduce energy consumption of broadband communication equipment without hampering the fast technological developments and the service provided.</td>
</tr>
<tr>
<td>Alliance for Telecommunications Industry Solutions (ATIS)</td>
<td>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.</td>
</tr>
<tr>
<td>Minimum Energy Performance Standards (MEPS) (Australia and Korea)</td>
<td>Cisco supports efforts that focus on the development of energy performance requirements and limit the maximum power consumption of product standby modes.</td>
</tr>
<tr>
<td>European Telecommunications Standards Institute (ETSI)</td>
<td>Cisco is engaged with ETSI in the development of standards for energy efficiency.</td>
</tr>
<tr>
<td>Minimum Energy Standards</td>
<td>Cisco provided the rapporteur for the router and switch standard ES 203 136 which addresses measurement methods for energy efficiency of routers and switches and for the ETSI server standard EN303470 where the active efficiency metrics and idle measurements are defined for 2- and 4-socket servers.</td>
</tr>
<tr>
<td></td>
<td>Cisco is also collaborating with industry peers on efficiency standards around NFV and SDN and has provided significant input to ETSI EN 303 423: Electrical and electronic household and office equipment—Measurement of networked standby power consumption of interconnecting equipment.</td>
</tr>
<tr>
<td>Responsible Business Alliance (RBA), formerly EICC</td>
<td>Cisco is a founding member of the RBA, leverages many RBA tools, and has contributed to the development and revision of the RBA Code of Conduct.</td>
</tr>
<tr>
<td>The Green Grid (TGG)</td>
<td>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).</td>
</tr>
<tr>
<td>International Telecommunication Union (ITU) (worldwide)</td>
<td>Cisco is a major contributor to the ITU-T SG5 Lead Study Group on ICT and climate change. On circular economy aspects, we will start to work on ITU-T LCE_Concepts: Circular Economy. Definitions and concepts for material efficiency for ICT.</td>
</tr>
<tr>
<td>Ministry of Economy, Trade and Industry (METI) (Japan)</td>
<td>Cisco supports efforts that focus on the development of a minimum energy efficiency requirement for networking router and switch product groups.</td>
</tr>
<tr>
<td>U.S. Department of Energy (DOE)</td>
<td>Cisco has been working with the EPA to define ENERGY STAR standards for networking equipment: SNE, LNE, telephony equipment, and servers. Cisco also has 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.</td>
</tr>
<tr>
<td>Environmental Protection Agency (EPA)</td>
<td>Cisco is a signatory of the EPA's ENERGY STAR program and participates in the development of energy efficiency standards for networking equipment.</td>
</tr>
<tr>
<td>Telecom Regulatory Authority of India (TRAI)</td>
<td>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.</td>
</tr>
<tr>
<td>European Committee For Electrotechnical Standardization—CENELEC TC10</td>
<td>Cisco is actively working on the following standards: prEN 45552–General method for the assessment of the durability of energy-related products, prEN 45554–General methods for the assessment of the ability to repair, reuse and upgrade energy related products.</td>
</tr>
<tr>
<td>Electronic Product Environmental Assessment Tool—EPEAT</td>
<td>Cisco is providing input and monitoring the following standards development: prEN 45553–General method for the assessment of the ability to re-manufacture energy related products, prEN 45555–General methods for assessing the recyclability and recoverability of energy related products, prEN 45556–General method for assessing the proportion of re-used components in an energy related product.</td>
</tr>
<tr>
<td></td>
<td>prEN 45557–General method for assessing the proportion of recycled content in an energy related product, prEN 45558–General method to declare the use of critical raw materials in energy related products.</td>
</tr>
<tr>
<td></td>
<td>Cisco is engaged with IEEE and NSF International in the development of server standards for energy efficiency, covering clouds services, telecommunications, and architectural framework.</td>
</tr>
</tbody>
</table>
Improving product energy efficiency

By improving product energy efficiency, we address two key challenges facing Cisco. First, in order to achieve the projected, and required, product performance specifications for the next 5 to 10 years, Cisco products will require an architecture having “energy scalability”—meaning it can provide energy-efficient service for variable traffic types, traffic demands, customer usage, and installs. Second, the GHG emissions associated with the energy our products consume during their lifetime of use is by far our largest emission source. In order to address these challenges, Cisco is investing in four primary product energy efficiency engineering initiatives:

• **Power initiative:** We are improving product efficiency from plug to port of our products, and set a product power efficiency goal in early FY18. This goal is to improve large rack-mounted-equipment system power efficiency—as measured from the input power from the facility to the board-mounted ASICs, memory, and other chip devices—from 77 percent to 87 percent by FY22 (FY16 baseline). Additional detail on this goal is available in our goal announcement blog post. Progress toward this goal is shown in Table 24. The outcome of such a goal drives Cisco to design new power systems that result in a net positive gain in overall product efficiency.

• **Thermal initiative:** We are exploring alternative methods of cooling (air flow, liquid, and refrigerant cooling) to reduce operating temperatures and facility cooling requirements. Forced air cooling systems in wide use today have limitations in cooling concentrated areas of high power from next-generation packet processing engines. To cool these higher-power components, more efficient and effective systems must be deployed. These advanced cooling systems, targeted towards 2023, will utilize multiphase cooling techniques to transfer expected thermal output of next-generation switches and routers.

• **High-speed interconnects initiative:** High-speed silicon-to-silicon or optics-to-silicon interconnects are an integral part of routing and switching systems. 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 (Gbps/W) consumed metric as high as possible to increase performance and reduce energy use. By the end of 2020, increasing traffic bandwidth demand will require interconnect speed efficiency to be discussed in terms of Tbps/W of traffic transmitted or received. It is assumed that by 2022, ASIC packet processing technology will consume more than 1,000 watts in a 4-inch by 4-inch area using hundreds of transmit and receive channels and thousands of power connections. This initiative drives optimization in the high-speed signaling interconnect to allow more physical space and effective methods of delivering power to the ASIC.

• **Customer facilities initiative:** We are working with customers to reduce the amount of energy required to operate IT facilities by using power solutions that increase the efficiency of overhead power, avoid step-down transformers, and provide integrated cooling strategies. These end-to-end solutions for our customers reduce hardware requirements and energy consumption while providing a more integrated method for managing IT infrastructures. This initiative includes developing power supplies having wide-ranging AC and DC inputs, and Power over Ethernet (PoE) and Pulsed Power systems integrated into connected building applications that reduce the buildout of future electrical infrastructure.

When we evaluate product energy efficiency, we consider the power performance of the entire system. We measure the percent efficiency as electricity passes through each component (or function). This can include, for example, the external power supply units (PSU), intermediate bus converter (IBC), point of load (POL), and ASIC, memory, or other chips.

Table 24. Product power efficiency improvements (large rack-mounted-equipment)

<table>
<thead>
<tr>
<th>KPI</th>
<th>FY16 baseline year</th>
<th>FY17</th>
<th>FY18</th>
</tr>
</thead>
<tbody>
<tr>
<td>System power efficiency (percent)</td>
<td>77%</td>
<td>80%</td>
<td>82%</td>
</tr>
<tr>
<td>Goal: Improve large rack-mounted-equipment system power efficiency—as measured from the input power from the facility to the board-mounted ASICs, memory and other chip devices—from 77 percent to 87 percent by 2022 (FY16 baseline).</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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 "enabling effect."

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).

In addition, Cisco products can support LEED accreditation. Currently, network products can only get LEED credit under the Innovation category of the LEED: BD+C: Data Center program. Under the LEED: BD+C: Data Center program, only ENERGY STAR-certified products can get LEED credit, up to six points. Information on ENERGY STAR qualification of Cisco products is discussed in the Scope 3 Product Use Phase (Product Energy efficiency) section of this chapter; certified Cisco products are listed on the ENERGY STAR website.

Cisco sponsored and contributed to the first SMART 2020 report in 2009, which identified opportunities for the ICT sector to develop and apply network technologies to reduce total GHG emissions by 15 percent. The report continues to be a seminal work and still guides industry strategy. Considering the ICT sector was projected to be responsible for only 3 percent of global emissions in 2020, this represents a substantial positive impact. Potential reductions are concentrated in the areas of transportation, buildings, power/energy, and industry.

1 See the Smart 2020 report published by GeSI for a more detailed explanation of the enabling effect.
Reducing GHG emissions from business air travel

The use of our remote collaboration technologies, Figure 46, helps Cisco and our clients reduce business-air-travel emissions. These technologies include Webex Teams®, Cisco TelePresence®, Cisco Webex®, Cisco Unified Communications, and Cisco Jabber® collaboration solutions. Our adoption of these technologies has yielded a reduction in business-travel carbon emissions and travel costs, plus an increase in employee productivity and work-life balance, all while maintaining and growing the customer relationships we need for continued revenue growth. Going forward, Cisco will continue to use collaboration technologies to address our business air travel impacts.

Replacing business air travel with remote collaboration requires more than just technology. Our business processes, management practices, and culture have also had to adapt. As experience with collaborative technologies increases, within Cisco and among our customers and partners, remote interactions have progressed from being the exception to now being a standard practice.

Hosting and attending Webex meetings with other employees or with customers, partners, and other stakeholders has become as common as using the telephone. We use Cisco TelePresence, Jabber, and Webex for virtual company meetings, executive operational reviews, and department “all hands” meetings. 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. Because the rate of adoption of remote collaboration technologies has matured, we are no longer trending adoption metrics included in our previous CSR reports.
Material use

We are manufacturing products and packaging with more recycled content, and designing for improved recyclability.
Make it green

A key requirement for our product and packaging designs is minimizing materials while achieving performance and reliability targets; see the Design for Environment (DfE) section for more information.

Make It Green is Cisco’s sustainable materials, packaging, and fulfillment solutions program. Make It Green has helped eliminate unwanted or redundant items often included in a typical shipment, reducing packaging and material waste. These solutions also help reduce GHG emissions through lower transportation weights.

Packaging

The amount of packaging waste being added to landfills is an environmental concern. To address our impacts in this area, we design our packaging to 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 can result in negative business and environmental impacts. 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: Including recycled content and recyclability in product designs

In our 100-percent-outsourced supply chain, material and waste reduction activities and associated GHG avoidance fall under Scope 3 Purchased Goods and Services and Scope 3 Transportation and Distribution. Please refer to these sections for more information about our achievements in packaging optimization in FY18.

Goal: decrease use of virgin plastics by 20% by FY25 (FY18 baseline)

Product

Upon request, we provide our customers with basic information about product weight and percent of recycled material. As these requests increase, we continue to improve our ability to support these requests and product information requirements for component-level materials and related weight data. Examples of ongoing work are listed in Table 25.
### Table 25. Focus areas for sustainable product, packaging, and fulfillment solutions

<table>
<thead>
<tr>
<th>Category</th>
<th>Benefits</th>
<th>Cisco product examples</th>
</tr>
</thead>
</table>
| 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 options to address growing customer demands. However, widespread customer awareness and adoption of such options remains a challenge. |
| 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 through 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. |
| 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, central processing units, hard drives, fans, and rack gear kits. |
| Dense packaging                                | Reduce packaging and shipping costs by optimizing supply chain packaging between our factories. | In FY18, we continued to focus on optimizing our inbound shipments.  
The inbound optimization of the Cisco Catalyst® 3K chassis avoided over 281 metric tonne of packaging (corrugated, metal, and wood) and saved over $1.4 million 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. | In FY18, Cisco produced 2.5 million IP phones with 35 percent recycled content plastic, avoiding the manufacture and use of more than 430 metric tonne of virgin plastic. |
Recycled content

Products

We use recycled industrial content in our products and our packaging through standard manufacturing. Electronic products consist primarily of electronic circuit boards, steel, and plastics. Cisco generally does not require a minimum percentage of postconsumer 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 FY17, the Cisco IP Phone 6800 and 7800 Series were released using a minimum of 35 percent postconsumer plastic in seven of its unique plastic components, expanding the project from FY16 to now include several product families.

We continue to make strides in this effort. In FY18, Cisco produced 2.5 million IP phones with 35 percent recycled content plastic, avoiding the use of more than 430 metric tons of virgin plastic.

In an effort to not only increase the use of recycled plastic, but decrease the use of plastics overall, we have set an ambitious goal to reduce our use of virgin plastics, Figure 47.

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 contains at least 10 percent postconsumer waste.

We continue to work on ways to reduce the number of physical documents shipped, including the evaluation of new fulfillment technologies that may provide region-specific documentation solutions. For more information, see Table 25 and the Scope 3 Purchased Goods and Services section.

Packaging

Generally, our packaging uses corrugated cardboard that includes a minimum of 30 percent recycled content. Almost all of our packaging for new products is made either of a single material or of 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.

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. 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.

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 the Cisco supplier delivers directly to the end customer.

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. Bags are sized to fit the product being shipped and minimize the amount of material used. Our contract manufacturers also reuse antistatic bags whenever technically feasible.
Hazardous Materials
As a global supplier of network equipment, 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.

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

Halogenated flame retardants
Nonregulated halogenated flame retardants (HFRs) can be found in printed circuit boards and plastic parts. We have worked with manufacturing partners, industry standards technical committees, and academia to validate proposed alternatives for HFRs. Cisco continues to identify, confirm, and, where technically practical, phase out nonregulated HFRs.

Some of the actions we have taken include:
- Qualified additional halogen-free PCB laminate materials and increased their use in new products
- Eliminated, from thousands of Cisco-designed plastic parts, the HFRs found in resin compounds
- Over the past 5 years, performed material assessments and identified the areas within our business with the greatest opportunity to move to HFR-free materials

Polyvinyl chloride
Polyvinyl chloride (PVC) is a nonregulated substance found in the insulation of cables. Cisco’s previous work on the iNEMI PVC Alternatives Project to reduce the PVC content in cable insulation focused on understanding the environmental trade-offs of standard, halogen-free, and bio-based cable jacketing. In FY17, we conducted a sample study to quantify the minimal usage of PVC in cable insulation in our supply chain. We estimate PVC in cable insulation accounts for less than 1 percent of the total product weight shipped annually by Cisco. We will continue to monitor PVC in cable insulation and make changes if they are necessary in the future. Cisco will continue to research alternate materials and apply them to new products where quality and performance requirements can be attained.

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 batteries can be easily located and recycled. Product labels are provided to indicate the product contains a battery. This information alerts our recyclers to remove a battery before further processing.

Note: This tool is only accessible using Internet Explorer.
Product End-of-Life

Extending the usable life of our products and the components inside them has long been a Cisco priority. We operate programs for customers, partners, and employees to take back, refurbish, and reuse unneeded products and are continually developing new ways to manage product materials.

Cisco’s Global Scrap Management Aspect Team sets goals for all ISO 14001-certified sites. One of our goals is lowering the percentage of material received and sent to landfill. For FY18, we set a goal of sending only 0.48 percent of returned material to landfills. We exceeded this goal, sending 0.35 percent of material to landfill, a decrease from 0.36 percent in FY17. Looking ahead, we hope to continue to decrease this percentage.

Our trade-in and recycling programs are designed to bring back the products Cisco or our acquired companies have sold to channel partners and end users. 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 FY18, we also refurbished, resold, reused, or recycled 13,946 metric tonne of products returned to us (Table 26). We attribute this increase in repurposed material to the high quality of and demand for the material we received in FY18.

Information on our compliance with product recycling regulations, such as the Waste Electrical and Electronic Equipment (WEEE) Directive, 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.

Table 26. Product trade-in and returns

<table>
<thead>
<tr>
<th>KPI</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product returns, metric tonne</td>
<td>12,180</td>
<td>11,718</td>
<td>12,609</td>
<td>11,398</td>
<td>13,946</td>
<td>All materials sent for harvesting, recycling, and reuse including materials received via a Returned Materials Authorization (RMA)</td>
</tr>
<tr>
<td>Refurbish, resell, and reuse rate, percent</td>
<td>23%</td>
<td>25%</td>
<td>19%</td>
<td>16%</td>
<td>31%</td>
<td>Material distributed by Value Recovery to Cisco Service Supply, Cisco Refresh, or internal labs</td>
</tr>
<tr>
<td>Returned material sent to landfill, percent</td>
<td>0.30%</td>
<td>0.27%</td>
<td>0.28%</td>
<td>0.36%</td>
<td>0.35%</td>
<td>Landfill material consists only of nonelectronic waste materials, such as broken pallets, wet cardboard, and shrink wrap, accompanying Cisco product returned by customers for recycling.</td>
</tr>
</tbody>
</table>

Figure 48. Cisco trade-in and recycling programs

Customer programs
- Cisco Migration Incentive Program (MIP)
- Cisco Takeback and Recycle (TB&R) 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

Learn how and why Cisco eScrap recycling is connected to our sustainability and the circular economy.
We have nine different programs in operation to support our product trade-in and recycling efforts aimed at customers, suppliers, partners, and internal users (Figure 48). A flow diagram of these programs is shown in Figure 49.

For close to two decades, Cisco has used circular economy principles to increase product returns for resale or recycling; to study leasing and as-a-service models to facilitate return and reuse; to implement IoT technologies for improved asset tracking, maintenance, and operations; and to improve product and packaging design. See the Circular Economy section for more information on our approach to the circular economy.

Harvesting of components

In January 2017, Cisco launched a pilot program allowing recyclers to harvest commodity components from materials for the first time. Recyclers may harvest processors, memory, and other hardware having sufficient market value to offset the cost of their harvesting, cleaning, packaging, and resale. The pilot was a success, returning more than $6.7 million worth of components into the reuse marketplace during FY18. Now, this program is part of our standard process—allowing more components to be returned for reuse.
Customer programs

The Cisco Migration Incentive Program (MIP; formerly the Technology Migration Program) and Exceptional Pick-Up Program (EPUP) enable customers to return used equipment. MIP is a global channel partner program that rewards the migration of an existing customer network to new Cisco technologies with incremental discount on the new equipment purchase. These programs provide Cisco with the newest and best-quality used equipment for refurbishment and reuse. Trade-in materials are refurbished, resold, or reused by Cisco Capital® Refresh, Cisco Service Supply, or our internal labs. Reuse is always our first priority. In FY18, we reused nearly $249 million of Cisco equipment, calculated at standard cost (COGS). Any nonreusable materials are harvested for components and recycled by one of our authorized recyclers.

The Cisco Takeback and Recycle (TB&R) program focuses on Cisco branded items that do not qualify for either the MIP or EPUP. The TB&R 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 47 approved recycling locations (Figure 50). 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 TB&R is easy and straightforward: Customers go to the web portal to 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 to return the materials to the appropriate location.

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 450 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.

The Non-Genuine Materials Program handles non-genuine Cisco products we occasionally receive in equipment returns. Non-genuine items also come to Cisco through law enforcement seizure of 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 (Figure 51). Cisco employees and contractors can bring 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 FY18, we held our 23rd annual Recycle IT Day event, with 142 Cisco sites around the world participating and 129 metric tonne of used electronics collected. Since Cisco started holding these events in 1995, our employees and contractors have helped recycle 2,973 metric tonne of used electronics.

E-scrap recyclers

We currently have two 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, eStewards, and WEEELABEX.

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 on a calibrated scale, each item is reviewed for possible component harvesting. After harvesting, the unit proceeds to the recycling process. The recycling process starts with each load of e-scrap being 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 22 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 be made into new products again. Additional information regarding our return and recycling programs is available on our product recycling web portal.

Product packaging EOL

We have not adopted a packaging recycling program, as the environmental impact, including transportation and emissions, from shipping packaging back to Cisco 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, here. Information on Cisco’s compliance with environmental packaging regulations can be found at our WEEE compliance information page.
Nonmaterial topics:
Effluents
Water use
Waste
Biodiversity
Non-GHG emissions
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 our business. We take 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 27 tracks liquid spills and discharges from Cisco facilities.

Table 27. Effluent Spills and Discharges

<table>
<thead>
<tr>
<th>KPI</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spills and discharges</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

Water use

Water scarcity affects more than 1 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 usage

We have been collecting and tracking water usage data for our major campus locations since FY07 (Table 28). In FY18, Cisco collected water data for 71 percent of our real estate portfolio. Our methodology is to extrapolate our measured water use to 100 percent of our facilities in order to report total water use (see Table 28), rather than only reporting measured water use. We use this methodology per industry best practice and the recommendation from our auditors. We have made great improvements in our ability to track water use, 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. Water 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.

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 use reclaimed water instead of potable water in applications such as landscaping and in cooling towers.

Based on the definition of consumption provided by CDP\(^1\), we have calculated our water consumption as negligible. None of the water Cisco withdraws is incorporated into products or waste products. We believe the amount of water evaporated from our cooling towers and irrigation is negligible compared to our broader water withdrawals and discharges. However, over the next few years, we will be working with our water utilities and utility bill management providers to improve our global water data collection processes and expect to be able to more precisely calculate our water consumption due to evaporation.

Table 28. Water use

<table>
<thead>
<tr>
<th>KPI</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total water withdrawn, m(^3), thousands</td>
<td>2,803</td>
<td>2,916</td>
<td>3,050</td>
<td>3,220</td>
<td>3,394</td>
<td>This figure covers 100 percent of Cisco’s facilities.</td>
</tr>
<tr>
<td>Total water withdrawn from municipal supply (third-party sources), m(^3)</td>
<td>2,760</td>
<td>2,872</td>
<td>3,010</td>
<td>3,204</td>
<td>3,386</td>
<td>We use municipal water for domestic purposes such as restrooms, cafeterias, cooling towers and irrigation. Some of our water utilities do provide recycled water, which we use for irrigation and cooling tower purposes.</td>
</tr>
<tr>
<td>Total water withdrawn from groundwater</td>
<td>44</td>
<td>44</td>
<td>40</td>
<td>16</td>
<td>28</td>
<td>This is for our Boxborough, Massachusetts, facilities. Water is treated on site and then discharged back to the groundwater.</td>
</tr>
<tr>
<td>Real estate portfolio covered by water reporting</td>
<td>72%</td>
<td>73%</td>
<td>74%</td>
<td>100%</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\)The amount of water that is drawn into the company boundary and not discharged back to the water environment or a third party

GRI 303-5, 306-3
We use the World Business Council for Sustainable Development (WBCSD) water tool to better understand our water use and risks at both the country and local watershed level. We define water stress in line with CDP and the WBCSD Global water tool, which state that high baseline water stress is when withdrawals are in the range of 40-80 percent of total annually available blue water in an area. Extremely high baseline water stress is when withdrawals are above 80 percent of availability of blue water. Through the tool we identified 70 percent of Cisco’s water use by volume is withdrawn from high or extremely high water-stressed watersheds. This figure is high because our two largest campuses, San Jose, California, and Bangalore, India, both have an “Extremely High” baseline water stress and make up 65 percent of our total measured water withdrawals.

However, Cisco’s total water withdrawals are relatively low compared to other companies. For example, through the U.S. Commercial Buildings Energy Consumption Survey (CBECS), the Energy Information Agency (EIA) estimates the 46,000 large commercial buildings (greater than 200,000 square feet) in the United States used (we assume this means withdrawn and either consumed or discharged in this context) about 18,400 gallons (69.7 m$^3$) per worker in 2012. In FY18, Cisco used 47 m$^3$ of water per employee, which is far below the EIA average. We will continue to monitor these sites for changes in water availability and will develop specialized water management strategies accordingly.

**Water conservation**

We have implemented numerous water conservation projects over the past few years 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 reclaimed water for irrigation and cooling towers
- 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

Cisco’s most material global issues are GHG/energy and product material use and waste from our products and packaging. However, water is an issue whose relevance varies by geography. Because of concern with long-term changes to climate and water availability, we are exploring at our Research Triangle Park campus (North Carolina, USA) how a large Cisco campus could become water neutral, meaning restoring water to local watersheds in quantities equal to our consumption.

We will develop targeted strategies to conserve water and evaluate partnerships with local organizations to address local water issues. We also audit our water usage at this site, identify opportunities to reduce our water consumption there, and invest in projects that restore local watersheds.

We will continue to monitor our water-stressed and water-scarce locations, including our San Jose campus, to determine if additional water conservation opportunities and strategies could be implemented in FY19.

**Water-energy nexus**

Our environmental sustainability materiality assessment determined 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 2015 water report 15 gallons of water are used on average to produce 1 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 our FY18 energy reduction projects (Table 17), which avoided 32.4 GWh of energy usage, also avoided 1.8 million cubic meters (m$^3$) of water usage in FY18. Since FY14, we estimate our energy reduction projects have avoided the use of over 11.3 million m$^3$ of water. To put this into perspective, the avoided water usage we achieved from our energy projects in FY18 is roughly equal to half of Cisco’s total FY18 water usage at its operations.
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 the particular region. All our facilities take steps to reduce their operational waste and recycle materials locally.

In FY18, we recycled approximately 73 percent of the waste generated at our facilities. Per the GHG Protocol Corporate Value Chain (Scope 3) Standard, we report emissions generated from operational waste sent to landfill only (1,096 tCO2e). Using the EPA Waste Reduction Model, we estimate that our waste and recycling efforts in FY18 have avoided 24,073 tCO2e that would have been produced had the material been sent to landfill instead of a recycling or composting facility. Therefore we estimate that Cisco's net GHG emissions from waste and recycling in our operations would be less than zero.

Table 29 shows our solid waste metrics. Our methodology is to extrapolate our measured waste to 100 percent of our facilities in order to report total waste generated and recycled, rather than only reporting measured waste. We use this methodology per industry best practice and the recommendation from our auditors. Figure 54 shows examples of how we reduce waste, increase reuse, and increase recycling rates on our campuses.

Figure 52 shows our trash recycling rates for solid wastes for our major North America campus locations.

Our headquarters in San Jose diverted 86 percent of all waste streams from landfill in FY18, including a compost program that diverted approximately 890 metric tonne of waste from local landfills to be turned into compost. A breakdown of our waste stream for the San Jose site in Figure 53 illustrates our key sources of operational waste, the complexity of proper waste stream segregation, and the need for robust recycling services. Our Boxborough campus diverted 100% of all waste from landfill in FY18 through a comprehensive composting, recycling, and waste-to-energy program.

In addition to exploring water neutrality at our RTP campus, we are studying how this campus

Table 29. Solid waste from operations (trash)

<table>
<thead>
<tr>
<th>KPI</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total operational waste generated, metric tonne</td>
<td>12,442</td>
<td>10,388</td>
<td>9,805</td>
<td>12,519</td>
<td>10,559</td>
<td>This figure covers 100 percent of Cisco’s facilities.</td>
</tr>
<tr>
<td>Percent real estate portfolio covered by waste reporting</td>
<td>56%</td>
<td>57%</td>
<td>65%</td>
<td>100%</td>
<td>100%</td>
<td>Includes major campus locations in the United States, India, and China.</td>
</tr>
<tr>
<td>Total operational waste recycled, metric tonne</td>
<td>9,790</td>
<td>7,885</td>
<td>7,358</td>
<td>8,500</td>
<td>7,717</td>
<td></td>
</tr>
<tr>
<td>Operational waste recycled, percent</td>
<td>79%</td>
<td>76%</td>
<td>75%</td>
<td>68%</td>
<td>73%</td>
<td></td>
</tr>
</tbody>
</table>
Cisco solid waste reduction initiatives

**Reduce**
- 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**
- 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**
- 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

Figure 54.
Biodiversity and land use

Biodiversity is the variability among living organisms 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. For more information, see Cisco Connected Workplace and Flexible work practices.

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 30 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.

Table 30. Biodiversity and land use

<table>
<thead>
<tr>
<th>KPI</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of real estate portfolio with biodiversity assessment</td>
<td>60%</td>
<td>61%</td>
<td>59%</td>
<td>58%</td>
<td>54%</td>
<td>Includes IUCN Red List and national conservation list species with habitats in areas affected by operations. See Cisco’s current CDP Water and Climate responses.</td>
</tr>
<tr>
<td>Total real estate footprint square footage, millions</td>
<td>23.0</td>
<td>22.1</td>
<td>22.2</td>
<td>20.8</td>
<td>21.4%</td>
<td>Reducing our square footage minimizes our physical impact.</td>
</tr>
<tr>
<td>Percentage Cisco Connected Workplace</td>
<td>31.0%</td>
<td>36.9%</td>
<td>45.8%</td>
<td>63.6%</td>
<td>65.4%</td>
<td>Converting our workspaces to Cisco Connected Workplaces allows us to use our space more effectively and further reduce our real estate footprint.</td>
</tr>
</tbody>
</table>

Protecting turtle habitat

The land on which our Boxborough, Massachusetts, campus is located is the habitat of Blanding’s Turtle (IUCN Endangered Species) and the Eastern Box Turtle (IUCN Vulnerable Species). We have taken measures to ensure the turtles can survive and even thrive in this location, including:

• Establishing two conservation areas of 49 and 60 acres, respectively;
• 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; and
• Restricting future development on approximately 50 acres of our land.

Connected Conservation

Conservation recently became an area of focus for Cisco, with a simple yet ambitious goal to help protect large game animals around the world. The Cisco Connected Conservation program was originated by an employee team who saw an opportunity to use Cisco technology and know-how to address the increased levels of animal poaching rates around the world, especially for elephants, lions, and rhinos. The program started with one of Cisco’s largest and most successful partners, Dimension Data, and has expanded to include the World Wildlife Fund (WWF) and other ecosystem partners.

Cisco and Dimension Data are pioneering a range of solutions at a private game reserve in South Africa; this has proven the effectiveness of digital technology models for creating safe havens for protected wildlife.

Cisco is helping to design and build networked security systems able to track the movement of visitors, staff, and anyone else who walks onto the reserve grounds. Surveillance of human movement 24/7 helps to identify suspicious activity, while protecting endangered species populations without disturbing the natural environment. Our strategic relationships have established a secure, reliable network operating 24 hours daily across the entire game reserve, supporting the existing preservation goals and operations.

Cisco’s Connected Conservation program provides a foundation for our ambitious goal: to accelerate the deployment of innovative digital technology solutions for conservation efforts, supporting the co-existence of wildlife and communities across the planet. More information is available here.
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 on-site fuel combustion (from vehicle engines, boilers, or emergency generators), and the subsequent formation of ozone from the photochemical reaction of NOx. Table 31 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.

Table 31. Non-GHG emissions

<table>
<thead>
<tr>
<th>KPI</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volatile organic compound (VOC) emissions&lt;sup&gt;1&lt;/sup&gt;</td>
<td>Negligible</td>
<td>Negligible</td>
<td>Negligible</td>
<td>Negligible</td>
<td>Negligible</td>
</tr>
<tr>
<td>NOx, metric tonne</td>
<td>270</td>
<td>212</td>
<td>207</td>
<td>138</td>
<td>176</td>
</tr>
<tr>
<td>SOx, metric tonne</td>
<td>0.88</td>
<td>0.72</td>
<td>0.72</td>
<td>0.65</td>
<td>0.67</td>
</tr>
<tr>
<td>Particulate matter</td>
<td>Negligible</td>
<td>Negligible</td>
<td>Negligible</td>
<td>Negligible</td>
<td>Negligible</td>
</tr>
</tbody>
</table>

<sup>1</sup> Quantities of VOC-based chemicals deployed are minimal and are not required to be monitored.
Message from Chuck Robbins

April 30, 2018

Dear Valued Business Partners and Suppliers:

For the 9th consecutive year, Cisco is inviting our partners and suppliers to report their greenhouse gas (GHG) emissions to CDP (formerly Carbon Disclosure Project) in one of the following ways:

1. If already invited directly by CDP (in February) please complete the CDP Climate Change questionnaire by the investor deadline of July 31, 2018. You will also receive a request from CDP to complete the Supply Chain module on behalf of Cisco with a supplier due date of August 16, 2018.

2. Otherwise, you will receive CDP’s information request on behalf of Cisco by the end of April 2018. Please complete the requested Climate Change questionnaire and Supply Chain module by the supplier deadline of August 16, 2018.

If you have not received an invitation from CDP to respond to their survey by early May, please contact CDP at respond@cdp.net.

Cisco’s long-term strategy for reducing GHG emissions includes our suppliers and partners completing following five step program:

1. Report to CDP annually, responding at a minimum to the questions highlighted in Reference 1 of this letter for all your facilities worldwide.

2. Make the response publicly available via the option provided in CDP’s online response system (Reference 2). Please do not send your completed questionnaire to Cisco. Cisco will obtain your reporting status and emissions information via an analytics package offered by CDP.

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) and show progress against your goal.

5. Request that your suppliers and business partners also report to CDP using the same process described in this letter and in the four steps above.

Supplier compliance to Cisco’s requirement to report GHG emissions to CDP is included in Cisco’s supplier scorecards.

Cisco is committed to reducing greenhouse gas emissions from our products, operations, and supply chain operations. Your cooperation in responding to this very important initiative is appreciated.

If you have any questions about Cisco or your company’s carbon reporting, please contact us at cisco-cdp-questions@cisco.com.

Best Regards,

John Kern Jeff Purnell
SVP, Supply Chain Operations VP, Global Supplier Management
Cisco Systems, Inc. Cisco Systems, Inc.

References

1. CDP 2018 Investor Survey (with Supplier Module questions). The questions requiring a response to meet Cisco’s scorecard requirements are highlighted in yellow in the document. https://www-1.compliance2product.com/c2p/getAttachment.do?code=Y47dRkC3ojkn4PTGGqHDEKjIGGQv6ZEK7mF-DxiwBZGisqrvKBO9LgEWsk1d1YjIYL

2. Using CDP’s online response system <available later>


# GRI Standards

## Organizational profile

<table>
<thead>
<tr>
<th>Disclosure Number</th>
<th>Disclosure Title</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>102-1</td>
<td>Name of the organization</td>
<td>Cisco Systems, Inc.</td>
</tr>
<tr>
<td>102-2</td>
<td>Activities, brands, products and services</td>
<td>Cisco designs and sells a broad range of technologies that have been powering the Internet since 1984. Across networking, security, collaboration, applications and the cloud, our evolving intent-based technologies are constantly learning and adapting to provide customers with a highly secure, intelligent platform for their digital business. For more information refer to 2018 Annual Report/form 10-K (page 1).</td>
</tr>
<tr>
<td>102-3</td>
<td>Location of headquarters</td>
<td>Cisco Systems, Inc., Corporate Headquarters, 170 West Tasman Drive, San Jose, CA 95134 USA</td>
</tr>
<tr>
<td>102-4</td>
<td>Location of operations</td>
<td>We conduct business globally and are primarily managed on a geographic basis in the following three geographic segments: the Americas; Europe, Middle East, and Africa (EMEA); and Asia Pacific, Japan, and China (APJC). For more information refer to <a href="https://newsroom.cisco.com/en_GB/overview">https://newsroom.cisco.com/en_GB/overview</a></td>
</tr>
<tr>
<td>102-5</td>
<td>Ownership and legal form</td>
<td>Cisco is publicly listed and traded on NASDAQ</td>
</tr>
<tr>
<td>102-6</td>
<td>Markets served</td>
<td>2018 Annual Report/Form 10-K/Customers and Markets (page 5)</td>
</tr>
<tr>
<td>102-8</td>
<td>Information on employees and other workers</td>
<td>People/Workforce Snapshot</td>
</tr>
<tr>
<td>102-9</td>
<td>Supply chain</td>
<td>Society/Supply Chain and Responsible Sourcing</td>
</tr>
<tr>
<td>102-10</td>
<td>Significant changes to the organization and its supply chain</td>
<td>There were no significant changes in FY18</td>
</tr>
<tr>
<td>102-11</td>
<td>Precautionary Principle or approach</td>
<td>Planet/Environmental Sustainability</td>
</tr>
<tr>
<td>102-12</td>
<td>External initiatives</td>
<td>Planet/Energy-Efficiency-Related Initiatives and Organizations Governance/Stakeholder Engagement Society/Engaging on Important Issues</td>
</tr>
<tr>
<td>102-13</td>
<td>Membership of associations</td>
<td>Planet/Energy-Efficiency-Related Initiatives and Organizations Governance/Stakeholder Engagement</td>
</tr>
<tr>
<td>Disclosure Number</td>
<td>Disclosure Title</td>
<td>Response</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Strategy</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>102-14</td>
<td>Statement from senior decision-maker</td>
<td>Our Story/Message from Chuck Robins</td>
</tr>
<tr>
<td><strong>Ethics and Integrity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>102-16</td>
<td>Values, principles, standards and norms of behavior</td>
<td>People/Ethics and Integrity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>People/Team Development/</td>
</tr>
<tr>
<td><strong>Governance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>102-18</td>
<td>Governance structure</td>
<td>2018 Proxy Statement/Corporate Governance (page 3)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2018 Annual Report/Governance and Responsibility (page 8)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Our Details/Governance</td>
</tr>
<tr>
<td><strong>Stakeholder Engagement</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>102-40</td>
<td>List of stakeholder groups</td>
<td>Strategy/Stakeholder Engagement and Management</td>
</tr>
<tr>
<td>102-41</td>
<td>Collective bargaining agreements</td>
<td>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.</td>
</tr>
<tr>
<td>102-42</td>
<td>Identifying and selecting stakeholders</td>
<td>Governance/Stakeholder Engagement and Management</td>
</tr>
<tr>
<td>102-43</td>
<td>Approach to stakeholder engagement</td>
<td>Governance/Stakeholder Engagement and Management</td>
</tr>
<tr>
<td>102-44</td>
<td>Key topics and concerns raised</td>
<td>Governance/Reporting and Materiality</td>
</tr>
<tr>
<td><strong>Reporting Practice</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>102-45</td>
<td>Entities included in the consolidated financial statements</td>
<td>Our Story/About This Report</td>
</tr>
<tr>
<td>102-46</td>
<td>Defining report content and topic Boundaries</td>
<td>Strategy/Reporting and Materiality</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Planet/CSR Materiality Assessment: Environment</td>
</tr>
</tbody>
</table>
## Disclosure Number

### Disclosure Title
- List of material topics

### Response
- Society
- Attracting and Retaining Top Talent
- Building Skills and Entrepreneurship
- Data Security and Privacy
- Inclusion and Collaboration
- Strategic Social Investments
- Community impacts
- Digital Rights
- Employee Health and Wellness
- Responsible Sourcing and Manufacturing

- Governance
- Culture of Integrity

- Planet
- Energy and Emissions
- Resource Use

## Restatements of information
- No major changes: any adjustments are explained within the report

## Changes in reporting
- No major changes: any adjustments are explained within the report

## Reporting period
- Fiscal year 2018

## Date of most recent report
- Fiscal year 2017

## Reporting cycle
- Annual

## Contact point for questions regarding the report
- csr_report@cisco.com

## Claims of reporting in accordance with the GRI Standards
- This report has been prepared in accordance with the GRI Standards: Core Option.

## GRI content index
- GRI Index

## External assurance
- Our Story/About This Report
<table>
<thead>
<tr>
<th>Tier</th>
<th>Material Issue</th>
<th>GRI Standard</th>
<th>GRI Disclosures</th>
<th>GRI Topic</th>
<th>Page</th>
<th>Omissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Attracting and retaining top talent</td>
<td>GRI 401 - Employment</td>
<td>103-1</td>
<td>Explanation of the material topic and its Boundary</td>
<td>People/Team Development</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>103-2</td>
<td>The management approach and its components</td>
<td>People/Team Development Society/Supplier Engagement</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>103-3</td>
<td>Evaluation of the management approach</td>
<td>People/Team Development Society/Responsible Sourcing and Manufacturing</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>401-2</td>
<td>Benefits provided to full-time employees that are not provided to temporary or part-time employees</td>
<td>People/Team Development People/Health and Wellness</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Inclusion and collaboration</td>
<td>GRI 404 - Training and education</td>
<td>103-1</td>
<td>Explanation of the material topic and its Boundary</td>
<td>People/Team Development</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>103-2</td>
<td>The management approach and its components</td>
<td>People/Team Development</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>103-3</td>
<td>Evaluation of the management approach</td>
<td>People/Team Development</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>404-2</td>
<td>Programs for upgrading employee skills and transition assistance programs</td>
<td>People/Team Development</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>103-1</td>
<td>Explanation of the material topic and its Boundary</td>
<td>People/Inclusion and Collaboration</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>103-2</td>
<td>The management approach and its components</td>
<td>People/Inclusion and Collaboration Society/Responsible Sourcing and Manufacturing</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>103-3</td>
<td>Evaluation of the management approach</td>
<td>People/Inclusion and Collaboration</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>405-1</td>
<td>Diversity of governance bodies and employees</td>
<td>People/Inclusion and Collaboration</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>405-2</td>
<td>Ratio of basic salary and remuneration of women to men</td>
<td>People/Inclusion and Collaboration</td>
<td></td>
</tr>
</tbody>
</table>

Cisco does not disclose information on governance bodies and employee age categories.

Data presented is aggregated for the entire Cisco compensation system, not by employment level.
<table>
<thead>
<tr>
<th>Tier</th>
<th>Issue</th>
<th>Material</th>
<th>GRI Standard</th>
<th>GRI Disclosures</th>
<th>GRI Topic</th>
<th>Page</th>
<th>Omissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Community impacts</td>
<td>GRI 413 - Local communities</td>
<td>103-1</td>
<td>Explanation of the material topic and its Boundary</td>
<td>People/Employee Community Impact Society/Our Investment Framework</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>103-2</td>
<td>The management approach and its components</td>
<td>People/Employee Community Impact Society/Our Investment Framework</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>103-3</td>
<td>Evaluation of the management approach</td>
<td>People/Employee Community Impact Society/Our Investment Framework</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>413-1</td>
<td>Operations with local community engagement, impact assessments and development programs</td>
<td>People/Employee Community Impact</td>
<td></td>
</tr>
</tbody>
</table>

While Cisco does not report on the following disclosures related to local community engagement and impact assessment, its partner organizations conduct appropriate analyses for the community programs that employees volunteer with:

- i. social impact assessments, including gender impact assessments, based on participatory processes;
- ii. environmental impact assessments and ongoing monitoring;
- iii. public disclosure of results of environmental and social impact assessments;
- v. stakeholder engagement plans based on stakeholder mapping;
- vi. broad-based local community consultation committees and processes that include vulnerable groups;
- vii. works councils, occupational health and safety committees and other worker representation bodies to deal with impacts;
- viii. formal local community grievance processes.

<table>
<thead>
<tr>
<th>Society</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Cisco does not disclose on the following related to local community impacts:

- ii. environmental impact assessments and ongoing monitoring;
- iii. public disclosure of results of environmental and social impact assessments;
- vi. broad-based local community consultation committees and processes that include vulnerable groups;
- vii. works councils, occupational health and safety committees and other worker representation bodies to deal with impacts;
- viii. formal local community grievance processes.
<table>
<thead>
<tr>
<th>Tier</th>
<th>Issue</th>
<th>Material</th>
<th>GRI Standard</th>
<th>GRI Disclosures</th>
<th>GRI Topic</th>
<th>Page</th>
<th>Omissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Data security and privacy</td>
<td>GRI 418 - Customer privacy</td>
<td>103-1</td>
<td>Explanation of the material topic and its Boundary</td>
<td>Society/Human Rights</td>
<td>Cisco did not report any incidents to global data protection authorities during FY18. In addition, there were no data protection incidents of high risk or material harm reported during this period.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>GRI 418 - Customer privacy</td>
<td>103-2</td>
<td>The management approach and its components</td>
<td>Society/Human Rights</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>GRI 418 - Customer privacy</td>
<td>103-3</td>
<td>Evaluation of the management approach</td>
<td>Society/Human Rights</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>GRI 203 - Indirect economic impacts</td>
<td>418-1</td>
<td>Substantiated complaints concerning breaches of customer privacy and losses of customer data</td>
<td>Society/Human Rights</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Strategic social investments</td>
<td>GRI 203 - Indirect economic impacts</td>
<td>103-1</td>
<td>Explanation of the material topic and its Boundary</td>
<td>Society/Strategic Social Investments</td>
<td>For information on engagement and impact assessments, refer to GRI 103-2. For information on development programs, refer to Society/Strategic Social Investments</td>
<td>Cisco does not disclose on the following related to local community impacts: ii. environmental impact assessments and ongoing monitoring; iii. public disclosure of results of environmental and social impact assessments; vi. broad-based local community consultation committees and processes that include vulnerable groups; vii. works councils, occupational health and safety committees and other worker representation bodies to deal with impacts; viii. formal local community grievance processes.</td>
</tr>
<tr>
<td>Tier</td>
<td>Material Issue</td>
<td>GRI Standard</td>
<td>GRI Disclosures</td>
<td>GRI Topic</td>
<td>Page</td>
<td>Omissions</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>----------------</td>
<td>--------------</td>
<td>----------------</td>
<td>-----------</td>
<td>------</td>
<td>-----------</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Digital rights</td>
<td>GRI 412 - Human rights</td>
<td>103-1</td>
<td>Explanation of the material topic and its Boundary</td>
<td>Society/Human Rights</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>103-2</td>
<td>The management approach and its components</td>
<td>Society/Human Rights</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>103-3</td>
<td>Evaluation of the management approach</td>
<td>Society/Human Rights</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>412-2</td>
<td>Employee training on human rights policies or procedures</td>
<td>Society/Human Rights</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GRI 416 - Customer health and safety</td>
<td>103-1</td>
<td>Explanation of the material topic and its Boundary</td>
<td>Society/Human Rights</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>103-2</td>
<td>The management approach and its components</td>
<td>Society/Human Rights</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>103-3</td>
<td>Evaluation of the management approach</td>
<td>Society/Human Rights</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>416-1</td>
<td>Assessment of the health and safety impacts of product and service categories</td>
<td>Society/Human Rights</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tier</td>
<td>Material Issue</td>
<td>GRI Standard</td>
<td>GRI Disclosures</td>
<td>GRI Topic</td>
<td>Page</td>
<td>Omissions</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>----------------</td>
<td>--------------</td>
<td>----------------</td>
<td>-----------</td>
<td>------</td>
<td>-----------</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Responsible sourcing and manufacturing (includes ethical sourcing, supply chain labor standards, supplier diversity)</td>
<td>103-1</td>
<td>Explanation of the material topic and its Boundary</td>
<td>Society/Responsible Sourcing and Manufacturing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>103-2</td>
<td>The management approach and its components</td>
<td>Planet/Energy and GHG Emissions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>103-3</td>
<td>Evaluation of the management approach</td>
<td>Planet/Energy and GHG Emissions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>308-2</td>
<td>Negative environmental impacts in the supply chain and actions taken</td>
<td>Planet/Energy and GHG Emissions</td>
<td>The following data is not made publicly available: i. Number of suppliers identified as having significant actual and potential negative environmental impacts; ii. Percentage of suppliers identified as having significant actual and potential negative environmental impacts with which improvements were agreed upon as a result of assessment; iii. Percentage of suppliers identified as having significant actual and potential negative environmental impacts with which relationships were terminated as a result of assessment, and why.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>414-2</td>
<td>Negative social impacts in the supply chain and actions taken</td>
<td>Society/Responsible Sourcing and Manufacturing</td>
<td>The following data is not made publicly available: i. Number of suppliers identified as having significant actual and potential negative environmental impacts; ii. Percentage of suppliers identified as having significant actual and potential negative environmental impacts with which improvements were agreed upon as a result of assessment; iii. Percentage of suppliers identified as having significant actual and potential negative environmental impacts with which relationships were terminated as a result of assessment, and why.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tier</td>
<td>Material Issue</td>
<td>GRI Standard</td>
<td>GRI Disclosures</td>
<td>GRI Topic</td>
<td>Page</td>
<td>Omissions</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>----------------</td>
<td>--------------</td>
<td>----------------</td>
<td>-----------</td>
<td>------</td>
<td>-----------</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Employee health and wellness</td>
<td>GRI 403 - Occupational Health and Safety</td>
<td>103-1</td>
<td>Explanation of the material topic and its Boundary</td>
<td>People/Health and Wellness</td>
<td>a. For all employees Cisco does not report on number and rate of work-related fatalities, does not provide detail of high-consequence work-related injuries, the main types of work-related injuries or number of hours worked.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>103-2</td>
<td>The management approach and its components</td>
<td>People/Health and Wellness</td>
<td>b. Cisco does not report data for all workers who are not employees.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>103-3</td>
<td>Evaluation of the management approach</td>
<td>People/Health and Wellness</td>
<td>c. Cisco does not report data on work-related hazards that pose a risk of high-consequence injury.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>403-6</td>
<td>Promotion of worker health</td>
<td>People/Health and Wellness</td>
<td>f. Cisco does not disclose reasons for excluding any workers from this disclosure.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>403-9</td>
<td>Work-related injuries</td>
<td>People/Health and Wellness</td>
<td>g. Cisco does not provide contextual information for data compilation.</td>
<td></td>
</tr>
<tr>
<td>Tier</td>
<td>Material Issue</td>
<td>GRI Standard</td>
<td>GRI Disclosures</td>
<td>GRI Topic</td>
<td>Page</td>
<td>Omissions</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>----------------</td>
<td>--------------</td>
<td>-----------------</td>
<td>-----------</td>
<td>------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td>Planet</td>
<td>Energy and greenhouse gas emissions</td>
<td>GRI 305 - Emissions</td>
<td>103-1</td>
<td>Explanation of the material topic and its Boundary</td>
<td>Planet/Energy and GHG Emissions</td>
<td>Cisco does not disclose biogenic emissions (not relevant to operations).</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>103-2</td>
<td>The management approach and its components</td>
<td>Planet/Energy and GHG Emissions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>103-3</td>
<td>Evaluation of the management approach</td>
<td>Planet/Energy and Scope 1 and 2 GHG Emissions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>305-1</td>
<td>Direct (Scope 1) GHG emissions</td>
<td>Planet/Energy and Scope 1 and 2 GHG Emissions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>305-2</td>
<td>Energy indirect (Scope 2) GHG emissions</td>
<td>Planet/Energy and Scope 1 and 2 GHG Emissions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>305-3</td>
<td>Other indirect (Scope 3) GHG emissions</td>
<td>Planet/Energy and Scope 3 2018 CDP Report</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>305-4</td>
<td>Emissions intensity</td>
<td>Planet/Energy and Scope 1 and 2 GHG Emissions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GRI 302 - Energy</td>
<td></td>
<td>103-1</td>
<td>Explanation of the material topic and its Boundary</td>
<td>Planet/Energy and GHG Emissions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>103-2</td>
<td>The management approach and its components</td>
<td>Planet/Energy and GHG Emissions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>103-3</td>
<td>Evaluation of the management approach</td>
<td>Planet/Energy and Scope 1 and 2 GHG Emissions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>302-1</td>
<td>Energy consumption within the organization</td>
<td>Planet/Energy and GHG Emissions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>302-3</td>
<td>Energy intensity</td>
<td>Planet/Energy and Scope 1 and 2 GHG Emissions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tier</td>
<td>Material Issue</td>
<td>GRI Standard</td>
<td>GRI Disclosures</td>
<td>GRI Topic</td>
<td>Page</td>
<td>Omissions</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>----------------</td>
<td>--------------</td>
<td>----------------</td>
<td>-----------</td>
<td>------</td>
<td>-----------</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Material use and waste</td>
<td>GRI 301 - Materials</td>
<td>103-1</td>
<td>Explanation of the material topic and its Boundary</td>
<td>Planet/Environmental SustainabilityPlanet/Material Use</td>
<td>Planet/Product End-of-Life</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>103-2</td>
<td>The management approach and its components</td>
<td>Planet/Environmental SustainabilityPlanet/Material Use</td>
<td>Planet/Product End-of-Life</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>103-3</td>
<td>Evaluation of the management approach</td>
<td>Planet/Product End-of-Life</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>301-2</td>
<td>Recycled input materials used</td>
<td>Planet/Material Use</td>
<td></td>
<td>Cisco has set long-term goals for recycled content, but currently does not report on recycled content for all products. Current disclosure only covers recycled content in IP phones and packaging.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>301-3</td>
<td>Reclaimed products and their packaging materials</td>
<td>Planet/Product End-of-Life</td>
<td></td>
<td>Data presented is aggregated for all products returned by weight, not presented as a percentage of all products sold.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GRI 306 - Effluents and waste</td>
<td>103-1</td>
<td>Explanation of the material topic and its Boundary</td>
<td>Planet/Effluents</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>103-2</td>
<td>The management approach and its components</td>
<td>Planet/Product End-of-Life</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>103-3</td>
<td>Evaluation of the management approach</td>
<td>Planet/Solid Waste from Operations (Trash)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>306-2</td>
<td>Waste by type and disposal method</td>
<td>Planet/Solid Waste from Operations (Trash)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GRI 307 - Environmental Compliance</td>
<td>103-1</td>
<td>Explanation of the material topic and its Boundary</td>
<td>Planet/Environmental SustainabilityPlanet/Environmental Sustainability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>103-2</td>
<td>The management approach and its components</td>
<td>Planet/Environmental Sustainability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>103-3</td>
<td>Evaluation of the management approach</td>
<td>Planet/Environmental Sustainability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>307-1</td>
<td>Non-compliance with environmental laws and regulations</td>
<td>Planet/Environmental Sustainability</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Governance

<table>
<thead>
<tr>
<th>Tier</th>
<th>Material Issue</th>
<th>GRI Standard</th>
<th>GRI Disclosures</th>
<th>GRI Topic</th>
<th>Page</th>
<th>Omissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Culture of integrity</td>
<td>GRI 205 - Anti-Corruption</td>
<td>103-1</td>
<td>Explanation of the material topic and its Boundary</td>
<td>People/Ethics and Integrity</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>103-2</td>
<td>The management approach and its components</td>
<td>People/Ethics and Integrity</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>103-3</td>
<td>Evaluation of the management approach</td>
<td>People/Ethics and Integrity</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>205-2</td>
<td>Communication and training about anti-corruption policies and procedures</td>
<td>People/Ethics and Integrity</td>
<td>Cisco reports communication and training data as an aggregate for employees and governance, not by region.</td>
</tr>
</tbody>
</table>

### Additional performance Indicators

<table>
<thead>
<tr>
<th>GRI 303: Water and Effluents</th>
<th>Performance Indicators</th>
<th>Page for DMA and Performance Indicators</th>
<th>Omissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRI 304: Biodiversity</td>
<td>Percentage of real estate portfolio with biodiversity assessment (Non-GRI indicator)</td>
<td>Planet/Other Issues</td>
<td></td>
</tr>
<tr>
<td>GRI 305: Emissions</td>
<td>305-7: Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions</td>
<td>Planet/Other Issues</td>
<td></td>
</tr>
<tr>
<td>GRI 306: Effluents and Waste</td>
<td>306-3: Significant spills</td>
<td>Planet/Other Issues</td>
<td></td>
</tr>
</tbody>
</table>
Cisco alignment

1.1, 1.2 2.1, 2.2, 2.4 3.1, 3.2, 3.4, 3.7 4.1, 4.3, 4.4, 4.5, 4.6, 4.7c 5.6, 5a, 5b

Cisco grantees & partners

Anudip
(also SDG 5, 8)
CARE
(also SDG 5, 8, 9)
DDD
(also SDG 5, 8)
Laboratoria
(also SDG 5, 8)
Living Goods
(also SDG 3, 5, 8)
Kiva
(also SDG 5, 8, 9)
Opportunity International
(also SDG 5, 8, 9)
Innovations for Poverty Action
InSTEDD
(also SDG 9)
Kobo Toolbox
Mercy Corps
(also SDG 2, 9)
NetHope
(also SDGs 9, 17)
American Red Cross
(also SDG 13)
Ushahidi

Feeding America
World Food Programme
Mercy Corps
(also SDG 1)
myAgro
(also #1, #5)
Digital Green
(also #1, #5)

Living Goods
(also SDG 5, 8)
TrekMedics

Citizen Schools
FIRST LEGO LEAGUE
MIND Research Institute
Gooru Learning
GenerationYES
New Teacher Center
Reynolds Center
Science Buddies
Teach for All
War Child
MyOptions
New Leaders
Road Trip Nation
114th Partnership

Anudip
(also SDG 1, 8)
CARE
(also SDG 1, 8, 9)
Digital Divide Data
(also SDG 1, 8)
Good World Solutions
(also SDG 8)
Laboratoria
(also SDG 1, 8)
Living Goods
(also SDG 1, 3, 8)
Kiva
(also SDG 1, 8, 9)
Opportunity International
(also SDG 1, 8, 9)
Million Women Mentors
FIRST LEGO LEAGUE
Science Buddies
War Child

Cisco programs

TacOps

Networking Academy
(also SDG 8)
Networking Academy
(also SDG 4 and 8)
Girls Power Tech
DARE
JUMP
<table>
<thead>
<tr>
<th>Cisco alignment</th>
<th>6.1, 6.2, 6.3, 6.4, 6b</th>
<th>7.2, 7.3</th>
<th>8.3, 8.4, 8.5, 8.6, 8.7, 8.8, 8.10</th>
<th>9.4</th>
<th>11.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cisco grantees &amp; partners</td>
<td>AKVO Foundation</td>
<td>CARE</td>
<td>Digital Divide Data</td>
<td>Good World Solutions</td>
<td>IoT and analytics</td>
</tr>
<tr>
<td></td>
<td>CAWST</td>
<td>(also SDG 1, 5)</td>
<td>(also SDG 1, 5, 9)</td>
<td>(also SDG 5)</td>
<td>networking infrastructure platforms</td>
</tr>
<tr>
<td></td>
<td>Safe Water Network</td>
<td>TaroWorks</td>
<td>Living Goods</td>
<td>TaroWorks</td>
<td>Community Solutions</td>
</tr>
<tr>
<td></td>
<td>Portland State University</td>
<td>Laboratoria</td>
<td>(also SDG 1, 5)</td>
<td>Laboratoria</td>
<td>Habitat for Humanity</td>
</tr>
<tr>
<td></td>
<td>(PSU) Foundation/Sweet</td>
<td>Living Goods</td>
<td>(also SDG 1, 3, 5)</td>
<td>Living Goods</td>
<td>Housing Trust of Silicon Valley</td>
</tr>
<tr>
<td></td>
<td>Sense Initiative</td>
<td>Kiva</td>
<td>(also SDG 1, 5, 9)</td>
<td>Kiva</td>
<td>housingtrust.com</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NESsT</td>
<td>Opportunity International</td>
<td>NESsT</td>
<td>Atma Connect</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Good World Solutions</td>
<td>(also SDG 1, 5, 9)</td>
<td>Good World Solutions</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Digital Divide Data</td>
<td>(also #1, #5)</td>
<td>Digital Divide Data</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Networking Academy</td>
<td>(also #1, #5)</td>
<td>Networking Academy</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>veterans program</td>
<td></td>
<td>veterans program</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supplier Code of Conduct</td>
<td></td>
<td>Supplier Code of Conduct</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>IoT and analytics</td>
<td></td>
<td>IoT and analytics</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>networking infrastructure platforms</td>
<td></td>
<td>networking infrastructure platforms</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Smart + Connected</td>
<td></td>
<td>Smart + Connected</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Communities</td>
<td></td>
<td>Communities</td>
<td></td>
</tr>
</tbody>
</table>

Cisco programs:
- Waste water treatment requirements for extended operations/supply chain
- Internet of Things (IoT)/LoRa technologies for water monitoring
- Goal for renewable energy powering operations
- Product energy efficiency/productivity
- Networking Academy
- Veterans program
- Supplier Code of Conduct
- IoT and analytics networking infrastructure platforms
- The Network Intuitive
- Smart + Connected Communities
## Cisco Programs

<table>
<thead>
<tr>
<th>Scopes</th>
<th>Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.2, 12.4, 12.5, 12.6.1, 12.7</td>
<td>Circular Economy, Material Use, Scope 3 Supply Chain</td>
</tr>
<tr>
<td>13.1</td>
<td>Connected Conservation</td>
</tr>
<tr>
<td>14.1</td>
<td>Used product recycling/100% product return; operations and supply chain waste management</td>
</tr>
<tr>
<td>15.5, 15.7</td>
<td>Connected Conservation</td>
</tr>
<tr>
<td>17.7, 17.17</td>
<td>Connected Conservation</td>
</tr>
</tbody>
</table>

### Cisco Grantees & Partners
- Ellen MacArthur Foundation, PACE Capital Equipment Coalition
- Cisco disaster response
- World Economic Forum (WEF)
- Responsible Business Alliance (RBA)
- Committee Encouraging Corporate Philanthropy (CECP)
- The Conference Board’s CSR Council II

---

Note: “Cisco Programs” refers to Cisco-run programs. “Cisco Grantees” refers to nonprofit/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. “Cisco Partners” refers to other organizations that we engage with through membership/sponsorship to address SDG related issues.