

Managing Our Environmental Impacts

Cisco has adopted a holistic approach to managing our environmental impacts and helping our customers manage theirs. We are pursuing greater sustainability in all that we do with a global executive commitment to a “green” vision and strategy, an ISO 14001-certified environmental management system (EMS), and active engagement of our employees throughout our business.

This subsection provides insight into environmental management at Cisco and focuses on the following key aspects of our environmental program:

- Our vision and strategy
- Key performance indicators
- Goals
- Environmental management systems
- Governance
- Employee engagement
- Advocacy

Our Vision and Strategy

Cisco's environmental vision is to use network technologies to promote environmental sustainability. Our strategy is built on working collaboratively to address the environmental impacts of our:

- **Operations:** Impacting how we operate as a business
- **Products:** Creating efficiencies and innovations in our products
- **Solutions:** Enabling Cisco and our customers to address global environmental issues using our solutions

We pursue this strategy by setting goals and measuring performance, investing in our environmental management system, empowering employees to take action, and participating in global dialogue around our key issues.

We believe that over the coming years the network will be the key technology enabler to monitor, manage, and reduce environmental impacts, including climate change and energy utilization. The network can play a critical role in reducing avoidable GHG emissions and decreasing the risk of climate change.

Today, 1.32 billion people are connecting to the Internet using computers, cell phones, personal digital assistants (PDAs), televisions, and other electronic devices. Estimates suggest that over the next five years, the number of users will double while the number of connections will increase fivefold, to more than 5 billion. Creating connections between electronic devices and the Internet will provide visibility into how electricity and other resources are consumed, enabling a shift in individual and organizational behavior. Through our networks, technologies and solutions, we can bring important innovations to market that improve energy and other resource efficiency and address global environmental challenges.

Energy use and product end-of-life waste are the most significant environmental impacts from our business, and are also the areas where we feel we can significantly reduce the impact of both our own operations as well as those of our customers. We aim to use networks, and our increasing ability to extend the reach and impact of these networks, to deliver solutions for energy and resource management on a global basis, and apply these solutions to our own operations.

Key Performance Indicators

A summary of Cisco's environmental key performance indicators (KPIs) is provided in the following table. Assumptions and detailed calculation methodologies for each KPI are discussed in following subsections.

Indicators	FY06	FY07	FY08	FY09
ENVIRONMENTAL MANAGEMENT				
Number of Cisco sites with ISO 14001 EMS certification	19	25	25	26
Employee base covered by ISO 14001 EMS certification	75%	73%	71%	68%

Indicators	FY06	FY07	FY08	FY09
GHG EMISSIONS				
Total gross* GHG emissions: Scope 1 (metric tonne CO ₂ e)	27586***	52,498	52,084	53,216
Total gross* GHG emissions: Scope 2 (metric tonne CO ₂ e)	317,666***	467,478	550,312	579,183
Total contractual* GHG emissions: Scope 2 (metric tonne CO ₂ e)	316,893***	403,188	310,961	226,733
Total air travel GHG emissions: Scope 3 (metric tonne CO ₂ e)	190,940	205,797	197,872	115,995
Change in air travel GHG emissions from FY06 (CGI global goal: 10% absolute reduction against FY06 baseline)		+8%	+4%	-39% (goal met)
Total contractual* GHG emissions: Scope 1, 2, and 3 metric tonne CO ₂ e	535,419***	661,483	560,917	395,944
Change in Scope 1, 2, and 3 from FY07 EPA global goal: 25% absolute reduction against CY07 baseline**			-15%	-40% (goal year is 2012)

* Gross and *contractual* are used consistent with Carbon Disclosure Project 7 survey terminology. Gross GHG emissions figures do not include reductions from Cisco's renewable energy purchases. Contractual GHG emissions figures include the impact of buying low-carbon electricity.

** Cisco's EPA Climate Leaders 25 percent reduction goal is measured against a calendar-year baseline per EPA requirements, but all public Cisco reporting is on a fiscal-year basis. We are reporting progress against the EPA goal using fiscal-year emissions, although officially 2009 progress will be reported to EPA based on emissions tallied by calendar year. Cisco does not publically report calendar-year emissions to avoid confusion with previously reported fiscal-year data.

*** In our FY06 CSR report, we only reported Scope 1 and 2 emissions data actually collected from Cisco sites and separately noted the estimated completeness of the data. We now collect actual emissions data for over 90 percent of our real estate portfolio and estimate the balance based on building square footage and type of usage. We do not believe the Scope 1 and 2 data collected for FY06 is sufficient to support extrapolation to 100 percent. Therefore, FY06 Scope 1 and 2 data in the table should not be trended against FY07 or later data.

Indicators	FY06	FY07	FY08	FY09
ENERGY AND ELECTRICITY USAGE				
Energy usage (GWh)	889*	1281	1438	1507
Electricity usage (GWh)	749*	1053	1203	1275

* In Cisco's FY06 CSR report, we only reported electricity usage actually collected from Cisco sites and separately noted the estimated completeness of the data. We now collect actual electricity usage for over 90 percent of our real estate portfolio and estimate the balance based on building square footage and type of usage. We do not believe the data collected for FY06 is sufficient to support extrapolation to 100 percent. Therefore, FY06 electricity usage in the table should not be trended against FY07 or later data.

Indicators	FY06	FY07	FY08	FY09
PRODUCT RETURN AND RECYCLING				
Product return (million pounds)	**	**	22.1	23.6
Materials to landfill (percent of returned product not reused or recycled)*	**	**	0.46%	0.44%

* Landfilled material consists of nonrecyclable materials (such as broken pallets, wet cardboard, and shrink wrap)

** In previous reports, Cisco reported weight of material sent to Cisco's recyclers. Leveraging process improvements started last year, we are reporting weight of material received from end users, which is the metric of primary concern to stakeholders. Historical data, prior to FY08, is not sufficiently available and is not reported.

Indicators	FY06	FY07	FY08	FY09
WATER CONSUMPTION*				
Total water consumption (m ³)	**	1,725,618	1,570,831	1,654,030

* Data for 11 Cisco sites.

Goals

Cisco's environmental performance is supported by our recognition of external standards calling for action to mitigate the collective damage we do to the biosphere. Cisco is dedicated to supporting the [Millennium Development Goals](#), where Goal 7 is a dedication to making quantifiable progress in ensuring environmental sustainability. In addition, we are supporters of the [United Nations Global Compact](#), which seeks to align businesses around common goals, such as undertaking activities to promote greater environmental responsibility and encouraging the development and diffusion of environmentally friendly technologies. For more information on our support for these global initiatives, see the CSR and Governance section.

In June 2008, as part of the U.S. Environmental Protection Agency (EPA) [Climate Leaders](#) program, Cisco committed to reduce Scope 1, 2, and business-air-travel Scope 3 GHG emissions worldwide by 25 percent absolute by calendar year 2012 (against a CY07 baseline).

In September 2006, Cisco made a commitment to the [Clinton Global Initiative](#) to reduce GHG emissions from all Cisco business air travel worldwide by 10 percent absolute (against a FY06 baseline).

In addition, through a separate commitment to the Clinton Global Initiative in 2006, we pledged to engage with global cities in a public-private partnership called [Connected Urban Development](#) (CUD) that demonstrates how information and communication technology (ICT) and network connectivity can increase efficiencies and reduce carbon emissions in urban environments. The CUD initiative was created to reduce global carbon emissions while promoting economic development by fundamentally changing the way cities operate and consume natural resources. By using network connectivity for communication, collaboration, and urban planning, we believe CUD can help cities improve efficiencies in the areas of service delivery, traffic management, public transportation, buildings, energy, economic development, and carbon monitoring tools.

Environmental Management System

Cisco's ISO 14001 Environmental Management System (EMS) provides a set of processes and practices that guide environmental activities at Cisco sites, as well as at the corporate level. As stated in Cisco's [Corporate Environmental Policy](#), the Cisco EMS seeks to minimize the negative and increase the positive impacts to the environment in the definition, design, manufacture, support, and use of our solutions by reusing, recycling, and adopting processes that conserve raw materials, energy, and water.

Through a continuous cycle of planning, implementing, reviewing, and improving processes, our EMS influences all aspects of Cisco's operations, products, and services, including compliance with environmental requirements and ongoing efforts to improve environmental business performance.

Beginning with an environmental impact matrix used to assess the most significant environmental impacts at each certified site, Cisco's EMS team ranks the impact, taking into account the surrounding geography, site activities, and products and services. The team then uses the assessment to develop goals and targets for each site. Our EMS focus areas are energy management, operational waste, reuse and recycling, electronic scrap reuse and recycling, "green" engineering, green communication, and value chain management. We work with teams at each site to implement strategies for measuring impacts, monitoring progress, and publishing metrics.

Once a plan is established, our sites work to implement environmental initiatives and goals. With the assistance of local EMS implementation teams, Cisco's corporate EMS team audits these sites virtually, using Cisco collaboration technologies such as Cisco TelePresence™ and Cisco WebEx®, and conducts in-person audits on a regular basis. We generally conduct a full audit at each site once every three years. We also engage a third-party audit firm to conduct annual onsite audits to certify our EMS against the ISO 14001:2004 standard.

In addition to measuring performance, these audits identify best practices at our local and corporate sites that can be adopted at sites across our operations. Examples from internal audits conducted in FY09 include the Green Bag program in Paris, local lunch meetings on various green topics; the Green Engineering Task Force governance model; and the Green Task Force's communications campaign for increasing employee awareness and participation in Cisco green activities on a global level. Third-party auditors also identified measuring GHG emissions as a best practice.

Through FY09, 25 Cisco sites have achieved ISO 14001:2004 certification through independent third-party audits, covering approximately 68 percent of Cisco's employee population. The percentage of employee population covered decreased by 2 percent since FY08 due to Cisco acquisitions in FY09. The number of certified Cisco sites increased by five since FY08, but this increase includes four sites that were previously certified and reported in 2008 under the umbrella of another Cisco site. As a result of changes in certification requirements, these sites became independently certified in FY09. Looking ahead, we intend to certify our site in Hong Kong, China, in early FY10 and integrate key acquisitions and sites in the coming years.

Indicators	FY06	FY07	FY08	FY09
ENVIRONMENTAL MANAGEMENT				
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Cisco EcoBoard consists of 14 executives from:

- Corporate communications
- Corporate finance
- Corporate marketing
- Corporate positioning
- Customer business consulting group
- Engineering (hardware and software)
- General Counsel
- Government affairs
- Information technology
- Sales
- Technical support services
- Value chain management

Governance

Cisco's environmental vision and strategy is managed by the Cisco EcoBoard, which was established in 2006 by John Chambers and reports to Cisco's Operating Committee. The EcoBoard includes 14 senior executives who represent key global business functions, providing diverse and comprehensive representation from all parts of Cisco's operations.

In FY09, the EcoBoard focused on closely aligning Cisco's environmental sustainability efforts with our business priorities by means of four focus areas:

- 1. Market Access:** Removing impediments and creating opportunities for Cisco "green" products and solutions
- 2. Market Enablement:** Opening markets to these products and solutions
- 3. Differentiation:** Creating sustainable engineering and product innovations that differentiate us from our competitors and allow Cisco and our customers to meet environmental goals
- 4. Positioning and Competition:** Ensuring that there is public awareness of Cisco's capabilities as a global IT company that provides environmental solutions and innovations

Each focus area is supported by workgroups that are responsible for planning and implementing a set of targeted initiatives that support the focus areas set by the EcoBoard. For example, the Cisco Green Engineering Task Force (GETF), a set of eight work groups supporting the EcoBoard's Differentiation focus area, is charged with delivering thought leadership around product solutions, including companywide coordination of energy-related product development efforts. In FY09, GETF efforts included educating product engineers and creating "green" metrics for product development; reducing power use in our labs and by our products; architecting solutions for our clients; and supporting industry standards and regulations to accelerate and coordinate the adoption of environmentally friendly product attributes.

There are over a dozen workgroups supporting the four EcoBoard focus areas. The leaders of each workgroup make up the Green Task Force (GTF). Consisting of senior leaders from each of the departments represented on the EcoBoard, the GTF provides critical cross-functional planning, management, monitoring, and coordination of Cisco's environmental programs.

The EcoBoard meets quarterly to review the progress of each of the workgroups and to address challenges. Each year, the EcoBoard and Green Task Force hold a joint meeting to discuss new issues and opportunities and to review plans for the coming year.

For more information on Cisco's overall CSR governance, see the CSR and Governance section.

Employee Engagement

It is of utmost importance to our environmental vision and strategy that we engage and inspire our employees to become “green ambassadors” for the company. Our strategy relies on embedding a “green” consciousness into the collective will of our company. We seek to inspire our employees to make the workplace more energy- and resource-efficient and to engender pride in Cisco’s environmental actions. We also look to our employees for their creative contributions to meeting Cisco’s environmental goals.

Our goal is to put Cisco’s environmental mission in the hands of our employees, facilitating their ability to collaborate, innovate, and share potential solutions across the company. Employees can educate themselves on Cisco’s environmental activities with resources like our Quarterly Environmental Newsletter and environmental dashboards. Our quarterly newsletter shares best practices across the company and news about programs, processes, and achievements. Our Environmental Aspect Team Dashboard and Eco-Dashboard provide transparency to our sites and our employees on our efforts to reach our environmental goals. In particular, our Eco-Dashboard, which is available to all Cisco employees, is creating a culture of transparency and engagement around Cisco’s environmental impacts.

Cisco further engages employees in our environmental efforts through our internal Cisco Green website. Launched in 2007, the Cisco Green website is a vibrant online community where Cisco’s employees can learn about Cisco’s environmental strategy, achievements, and “green works” in progress, as well as exchange information and ideas on any number of related topics. The site offers a wide range of ways to engage and learn, including a discussion forum, a collection of employee thoughts and commentary, a “green news” feed, and a calendar of worldwide events and volunteer opportunities.

Building on the success of the Cisco Green website, Cisco launched the Think Green, Act Green (TGAG) campaign on Earth Day 2009. The TGAG campaign encourages employees to pledge to implement environmentally sustainable behaviors in the workplace. In the fourth quarter of FY09, we collected over 1200 pledges.

In FY09, we held our first online Earth Day Fair, using Cisco WebEx technology, inviting employees to log onto our Virtual Earth Day portal at the appropriate time for their location and engaging them in virtual conversations, training sessions, and other events. During one 24-hour period beginning April 22, 2009, we showcased Cisco technology, customer solutions, and thought leadership related to environmental sustainability. Our online offerings included a mix of video and live presentations from a range of speakers, including former Vice President Al Gore and San Francisco Mayor Gavin Newsom, as well as senior representatives from Cisco enterprise customers, GridWise alliance, and the Carbon Disclosure Project. Content was tailored to each Cisco operating region.

Launched in March 2008, online discussion forums also play a key role in engaging Cisco employees. The “Let’s Talk Cisco Green” discussion forum has spurred numerous conversations on Cisco’s environmental initiatives and topics such as telecommuting and eliminating plastic water bottles.

We also engage our employees in environmental sustainability through events such as Bike to Work Day and Earth Hour, as well as regional initiatives such as Environment Day in India, where we promoted Think Green, Act Green in Bangalore.

Advocacy

The scale and urgency of today's global environmental challenges require solutions that involve cooperation across industries and public-private partnerships. Conversations with our stakeholders play a critical role in our approach to bringing about environmental improvements worldwide.

Cisco actively engages with governments and standard-setting bodies around the world to monitor and influence the development of emerging regulations, particularly around climate change. Cisco is directly affected by emerging product energy-efficiency regulations and indirectly affected by emissions regulations affecting our customers and partners.

We believe regulations and standards bring clarity to the global marketplace and create a level playing field while encouraging reductions in global emissions, hazardous materials, and waste. Cisco also believes that product 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.

Cisco supports market-based mechanisms that will reduce carbon emissions over time and create market incentives for consumers and businesses to use energy more efficiently and producers to reduce their GHG emissions through efficiency and innovation. Cisco also supports policies that increase tax incentives for use of energy-efficient products, promote investment in renewable energy, increase funding for environmental/energy R&D, and provide incentives for smart grid deployment.

Cisco is very active in the environmental policy committees and councils of trade associations in the United States, Europe, and Japan, such as the Information Technology Industry Council, DigitalEurope, and TechAmerica, and in external collaborations such as the Global e-Sustainability Initiative (GeSI). Cisco is also actively engaged in the International Telecommunication Union, leading the working group focused on metrics for energy efficiency in ICT products and services.

In FY09, Cisco contributed to the global dialogue on environmental issues in a variety of ways:

- Cisco held a climate change policy panel on Earth Day with panelists from the European Commission and an advisor to the U.S. administration to educate Cisco employees about regulations to combat climate change and government actions to reach an international agreement on climate change.
- Cisco is a board member of [GeSI](#), an international strategic partnership of ICT companies and industry associations committed to creating and promoting technologies and practices that foster economic, environmental, and social sustainability and drive economic growth and productivity.

Cisco was chosen to lead the GeSI policy working group and participates in the climate change working group.

- In December 2008, Cisco joined 140 business leaders in signing the [Poznan Communiqué](#) pointing out key elements of an international deal on climate change.
- In September 2009, Cisco signed the [Copenhagen Communiqué on Climate Change](#), encouraging progress on an international agreement on climate change and reinforcing the message to governments that the international business community wants a strong and effective international climate framework.
- Cisco is a member of the [World Economic Forum Task Force on Low-Carbon Economic Prosperity](#) that recently launched the Eco-Sustainability project. The aim of the task force is to synthesize the role ICT can play in mitigating climate change and to develop a charter highlighting the sector's role in shaping a sustainable future. In March 2009, Cisco signed a letter directed to G20 Leaders and the UN Secretary General including a set of recommendations to give extra momentum to the climate discussions.
- Cisco developed the [One Million Acts of Green](#) initiative to show that individual, organizational, and community acts add up to something significant. In under a year, nearly 2 million "acts of green" have been recorded globally, avoiding an estimated 220,000 metric tonnes of greenhouse gases and demonstrating the power of mobilizing the human network to drive change. Watch a [video](#) to learn more.
- Cisco continued to take a leading role with the UN-led [Solving the E-Waste Problem](#) program, working within the Global Policy and Recycling task forces.
- Cisco became a coleader for the EU WEEE directive within the Environmental Policy Group of Digital Europe, an association that combines 39 national digital technology associations from 28 European countries with over 61 direct company members. Through the Environmental Policy Group, Cisco is working with industry peers to respect all applicable environmental legislation, while allowing the ICT sector to prosper.