2009 HP GLOBAL CITIZENSHIP REPORT

See the report online at: www.hp.com/go/globalcitizenship

TABLE OF CONTENTS

COMMITMENT

As one of HP's seven corporate objectives, global citizenship has long been integral to the success of our business. We're responding to pressing issues, such as mitigating climate change, using energy more efficiently, enriching education and improving healthcare, by providing solutions that are transforming how people live, work and connect.

See the report online at: www.hp.com/go/globalcitizenship

LETTER FROM CEO MARK HURD

At HP, we are committed to aligning our business goals with our impacts on society and the environment. Global citizenship influences how we run our business, holding us to high standards of integrity, ethics, contribution and accountability in everything we do. Through rigorous internal policies and active engagement with outside stakeholders, we work to ensure that we live up to our ideals.

In 2009, the global economy experienced the worst recession in a generation. At HP, we set a goal of controlling discretionary spending, while keeping the muscle of the organization intact. Thanks to the hard work and talent of HP employees, we were able to maintain forward progress on our core strategy. That includes our commitment to global citizenship, which we believe becomes even more important in difficult times.

With the expansion of our enterprise services capabilities, HP can do more than ever to help our customers build sustainable businesses. We are working in areas such as education, healthcare and energy to harness the power of information, using IT to change the equation and help create a more efficient, environmentally responsible and equitable world. And in HP Labs, we're working on the future. Innovations like nano-scale sensors, breakthrough software for analytics and knowledge discovery, and data centers with net-zero environmental impact will be the building blocks of tomorrow's sustainable society.

We are also improving HP's own products and operations. Last year, we announced that by the end of 2011, we will reduce the energy consumption and associated greenhouse gas emissions of all HP products combined by 40 percent compared to 2005 levels. We are leveraging the power of our supply chain to protect both the environment and human rights. And through HP's Office of Global Social Innovation, we are developing new ideas and approaches for education and healthcare delivery. Around the world, our efforts are supported by HP employees who volunteer in their local communities and donate in conjunction with HP matching grants to the causes they care about most. At HP, we also recognize that these issues are bigger than any single organization can address on its own, so we support the UN Global Compact to promote higher standards and we cultivate partnerships with industry peers, governments and NGOs to achieve our shared objectives.

Together, these coordinated initiatives have helped put HP at the forefront of global citizenship. Corporate Responsibility Magazine recently recognized our efforts with the no. 1 ranking in the annual 100 Best Corporate Citizens List and Newsweek ranked HP as the greenest company among the 500 largest corporations in America.

In the years ahead, we are well positioned to lead the evolution of our industry and create extraordinary opportunities for our customers, our stockholders, our people and the world around us.

COMMITMENT

HP PROFILE

Around the world, more than 1 billion people rely on HP technology every day:

- In Australia, a bank uses the HP Carbon Footprint Calculator to evaluate the greenhouse gas emissions from powering its printers and PCs.

- In Singapore, a sales team gathers in an HP Halo solutions room rather than boarding an airplane to meet with colleagues in Germany.

- In Canada, a nonprofit organization taps into HP cloud computing technology to develop a solution that reduces the time for manufacturers to trace and remove recalled food products from the supply chain.

- In the United States, a nurse in a Veterans Affairs hospital scans bar codes created by the HP Patient ID system to ensure patients receive the correct medication.

- And in India, Lithuania and Nicaragua, teachers and students use HP Tablet PCs to connect and collaborate, opening up new avenues for learning.

In these and countless other ways, HP products, services and solutions are profoundly changing how the world lives and works.

Yet the advance of technology also raises complex global challenges. For example, we must dramatically cut energy use while meeting rising demand for computing resources; protect personal privacy while accelerating information-sharing in the digital age; and reduce the volume of electronic waste going to landfills as customers in emerging markets greatly increase the number of PCs, printers and servers purchased and disposed of each year.

At HP, we believe that technology is key to unleashing the creative vision and ingenuity needed to solve these challenges—and to create opportunities for people to thrive in a rapidly changing world.

Our unrivaled combination of size, scale and global reach give us a unique advantage. Over the past several years, we have executed a far-reaching strategy to put HP in this position of leadership. Through acquisitions, industry partnerships, and investments in research and development, we have amassed the most comprehensive portfolio of IT hardware, software and services in the industry, backed by approximately 304,000 employees in approximately 170 countries.

DID YOU KNOW?

- Sixty-five percent of the world's power transmission is managed by HP and its partners.

- Our card processing services administer over 68 million credit card accounts and process 3.5 billion transactions annually.

- We are the leading provider of Medicaid processing services in the United States, handling about 1 billion Medicaid claims and administering about $100 billion in benefits a year.

- Ninety of the world's top 100 retailers are HP clients.

- We process 500 million travel reservation transactions annually.

- HP serves 109 domestic and international air carriers—more than any other IT services provider.

- We manage over 200 data centers, 380,000 servers and 5.4 million desktops.

- HP operates IT product recycling services in 56 countries or territories.

We are guided by shared values and seven companywide objectives, which include a longstanding commitment to global citizenship. Larger than any organization or program, global citizenship at HP encompasses all the ways we go about aligning our business goals with our impacts on society and the environment, as this report details.

The scope of HP's business:

- **PERSONAL SYSTEMS** HP is the world's leading vendor of personal computers, shipping over 50 million devices annually. And that's just one segment of our personal systems offering. We have the industry's broadest portfolio of notebooks, desktops, workstations, thin clients, displays, handheld devices and personal storage solutions.

- **IMAGING AND PRINTING** The worldwide leader in inkjet and laser printing for over 20 years, HP

COMMITMENT

HP CORPORATE SUMMARY

- Fortune 9 U.S.

- Fortune 32 Global

- Chairman, chief executive officer and president: Mark Hurd

- Approximately 304,000 employees as of October 31, 2009

- Incorporated in Delaware, United States

- Listed on the New York Stock Exchange with the ticker symbol HPQ

- Corporate and regional headquarters (see link in report online)

- Recorded $114.6 billion in net revenue for fiscal year 2009

- HP ships approximately 3.5 products every second. In 2008, for example, we shipped over 100 million printers, PCs and servers.

Revenue by segment, fiscal year 2009
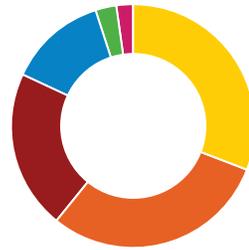
Personal Systems Group	31%
Services	30%
Imaging and Printing Group	21%
Enterprise Storage and Servers	13%
HP Software	3%
HP Financial Services and other	2%

Revenue by region, fiscal year 2009
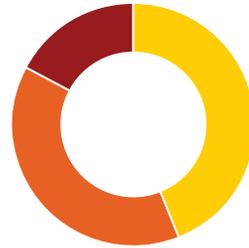
Americas	44%
Europe, Middle East and Africa	39%
Asia Pacific and Japan	17%

is advancing the digital transformation of printing while offering customers new ways to be creative, save money, improve productivity, and stand out.

- **ENTERPRISE BUSINESS** HP helps large organizations establish strategic advantages by creating ecosystems that use technology to respond efficiently to dynamic conditions in real-time. Our solutions use HP servers, storage, software, networking and services to create or strengthen business elasticity, insight and sustainability.

- **SERVICES** HP is the second-largest IT services company in the world, giving us the scale and scope to manage customers' most critical business technology needs. We offer one of the industry's broadest portfolios of technology services, including applications services, infrastructure services and business process outsourcing.

- **HP FINANCIAL SERVICES** We help customers reduce the cost of running their businesses— from planning and acquiring technology through to retiring and replacing it.

- **HP LABS** With hundreds of dedicated researchers in six worldwide locations, HP Labs develops solutions to the most complex challenges facing our customers in the next decade, including those in the areas of analytics, cloud, immersive interaction, content transformation, digital commercial print, information management, intelligent infrastructure and sustainability.

COMMITMENT

GLOBAL CITIZENSHIP STRATEGY

> Global citizenship is integral to the success of HP's business. From how we develop products, run our operations, manage our supply chain and engage with stake-holders, it drives us to accept challenges and pursue solutions that are the lifeblood of continuous innovation and growth. It also guides our decision making, ensuring that we uphold the values that have helped distinguish HP as a leader committed to using technology to benefit people, businesses, society and the environment.

—SHANE ROBISON, EXECUTIVE VICE PRESIDENT AND CHIEF STRATEGY AND TECHNOLOGY OFFICER

Global citizenship is one of HP's seven corporate objectives, a commitment spanning our entire organization and rooted in values that have guided the company since it was founded. For over 70 years, this commitment has driven us to meet higher standards of integrity, contribution and accountability as we align our business goals with our impacts on society and the environment.

Today, with our industry-leading portfolio, worldwide reach and the collective talent and expertise of our 304,000 employees[1], HP is in a unique position to make meaningful and lasting contributions to improve people's lives and work.

Engaging with stakeholders, including nongovernmental organizations, investors, employees, governments and regulators, is vital to the success of global citizenship. We regularly communicate and meet with stakeholders to respond to their feedback, express our views, gain insights, share best practices, shape standards and influence public policy discussions. In all matters, we are committed to carrying out engagements in a transparent and appropriate way.

Our global citizenship efforts span a broad range of areas—from ethics and compliance, environmental sustainability and education to responsible supply chain management, privacy and social innovation—as detailed by this report.

The recent economic downturn, combined with powerful social, demographic and environmental forces, is creating unprecedented challenges and opportunities for individuals, communities, companies and governments alike.

Issues such as meeting the resource needs of a fast-growing global population, mitigating the effects of climate change, managing rapidly increasing volumes of information and opening up educational opportunities for all cut across industries, economies

[1] As of October 31, 2009.

COMMITMENT

and borders and require new levels of leadership, innovation and collaboration.

HP is responding by aligning our global citizenship efforts with our business goals, focusing where we believe we can apply our technologies, resources and expertise to make the greatest impact.

In setting priorities and taking action, we regularly review our progress and adjust our strategies, taking into account the following factors:

- The perceptions and expectations of customers, who range from individual end-users to small- and medium-size business owners to large enterprise and public sector organizations

- Customer perceptions and expectations, which we gather through surveys, requests for proposals, industry analysts and other resources

- External standards and regulations, such as the Electronic Industry Code of Conduct, the UN Global Compact and emerging environmental legislation in countries around the world

- Feedback from stakeholders, such as nongovernmental organizations and our Trusted Advisory Network, which we created in 2009 to deepen dialogue, increase feedback and gather recommendations

- Recommendations from our strategic and supply chain partners, who have a critical role across our business and operations

- Employee input, including ideas for new programs and improvements to current initiatives

- Risks and opportunities associated with our environmental footprint, supply chain management and public policy priorities, among other areas

Our 2009 Global Citizenship Report features five essays, each exploring how HP is responding to an issue with far-reaching implications for our business, the IT industry and the world at large. These essays provide the broader context for global citizenship at HP, explore some of the risks and opportunities associated with each issue. The essays address how HP is applying its leadership, expertise and technology to:

- Harness the information explosion
- Change the energy equation
- Change the education equation
- Change the healthcare equation
- Raise standards in the global IT supply chain

- Media coverage and industry analyst reports, which offers insights into how social and environmental issues are shaping the perceptions and priorities of business customers and consumers

Global citizenship reporting

This is the ninth consecutive year that HP has reported on its global citizenship programs, performance and goals. We have broadened the scope of our Global Citizenship Report over that time, providing greater transparency into our operations, employee practices, product development process, supply chain management and many other parts of our business. (See About this report for more detail.)

WHY GLOBAL CITIZENSHIP?

Our commitment to global citizenship is essential to the long-term success of HP. Our investments in this area strengthen our business in numerous ways:

- **CUSTOMER INSIGHT** Global citizenship helps us understand and respond to customer expectations in areas such as supply chain responsibility, privacy and the environmental performance of our products. For example, we track requests for information relating to global citizenship in requests for proposals, which provides insight

into issues of particular importance to customers. (See Customers.)

- **MARKET ACCESS** Preparing for upcoming legislation, participating in public policy discussions and maintaining our record of legal compliance helps us maintain access to markets. Ensuring supplier diversity is also critical, particularly for fulfilling contracts with federal and many state agencies in the United States. (See Supplier diversity.)

COMMITMENT

- **COMPETITIVENESS** When making purchasing decisions, increasing numbers of enterprise and public sector customers evaluate supply chain management and environmental performance. (See Customers.)

- **EMPLOYEE ENGAGEMENT** With growing mainstream interest in ethical, social and environmental issues, good global citizenship is important to attracting and retaining top talent. To meet this growing expectation, HP offers educational programs to help employees reduce their environmental impact, encourages them to volunteer in their communities and keeps them apprised of the company's global citizenship goals and progress. (See Employees and global citizenship.)

- **EXTERNAL ENGAGEMENT** Global citizenship is key to building relationships based on productive dialogue, collaboration and shared insights. HP works with numerous nongovernmental organizations to address issues ranging from environmental sustainability to supply chain responsibility, and seeks feedback from our Trusted Advisory Network. (See Stakeholder engagement.)

- **REPUTATION MANAGEMENT** Customers are increasingly considering global citizenship in making purchasing decisions. Upholding HP's reputation as an honest and responsible company is also integral to building trust among governments, nongovernmental organizations, investors and other key stakeholders.

- **RISK REDUCTION** Improving social and environmental performance in our supply chain and ensuring compliance with environmental legislations is key to mitigating risks to our business. HP works with its suppliers to help build their capabilities in this area. (See Supply chain responsibility.)

- **COST SAVINGS** Environmental sustainability initiatives can reduce costs and increase efficiency. For example, in 2009 we completed projects and operational changes that we expect will deliver savings of more than 66 million kWh of electricity in 2010. (See Climate and energy—Operations.)

- **INNOVATION** Innovation drives improvements in how we run our operations, manage our supply chain and develop our products, particularly in reducing our environmental impact and increasing sustainability. (See Environmental sustainability.)

GOVERNANCE AND MANAGEMENT

The success of global citizenship depends on leadership, participation and support at every level of an organization, especially for a company as far-reaching, diverse and complex as HP.

In November 2009, the HP Board of Directors formed a new Public Policy Committee. The committee assists the Board in fulfilling its responsibilities for generally HP's policies and processes relating to HP's public policy, government affairs and global citizenship activities. In so doing, the committee identifies, evaluates and monitors the social, political and environmental trends, issues, concerns, legislative proposals and regulatory developments, domestic and foreign, that could significantly affect the business and affairs of HP. The committee may also report and make recommendations to the Board relating to activities, policies and programs with respect to matters of local, national and international public policy affecting HP's business. These may include:

- Trade policy and major legislative and regulatory developments

- Relations with regulators, governmental agencies, public interest groups and other stakeholders

- HP's policies with respect to corporate social responsibility and global corporate citizenship

- General guidelines for charitable and political contributions, volunteerism and pro bono outreach

Our Global Citizenship Council, comprising senior executives from across the company's functions, meet bimonthly to ensure effective governance. The Council seeks input from investor relations, research and development, corporate strategy, legal and other business and functional groups. It advises HP's Executive Council, which retains overall responsibility for global citizenship as part of our business strategy.

The Council's charter is to promote and advance global citizenship strategically across HP. Council members focus on measures that ensure global citizenship is integrated into day-to-day functions and responsibilities, such as:

- Strategy and planning
- Policies and standards
- Compliance and risk mitigation
- Issue resolution
- Advocacy and engagement
- Performance tracking and reporting

The Council also discusses potential conflicts between global citizenship and business objectives.

HP maintains separate councils focused on key global citizenship issues such the environment, ethics, legal compliance, privacy and our supply chain, as the graphic below illustrates. These councils include leaders from our business units, regional organizations and functions with expertise in relevant areas. Each council meets periodically to confirm that HP's global citizenship strategies are being implemented effectively and to establish goals and measure progress. To ensure alignment, leaders from each focus area council also sit on the Global Citizenship Council.

Because global citizenship is rooted in our company values, it helps guide our employees' decisions and their actions. It is a source of motivation and pride, a shared foundation integral to the culture of HP.

HP Board of Directors

Public Policy Committee – overseeing policies and processes relating to HP's public policy, government affairs and global citizenship activities

HP Executive Council

GLOBAL CITIZENSHIP PAN-HP COUNCIL

Global Marketing Council

Stakeholder Advisory Groups

Ethics and Compliance Committee & Compliance Council

Environment Sustainability Council

Supply Chain Board (i.e., SC SER)

Privacy and Data Protection Board

Social Investment Advisory Council

COMMITMENT

STAKEHOLDER ENGAGEMENT

Stakeholder engagement is integral to global citizenship, and HP works to build strong, mutually productive relationships with our diverse stakeholders. They include:

- Communities
- Customers
- Employees
- Investors
- Legislators and regulators
- Industry analysts and media
- Nongovernmental organizations (NGOs)
- Suppliers
- Universities

We engage with these groups to understand their perspectives and respond to their expectations of HP, as well as to gain their insights into emerging trends, risks and opportunities. In turn, we share with them our positions and challenges on key issues such as climate change and supply chain responsibility, and demonstrate how global citizenship is integral to our business and brand.

We provide examples of our relationships with each stakeholder group in the table below, and provide more detail in relevant areas throughout this report.

In the remainder of this section, we highlight engagements in 2009 with our Trusted Advisory Network (TAN) and key NGOs, including:

- Conservation International
- Electronics TakeBack Coalition and Texas Campaign for the Environment
- Greenpeace

- Students and Scholars Against Corporate Misbehavior (SACOM)
- World Wildlife Fund

We also belong to numerous membership organizations that address an array of global citizenship issues.

2009 highlights

CLIMATE CHANGE: CONSERVATION INTERNATIONAL

In 2009, HP began collaborating with Conservation International, a nonprofit organization that applies innovations in science, economics, policy and community participation to protect the Earth's biodiversity. HP and Conservation International are jointly developing initiatives to address climate change and innovate technology-based solutions that promote conservation in a low-carbon economy.

CLIMATE CHANGE: WORLD WILDLIFE FUND

HP continues to work closely with World Wildlife Fund (WWF) on key environmental issues including climate change. Together, we are leveraging our experience in technology innovation and environmental conservation to reduce greenhouse gas emissions, improve energy use, protect forests, influence policy makers on climate change and showcase IT solutions for a low-carbon economy.

In 2009, we made substantial progress toward these priorities. For example, HP continued to reduce the carbon footprint of our operations and products; allocated more than US$1.4 million in cash and HP equipment to establish three projects aimed at addressing the causes and consequences of climate

COMMITMENT

change; and launched a Sustainable Innovation Award, open to MBA and other post-graduate students across Europe, the Middle East and Africa.

We also worked with WWF on:

- Climate Conversations, a three-part television series exploring the effects of climate change on people's lives and what companies such as HP are doing to reduce carbon emissions. The program, which aired leading up to the Copenhagen summit, includes Climate Witness, an online forum for individuals to "tell their story" about climate change to business leaders, policy makers and others. View the Climate Conversations video in the report online.

- Earth Hour initiative, a global campaign to raise awareness around energy savings and climate change. In 2009, 3,900 cities in 84 countries and 43 U.S. states participated in Earth Hour, and sites such as the Great Pyramids of Egypt and the Eiffel Tower went dark for an hour.

HP and WWF have co-authored three reports examining how IT can contribute to solutions to reduce GHG emissions. "The potential global CO_2 reductions from ICT use" identified potential IT applications that can help save more than a billion tonnes of carbon dioxide equivalent (CO_2e) emissions annually. "Virtual Meetings and Climate Innovation in the 21st Century" highlights the potential CO_2e emissions reductions from the development of a global, open access, video conferencing infrastructure. "Becoming a winner in a low-carbon economy" shows businesses how IT can help them reduce their energy use and GHG emissions.

In 2009 we renewed our commitment to WWF Climate Savers by extending our goals to reduce GHG emissions in our operations and energy consumption by our products.

PAPER CONSERVATION: WORLD WILDLIFE FUND

As part of the Paper Sourcing Policy that we released in 2008, HP expanded our relationship with WWF by joining the Global Forest & Trade Network in North America, a WWF initiative linking more than 300 companies that share a commitment to responsible forestry. HP will progressively increase the amount of responsibly harvested wood fiber used in its paper products and sold globally. We have set a target that 40 percent or more of HP Branded paper sold will be Forest Stewardship Council-certified or have more

than 30 percent post-consumer waste content by the end of 2011. We are engaging suppliers and educating customers about this commitment, and WWF is providing technical assistance.

Learn more about how HP is reducing paper use and increasingly sourcing paper from sustainable sources in the Paper section.

ELECTRONIC TAKE BACK: ELECTRONICS TAKEBACK COALITION AND TEXAS CAMPAIGN FOR THE ENVIRONMENT

HP worked with the Electronics TakeBack Coalition (ETBC) and the Texas Campaign for the Environment to develop a comprehensive policy for accepting and processing e-waste. Learn more about our commitments and progress in this area in Product reuse and recycling.

PHASE OUT OF POLYVINYL CHLORIDE/BROMINATED FLAME RETARDANTS: GREENPEACE

HP has made important strides to phase out polyvinyl chloride (PVC) and brominated flame retardants (BFRs) from our PC products. This includes introducing PVC- and BFR-free[1] laptop and desktop personal computers (see the HP ProBook 5310 and HP Compaq 8000f Elite Business Desktop PC case studies in the Tech gallery.

HP has stated in previous Global Citizenship Reports that as technologically feasible alternatives become readily available that will not compromise product performance or quality and will not adversely impact health or the environment, we will complete the phase out of BFRs and PVCs in newly introduced personal computing products.

It became apparent early in 2009 that alternative materials meeting these requirements would not be available in sufficient quantities to eliminate these substances by our original target year of 2009. As a result, HP revised our PVC/ BFR goal to the end of 2011.

HP worked with the NGO Greenpeace International to share the details of how we planned to meet our goal to phase out PVC/BFRs from newly introduced PC products. We also described how our approach to this challenge is consistent with our longstanding principles of responsible innovation. We are deliberate and thorough in our research and development efforts, and are careful not to inadvertently introduce new challenges in solving existing ones.

See the Materials section for more information about our approach and progress.

[1] Meeting the evolving definition of 'BFR/PVC-free' as set forth in the "iNEMI Position Statement on the 'Definition of Low-Halogen' Electronics (BFR/CFR/PVC-Free)'." Plastic parts contain < 1000 ppm (0.1%) of bromine [if the Br source is from BFRs] and < 1000 ppm (0.1%) of chlorine [if the Cl source is from CFRs or PVC or PVC copolymers]. All printed circuit board (PCB) and substrate laminates contain bromine/chlorine total < 1500 ppm (.15%) with a maximum chlorine of 900 ppm (.09%) and maximum bromine being 900 ppm (.09%).

COMMITMENT

SUPPLY CHAIN WORKING CONDITIONS: STUDENTS AND SCHOLARS AGAINST CORPORATE MISBEHAVIOR (SACOM)

In 2009, HP collaborated with Students and Scholars Against Corporate Misbehavior (SACOM) on a pilot labor rights training program at two of our suppliers in China. With the support of HP, local NGOs have provided or are training approximately 4,500 workers. The training focused on helping workers understand their labor rights and on offering means for them to raise issues about their working environment. It also emphasized raising awareness of and adherence to HP's Electronic Industry Code of Conduct (EICC) among workers as well as management at our supplier factories.

See Supply chain – Proactive engagement for more information about this initiative and HP's other supply chain capability building programs.

Types of stakeholder group engagements

GROUP	ENGAGEMENT	EXAMPLES FROM 2009
COMMUNITIES	HP employee volunteers Disaster relief Philanthropy Tours of facilities	HP employees supported local organizations and programs through our volunteering and giving programs.
CUSTOMERS	Eco Highlights labels Product information on HP.com Surveys Inquiries/responses regarding requests for proposals Cause-related marketing	We communicated with customers at major events such as the Consumer Electronics Show and Technology@Work.
EMPLOYEES	hpNOW/intranet Annual employee surveys Networking groups Open Door Policy Regular briefings, meetings and annual performance reviews	We provided communications, training and mentorship opportunities to help employees transition to HP via our acquisition of EDS. We also encouraged employees to participate in our Power to Change program which promoted turning computers and printers off when not in use to conserve resources. See Employees and global citizenship for more detail.
INVESTORS	Statutory and other disclosures and reporting Annual meeting of stockholders Regular meetings and briefings	HP held four live audio webcasts to announce its quarterly earnings during fiscal year 2009.

(table continued)

COMMITMENT

GROUP	ENGAGEMENT	EXAMPLES FROM 2009
LEGISLATORS AND REGULATORS	Public engagement program Regular meetings and briefings Trade association and business organization memberships	HP continued to work with governments and industry associations to support appropriate regulations and standards for issues such as privacy, electronic waste and climate change. For example, HP joined 1,000 other companies in endorsing the Copenhagen Communiqué on Climate Change. See Public policy for details.
INDUSTRY ANALYSTS/MEDIA	Direct engagement on topics of interest Briefings, interviews and meetings regarding global citizenship	We engaged with industry analysts and other stakeholders for feedback on our 2008 Global Citizenship Report, which we used in developing this year's report.
NON-GOVERNMENTAL ORGANIZATIONS	Trusted Advisory Network Strategic Alliances Direct engagement on topics of interest Meetings and conferences	We initiated our Trusted Advisory Network to generate more frequent and actionable insights, feedback and recommendations from key NGOs.
SUPPLIERS	Supply chain social and environmental responsibility program Procurement management process Supplier diversity program	We provided capability-building programs to our suppliers to enhance their social, ethical and environmental programs and performance.
UNIVERSITIES	Collaborations between businesses, suppliers, NGOs and universities to conduct research and develop best practices	HP and World Wildlife Fund joined forces with Ashridge Business School and the European Academy of Business in Society in holding a competition of academic essays about sustainable innovation. The competition was open to postgraduate students at 700 universities in Europe, the Middle East and Africa. The award was presented at an EU conference focused on the emerging eco-efficient economy, with the winner receiving a cash prize and a mentorship with an HP executive.

COMMITMENT

TRUSTED ADVISORY NETWORK

In 2009, we deepened our engagement with nongovernmental organizations (NGOs) through our Trusted Advisory Network (TAN) program, which replaced our Stakeholder Advisory Council (SAC).

Introduced in 2007, the standing members of SAC met in full-day sessions with HP senior leaders to broadly discuss global citizenship issues, risks and opportunities. The SAC met for the final time in January 2009, addressing the environmental performance of HP products.

The TAN holds more frequent, focused meetings with a broad set of stakeholders, including investors, nongovernmental organizations (NGOs), academia, industry analysts and customers. Stakeholders were selected for their expertise in specific areas. This model offers the advantage of expanding the number and variety of stakeholders we engage, yielding deeper insights and more actionable recommendations. HP held these meetings by phone and in person in 2009, and will leverage our HP Halo solutions by holding upcoming meetings via videoconference to minimize their carbon footprint.

The TAN met four times in 2009. We consulted TAN members on HP's environmental strategy, human rights issues, our annual Global Citizenship Report, and HP's efforts to support and enable a low-carbon economy. We carefully consider the group's input as we continue to develop our programs.

Participants varied depending on the topic, and included NGO representatives with substantial expertise in and influence on environmental and social issues. For example, World Wildlife Fund, Electronics TakeBack Coalition, Forum for the Future, CSR Asia and the Interfaith Center on Corporate Responsibility were among the more than 20 NGOs that participated in our TAN in 2009 along with numerous industry analysts, academics and business leaders from other Fortune 500 companies.

PERSPECTIVES

Throughout this report, we include perspectives from external stakeholders to provide independent insights on various aspects of global citizenship, including in some cases HP's performance. These are listed below.

Climate and energy

Amory B. Lovins
Chairman and chief scientist
Rocky Mountain Institute

Sustainable design

Lauren Heine, PhD
Science director
Clean Production Action

Ethics and compliance

Keith T. Darcy
Executive director
Ethics and Compliance Officer Association

Supply chain responsibility

Richard M. Locke
Deputy Dean, Sloan School of Management

Alvin J. Siteman (1948) Professor of Entrepreneurship
Professor of Political Science
Massachusetts Institute of Technology

Human rights

Professor John Ruggie
Special representative of the UN secretary-general for business and human rights

Privacy

Martin E. Abrams
Senior policy advisor and executive director
Centre for Information Policy Leadership
Hunton & Williams

Social innovation

Sean C. Rush
President and CEO
JA Worldwide

COMMITMENT

AFFILIATIONS AND MEMBERSHIPS

We belong to many organizations that address global citizenship issues:

BUSINESS FOR SOCIAL RESPONSIBILITY (BSR), a global nonprofit organization that helps member companies enhance business performance while respecting ethical values, people, communities and the environment

BUSINESS LEADERS INITIATIVE ON HUMAN RIGHTS (BLIHR), a program to help lead and develop the corporate response to human rights

CENTER FOR CORPORATE CITIZENSHIP AT BOSTON COLLEGE, a membership-based research organization associated with the Carroll School of Management, which is committed to helping a business leverage its social, economic and human assets to ensure both its success and a more just and sustainable world

CLIMATE SAVERS COMPUTING INITIATIVE (CSCI), a nonprofit organization committed to reducing carbon dioxide emissions through the development and deployment of smart technologies to improve efficiency and reduce the amount of energy a computer consumes

CLINTON GLOBAL INITIATIVE (CGI), which convenes global leaders to devise and implement innovative solutions to some of the world's most pressing challenges

COMBAT CLIMATE CHANGE (3C), a business leaders' initiative to support the negotiation process led by the United Nations Framework Convention on Climate Change to establish a new global agreement

CSR ASIA, which builds capacity in companies and their supply chains to promote awareness of CSR in order to advance sustainable development across the region

CSR EUROPE, a business membership network that promotes the business case for corporate social responsibility

ELECTRONIC INDUSTRY CITIZENSHIP COALITION (EICC), a group of companies working together to create a comprehensive set of tools and methods that support credible implementation of the Code of Conduct throughout the Electronics and Information and Communications Technology (ICT) supply chain

eSKILLS INDUSTRY LEADERSHIP BOARD (ILB), which is set to lead the ICT sector's contribution to the development and implementation of a long term e-skills and digital literacy agenda in Europe

ETHICS & COMPLIANCE OFFICER ASSOCIATION, a non-consulting, member-driven association exclusively for individuals who are responsible for their organization's ethics, compliance, and business conduct programs

ETHOS INSTITUTE, a leading Brazilian CSR organization to mobilize, encourage and help companies manage their business in a socially responsible way

EUROPEAN ACADEMY OF BUSINESS IN SOCIETY (EABIS), a unique alliance of companies, business schools and academic institutions that is, with the support of the European Commission, committed to integrating business in society issues into the heart of business theory and practice in Europe

GLOBAL e-SUSTAINABILITY INITIATIVE (GESI), which fosters global and open cooperation, informs the public of its members' voluntary actions to improve their sustainability performance, and promotes technologies that foster sustainable development

GLOBAL FOREST TRADE NETWORK (GFTN), the World Wildlife Fund's (WWF) initiative to eliminate illegal logging and improve the management of valuable and threatened forests

GLOBAL REPORTING INITIATIVE (GRI), a networked-based organization committed to transparency and accountability in reporting through use of the world's most widely adopted sustainability reporting framework

MEXICAN CENTER FOR PHILANTHROPY (CEMEFI), whose mission is to foster and enhance a culture of philanthropy and social responsibility in Mexico

NATIONAL ASSOCIATION FOR ENVIRONMENTAL MANAGEMENT (NAEM), a non-profit, non-partisan educational association dedicated to advancing the knowledge and practice of Environmental, Health & Safety (EHS) management

PAPER WORKING GROUP, a collaboration between 10 leading companies and Metafore, a nonprofit organization, to make environmentally preferable paper products more widely available and affordable

PEW CENTER ON GLOBAL CLIMATE CHANGE, a nonprofit organization that brings together business leaders, policy makers, scientists and other experts to bring a new approach to the complex issue of climate change while sustaining economic growth

SOCIAL ACCOUNTABILITY INTERNATIONAL (SAI), whose mission is to promote human rights for workers around the world

COMMITMENT

SUSTAINABILITY ENGAGING STAKEHOLDERS, a program which provides a unique forum on corporate accountability, reporting, disclosure, and stakeholder engagement

UNITED NATIONS GLOBAL COMPACT, a voluntary and strategic policy initiative for businesses that are committed to aligning their operations and strategies with ten universally accepted principles in the areas of human rights, labour, environment and anti-corruption. HP became a participant in 2002

THE GREEN GRID ASSOCIATION, a global consortium of IT companies and professionals seeking to improve energy efficiency in data centers and unite industry efforts to develop a common set of metrics, processes, methods and new technologies

THE INTERNATIONAL CLIMATE CHANGE PARTNERSHIP (ICCP), a global membership-based coalition of companies committed to constructive and responsible participation in the international policy process concerning global climate change

WORLD ECONOMIC FORUM, an independent international organization committed to improving the state of the world by engaging leaders in partnerships to shape global, regional and industry agendas

WWF CLIMATE SAVERS, the World Wildlife Fund's initiative to mobilize companies to cut carbon dioxide by voluntarily reducing greenhouse gas emissions

COMMITMENT

CUSTOMERS

Enterprises, governmental agencies and consumers often consider global citizenship when choosing information technology (IT) products, solutions and services. To help them make informed decisions, HP provides information and resources to evaluate our performance in areas such as the environment, supply chain management and privacy. We believe this commitment to outreach, education and transparency gives HP a competitive advantage.

Enterprise customers

An increasing number of enterprise customers include criteria related to global citizenship in their procurement policies, requiring IT suppliers to demonstrate how they are reducing their carbon footprint, for example, or how they ensure ethical treatment of workers in their supply chain. As this report details, HP is a leader in these and other areas, which provides us an edge in winning business.

Large organizations are also giving preference to suppliers that can help them improve their own global citizenship performance. With the breadth of HP's portfolio and expertise, we work with customers to address complex and challenging issues related to global citizenship, such as reducing the energy to run their data centers, responsibly recycling old IT equipment or securing data to protect the privacy of customers, employees and partners.

Our free, online HP Carbon Footprint Calculator helps customers understand and identify ways to reduce the environmental impact of their computing and printing. Enterprise customers can use the tool to build a baseline estimate of their HP products' carbon footprint. This is just one of the ways HP is helping customers understand their own environmental performance and supporting the transformation to a low-carbon economy.

HP's Enterprise Innovation as a Service takes these capabilities one step further. It offers customers and organizations access to innovation support services, tools and expertise to help them accelerate progress to achieve successful outcomes across a spectrum of business issues, including environmental sustainability and corporate responsibility. For example, the HP Global Innovation Network is a web-based portal that brings together ideas, inventions, products, capabilities and solutions from HP, its partners, and the industry, so HP, globally, can respond more effectively to customers' business challenges.

Governmental agencies

Governmental policies and priorities related to global citizenship are having a direct impact on accessing and competing in numerous markets. Public sector buyers worldwide consider a number of criteria in procurement, including the environment, and privacy and data security. For example, the European Commission strongly recommends that its members increase green public procurement, and urges each country to set targets and outline concrete steps for meeting them.[1]

In the United States, the Federal Acquisition Regulation (FAR) sets procurement policy for all federal agencies, and specifies that the government acquire supplies and services that promote energy and water efficiency, advance the use of renewable energy products, and help foster markets for emerging technologies. In 2009, FAR was updated to require use of the Electronic Product Environmental Assessment Tool (EPEAT) when purchasing personal computer products such as desktops, laptops, and monitors.[2] HP has the broadest portfolio of EPEAT Gold-rated products in the industry, which is the highest level of certification achievable.

Ensuring diversity among our suppliers is also a critical requirement, particularly for fulfilling contracts with federal and many state agencies in the United States. HP has maintained a Corporate Supplier Diversity Program Office for more than 30 years in the United States and belongs to more than 20 supplier diversity organizations in the United States, Canada and Europe. We continued to expand our supplier diversity programs in 2009, and estimate that approximately $10 billion worth of business required HP to demonstrate supplier diversity last year.

Consumers

Consumers are increasingly attuned to a broad spectrum of global citizenship issues, including the environment, human rights and labor practices, privacy and philanthropy.

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[1] EUROPA, EU Commission on the environnent: http://ec.europa.eu/environment/gpp/index_en.htm.

[2] U.S. Environmental Protection Agency: http://www.epa.gov/epp/pubs/guidance/far.htm.

COMMITMENT

For example, according to survey results from The Carbon Trust Standard, two-thirds of U.K. consumers said that it is important to buy from environmentally responsible companies.[3] Studies in the United States and other countries yielded similar findings, even during the global recession. Yet research also indicates a lack of consensus among consumers about what it means to be environmentally sustainable, and which measures are most important and effective.

HP continues to educate consumers about ways they can be more sustainable as well as our progress in reducing our own environmental impact. For example, we introduced the HP Eco Highlights label in 2008, helping customers easily identify and understand the environmental attributes of a specific HP product, tool or service. The HP Eco Highlights label is available on more than 215 HP products. In addition, HP offers many products that meet eco-label programs, including EPEAT, ENERGY STAR®, China's Energy Conservation Program, Germany's Blue Angel and Japan's Green Mark.

HP also increases consumer awareness of environmental issues through specific initiatives. For example, our global "Power to Change" campaign highlighted how individuals can increase energy efficiency by making simple changes in using technology and taking advantage of power management features of HP products. The campaign featured a free downloadable widget that tracks the cumulative energy savings associated with participants powering down idle PCs.

In Brazil, HP teamed with Akatu Institute, a nonprofit organization that educates and mobilizes citizens about environmental responsibility, on a program called "Conscious Choice" that raised approximately $560,000. HP promoted products that help consumers reduce their environmental impact and donated a portion of the sales to the Akatu Institute. Proceeds were used to develop and distribute materials to 2,000 schools in Brazil to raise awareness of conscious consumption and environmental sustainability.

These educational initiatives are in addition to our efforts to improve the environmental performance of HP products through our Design for Environment (DfE) program. For example, HP has set a goal to help customers save 1 billion kWh of electricity by 2011, relative to 2008, through a variety of product design strategies in HP's high-volume HP desktop and notebook PC families. Through efforts such as these, HP is working to make it easier for consumers to choose products that help them reduce their environmental impact.

Our efforts to educate consumers about global citizenship go beyond environmental sustainability. In 2009 we also introduced Create Change, a program encouraging customers to select one of several partner nonprofit organizations to receive 4 percent of their purchase of HP products from HP Direct, HP's U.S. home/home office online store. Create Change allows customers to display support for select organizations using digital badges and social media alerts. Piloted in the United States, Create Change reached more than 40,000 people and generated $50,000 in donations to nonprofit organizations.

Insight and education

We continue to deepen our understanding of global citizenship issues that matter most to our customers. In 2009, we did this by:

- Monitoring and evaluating customer inquiries on global citizenship issues, including requests for proposals (RFPs) from public sector and enterprise customers as well as inquiries from consumers (see table on the next page)

- Engaging with industry analysts who advise enterprise customers on their purchasing decisions

- Analyzing results from public opinion surveys as well as syndicated and customized research

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[3] The Carbon Trust Standard, "Green Expectations: Consumers Still want to Buy Green, but Expect Evidence of Action," March 12, 2009,
See: http://www.carbontrust.co.uk/news/news/press-centre/2009/Pages/green-expectations.aspx.

COMMITMENT

Customer environmental requirements in requests for proposals (RFPs), 2006–2009[*]

	2006	2007	2008	2009
Product recycling	25%	19%	28%	46%
Eco-labels and declarations	30%	18%	41%	13%
Product design	26%	28%	42%	24%
Environmental management	19%	24%	34%	20%
Materials use	27%	33%	25%	14%
Supplies	5%	8%	10%	9%
Packaging	5%	3%	8%	8%

[*] Based on reported data for RFPs with environmental questions. Does not include RFPs for which environmental questions were addressed directly by customers or our sales force.

COMMITMENT

INVESTORS

Mainstream as well as socially responsible investors (SRI) are placing greater emphasis on global citizenship, as evidenced by the growing number of indices, such as the FTSE4Good Index and the Dow Jones Sustainability Index, that track performance of companies against corporate responsibility and sustainability measures.

This increasing emphasis is shaping how companies monitor and disclose performance across a range of issues related to global citizenship. For example, in 2009 over 50 major investment firms and professionals joined the Social Investment Forum, a nonprofit dedicated to advancing the practice and growth of socially responsible investing, in calling on the U.S. Securities and Exchange Commission to require publicly traded companies to report annually on a range of environmental, social and corporate governance matters.[1]

Worldwide, SRIs comprise an increasingly significant proportion of the investment community. For example, in three years the number of signatories to the Principles for Responsible Investment, an investor partnership with the United Nations Environment Programme Finance Initiative and the UN Global Compact, has grown from 50 to over 500, representing $18 trillion in assets and 36 countries.[2] While much of the focus of SRI is on mitigating risk, such as by avoiding excessive polluters, there is growing momentum behind investing in companies well-positioned to thrive in an economy that increasingly values sustainable business practices.

Accordingly, providing information about our global citizenship performance"such as how we are reducing our carbon footprint, responsibly managing our supply chain and developing innovations to accelerate the shift to a low-carbon global economy"demonstrates that HP is a strong long-term investment, supporting our stock value and increasing access to capital.

Analysts from SRI firms and other investment-focused organizations provide important feedback on HP's performance. HP ranked highly with SRI analysts, media and other organizations in 2009, as outlined below.

ORGANIZATION	RANKING OR RATING
CARBON DISCLOSURE PROJECT	The CDP chose HP as part of the CDP Carbon Disclosure Leadership Index for both the Global 500 and the S&P 500 rankings in 2009.
CORPORATE KNIGHTS INC. AND INNOVEST STRATEGIC VALUE ADVISORS—100 MOST SUSTAINABLE COMPANIES 2009	HP was listed as one of the 100 most sustainable corporations for the fifth year by Corporate Knights Inc. and Innovest Strategic Value Advisors.
COVALENCE	HP was ranked ninth for Best EthicalQuote Score in the technology hardware sector in the Covalence Ethical Ranking 2009. Across all sectors, HP was ranked 39th for Best Ethical Score.
DOW JONES SUSTAINABILITY INDEX (DJSI)	HP received top score in the computer hardware sector in 2009. HP has been on the DJSI for seven consecutive years, achieving top scores for the last three years.
FTSE4GOOD	HP is included in all four FTSE4Good indices for the seventh consecutive year.

(table continued)

[1] Letter to the U.S. Securities and Exchange Commission, Social Investment Forum, July 21, 2009. http://www.socialinvest.org/documents/ESG_Letter_to_SEC.pdf
[2] Annual Report of the PRI Initiative, Principles for Responsible Investment, 2009.

COMMITMENT

ORGANIZATION	RANKING OR RATING
KLD RESEARCH & ANALYTICS, INC.	HP is a member of eight indices tracked by KLD Research & Analytics, Inc., including the Domini 400 Social Index (DS400) and Global Sustainability Index (GSI).
NEWSWEEK GREEN RANKINGS	HP was ranked first in Newsweek's 2009 Green Rankings of America's 500 largest corporations.
OEKOM RESEARCH	HP is rated as "Prime," which indicates that it is among the world's best companies in the IT industry and fulfills the sector-specific minimum requirements defined by Oekom Research.

COMMITMENT

TIMELINE

1939
- HP founded

1940
- HP records its first charitable donation: $5 to local charities

1955
- Matching gift program started for cash donations by employees to four-year colleges and universities. HP matched employee amount up to $2,000 per year, per school

1957
- Citizenship objective established by William Hewlett and David Packard

1959
- Bill Hewlett and local community business and labor leaders create the Santa Clara County United Fund

1961
- HP Core Values established

1976
- HP starts company-sponsored vanpool program

1979
- Launch of HP Standards of Business Conduct
- The Hewlett-Packard Company Foundation is founded

1987
- Product recycling launched internally

1991
- HP Planet Partners LaserJet print cartridge return and recycling program started

COMMITMENT

1992
- Launch of Design for Environment program

1993
- First environmental report published
- Domestic partner benefits introduced

1994
- First packaging management system created
- Telecommuting policies are formalized, making HP one of the first companies worldwide to encourage telecommuting

1995
- Employee Privacy Policy updated

1997
- HP Planet Partners inkjet print cartridge return and recycling program launched

1998
- First online privacy statement published

1999
- Accessibility Program Office created
- Better Business Bureau OnLine's Privacy Seal Program initiated, with HP as a founding sponsor

2000
- Accessibility Policy published
- e-inclusion program launched
- First Digital Village founded in East Palo Alto, CA

2001
- HP self-certified to EU Safe Harbor Privacy Principles

COMMITMENT

2002
- First combined HP Social and Environmental Responsibility Report published
- Supply Chain Code of Conduct released
- UN Global Compact endorsed

2003
- Master Privacy Policy published
- HP recycled plastic included in first hardware product
- Supply Chain Social and Environmental Responsibility (SER) program rolled out
- Global Citizenship Policy and Human Rights and Labor Policy adopted

2004
- Electronic Industry Code of Conduct (EICC) co-developed by HP
- First nationwide in-store electronics recycling pilot program in the United States offered with Office Depot
- Business Leaders Initiative on Human Rights (BLIHR) joined

2005
- Fifty-four suppliers at 85 sites audited in Latin America, Asia and Europe
- e-inclusion and education projects conducted in more than 40 countries across six continents

COMMITMENT

2006

- International climate change initiative launched with the conservation organization World Wildlife Fund (WWF)
- Two capability building projects started for suppliers, in China and Central Europe

2007

- HP Stakeholder Advisory Council launched
- Disclosed a comprehensive list of HP suppliers
- Comprehensive climate change strategy introduced

- PVC eliminated from HP packaging
- Privacy accountability model introduced

2008

- Greenhouse gas (GHG) emissions reported for largest suppliers representing more than 80% of the company's costs for the materials, manufacturing and assembly of its products worldwide

- HP Environmentally Preferable Paper Policy launched
- $46.2 million in cash and products contributed to social investment projects around the world

COMMITMENT

2009

- HP Trusted Advisory Network (TAN) launched, replacing Stakeholder Advisory Council (SAC)
- HP SkyRoom launched, extending HP's advanced video collaboration technology to our workstations and PCs and potentially decreasing customer GHG emissions due to avoided business travel
- Health Enables Returns health training program for female workers in supplier factories successfully completed in Mexico and expanded to three sites in China

- GHG emissions from operations reduced 10% in absolute terms from 2008 to 2009
- HP Compaq 8000f Elite Business Desktop PC launched, the first Windows based Desktop PC in the industry to be free of brominated flame retardants (BFRs) and polyvinyl chloride (PVC) from the wall to the mouse for every configuration sold[1]
- 112,000 tonnes of electronic products and supplies recovered for recycling, and 30,000 tonnes of hardware recovered for reuse and remarketing

- A cumulative 60% of suppliers by total spend reached with capability-building initiatives
- Expanded supply chain social and environmental responsibility (SER) program beyond production suppliers to engage and assess 55 high-priority nonproduction suppliers
- Approximately $52.2 million in cash, technology and services contributed to social innovation programs worldwide

Select HP goals for 2010

- Remove all mercury from HP's entire notebook line by the end of 2010
- Reuse 450 million pounds (200,000 tonnes) of electronics products by the end of 2010 (since 2003)
- Recycle 2 billion pounds (900,000 tonnes) of electronics products and supplies by the end of 2010 (since 1987)

Select HP goals for 2011

- Save customers 1 billion kWh of electricity through a variety of product design strategies in HP's high-volume HP desktop and notebook PC families,[2] relative to 2008
- Use a cumulative 100 million pounds (45,000 tonnes) of recycled plastic in our printing products (with a 2007 baseline)

Select HP goals for 2012

- Suppliers representing 75% of high risk production spend will report on key performance indicators

Select HP goals for 2013

- HP will reduce the greenhouse gas emissions from HP-owned and HP-leased facilities by 20% under 2005 levels by the end of 2013 on an absolute basis[3]

COMMITMENT

GLOBAL CITIZENSHIP POLICIES

See links in the report online.

Accessibility

• HP Accessibility Policy

Business ethics

• HP Standards of Business Conduct

Corporate governance

• Corporate Governance Guidelines

Diversity

• HP Nondiscrimination Policy
• HP Harassment-free Work Environment Policy

Environment

• Environment, Health and Safety Policy
• Environmentally Preferable Paper Policy
• Hardware Recycling Standards
• Printing Supplies Recycling Policy
• Paper Use

Global citizenship

• HP Global Citizenship Policy

Human rights

• HP Human Rights and Labor Policy

Labor practices

• HP Best Work Environment Policy
• HP Open Door Policy
• HP's Open Door Policy commits us to create a workplace where everyone's voice is heard, issues are promptly raised and resolved, and communication flows across all levels of the company.
• Personnel Policies and Guidelines (PPG)
• PPG cover staffing, work hour requirements, privacy, political activities, diversity, harassment, drug policy, compensation, benefits, time off, training and development, employee services, security, termination, etc. The PPG is not publicly available.

Privacy

• HP Global Master Privacy Policy

Products

• HP General Specification for the Environment

Supply chain

• HP Supply Chain Social and Environmental Responsibility Policy
• Electronic Industry Code of Conduct

COMMITMENT

GLOBAL ISSUES

Buildings designed to be energy and resource efficient. A more affordable, effective healthcare system. Education that makes the most of technology to prepare students to succeed in today's world. HP is helping our customers respond to these opportunities. Explore some of the global issues we believe are key to the long-term prosperity and sustainability of individuals, business and society.

See the report online at: www.hp.com/go/globalcitizenship

HARNESSING THE INFORMATION EXPLOSION

The information explosion now underway is closely linked to dramatic demographic changes worldwide. The earth's population will grow to eight billion by 2025, with increasing numbers migrating to cities, especially in developing countries. As expanding middle classes increase demands on resources, from energy and water to education and healthcare, information technology (IT) is transforming systems and services to meet the needs of generations to come.

IT can create efficiencies that vastly improve healthcare and education systems and make them more accessible. Smart meters make energy grids more efficient, and radio frequency identification systems improve logistics by tracking items at every stage of their journey. An Internet connection gives anyone the ability to access, distribute or share content, speeding the distribution of information, making it easier to organize and giving voice to ordinary people.

The volume of digital information that exists is staggering—500 billion gigabytes, equivalent to a stack of books stretching to Pluto and back ten times—but it is poised to grow much larger quickly. Just 20 percent of the world's people is online today, according to IDC. As more people gain access to mobile devices and the Internet, tap into cloud services and digitize their lives, we're at risk of being overwhelmed by data. If left unmanaged, such vast volumes of information are largely meaningless, and require storage on an enormous scale.

LiveBI

When well managed, however, digital information becomes a key to well-informed decisions and improved productivity. For example, HP Labs is working on a solution called Live Business Intelligence (BI), a unified data and analytics platform. By allowing much more powerful and sophisticated analysis of highly complex data in real time, Live BI will yield insights for transforming operational processes and customer interactions.

BRAIN

HP Labs has also developed BRAIN (Behaviorally Robust Aggregation of Information), a method of more accurately predicting behavior and improving forecasts. Powerful algorithms analyze people's past choices, assess their attitude toward risk and predict future actions. SwissCom, Switzerland's leading telecom service provider, uses BRAIN to predict which new wireless services mobile phone users will adopt. Over a nine-month period, BRAIN forecasts were an average of 27 percent closer to the actual result than standard polling. Pharmaceutical giant Pfizer is piloting BRAIN to assess which drugs in clinical trials will be approved and generate revenue, which in turn helps the company decide where to focus its marketing budget. See more about BRAIN in the report online.

GLOBAL ISSUES

CeNSE

Another innovation in harnessing information is underway at HP Labs, which is developing networks of billions (and eventually trillions) of highly sensitive nanoscale sensors. These highly attuned sensors can detect minute environmental changes by mimicking human senses. Known as Central Nervous System for the Earth (CeNSE), the technology will provide real-time and archived intelligence on environmental, biological and structural changes worldwide. This information, in turn, can be used to help optimize infrastructure and even prevent disasters from occurring (see Tech gallery and the HP Labs website).

Privacy

But these advances in gathering, analyzing and applying information are accompanied by challenges. Just as the Industrial Revolution gave rise to new protections of labor rights, child workers, and health and safety, the information explosion is driving new measures to protect personal privacy and data security.

According to IDC, one-third of digital information contains personal or proprietary information, a percentage forecast to grow to 45 percent by 2012.[1] As organizations gather and use sensitive information from customers, employees and other stakeholder, it increases the risk of privacy violations. Unauthorized access to data can lead to fraud, identity theft and

security threats. And personal data stored on laptops and disks is at risk from hardware loss or theft.

HP is leading the way in developing policies, systems, products and services to protect privacy and keep personal data secure. Our approach is based on accountability. We create a chain of custody for all the information we handle, ensuring someone is responsible for keeping it secure at all times. HP is also deeply involved in the development of public policy in this field, as new legal frameworks become necessary to deal with problems never before encountered.

In addition, we offer solutions to help customers protect their privacy and their data, ranging from secure outsourced data processing solutions to computing products with full disk encryption. HP product designers integrate information safeguards into all new offerings, consistent with our companywide privacy standard for product and service development. Learn more about our approach in the Privacy section.

The information explosion will only accelerate. To keep up, companies must change the way they do business. HP is providing industry leadership by addressing emerging risks to privacy while developing new solutions to more effectively gather, apply and manage data. From enterprise-level information management innovations spearheaded by HP Labs to smart design in consumer products, HP is helping customers safely realize the full benefits of the information explosion.

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[1] Source: As the Economy Grows, the Digital Universe Expands. A multimedia white paper by IDC, May 2009. Sponsored by EMC. See: http://www.emc.com/collateral/demos/microsites/idc-digital-universe/iview.htm

GLOBAL ISSUES

CHANGING THE ENERGY EQUATION

The world's demand for energy has soared as growing prosperity has transformed lives around the globe. Consumption grew by more than a third between 1990 and 2006, and is forecast to increase an additional 44 percent by 2030[1]. As energy use has risen, global greenhouse gas (GHG) emissions have gone up as well.

While the information technology (IT) industry accounts for only 2 percent of GHG emissions worldwide, it has the potential to help mitigate the other 98 percent. Innovative technologies can pave the way to more sustainable economic growth by measuring consumption, driving greater efficiency in using resources and displacing energy-intensive processes altogether.

Transparency

You can't manage what you can't measure. And that's a problem when it comes to reducing energy consumption and shrinking the global carbon footprint.

HP has developed sophisticated tools for managing power usage and measuring carbon emissions. For example, the Advanced Meter Infrastructure solution for utilities monitors energy consumption in real-time, helping producers and customers anticipate and more efficiently meet demand. Energy producers such as Hydro One, Gas Natural and Sempra Energy are already using HP products, services and consulting in their smart metering initiatives.

We also help businesses and consumers better measure energy and emissions with our online Carbon Footprint Calculator for printers and PCs. (See Tech gallery.) For a more comprehensive view, our Carbon Impact Assessment Service takes into account the energy use and associated emissions of an entire IT environment.

Efficiency

Understanding how much energy you're using is the first step. The next is increasing the efficiency of systems to use less.

At HP, we're committed to ongoing innovation that makes IT more efficient. That's why we're focused on increasing the energy efficiency of our products and services, as well as working closely with our suppliers to help them reduce their carbon footprint.

For example, Instant-on Technology for printers virtually eliminates warm-up time cutting a printer's energy use by up to 50 percent. HP estimates that for HP monochrome LaserJet products alone, Instant-on Technology helped customers avoid 1.3 million tonnes of CO_2e emissions in 2009, equivalent to removing more than 240,000 cars from the road for one year. Simply measuring energy use can also go a long way to increase IT's efficiency. For example, HP Power Assistant, available on some HP desktop PCs, reports on your PC's energy consumption in real time, giving users an estimate of what running their PC costs—in dollars, kilowatt hours and even carbon emissions. Users can then tap HP Power Assistant to optimize their PC's settings, such as by reducing screen brightness and turning off wireless features.

Beyond printers and PCs, HP is also dramatically increasing the efficiency of power-hungry data centers.

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[1] "International Energy Outlook 2009," U.S. Energy Information Administration. May 27, 2009.

GLOBAL ISSUES

The energy used by data centers doubled between 2000 and 2006—and was forecast to double again by 2011.[1] As a result, data centers worldwide now account for more GHG emissions than the nations of Argentina and the Netherlands combined.[2]

In response, HP is designing data centers to be substantially more efficient and to use local, renewable energy resources. For example, the facility we're completing in Wynyard, UK, saves energy by using the cold North Sea air to cool the equipment, and sensors to ensure lights are only on when needed. Already recognized for design excellence, Wynyard is expected to achieve a 40 percent reduction in energy consumption compared with existing data centers of its size.

We're also developing more energy-efficient server hardware. For example, "skinless" server trays are 31 percent lighter than standard servers, and are so efficient that a 9,300-square-meter data center built entirely with this architecture would save enough energy to power over 4,600 average U.S. households. That's $4.1 million in savings annually; the material saved is equivalent to 4.3 Boeing 747s (760 metric tonnes).

IT can help make processes more efficient in every industry. For example, buildings are the largest users of energy in the developed world and better information can enable real-time optimization of heating, cooling and other systems that use energy.[3] Similarly, IT can help farmers save water, fertilizer and energy by supplying intelligence about weather, soil moisture and other growing conditions.

Transformation

Beyond increased efficiency, the ultimate goal is to replace energy- and material- intensive processes—or entire business models—just as digital music distribution is quickly replacing the physical products and processes that industry has relied on for decades.

For example, HP Halo solutions already save energy and GHG emissions by replacing travel with video collaboration. One round trip from New York to London generates about 1,250 kg (2,750 pounds) of carbon dioxide per person. Imagine the positive impact on the environment as increasing numbers of people meet via Halo instead of traveling around the globe for meetings. We have recently adapted Halo

technology to create SkyRoom, now available on our Workstation PCs, eliminating the need for a dedicated conference room. (See Tech gallery.)

Other HP applications save energy by conserving paper. Traditional printing methods are wasteful. Up to 25 percent of traditionally produced book stock is unsold.[4] In the United States, 2.3 billion magazines sent to newsstands in 2007 were never read. All that paper, as well as the energy used to produce it and print the publications, is wasted. Digital printing, using HP products such as Indigo presses, minimizes overruns, reducing wasted energy. MagCloud, an HP web-based service, allows anyone to produce professional-quality magazines on demand. (See Tech gallery.)

And HP is leveraging breakthroughs in photonics that use light to transmit data, dramatically reducing energy consumption while increasing bandwidth. We're starting to implement this technology in our blade servers; the next step is to use the same technology for intra-chip communication. In addition to saving energy while in use, photonics will reduce the need for copper, which translates to less energy used in mining and smelting copper and less waste from those processes.

These innovations present HP and its customers exciting opportunities to decrease energy use. But a larger effort is required—across the industry, businesses and government agencies—to fully capitalize on these advancements. The goal is nothing less than a transformation in the way we use energy.

HP sees cities redesigned with energy as the organizing principle, materials measured in terms of their total energy cost, and power and other services dynamically provisioned. We see a world where networks of billions of embedded sensors act as a "Central Nervous System for the Earth" to dynamically distribute energy in real time. HP Labs is working on technology that could help make this a reality with CeNSE, a highly intelligent network of billions and eventually trillions of nano-scale sensors that could continually monitor and communicate masses of information, so data can be analyzed and acted upon quickly. (See Tech gallery.)

Information will be the most precious resource in the 21st century. We must harness it to use energy more efficiently. In a world where demands and supplies often don't match up, technology can help create a more sustainable global society.

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[1] "EPA Report to Congress on Server and Data Center Energy Efficiency," U.S. EPA, August 2, 2007.

[2] "Revolutionizing Data Center Energy Efficiency," McKinsey & Company, July 2008.

[3] World Business Council for Sustainable Development.

[4] "Findings from the U.S. Book Industry: Environmental Trends and Climate Impacts," page 31. Book Industry Study Group and Green Press Initiative, 2008.

CHANGING THE HEALTHCARE EQUATION

n recent decades, information technology (IT) has transformed business processes in almost every sector, making products and services more available, efficient and cost effective. Healthcare systems worldwide have yet to take full advantage of information technology. Systems for healthcare administration tend to be outdated, with manual processes for storing and updating patient records and different clinics or providers keeping duplicate records. Already strained by the increasing number of patients and escalating operational costs, healthcare budgets are further burdened by inefficient administration that diverts spending from treatment, reducing the availability and quality of care. The system's inefficiencies are in sharp contrast to the cutting-edge technologies used to prevent, diagnose and treat illness.

These challenges will become more pronounced as expanding, aging populations increase demand for healthcare, and changing lifestyles make conditions such as diabetes and heart disease more prevalent. Information technology offers promising solutions.

It can help improve people's health by increasing the quality and affordability of care and by advancing medical research. HP Enterprise Services has unrivalled experience in this area.

Increasing affordability

According to a Rand Corporation study, efficiencies gained through IT can reduce healthcare expenditures by between 10 and 15 percent in the United States. Technology can automate day-to-day processes and reduce the number and length of tasks required, cutting administration costs and freeing up money for patient care.

To ease the burden on strained healthcare organizations, HP offers technology services and solutions, including extensive business intelligence and decision support services. For example, HP is building a disease surveillance system for the State of Hawaii and providing extensive data management services to the Canadian provinces of British Columbia, Newfoundland and Labrador.

Managing and processing health insurance claims more efficiently also saves time and money and improves service, helping more people access treatment. HP is a leading provider of IT services for payer organizations, including the National Health Service in the United Kingdom, the U.S. federal Medicare program and U.S. Medicaid, the state health program for people with low incomes. Although partly funded by the federal government, each state administers Medicaid individually. HP works with 32 states, including 22 Medicaid programs; our systems handle about one billion claims and administer approximately $100 billion in benefits each year.

By making these administrative processes more efficient, HP systems make it easier to extend healthcare to those in need. In Arkansas, HP set up a system that helps women more easily access Arkansas BreastCare, a breast and cervical health program, by using an automated enrollment system to determine program eligibility instantly over the telephone. Enroll-

ment has increased fourfold, and 17,000 uninsured and underinsured women have benefited from early detection and treatment.

Improving quality

IT can reduce mistakes by ensuring healthcare professionals receive the information they need to provide the best treatment. Electronic Medical Records (ERM) represent one solution. According to an Institute of Medicine report, medical errors cause up to 98,000 deaths each year in the United States. Replacing manual processes with electronic medical records and innovative uses of technology can increase access (through lower costs) and save lives.

As a leading technology provider for private and public health organizations, HP is currently setting new standards in efficiency by enabling electronic records, health information exchanges, wireless solutions and other innovations that improve both productivity and quality of care. Lowering data capture and entry costs, improving data quality, and increasing information sharing help healthcare providers better manage the overall health of patients.

Increasing patient safety in hospitals and ambulatory facilities relies heavily on capturing and analyzing raw data, and sharing that information alongside recommended solutions. In collaboration with other organizations, HP helps providers set up reporting systems capable of collecting information regarding serious events (those involving actual harm) and incidents (near misses). The findings from these reports can then be used to prevent future occurrences.

The HP Patient ID solution uses printer technology to produce ID wristbands that include bar codes, enabling healthcare professionals to review a patient's vital information, including consent forms and lab results, while a nurse can connect instantly to the pharmacy system to verify a match between patients and their medication. Another HP technology application tracks the location and use of infusion pumps for administering fluids, ensuring the right pump is in the correct ward and allowing clinicians to spend less time managing equipment and more time with patients.

While these are just a few examples to demonstrate progress, HP's broader vision is of fully connected digital hospitals, where integrated systems provide healthcare workers fast and secure access to all the information they need, when and where they need it. Such a system promises to increase productivity, make better use of medical equipment, shorten treatment times, and improve patient outcomes.

To help realize this vision, HP partners with leading global providers, including GE Healthcare and local organizations, to ensure the most effective delivery of solutions. In Norway, for example, we are working with local telecommunication company Telenor and others to bring the latest information technology to St. Olav's Hospital. The new hospital runs on a converged IP network that delivers all data, voice and video services as well as provides interconnectivity with medical devices and building control systems, delivering the right information to the right people at the right time—wherever they are. Healthcare workers use handheld devices to access patient information and order medication and tests, and each bed is equipped with a computer screen that keeps patients informed.

In another case, a hospital hopes that by going digital it will become one of the most patient-oriented and cost-effective hospitals in Norway, expecting to reduce operating costs by at least 20 percent while enhancing service and treatment methods. HP is helping them become one of Europe's technically most advanced hospitals by outfitting them with a high-performance digital network, security infrastructure, teleconference and video conference systems, as well as desktop computing and printing facilities.

Advancing treatment

IT is also helping to expand the boundaries of medical knowledge and treatment by aiding scientists in deepening their understanding of disease, how treatments work and how different patients respond. This knowledge will enable personalized healthcare, which will in turn improve clinical outcomes and cost effectiveness.

IT systems can capture and analyze complex data sets such as genetic sequences, and streamline how biological samples such as blood, urine and tissue are analyzed and recorded. This has helped the M.D. Anderson Cancer Center in Texas cut the time required to analyze data used in cancer treatment from 20 minutes to 20 seconds. Improving clinical trial data collection and analysis helps drug companies bring new medicines to market more quickly and benefit patients sooner.

HP recognizes that moving healthcare administration into the digital age also brings new challenges. Patient records must remain secure, and we support regulatory and industry measures to ensure this. Read more about HP's approach to privacy in the essay Harnessing the Information Explosion and in the Privacy section of this report.

Modernizing healthcare systems is a high priority for healthcare organizations, governments and insurers,

and IT offers the most effective way to get there. HP has made substantial progress in this area, but much more work remains. Health record management is more complex than many tasks that we routinely perform electronically, such as some basic financial transactions. The consequences of system failure are also exceptionally high. When properly implemented by an experienced provider, however, IT offers an extraordinary opportunity to dramatically improve the efficiency, quality and affordability of care, and create a healthier society.

CHANGING THE EDUCATION EQUATION

Education goes hand-in-hand with economic development. The prosperity of communities and nations depends on having individuals with the talent and skills to participate and compete in the knowledge economy. A highly educated workforce has the power to drive innovation, raise productivity and stimulate growth. Take for example the economy of South Korea, where over a period of 35 years a tenfold increase in university attendance coincided with dramatic growth in gross domestic income (GDI).[1]

At HP, we believe we can fuel economic development and well-being by applying technology to broaden education's reach and transform its impact. We're harnessing technology in new ways to extend education to more people, making it more relevant, immersive and open.

Relevant to today—and vital to tomorrow

The common model for education is outdated, failing to adapt to how the world has fundamentally changed. Today, technology is ubiquitous in our lives. It is embedded into our everyday tasks, from balancing our bank account online to sharing photos. Information has exploded—news sites, blogs and social media sites are readily available as educational resources. Yet many teachers lack the training to effectively integrate technology into the classroom, leaving students unprepared to compete in today's global economy.

What students need most are the skills to use technology to find, synthesize and apply information efficiently in solving problems and creating opportunities. To meet this requirement, classrooms must be as technologically integrated as the world around us. Making technology a seamless part of the educational experience helps students master 21st century skills as well as other core competencies, such as critical thinking and collaboration.

Building these skills is especially important in economically disadvantaged areas such as North Kansas City, Missouri, where the poverty rate is 40 percent. In an effort to break the cycle of poverty, the school district there is distributing 6,000 HP always-connected Mini PCs to its students, giving inner-city youth opportunities to build skills they will need in the workforce: using multimedia tools, conducting online research, using PCs to complete project-based lessons and using e-mail and other technology tools to communicate with teachers and other students.

In addition, technology can make education more relevant to more people. For example, at the Hope Technology School teachers are using HP TouchSmart PCs to connect with students who have developmental differences. By using the HP Voice Note program, students can record themselves and play the files back with a simple touch of the screen. This method is particularly helpful with students who have difficulty speaking because it reinforces language skills and motivates them to speak more. Students can also use their voice notes to communicate with classmates

[1] Moyer, E.J., "An Educated View of Universities," Research Africa, March 20, 2007, p. 20.

GLOBAL ISSUES

and teachers and more fully engage in the learning experience. Technology is allowing them to learn in a way that's tailored to their needs.

Immersive and engaging learning

It's a simple equation: When students are immersed in a subject and deeply engaged, they learn more. This is a key advantage of technology, as it can bring education to life in a way that the blackboard never could.

Consider the Mid Valley Elementary School in Oregon, where only 62 percent of third to fifth graders met state math standards in 2007. Using a 2008 grant from HP, the school employed HP tablet PCs and other mobile technologies to facilitate project- and activity- based learning. In addition, the school's teachers received professional development to more effectively integrate technology into their lesson plans and instruction. With this new approach, the overall performance on state math standards increased by 15 percentage points. The success with students speaking limited English was even higher, increasing from 50 to 86 percent, and the number of special education students meeting state standards tripled.

The Universidad EAFIT, located in MedellÍn, Colombia, offers another example of how technology can more deeply engage students. With an HP Innovations in Education grant, this elite academic institution has put technology at the core of the learning experience. Mobile technologies such as HP tablet PCs and iPAQs let students take the classroom wherever they go. They use blogs, e-mail and instant messaging to collaborate with each other, interact with their professors and share insights.

Technology is not only helping these university students learn the basics, but also apply what they're learning in ways that work best for them. It's an immersive, interactive experience, and a more effective way to prepare students to succeed beyond traditional classroom boundaries.

Making education open to all

To drive economic development worldwide, we must make education available to everyone. Technology is the key. It is a potent force for education equity, capable of freeing learning from traditional limitations and opening educational opportunity to more people in more places.

Extending educational opportunities is especially important in places where schools are few and far between. More than 80 percent of the world's population lives in developing countries where access to schools is not guaranteed. In response, HP has teamed up with the Happy Hearts Fund to use technology to connect students in the Czech Republic, Indonesia, Sri Lanka, Thailand and Vietnam to educational resources. By equipping classrooms with HP PCs and wireless connectivity, students who ordinarily wouldn't have access to a computer are conducting research online and using videoconferencing to collaborate with others around the world.

Technology can also make skills-based training more easily available to those outside of the educational system, such as young entrepreneurs. In partnership with the Micro- Enterprise Acceleration Institute (MEA-I) and the United Nations Industrial Development Organization, HP supports the Graduate Entrepreneurship Training through IT (GET- IT) program, which helps 16- to 25-year-olds begin careers and launch new businesses. For example, when the Government of Ebonyi State, Nigeria, granted 25 young entrepreneurs micro-credits to start their own agricultural enterprises, GET-IT stepped in to provide training in essential business skills, including using technology for marketing and communications.

One of those entrepreneurs, Rachel Odii, was able to successfully establish her own farm business, Bridge Farms. Of her GET-IT experience, she said, "The GET-IT program has given me the potential to showcase my work to the world and has shown me how to improve my productivity. Through GET-IT I have learned how to use the Internet as a window to see what others are doing, how products are being utilized and how best to modify. We are now digital farmers."

Aspiring entrepreneurs can enroll at one of 100 GET-IT centers in Africa, Europe, and the Middle East. Others can access online training courses through www.get-it-city.net, an HP-sponsored portal that offers interactive resources and tools to facilitate self-directed learning.

Technology can also contribute to economic development in emerging regions by stemming the loss of their best and brightest minds. An estimated 70,000 highly qualified people—skilled professionals, scientists, academics and researchers— leave Africa every year to seek out greater opportunities in their fields. Collaboration between HP and the United Nations

Educational, Scientific and Cultural Organization (UNESCO) is turning this "brain drain" into a "brain gain" by allowing university faculty to engage in real-time scientific collaboration from their home countries through grid and cloud computing.

For example, Cheikh Anta Diop University in Senegal is using their access to the European Grid (EGEE) infrastructure to tap into computing power and storage capacity. Now, their scholars can collaborate with colleagues worldwide and engage in cutting-edge projects without having to leave their home countries. Since the pilot project launched in 2006, the program has connected 20 higher education institutions throughout the Middle East and Africa.

Generation 2020

This is just the beginning. Advances in technology are transforming education for Generation 2020—giving the ninth grader who may someday work at a company like HP the technology skills she will need, or the African scholar the technology tools he will use to invent a breakthrough in science or engineering. Innovations from HP are raising the bar of educational achievement and helping more people, communities and nations participate and prosper in the knowledge economy.

GLOBAL ISSUES

CHANGING THE SUPPLY CHAIN EQUATION

HP is the world's largest information technology (IT) company and has the industry's most extensive supply chain—with more than 700 production suppliers working in more than 1,200 locations worldwide and employing more than 300,000 people. We embrace the challenge of raising standards in our supply chain and have been driving social and environmental responsibility (SER) progress for ten years. The insight we have gained helps us to continue to make improvements in our global production network even as we continue to uncover new challenges.

Raising standards through collaboration

When we founded our program in 2000, we designed it to be collaborative and to promote continual improvement in supplier facilities. Working with industry and community groups and other stakeholders helps us widen and strengthen our influence. Early in our program, we co-led the development of the Electronic Industry Code of Conduct (EICC), the standard which is now applied across the industry's global supply chain and which HP has adopted.

Based on this code of conduct, our work with suppliers follows a four-phase process. In phase one, we assess suppliers' risks and establish a contractual framework for SER performance expectations. In phase two, HP's suppliers conduct self assessments that help them to understand, prioritize and address specific risks. Higher-risk suppliers move into a third phase of validation and improvement through onsite

audits. In the fourth phase, we address needs for supplier capability building and education and implement regionally based programs designed for continual improvement.

HP has engaged more than 600 suppliers in this process and conducted over 500 supplier site audits since 2000. Since then, suppliers' performance has improved and the number of nonconformances seen in our earlier audits has decreased in many areas.

Engaging locally and regionally for long-term success

Improving supply chain standards is an ongoing process, and collaboration is vital to our program's success. While assessing conformance is essential, our goal is long-lasting change. To achieve this we have found it important to go beyond assessment and actively support suppliers in developing their labor, health and safety, environmental, and ethics management capabilities.

HP provides the level and types of support appropriate for each region's specific needs within our supply chain. We invest in supplier training, often in collaboration with local nongovernmental organizations (NGOs) and industry partners.

Engaging locally ensures our programs address the area's key challenges and concerns raised by audit results, while strengthening our relationships. For example, in 2009 we concluded a two-year project with local training providers and the Hong

GLOBAL ISSUES

Kong–based labor rights organization Students and Scholars against Corporate Misbehaviour to conduct programs in two supplier factories in China. The pilot program, which included labor rights training for workers, was the first of its kind in the IT industry. The program trained more than 4,000 workers, as well as dozens of workers' representatives, and tested the feasibility of a third-party hotline for workers to raise their concerns.

Another example is the Health Enables Returns project (HERproject). HP joined the HER project in 2008 in Mexico, initiating a health training program at two supplier factories. The program helps female workers meet their health needs by improving their awareness and access to services through partnerships between companies, factories and local nonprofit service organizations. Training involves health assessments of female workers followed by peer health educator training. Supplier management has responded positively as well, satisfied by the positive impact on health, workplace satisfaction, and turnover generated by the program without disrupting production.

We continue to adapt and implement similar programs where they are needed in different regions.

Promoting transparency in the supply chain

We believe that transparency gains trust, which improves the effectiveness of our supply chain work. We provide global and regional summaries of our audit findings as well as detail of our supplier capability building programs in our Global Citizenship Report.

In 2007 we were also the first in our sector to publish the names of our suppliers and we continue to do so. This remains an industry-leading practice.

Addressing new challenges in materials sourcing

We continue to face new challenges in our supply chain and are committed to addressing them. For example, a number of stakeholders have alerted us to reported human rights violations associated with trade in minerals from conflict regions of The Democratic Republic of Congo (DRC). The minerals are ores of gold, tantalum, tin and tungsten, metals used in components commonly found in electronics products. While all four metals are used by many other industries and are also sourced from regions other than the DRC, HP considers it unacceptable that the sourcing of metals eventually incorporated into our products could be contributing to armed conflict.

Although these issues are far removed from HP, typically five or more tiers from our direct suppliers, we have a shared responsibility to address them. At this time, there is no certification mechanism that can assure us that the metals used in our products are not sourced from mineral trade associated with the conflict in the DRC. HP is working alongside companies in other industries to drive the creation of such a mechanism. We believe that it is our responsibility to create awareness and encourage accountability in our supply chain and we will continue to do so until a defined certification process is established.

As we continue to develop our supply chain SER program to achieve lasting results in our supply base, we remain committed to the open and collaborative process we established ten years ago.

GLOBAL ISSUES

ENVIRONMENT

HP's strives to be the world's most environmentally responsible IT company. Over the past year, we continued to make big strides in improving the performance of our products and services, operations and our global supply chain. We also helped consumers, businesses and the public sector save energy, conserve resources and responsibly recycle IT equipment. Learn more about our progress—and see how we're helping accelerate the shift to a low-carbon economy.

See the report online at: www.hp.com/go/globalcitizenship

ENVIRONMENTAL SUSTAINABILITY

"The success of HP's business requires our commitment to environmental sustainability. In a world being reshaped by climate change, volatile energy prices and growing scarcity of natural resources, we are designing our products and services to be energy efficient, use fewer materials and be more easily recyclable. Sustainable design minimizes environmental impact across the entire life cycle while helping our customers reduce costs, create efficiencies and increase productivity."

—VYOMESH JOSHI, EXECUTIVE VICE PRESIDENT OF THE IMAGING AND PRINTING GROUP

Climate and energy

We continually work to save energy in our operations and in how our products are manufactured, transported and used. The IT industry is responsible for just 2 percent of the world's greenhouse gas (GHG) emissions, but has a big opportunity to help reduce the other 98 percent. HP invests considerable talent, technology and resources to develop solutions for the wider economy that will reduce energy use, such as HP Halo and HP SkyRoom which can decrease the need for business travel. We often collaborate with other organizations to meet these objectives—as in our work with the conservation organization World Wildlife Fund (WWF) to advance research on the impacts of climate change and promote thought leadership on the emerging low-carbon economy.

See our Changing the energy equation issue essay to learn more.

Sustainable design

HP offers a wide portfolio of innovative products, services and solutions that help reduce the environmental footprint of businesses and consumers alike. For example, our HP Compaq 8000f Elite Business PC is the first Windows-based desktop PC in the industry to be free of brominated flame retardants (BFRs) and polyvinyl chloride (PVC)[1] from the wall to the mouse for every configuration sold. This means that all internal and external PC components, including the keyboard, mouse and power supply are BFR/PVC-free.[1]

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[1] HP Compaq 8000f Elite USDT Business PC is brominated flame retardant and polyvinyl chloride-free (BFR/PVC-free), meeting the evolving definition of 'BFR/PVC-free' as set forth in the "iNEMI Position Statement on the 'Definition of Low-Halogen' Electronics (BFR/CFR/PVC-Free)'". Plastic parts contain < 1000 ppm (0.1%) of bromine [if the Br source is from BFRs] and < 1000 ppm (0.1%) of chlorine [if the Cl source is from CFRs or PVC or PVC copolymers]. All printed circuit board (PCB) and substrate laminates contain bromine/chlorine total < 1500 ppm (.15%) with a maximum chlorine of 900 ppm (.09%) and maximum bromine being 900 ppm (.09%).

The HP Deskjet D2600 uses 30 percent less energy than the previous model and is made from 50 percent recycled plastic. It uses HP 60 ink cartridges, which themselves are made from up to 70 percent recycled plastic captured from the HP "closed loop" inkjet recycling process, an industry first and only, and other sources such as recycled plastic water bottles.

In 2009, we exceeded our goal to triple the amount of recycled materials used in our inkjet printers relative to 2007, originally targeted for 2010. In 2009, we set a new goal to use a cumulative 45,000 tonnes (100 million pounds) of recycled plastic in our printing products by 2011.

See our Tech gallery for more examples.

Suppliers

Through our long-standing supply chain social and environmental responsibility program, we work with our suppliers to ensure they adhere to high standards and strive to reduce their environmental impacts. (See Supply chain responsibility for detail.) We received responses on energy use and GHG emissions in product manufacturing during 2008 (the most recent data available) from suppliers representing 86 percent of our material and manufacturing spend (up from 81 percent for 2007). Aggregate carbon dioxide equivalent (CO_2e) emissions were 4.1 million metric tonnes, which is roughly two and a half times the emissions from our own operations. See Product manufacturing to learn more.

HP operations

In addition to making our global operations more energy efficient, which helps to reduce GHG emissions, we are also decreasing the volume of resources we use and limiting the waste we produce. In 2009, we diverted 88.8 percent of our waste from landfill, exceeding our target of 87 percent.

Product reuse and recycling

We launched our first recycling program in 1987, and we remain committed to increasing the volume of our products recovered. HP now operates product recycling services in 56 countries or territories worldwide. In 2009, we recovered for reuse 3.6 million hardware units weighing 30,000 tonnes and recycled 118,000 tonnes.

[1] The average energy consumption of HP products is estimated using high volume product lines representative of the overall shipped product volume. Energy consumption has been estimated in 2005 and annually since. The high volume product lines include notebook and desktop computers, inkjet and HP LaserJet printers, and industry-standard servers.

CLIMATE AND ENERGY

Climate change presents significant environmental, social and economic challenges and opportunities for HP, our customers and society. We are working within our own business and with others to reduce energy use and greenhouse gas[1] (GHG) emissions from product manufacture, transport and use. The IT industry is responsible for about 2 percent of global GHG emissions. But our products and services offer great potential to help reduce energy use and emissions throughout the global economy—the other 98 percent. This represents significant opportunities for HP and our customers.

Effectively responding to climate change requires a broad coalition spanning governments, industries, nongovernmental organizations (NGOs) and individuals worldwide. To that end, HP is collaborating with organizations such as Worldwide Wildlife Fund (WWF) to demonstrate business leadership in addressing climate change, advance industry standards for energy efficiency and reduce GHG emissions throughout the economy.

HP was actively engaged in the international climate policy process throughout 2009, including:

- Signing the 2009 Copenhagen Communiqué on Climate Change, which called for a strong and effective UN climate framework

- Supporting the Climate Group's Climate Week event in New York in September

- Participating in the Governor's Global Climate Summit in Los Angeles in October to show support for leadership from sub-national government leaders from around the world

HIGHLIGHTS

20%
our new goal for cutting the energy use and GHG emissions from our operations by 2013, compared to 2005

1 BILLION kWh
the amount of electricity we aim to save customers by 2011 through a variety of product design strategies in HP's high-volume HP desktop and notebook PC families, relative to 2008

40%
expected improvement in energy efficiency compared to the average data center in our new facility in Wynyard, UK

[1] Throughout this report, "greenhouse gas" or "GHG" refers to all greenhouse gases emitted by human activities, and "CO_2e" refers to "carbon dioxide equivalent," the unit used to measure greenhouse gases. CO_2 is the main, but not the only, man-made greenhouse gas.

ENVIRONMENT

- Contributing to an IDC special report offering recommendations to policy makers on how information and communications technology (ICT) investments can contribute to achieving climate change goals

- Attending the COP15 UN climate conference in Copenhagen in December, to demonstrate our support for international action and advocate for the potential of IT and innovation to help the transition to a low-carbon economy.

Strategy

Our climate strategy involves harnessing the power of IT to drive greater efficiency across the global economy. The key is applying IT to transform energy-intensive and carbon-heavy processes to become more:

- Transparent—developing technologies that make energy consumption more visible throughout the economy, and transparently reporting on the performance and goals of our own supply chain, operations and products

- Efficient—making IT more efficient, from devices to data centers, and applying IT to enable automatic provision of energy, water and other resources

- Transformational—replacing energy- and carbon-intensive processes with inherently lighter-footprint digital alternatives, from business travel to business models

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PROGRESS IN 2009

See our summary table of GHG emissions related to HP's business on the next page.

Operations

- We launched the Global Workplace Initiative, a major project to reduce the space we occupy and use resources more efficiently, thus reducing HP's climate impact.

- New data centers in Texas and the UK use innovative design features to excel in energy efficiency.

- We introduced a new goal to reduce the GHG emissions from HP-owned and HP-leased facilities to 20% below 2005 levels by 2013 on an absolute basis.

Products, services, software

- A new goal commits us to reduce the energy consumption of our products by 40 percent by 2011, compared with 2005.

- HP Auto-on/Auto-off technology helps customers save energy by putting the printer into a mode that uses less than one watt of power.

- HP Critical Facilities Services provides consulting, design and assurance services to design and build next generation facilities as well as upgrade and modernize current data centers so they are both energy- and space-efficient.

- Other HP software and service solutions help customers save energy by analyzing energy use, identifying inefficiencies and dynamically adjusting data center equipment.

Low-carbon economy

- We are providing the computing and data management technologies necessary to enable smart electricity grids.

- We are applying IT to create energy-intelligent devices and systems in sectors ranging from agriculture to oil.

- In 2009, we extended HP's advanced video collaboration technology to our workstations and PCs with the SkyRoom product, which allows up to four people to meet virtually, sitting at their desks using a standard business network.

(table continued)

ENVIRONMENT

Collaboration

- We worked with other companies to advance energy efficiency in IT products and the utilities sector, and GHG emissions reporting in supply chains.

- HP continued to encourage legislative action on energy and climate policies to improve energy efficiency and reduce GHG emissions throughout the global economy.

Greenhouse gas emissions related to HP's business, 2009

CATEGORY	2009 EMISSIONS [tonnes CO_2e]	LEVEL OF INFLUENCE*	OUR ACTIONS
HP operations	1,951,000	High	We manage our facilities and data centers to reduce energy consumption.
HP employee business travel	365,800	High	Our travel policies and telepresence solutions reduce business travel.
Product manufacturing	4,100,000**	Medium	We work with our first-tier suppliers to report and reduce their energy use.
Product transport	1,700,000	Medium	We optimize distribution networks and convert to lower-energy transport modes where appropriate, but we do not control shipping operations.
Product use	Roughly an order of magnitude more than emissions from product transport	Medium	We design products and offer services to use less energy.
Product recycling (CO_2e avoided)***	210,000	Medium	We offer customers a range of reuse and recycling services.

* Refers to the level of influence HP has on this category of emissions.

** 2008 is the most recent year for which this data is available.

*** According to the U.S. Environmental Protection Agency's Waste Reduction Model (WARM) Tool, CO_2e reductions from recycling are calculated per the following formula: 1.858 kg CO_2e/kg recovered electronic waste.

See Climate and energy – Operations for a discussion of GHG emissions by scope.[1]

[1] The World Resources Institute (WRI) defines Scope 1, 2 and 3 greenhouse gas emissions in its Greenhouse Gas Protocol.

ENVIRONMENT

OPERATIONS

HP is committed to reducing its climate impact by continually making its global operations more energy efficient and seeking low-carbon energy sources where possible. In 2009 we launched the Global Workplace Initiative, a major effort to cut costs and decrease our greenhouse gas (GHG) emissions by improving our use of space, installing more efficient equipment and increasing our purchases of renewable energy. Our target is to cut absolute GHG emissions to 20 percent below 2005 levels by 2013.

Due to our integration of EDS in 2009, we have reset our baseline and goals for energy use and GHG emissions to embrace the additional 465 sites and a large number of additional employees. In 2009, our global GHG emissions from operations[1] equaled 1,951,000 tonnes carbon dioxide equivalent, a decrease of 10 percent compared with the combined total for HP and EDS in 2008.

Scope of this section

- Data are based on HP's fiscal year (ending October 31, 2009).

- In this section we report HP's scope 1, 2 and 3 GHG emissions[2] arising from HP's facilities, automotive and air fleet, and employee business

travel. Scope 1 emissions include those from the direct use of natural gas, diesel, refrigerants and PFCs at operations, and from fuel used by HP's automotive and air fleet. Scope 2 emissions are from purchased electricity. Scope 3 emissions result from employee business travel by commercial airlines and rental cars. In other sections, we also report estimated scope 3 emissions from product manufacturing, product transport and product recycling (which has a net benefit).[3]

- In 2009, HP collected data from 414 sites (including all manufacturing sites and our largest office, warehouse, data center and distribution sites). This accounted for 83 percent of our total floor space of approximately 7.3 million square meters. We extrapolated data from comparable facilities, primarily leased small office space, for the remaining 17 percent of floor space, unless stated otherwise.

- We continue to refine the process by which we collect data and calculate trends. Gathering and extrapolating data quarterly instead of annually will more accurately reflect changes in our operations.

- See a list of major operations in the report online.

ENERGY USE

Energy use accounts for 98 percent of the greenhouse gas (GHG) emissions generated by our operations and represents one of the largest costs of operating our facilities. The remaining 2 percent of our GHG emissions is generated by refrigeration equipment and HP manufacturing processes. We report GHG emissions from employee business travel separately in Business travel.

We estimate emissions from product manufacturing and product transport, as well as the emissions benefit related to product recycling. Although these are

not under our direct control, we do have programs in place to reduce them.

We strive to reduce our energy consumption, to decrease GHG emissions and costs. We have now brought 465 former EDS sites into our energy-efficiency program and are implementing the Global Workplace Initiative at these locations. These facilities are also acting on efficiency recommendations made in a 2008 study by the Rocky Mountain Institute, a nongovernmental organization. These sites represented about 28 percent of our total energy use in 2009.

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[1] Energy use in HP-owned and leased facilities accounts for 98 percent of the greenhouse gas (GHG) emissions generated by our operations. The remaining 2 percent of our GHG emissions from operations is generated by refrigeration equipment and HP manufacturing processes.

[2] The World Resources Institute (WRI) defines scope 1, 2 and 3 greenhouse gas emissions in its Greenhouse Gas Protocol.

[3] According to the U.S. Environmental Protection Agency's Waste Reduction Model (WARM) Tool, CO_2e reductions from recycling are calculated per the following formula: 1.858 kg CO_2e / kg recovered electronic waste.

ENVIRONMENT

Following the integration of EDS, we have re-established a 2005 baseline for our emissions reduction target to include former EDS sites and all other acquisitions that have occurred since 2005. Our new baseline is 2,273,800 tonnes carbon dioxide equivalent. Our new goal is to reduce GHG emissions from HP-owned and HP-leased facilities to 20 percent below 2005 levels by 2013, in absolute terms.

This GHG emissions goal replaces our previous goal to reduce energy consumption and the resulting GHG emissions from HP-owned and HP-leased facilities worldwide to 16 percent below 2005, by 2010. We had already decreased the energy used in HP operations by more than 9 percent through 2008, so following the acquisition of EDS we set an interim target to reduce energy consumption in our facilities by 7 percent (the remaining percentage in the goal) below 2008 levels by the end of 2010. We decreased energy consumption 9 percent in 2009 compared with 2008, capitalizing on opportunities for real estate consolidation and energy efficiency due to the acquisition. We are working to ensure we maintain these gains through 2010. (See Performance below for more information.)

Improving workplace energy efficiency

In 2009 we launched a major effort to further improve the energy efficiency of HP operations. The Global Workplace Initiative builds on our earlier efforts to improve real estate efficiency. Following the integration of EDS, HP now owns and leases 46 percent more space than a year ago, providing us with fresh opportunities to improve efficiency.

Under the initiative we are streamlining our operations to use fewer sites, more efficiently. We are consolidating our operational locations to core sites and adapting buildings to support a higher density and more mobile workforce. Main activities include:

- Installing more energy-efficient technology in offices, research labs and data centers

- Increasing flexible workspace and decommissioning surplus office space

- Consolidating data centers into fewer, more efficient sites

- Using recycled and recyclable materials in construction, and including sustainable design features in new buildings

In 2009, we completed projects and operational changes that we expect will deliver savings of more than 66 million kWh of electricity in 2010. We invested $5 million in initiatives such as implementing lighting retrofits in parking garages and office spaces, and installing fluorescent lights, motion sensors and other energy-saving technology across our operations.

We also introduced Power to Change, an effort that challenges HP employees to save energy in offices and conference rooms by turning off lights and equipment at their desk at the end of the day, and shutting off lights and projectors when conference rooms are no longer needed. Employees can use a dedicated website to record their involvement and share ideas. Read more about Power to Change.

All legacy HP buildings in the UK (not including former EDS sites) meet the Carbon Trust Standard, a certification that recognizes businesses that reduce their carbon footprint and commit to further annual cuts.

Data center consolidation

HP operates over 150 client-facing data centers worldwide, in addition to our six internal data centers located in three cities in the United States. These meet the data storage needs of our enterprise customers and our own internal IT activities.

Before the integration of EDS, we completed a three-year program (from 2005 to 2008) to consolidate 85 HP internal IT data centers into just six locations in three U.S. cities: Atlanta, Austin and Houston. Consolidation helped us to reduce costs, eliminate older technologies and improve service levels, while decreasing environmental impact. We achieved a 40 percent reduction in servers, while delivering a significant increase in processing power. Overall, by 2009 the project cut our internal IT data centers' energy consumption by 60 percent from 2005 levels.

The six data centers are expandable to more than double their existing area, enabling us to accommodate future growth without building new centers. One of them, near Houston, is expected to achieve the LEED® Gold standard for sustainable building design. We also consolidated computer rooms at HP's R&D campus in Cupertino, California, into a single large room, reducing GHG emissions by 3,900 tonnes of CO_2e each year. In 2009, HP received an award from the State of California recognizing the improvements in efficiency at Cupertino.

HP Enterprise Services is now reviewing its data center capacity and in 2010 will produce a multi-year plan to reduce the number of internal and customer-facing facilities it operates worldwide. It is committed to modernizing its data centers, improving their energy efficiency and extending their useful lives.

ENVIRONMENT

DATA CENTER ENERGY EFFICIENCY, WHATEVER THE WEATHER

Best-practice data center efficiency is exhibited at two HP Enterprise Services data centers in very different environments: inland Oklahoma, United States, and coastal northern England, UK.

In December 2008 we completed a 17-month project to expand and upgrade our Tulsa, Oklahoma, data center. The facility is designed to be energy efficient in temperatures that range from below freezing in winter to over 100°F in summer. It has a highly reflective roof, technology to prevent hot air from entering cooled areas and a specially designed cooling system. The efficiency measures built into the design provide the data center a power usageeffectiveness (PUE)[1] rating of 1.35, ranking it among the top 10 percent of all data centers in the United States for energy efficiency.[2] We also focused on reducing the data center's carbon footprint during its construction.

HP's Wynyard data center in the UK, which opened in February 2010, is one of the largest and most energy-efficient data centers in Europe. It is cooled using ambient air, which is often cold in that part of the country, nearly year-round. Its features include technology to humidify, cool and re-circulate air as necessary to maintain constant conditions, white walls to reduce the amount of lighting needed, and a reflective roof to minimize heat absorption. Chillers are available for use on hot days. The Wynyard design has achieved a PUE rating of 1.2, 40 percent better than the industry average. This will save HP an estimated $4 million per year. Rainwater is collected in storage tanks for use in landscaping, non-potable water use in the building, and the humidification process. The innovative design has already achieved a BREEAM certification of "Excellent" and won Data Center Dynamics' Green Data Center award in December 2008.

Rocky Mountain Institute (RMI) collaborated with HP on conceptual design of the Wynyard data center. A three-day 'charrette'—an intensive, transdisciplinary design workshop with an ambitious deliverable—convened a wide range of HP stakeholders and experts with external designers and advisors. This approach tested, refined, validated and integrated innovative ideas of HP staff and the wider data-center design community. Iterative collaboration revealed that a radically efficient data center design was not only possible, but cost-effective and deliverable on the already tight timeline.

RMI has worked similarly with scores of diverse firms to identify creative ways to couple improved energy and environmental performance with attractive economics. HP's participants brought to the design table deep knowledge and a pragmatic attitude. Their open-minded collaboration drove the charrette's recommendations to completion of a working, high-performing data center that's now inspiring new business models.

–AMORY B. LOVINS, CHAIRMAN AND CHIEF SCIENTIST, ROCKY MOUNTAIN INSTITUTE

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[1] Power usage effectiveness is the accepted measure of data center energy efficiency.
[2] Using data provided to the U.S. Environmental Protection Agency during the recent Energy Star survey.

ENVIRONMENT

Renewable energy

HP purchased approximately 131 million kWh of renewable energy worldwide in 2009. Voluntary renewable energy purchases (including credits and energy generated on-site) represented 3.6 percent of HP's electricity use in 2009, in addition to the renewable energy available by default in the power grid. This is a 30 percent increase over the amount purchased in 2008.[1] Our goal remains to achieve 8 percent of voluntary purchases of electricity from renewable sources by 2012.

To meet this goal, we are exploring opportunities with providers of wind and solar power, participating in green energy programs and securing renewable energy. For example:

We have contracted an energy provider in Texas to supply one of our Austin data centers with 19 million kWh of wind power annually for 20 years, equivalent to 20 percent of that center's current energy needs.

In 2009 we met 50 percent of our Irish operations' energy needs using wind power.

SunPower Corporation generates solar energy at HP's San Diego facility, using 6,256 solar panels. The panels produce 1.7 million kWh per year, meeting over 10 percent of the facility's energy needs and reducing CO_2e emissions by more than 550 tonnes. We have committed to buy this energy from Sun-Power for 15 years, saving over $750,000 in total. As part of the initiative, HP and SunPower offered HP employees discounted solar panels for their homes. More than 88 employees and retirees have had the panels installed as a result.

We approved two new solar energy projects. In Grenoble, France, HP will be able to claim the carbon credits generated by a 175,000 kWh per year project that feeds the electricity grid. In Kyriat-Gat, Israel, an 81,000 kWh per year project will help power the HP Indigo digital press facility.

Our new 35,000-square-meter data center near Houston will feature an on-site photovoltaic solar power system that will generate nearly 280,000 kWh of electricity annually. (Read more about this data center's sustainable design.)

To meet the remainder of our renewable energy goal, we also purchase renewable energy credits (RECs) as part of our electricity contracts in the United States. To decrease our emissions further, we source large hydroelectric energy contracts in Belgium, Italy and the UK.

See detail about renewable energy purchasing in the Data and Goals section.

Performance

In 2009, we decreased our total energy use by 9 percent compared with 2008 (including former EDS sites). This included an 8 percent reduction in electricity use and a 16 percent decrease in natural gas consumption. This was due to two main factors:

- A decrease of 9 percent in square footage, largely due to the integration of EDS after the acquisition in 2008

- Success in numerous energy-reduction initiatives (see above)

Energy use, 2005–2009 [million kWh][1]*
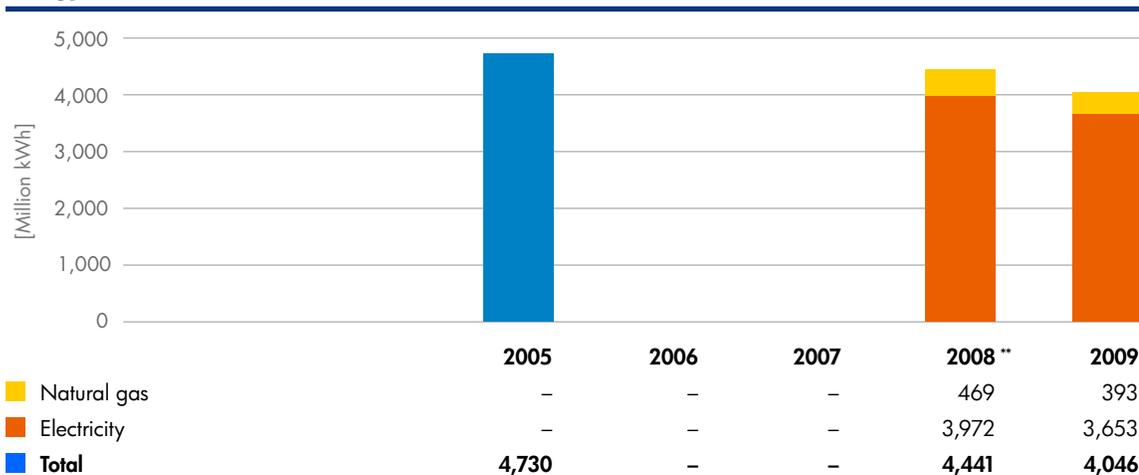
	2005	2006	2007	2008 **	2009
Natural gas	–	–	–	469	393
Electricity	–	–	–	3,972	3,653
Total	**4,730**	**–**	**–**	**4,441**	**4,046**

* Data for 2005 reflect the reset baseline including EDS and other acquisitions since 2005. Data for 2008 and 2009 include EDS and all other acquisitions. Revised calculations for 2006 and 2007 were not performed.

** EDS data for 2008 have been modified compared with data previously reported to exclude customer-owned and operated facilities.

[1] After publication of the 2008 Global Citizenship Report, we recalculated this number when comprehensive data from acquired EDS sites was available. The correct figure is 2.5 percent of total energy purchased and not 4 percent as originally stated.

ENVIRONMENT

GREENHOUSE GAS EMISSIONS

We are committed to becoming more energy efficient across our business to reduce our total operational carbon footprint. In 2009, following integration of EDS, we set a new goal to reduce our absolute energy consumption and the resulting greenhouse gas (GHG) emissions from HP-owned and HP-leased facilities worldwide to 20 percent below 2005 levels, by the end of 2013.

We calculate our GHG emissions according to the GHG Protocol of the World Business Council for Sustainable Development and the World Resources Institute.[1] GHG emissions from HP employee business travel are reported here. We estimate emissions from product manufacturing, product transport, and product recycling (which has a net benefit).[2] Although these are not under our direct control, we have programs to reduce them.

Performance

We reduced global GHG emissions from operations (not including employee business travel) by 214,500 tonnes of CO_2e in 2009 compared with 2008, a 10 percent decrease. This was due to several main factors related to energy use:

- A decrease of 9 percent in square footage, largely due to the integration of EDS after the acquisition in 2008

- Success in numerous energy-reduction initiatives (See Energy use.)

- An increase in renewable energy purchases from 2.5% to 3.6% of total electricity purchases

- Purchases of other large hydroelectric energy contracts in several countries in Europe

Greenhouse gas emissions, 2005–2009 [tonnes CO_2e]*
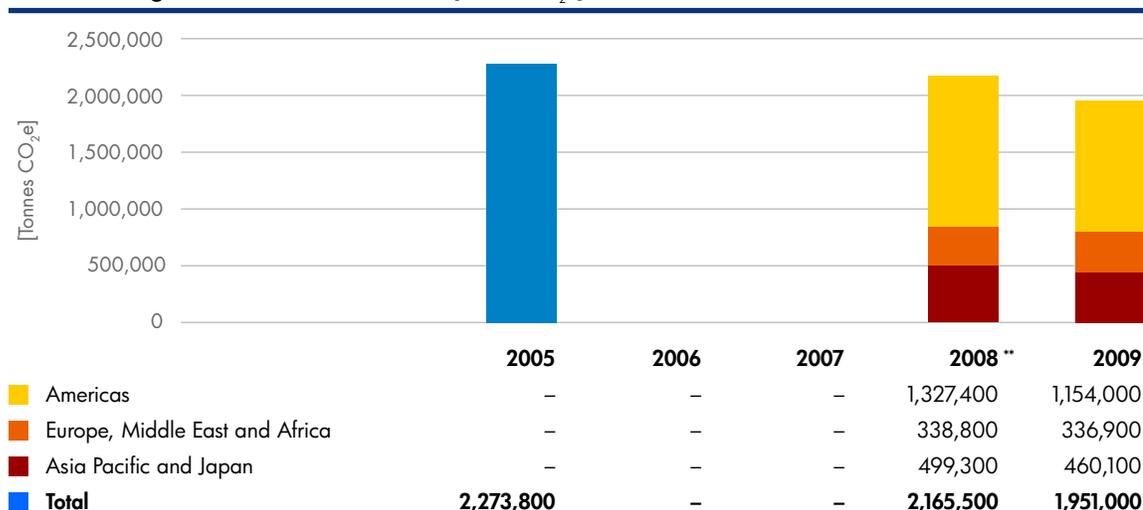
	2005	2006	2007	2008 **	2009
🟨 Americas	–	–	–	1,327,400	1,154,000
🟧 Europe, Middle East and Africa	–	–	–	338,800	336,900
🟥 Asia Pacific and Japan	–	–	–	499,300	460,100
🟦 **Total**	**2,273,800**	**–**	**–**	**2,165,500**	**1,951,000**

* Data for 2005 reflect the reset baseline including EDS and other acquisitions since 2005. Data for 2008 and 2009 include EDS and all other acquisitions. Revised calculations for 2006 and 2007 were not performed.

**EDS data for 2008 have been modified compared with data previously reported to exclude customer-owned and operated facilities.

[1] The World Resources Institute (WRI) defines Scope 1, 2 and 3 greenhouse gas emissions in its Greenhouse Gas Protocol.

[2] According to the U.S. Environmental Protection Agency's Waste Reduction Model (WARM) Tool, CO_2e reductions from recycling are calculated per the following formula: 1.858 kg CO_2e / kg recovered electronic waste.

ENVIRONMENT

The sources of GHG emissions from HP operations in 2009 were as follows:

Electricity	93%
Natural gas	4%
Refrigerant emissions	2%
Diesel	1%
Manufacturing emissions	<1%

See the regional breakdown of GHG emissions per square meter in the Data and Goals section.

Perfluorocarbons

Perfluorocarbons (PFCs) are gases used widely in the semiconductor industry for cleaning and etching. The global warming potential of PFCs ranges from 6,500 to 23,900 times greater than that of CO_2.

HP's PFC emissions from operations[1] accounted for less than 1 percent of our total GHG emissions in 2009. In the United States, we participate in the EPA-SIA PFC Emission Reduction Partnership to reduce specified PFC emissions by 10 percent from 1995 levels by the end of 2010.

We achieved our target worldwide in 2006 through process improvements and emissions abatement, and have continued to reduce PFC emissions to less than 3,700 tonnes CO_2e in 2009. This represents an 88 percent reduction (over 23,000 tonnes) from the 1995 baseline, including a reduction of 74 percent (over 8,500 tonnes) between 2008 and 2009. The recent reduction is due primarily to scaling back semiconductor fabrication operations.

See the breakdown by type of PFC in the Data and Goals section.

REPORTING AND VERIFICATION

"In summary, I felt that HP management was very committed to providing accurate climate change reporting data. On the basis of our examination of the documentation to support the baseline adjustments to HP's global GHG report, we conclude that the information is reasonably complete and accurate in all respects.

–CAROL OSGOOD, AUDITOR, BUREAU VERITAS CERTIFICATION

We record and verify our greenhouse gas (GHG) emissions data to help us manage our performance over time. We publicly report annual GHG emissions from HP-owned and HP-leased facilities worldwide.

In addition to our internal review, we commission independent auditor Bureau Veritas Certification to verify our GHG emissions measurements and annual reporting under the GHG measurement and reporting protocols of the World Resources Institute and World Economic Forum (WEF). Bureau Veritas Certification also verified the approach and calculation of our 2008 California GHG emissions.[2] See details regarding the CCAR verification of our 2008 data online.

[1] PFC emissions do not include HP supply chain.
[2] Because of the timing required for the verification process, the data verified lags the report year by one year.

TRAVEL

We calculate greenhouse gas (GHG) emissions for HP employee travel, including commercial air travel and use of the HP air fleet and company cars.

In 2009, employees traveled more than 1.15 billion miles by air, more than 75 percent of which was long-haul (greater than 994 miles in distance), generating approximately 214,000 tonnes of carbon dioxide equivalent (CO_2e) emissions. This represents a 33 percent decrease in emissions compared with 2008, primarily through a reduction in long-distance flights. We continue to reduce emissions from travel by using teleconferencing where possible. Globally, we have also begun to provide employees who are booking travel with information about the emissions associated with their journey. When more than one option is available, they can choose the one with the least environmental impact.

HP maintains a small number of aircraft and a fleet of company cars for sales and services employees. Under our Green Fleet Contra Emission Program, we have set strict CO_2e emissions limits for all new cars we purchase in some countries in our Europe, Middle East and Africa region. The limits will decrease each year. Through this measure and other components of the program, we are working to eliminate high-fuel-consumption cars from our fleet.

We encourage employees to use teleconferencing facilities, including the HP Virtual Room and HP Halo solutions, whenever possible to cut down on travel, GHG emissions and costs.

HP Halo allows our employees around the world to meet virtually while still feeling as if they are in the same room. HP Halo is installed in HP locations around the world. Most studios are used on average 150 hours per month, but in some locations usage is as high as 250 hours per month. HP has quadrupled the number of studios at HP locations, which allowed us to eliminate more than 20,000 additional trips annually over prior years, reducing CO_2e emissions by another 35,000 tonnes and saving millions of dollars in travel costs. On a per studio basis, the net CO_2e savings is more than 230 tonnes each year.

HP has reduced business travel by 43 percent in some groups and eliminated it completely in other business teams. HP Halo also includes energy-saving features, such as displays and lights that automatically turn off when not in use.

HP SkyRoom technology offers an affordable and convenient desktop collaboration alternative to business travel, saving time and the GHG emissions associated with travel to meetings. It enables up to four colleagues in different locations to conduct a high-quality video conference at their desks while sharing rich media content such as 3-D graphics.

See detailed travel data in the Data and Goals section.

Employee commuting

While GHG emissions from employee commuting are not directly within HP's control, we offer programs designed to reduce those emissions.

Many HP employees have the option of working outside the office—at home, at customer facilities and at offices where people are free to use any available desk—and often divide their work time between these locations. Allowing employees to choose where they work reduces commutes to the office and can improve efficiency and work-life balance.

We encourage employees to cut down on single-occupied vehicle trips into HP offices, by bicycling, compressing work schedules and carpooling. Carpoolers can often park in designated parking spots. Most of the sites with bicycle commuters offer showers, bike lockers and storage.

In the United States, HP employees can purchase public transit and vanpool services through a payroll deduction with tax benefits. The program also offers an online system that makes ordering transit passes quicker and easier.

ENVIRONMENT

PRODUCT MANUFACTURING

HP has long recognized the importance of energy efficiency in our own operations and in product performance, and we have now widened the focus to include suppliers.

HP's strategy is to encourage major suppliers to improve energy efficiency and increase use of renewable energy sources. This will reduce their operating costs and their potential exposure to carbon pricing, and will help mitigate volatility of energy supply. The program is being implemented through supplier engagement, reporting greenhouse gas (GHG) emissions, establishing reduction targets and building suppliers' capability in this area. We are asking our largest suppliers to engage their own first tier suppliers in the same way.

We have expanded carbon accounting beyond our own operations. After becoming the first major IT company to publish aggregated supply chain GHG emissions in 2008, we have continued working with suppliers, establishing expectations about energy efficiency in their operations.

We received responses on energy use and GHG emissions in product manufacturing for 2008 from suppliers representing 86 percent of our material and manufacturing spend (up from 81 percent for 2007). Aggregate carbon dioxide equivalent (CO_2e) emissions were 4.1 million metric tonnes, which is more than twice the emissions from our own operations. This is not directly comparable to the 2007 figure of 3.5 million tonnes CO_2e because it covers 5 percent more of our spending and because HP's revenues have increased 13.5 percent during the period.

Our suppliers have become increasingly committed to reducing energy and emissions. The number of suppliers calculating and disclosing their emissions increased by a third, two-thirds of suppliers reporting to HP have established GHG reduction goals, and about a fifth are estimating the emissions of their own suppliers.

Calculating emissions

Many factories supplying HP also supply other electronics brands, so it is impractical to measure the energy used to make HP products separately from our suppliers' other business. Therefore, we allocate HP's share of their energy consumption in proportion to the value of our business in our suppliers' annual revenue. This method has its limitations, and we will continue to work with suppliers to improve data quality.

We are also working more broadly to better standardize tools and methodologies to facilitate consistent and reliable reporting among suppliers and enable a more robust process that could apply throughout HP's supply chain. Activity includes:

- HP is co-lead of a working group in the Electronic Industry Citizenship Coalition (EICC) to build an online carbon reporting system that will make it easier for suppliers to measure and disclose their GHG emissions and will increase consistency in reporting. Since going live in June 2009, approximately 12 electronics companies have used it to request responses from over 300 suppliers.

- HP is also participating in a technical work group for the GHG Protocol Supply Chain Initiative (sponsored by the World Business Council for Sustainable Development and World Resources Institute). The group is developing a methodology for quantifying and reporting corporate "scope 3" GHG emissions. HP's success in working with its suppliers to collect information about their GHG emissions and to establish GHG reduction goals was recognized by the World Resources Institute, which included HP's results as the only company example in the guidance document provided to companies that are road-testing the draft GHG Protocol scope 3 standard in February 2010.[1]

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[1] The World Resources Institute (WRI) defines scope 1, 2 and 3 greenhouse gas emissions in its Greenhouse Gas Protocol.

ENVIRONMENT

PRODUCT TRANSPORT

With more than a million products in transit on a typical day, shipments of HP products require large amounts of fossil fuels, causing greenhouse gas (GHG) and other emissions. Most of these emissions are from international airfreight, while roughly 25 percent are from road transport and parcel freight. Although we use ocean transport extensively, we estimate it produces less than 5 percent of our total GHG emissions from logistics.

We aim to reduce energy use and emissions by continuing to shift product transport to more efficient modes, optimizing our distribution network, influencing transport providers to improve their environmental performance, and improving the utilization of trucks, containers and pallets.

In 2008, HP added environmental performance as one of the seven core elements in our new logistics strategy, and we introduced environmental criteria in requirements for carriers. Requests for quotations (RFQs) to carriers for large regional and international programs now cover aspects such as environmental policies and programs, the ability to calculate GHG emissions specific to HP's freight, and proposals to help HP reduce emissions.

Changing transport modes

Most of our computer and imaging products are assembled in Asia and then transported to Europe, the Americas and within Asia Pacific for sale. We typically ship these products by air and ocean to regional distribution centers, and then by truck or rail to their final destinations. We are converting some shipments from air to ocean, which reduces costs and also GHG emissions. GHG emissions are reduced because each tonne of freight transported by ocean produces only about 1/60th of the carbon dioxide equivalent (CO_2e) emissions that airfreight produces. The table below shows typical emissions per kilometer of transport by mode.[1]

TRANSPORT MODE	CO_2e PER KM (KG)
Air	0.57
Road (truck)	0.072
Rail	0.02
Ocean	0.01

In 2009 we converted some shipments from air to ocean transport. These included some notebook shipments from Asia to Latin America and Europe as well as some inkjet products from Asia to Europe and the United States. We also converted some shipments from air to ocean for our Halo solutions video collaboration studios, which are produced in Puerto Rico and shipped to all destinations across the globe. Another mode conversion included changes from truck to rail within Europe and the United States.

Improving distribution

Optimizing our distribution network decreases the distance products travel and therefore reduces GHG emissions. For example:

- We introduced direct shipping in 2009 for notebooks from Asia to Latin America, instead of routing through Miami, and from Asia to Johannesburg, South Africa, bypassing Luxembourg. This saved 1,000 tonnes of CO_2e in 2009.

- We also began to ship inkjet products from Singapore to Sydney and Melbourne instead of to Freemantle on the west coast of Australia. This reduced the ocean journey length and avoids inland travel by truck and rail from Freemantle to Sydney and from Sydney to Melbourne. This saved 2,600 tonnes of CO_2e in 2009.

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[1] According to the World Resources Institute GHG Protocol.

ENVIRONMENT

Western Europe
distribution hub

Shanghai

— Direct shipping
····· Avoided routes

Johannesburg
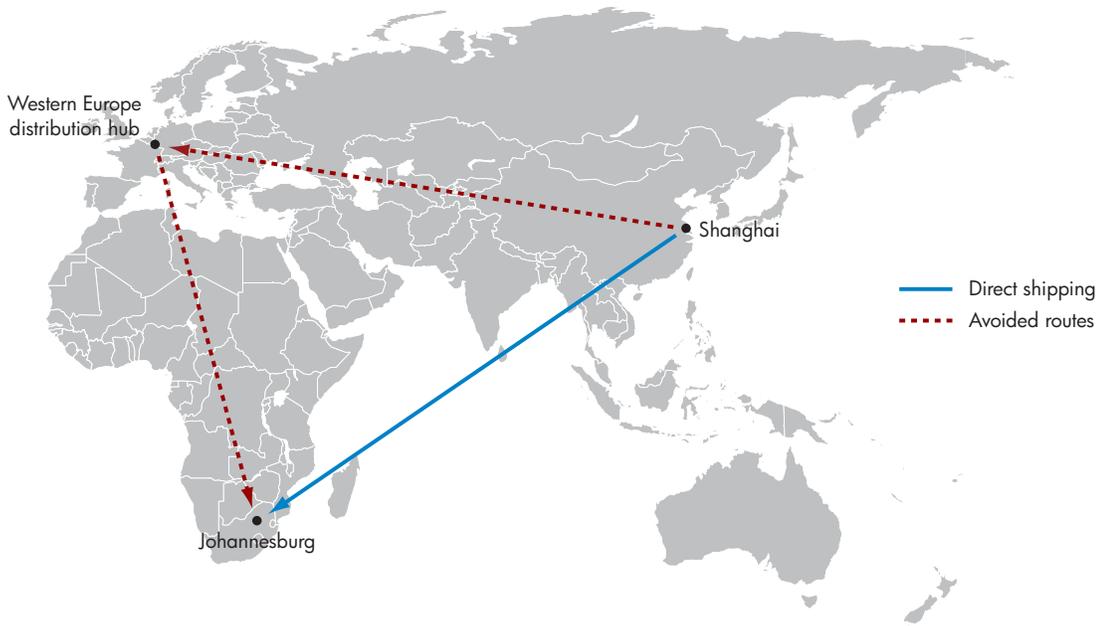
SmartWay

HP continues to participate in the SmartWay[SM] program, a voluntary partnership between the U.S. Environmental Protection Agency (EPA) and the U.S. surface freight industry that targets reductions in fuel consumption, GHG emissions and other air emissions.

In April 2008, HP became the first company out of almost 1,000 SmartWay partners to include the SmartWay logo on its product packaging. All HP products in the United States and Canada are shipped using a network composed entirely of exclusive SmartWay-certified surface transportation carriers. HP earned a SmartWay Excellence Award from the EPA for leadership in reducing fuel consumption and GHG emissions.

Improving the utilization of trucks, containers and pallets

We have expanded the use of plastic pallets, which are more than 70 percent lighter than wooden ones, saving fuel in transport. After use, our pallet vendor picks up the pallets from customers and reuses them if possible or sells the plastic to recyclers. The recapture rate is more than 90 percent for our Europe, Middle East and Africa region and more than 70 percent for the Americas. In some cases, customers in the Ameri-

cas keep the pallets for internal use. (See more about pallets in Packaging.)

Now we have implemented the next generation of airfreight handling technology for notebook air shipments from Asia to Europe. Similar to slip sheets, which are often used to avoid pallets in ocean shipping, "clamp loading" uses special forklift devices to load notebooks on a lightweight, low-cost foam pallet that is recycled by our freight forwarders. This allows us to eliminate the use of plastic pallets which enables us to load 11 percent more cargo on an airplane. We are also able to build loads more efficiently to fit specific airline configurations. Overall, we estimate this saves more than $5 million and 20,000 metric tonnes CO_2e on an annualized basis.

ENVIRONMENT

Performance

In 2009, the emissions for the freight our global logistics providers transported on our behalf equaled an estimated 1.7 million tonnes CO_2e. This compares with 1,951,000 tonnes CO_2e from our own operations. Last year, we estimated GHG emissions in 2008 from product transport equaled 1.8 million tonnes CO_2e. The decrease is due in part to the global economic downturn as well as specific projects in 2009 (including those described above), which reduced GHG emissions by more than 52,000 tonnes CO_2e.

PRODUCTS, SERVICES AND SOFTWARE USE

HP is committed to providing products, services and software to help customers improve their energy efficiency and meet their sustainability objectives. We continue innovating, as we have since 1992 when we launched our Design for Environment program, to drive energy efficiency, reduce the carbon intensity of HP products and help customers to save energy. Further progress is essential, since greenhouse gas (GHG) emissions from IT equipment are growing at about 6 percent a year in absolute terms[1] due to the growth in IT usage. We are committed to reduce the energy consumption of our products by 40 percent by 2011, from a 2005 baseline.

We take a holistic approach, from the desktop to the data center, including products, services and software. Each PC uses relatively modest amounts of energy – typically less than 50 watts when in "idle" mode. However, saving relatively small amounts of energy on each PC, server and printer results in large emissions reductions because of the high numbers of products in use – In total, PCs (including monitors) and printers are responsible for almost twice as much GHG emissions as data centers.[2]

In 2009 we extended the Carbon Footprint Calculator for printing to our personal computing products. The web-based HP Carbon Footprint Calculator helps customers to reduce the environmental impact—and costs—of computing and printing. (See Tech gallery.)

It provides an estimate of how power-saving technologies and more efficient features can lower customers' energy use, and carbon footprint. The tool covers printers, desktop PCs, notebooks, workstations, thin client[3] computers, displays and point of sales equipment. (See Tech gallery.) We also launched Power To Change, a campaign that encourages personal computer users to change behavior to make the most of our low-energy features.

We help customers adopt more sustainable practices with products such as Halo Solutions (see Tech gallery) and SkyRoom (see Tech gallery), reducing energy costs and emissions by avoiding travel, while digital printing reduces energy and paper use in conventional printing. (See Enabling a low-carbon economy.)

Data center energy use reduction is important because each center uses substantial amounts of energy and the number of data centers is increasing rapidly—electricity consumption of U.S. data centers is expected to double between 2006 and 2011.[1] Reducing data center power consumption starts with more energy-efficient IT infrastructure and includes technology initiatives such as virtualization and automation. Further advances are achieved through optimization of data center planning, energy efficient data center designs and integration of facilities with IT. HP products and services are available in all these areas.

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[1] "Smart 2020: Enabling the Low Carbon Economy in the Information Age," The Climate Group, a report on behalf of the Global e-Sustainability Initiative, with analysis by McKinsey & Company, 2008.

[2] Kumar, Rakesh and Mieritz, Lars, "Conceptualizing "Green IT" and data centre power and cooling issues", Gartner Research Paper No. G00150322, (2007).

[3] A thin client is a device that typically only connects to a network and starts up a dedicated web browser, using a server for processing and storage.

ENVIRONMENT

After exceeding our previous goal more than two years early, HP set a new goal in 2009 to reduce the energy consumption and associated GHG emissions of our products to 40 percent below 2005 levels by the end of 2011.

Notebook and desktop PCs and workstations

By 2009, the average energy consumption of our highest-volume desktop and notebook PCs had already decreased by 41 percent since 2005.

We continue working to increase energy efficiency, and at the end of 2009 we had over 120 HP PC product families with configurations that meet the new ENERGY STAR® 5.0 specifications, which include a requirement for 85 percent energy efficient internal power supplies. This includes HP thin client computers, making HP the first company to qualify products in this new category.

HP Power Assistant,[1] available on desktop and notebook products, helps users to conserve power. And specifically in notebooks, it also stretches battery run time. On the network level, HP Power Assistant measures, records and reports platform energy use to provide IT departments the information needed to save money and energy.

In 2009, we estimate that by using HP Power Management Technology, customers reduced GHG emissions by 460,000 tonnes of carbon dioxide equivalent (CO_2e), the equivalent of taking 88,000 cars off the road for one year. Our goal is to save customers 1 billion kilowatt-hours (kWh) of electricity by 2011 through improved energy consumption of our notebooks, PCs and workstations, relative to 2008.

Imaging and printing

HP enables customers to make smart printing choices by providing products, services and tools to save energy and paper. Saving paper is an important way to reduce climate impact because some estimates suggest that making 1 tonne of paper results in 1.5 tonnes of CO_2e emissions. This is the major contributor to GHG emissions from the printing process. (See also Enabling a low-carbon economy.)

In 2009, HP shipped more than 24 million ENERGY STAR qualified printers—more than any other vendor.

All new 2009 inkjet and LaserJet printer families have ENERGY STAR qualified offerings. The HP Officejet Pro 8500 Premier All-in-One uses only half the energy of comparative laser printers. (See Tech gallery.)

We introduced HP Auto-Off technology in 2009, which saves energy by putting the printer into a mode that uses less than one watt of power. It will help customers improve energy efficiency in personal desktop LaserJet printers by three times compared with normal sleep mode. HP will configure printers to power down, but customers can set their own power-down times.

HP Auto-Off works in concert with Instant-on Technology, found in HP LaserJet printers, which helped customers avoid 1.3 million tonnes of CO_2e emissions in 2009 (see Tech gallery). This feature enables a printer to warm up in a matter of seconds from the sleep mode or even off mode.

HP's Eco Solutions printing practice includes products and services such as Managed Print Services and HP Web Jetadmin (see Tech gallery) that help large organizations reduce their environmental impact by improving printing efficiency.

Data centers

Energy use for data centers is high and growing, driven partly by an information explosion (see Global issues essay)—it is estimated that the world digitized about 186 exabytes of data in 2007 (one exabyte is a billion gigabytes) and that will grow to nearly 1,000 exabytes in 2020.

Improving the energy efficiency of data centers, including our own is therefore a priority for HP. We collaborate and consult with government authorities and industry bodies to help improve IT industry practices relating to data center energy use. This includes being part of the team that created the EU Code of Conduct and data center Code of Conduct best practice, and working with the United States Green Building Council to develop standards for better environmental design for data centers. We are also participating in a U.S. Department of Energy steering

[1] Power and cost calculations are estimates. Results will vary based on variables that include information provided by the user, the time the PC is in different power states, on battery or AC, the hardware configuration, variable electricity rates and the utility provider. HP advises users to use the information provided for reference only and to validate impact in their environment. Environmental calculations were based on U.S. EPA eGrid 2007 data found at www.epa.gov/egrid. Regional results will vary.

ENVIRONMENT

committee developing a framework to certify data center energy specialists.

We deliver a wide range of solutions, from energy-efficient servers, storage and networking devices, through automation, to data center consulting, design and management. In 2009, we introduced HP ProLiant Generation 6 (G6) servers, delivering twice the performance at half the power of the HP servers they replace. HP ProLiant DL 360 and DL380 G6 servers were the first in the industry to meet the ENERGY STAR for Computer Servers 1.0 guidelines released in May 2009. (See Tech gallery.) Several ProCurve network switches have been certified to Miercom's Green Standard. One of these switches measured as up to 45 percent more efficient than the industry average. (See Tech gallery.)

Our data center service capabilities include the following:

- HP Energy Efficiency Analysis helps customers calculate facilities' baseline energy efficiency and the scale of potential improvements and identify ways to achieve them. (See Tech gallery.)

- HP Critical Facilities Services provides consulting, design and assurance services to design and build next generation facilities as well as upgrade and modernize current data centers so they are both energy- and space-efficient. (See Tech gallery.) HP CFS innovations include multi-tier hybrid designs that can drive down capital costs by 15–25 percent compared with current industry benchmarks and significantly reduce energy-related operating costs.

- Facility and Technology Assessment Services, including power and cooling analysis and energy efficiency analysis.

- Energy Efficiency Design helps maximize data center space utilization, performance and efficiency.

- Assessment Service for blade servers gauges data center readiness to meet potential environmental challenges and to provide guidance for improving data center capacity and efficiency.

See Tech gallery for more information.

Other enterprise solutions

HP offers numerous other solutions that help organizations decrease energy use and GHG emissions, such as the following:

- HP Carbon Emissions Management Services help customers calculate, record and analyze IT-related GHG emissions, enabling the measurement and management of emissions for compliance purposes. They include HP Carbon Accounting Solution and C-Counter. (See Tech gallery.)

- HP Managed Print Services, which enables organizations to reduce their energy and paper use and cut costs related to printing. (See Tech gallery.)

- HP works to improve the energy efficiency of customers who outsource their operations and data centers to us. Innovations such as at Wynyard in the UK demonstrate our capabilities.

Our products, software and services are also enabling the development of a low-carbon economy.

Software

HP software products also can help customers identify ways to cut costs and save energy:

- Performance Center helps customers analyze and validate the performance of applications against business requirements. It simulates resource requirements for new applications and identifies inefficiencies, to better help customers avoid unneeded capacity and use energy efficiently.

- TRIM document and records management software helps customers efficiently manage storage requirements. It provides secure storage while helping customers dispose of redundant data that is unnecessarily taking up space and using energy.

- Business Service Automation works in conjunction with data center hardware to dynamically adjust capacity, switching off equipment when it is not needed.

ENVIRONMENT

ENABLING A LOW-CARBON ECONOMY

While HP is engaged in many initiatives to reduce the energy consumption of its products in manufacture, transport and use, our greatest contribution to tackling climate change will lie in developing products and services to enable a broad-based digital transformation toward a low-carbon economy. We believe that we can apply IT to reduce energy-intensive and carbon-heavy processes in three ways: measurement that increases the transparency of energy use, increased efficiency of activities and processes, and replacing physical goods and services with digital versions. These approaches are a key element in our climate strategy.

We are committed to improve the efficiency of IT products and services, but the IT industry is responsible for only about 2 percent of the world's greenhouse gas (GHG) emissions. We can make a bigger impact by significantly reducing the other 98 percent of emissions.

HP is a member of the Global e-Sustainability Initiative (GeSI), which has identified information and communications technology (ICT) opportunities that can lead to emission reductions. A recent study by the organization estimates possible emissions savings overall equalling five times the size of the IT sector's own footprint, up to 7.8 billion tonnes CO_2e, or 15 percent of total emissions by 2020 compared with current "business as usual" projections.[1]

HP has also partnered with the environmental organization World Wildlife Fund (WWF) to examine the potential for IT to enable GHG emission reductions in several sectors and applications.

Low-carbon IT solutions

HP is applying IT to energy- and carbon-intensive processes to make them transparent, efficient and transformational.

TRANSPARENT

HP is developing software and services to help assess, manage and report energy use and GHG emissions, such as through our Carbon Emissions Management Service for enterprises and our Carbon Footprint Calculator for printers and PCs (see Tech gallery).

HP sponsored the Financial Times Climate Change Challenge, a competition in 2008–09 to find the most innovative solution to address the effects of climate change. HP chairman and CEO, Mark Hurd, was one of the judges. The winner, Kyoto Box, designed an inexpensive, solar-powered cardboard cooker that could reduce firewood use by one half, saving trees and preventing carbon emissions. The organization received a $75,000 prize to commercialize the idea.

We also provide the computing, advanced metering and data management technologies necessary to enable smart electricity grids, which are interactive networks enabling utilities to reduce energy consumption. Real-time information can help reduce consumption by providing transparency on consumers' energy use, and enabling utilities to better anticipate and manage demand. HP is helping to make the smart grid a reality with business initiatives providing:

- Business intelligence, IT transformation and data management

- Management and control of the electricity smart grid and the intelligent network for gas and water utilities

- Solutions addressing security and safety risks

EFFICIENT

HP is continually improving the efficiency of products and services, from the desktop to the data center. See Products, services and software use to learn more.

We are also applying IT to create energy-intelligent devices and systems in sectors ranging from agriculture to oil. By providing more real-time data and analysis, IT can enhance efficiency and decrease GHG emissions across entire systems such as buildings, farms and oil rigs. HP Labs has proved the existence of the memristor, a new element of electronic circuitry that has the potential to enable very low-cost, self-powered sensors that can measure data with extraordinary sensitivity. In buildings, the largest

[1] SMART 2020: Enabling the low carbon economy in the information age.

ENVIRONMENT

source of GHG emissions in the developed world, this would enable real-time optimization of heating, cooling and electricity usage. In agriculture, an industry with high climate impact, it would allow farmers to use water and fertilizer more effectively. On an oil rig, it would let engineers know precisely when maintenance is needed or parts need replacing.

TRANSFORMATIONAL

IT can replace physical products and processes with digital ones, such as reducing the need for business travel by enabling virtual meetings, saving paper and energy through digital printing, and substituting e-commerce for physical stores and shopping trips, all of which have the potential to decrease GHG emissions.

VIRTUAL MEETINGS Travel to business meetings, especially air travel, results in extensive GHG emissions. For example, one round trip from New York to London for one person produces nearly 1,250 kg (2,750 pounds) of carbon dioxide.

HP Halo solutions, our advanced video collaboration service, reduces the need for business travel by replicating the meeting environment virtually (see Tech gallery). In 2009, we extended this technology to our workstations and PCs with the SkyRoom product, which allows up to four people to meet virtually, sitting at their desks using a standard business network (see Tech gallery).

DIGITAL COMMERCIAL PRINT AND PUBLISHING Conventional commercial printing of books, newspapers, magazines and marketing materials typically results in high levels of over-production and waste. This is mainly because large-scale traditional printing presses involve time-consuming and expensive setup, which requires longer print runs to achieve a low cost per page. As a consequence, publishers typically produce large batches based on anticipated sales over several months, or more. Overproduction is typical—as much as 25 percent of book stock is destroyed without ever being sold.[1]

Digital press technology can eliminate much of this waste by cost-effectively producing just the amount needed at a given time. Shorter runs also make it possible to publish targeted content, saving paper by avoiding printing pages that are not relevant to the target readers. Paper savings translate to GHG emissions reductions, because paper represents approximately 70 percent of life cycle GHG emissions in typical print applications. See Life cycle assessment to learn more.

HP conducted a study to identify the potential to reduce GHG emissions through a conversion from analog to digital commercial printing and improved management of existing digital office printing.[2] The largest potential savings come from reducing set-up losses associated with analog printing presses and implementing print on-demand strategy, minimizing unnecessary printing. We estimate that the shift to digital commercial printing has the potential to decrease annual global GHG emissions by 2020 between 110 and 250 million metric tonnes CO_2e. This is roughly equivalent to estimated potential savings for global implementation of automated lighting or telecommuting.[3]

HP provides a range of digital printing products and services from small office to commercial printing of signs, graphics, books and magazines, including the following:

- HP T300 Color Inkjet Web Press (see Tech gallery) for high-speed production printing

- HP Indigo 7000 digital press, a sheet-fed press for printing high quality documents and publications

- HP Scitex FB7500, a flatbed printer for applications such as point-of-sale material and posters

- HP Designjet L25500 series for outdoor signage

- Magcloud, a cloud-based service for on-demand magazine publishing (see Tech gallery)

[1] Findings from the U.S. Book Industry: Environmental Trends and Climate Impacts. Book Industry Study Group and Green Press Initiative, 2008.
[2] Reducing the Greenhouse Gas Emissions of Commercial Print with Digital Technologies. Scott Canonico, Royston Sellman and Chris Preist, Proceedings of the 2009 IEEE International Symposium on Sustainable Systems and Technology (ISSST).
[3] SMART 2020: Enabling the low carbon economy in the information age.

COLLABORATION

Due to the breadth and complexity of the issues involved, addressing climate change effectively requires partnership across many different types of organizations. In collaboration with governments, nongovernmental organizations (NGOs) and other technology companies, HP is encouraging legislative action on energy and climate policies to improve energy efficiency and reduce greenhouse gas (GHG) emissions throughout the global economy.

Public policy work

HP supports coordinated and cost-effective actions by governments to help businesses and individuals address climate change. In 2009, a delegation of HP executives participated in the UN conference on climate change in Copenhagen (COP15) to show support for the international negotiations to mitigate climate change and to demonstrate how IT and innovation are critical to achieving a low-carbon economy.

We encourage the development and promotion of effective climate change policies through participation in organizations such as:

- The Climate Group
- Combat Climate Change
- The International Climate Change Partnership
- Pew Center on Global Climate Change
- World Wildlife Fund (WWF).

As part of our collaboration with WWF, HP joined 11 other companies in 2009 in an open WWF letter to the U.S. Senate urging legislators to pass comprehensive climate change legislation. We also participated in the Ceres and Clean Economy Network "We Can Lead" campaign and signed on to two statements calling for comprehensive climate change legislation in the United States. HP was also active in Behind the Green, an educational initiative created by the Digital Energy Solutions Campaign to promote the role IT plays in helping to improve energy efficiency.

For more information on our public policy activities in this area, including our position and guiding principles for climate change mitigation strategy, see our climate change global issue brief in the report online.

World Wildlife Fund collaboration

HP continues to work closely with World Wildlife Fund (WWF) on key environmental issues including climate change. Together, we are leveraging our experience in technology innovation and environmental conservation to reduce greenhouse gas emissions, improve energy use, protect forests, influence policy makers on climate change and showcase IT solutions for a low-carbon economy. (See more detail in Stakeholder engagement.)

Industry collaboration

We work closely with other IT companies to advance energy efficiency. Examples include the following:

- HP is a founding board member of The Green Grid Association, a nonprofit global consortium focused on improving data center energy efficiency.

- HP is a board member of Climate Savers Computing Initiative (CSCI), which brings together businesses, consumers and conservation organizations working for more energy-efficient PCs and servers.

- HP is a member of the Global e-Sustainability Initiative (GeSI) and contributed to the development of a U.S. Addendum to the Smart2020 report. The addendum, published in 2009, applies the Smart2020 analysis to the U.S. economy and makes practical policy recommendations.

- HP is working in partnerships to establish better standardization of GHG emissions measurement in supply chains.

- HP works with other leading firms through the Smart Energy Alliance to help utilities transform their energy transmission and distribution operations.

ENVIRONMENT

PERSPECTIVE

Ubiquitous IT has changed the lives of billions of people. In 2005, servers (including their cooling and auxiliary equipment) used 1.2 percent of U.S. and 0.8 percent of global electricity; all IT, telecoms, and office equipment used 3 percent of U.S. electricity. However, IT's growth is increasingly offset by power-sipping hardware, server-sharing software, terse code, and efficient power supplies and cooling systems.

For example, the new Wynyard data center that my team co-designed with EDS (now part of HP) got 16-fold more computing per kWh than conventional designs, and cost one-tenth less to build. Full exploitation of the identified opportunities would have boosted energy productivity by about 80-fold at half normal capital cost.

Moreover, IT probably saves far more energy indirectly than it uses directly. Computers optimize car engines. Electronic controls improve buildings and factories. Computer analysis fine-tunes nearly everything that makes or uses energy. The Internet itself probably saves energy: videoconferences displace flying, a Google search releasing 0.2 grams of carbon displaces thousands-fold more carbon released by driving to the library, and e-commerce reduces retail and warehouse space and shipping.

IT is also enabling a dramatic shift of power generation from fossil and nuclear fuels to renewables. In 2008, the world invested more in renewable than in fossil-fueled electricity generation; renewables (except big hydro) plus cogeneration produced two-thirds of the world's new electricity. IT is both using energy with elegant frugality and enabling huge energy savings and climate-safe sources. Together, IT and energy are creating abundance by design. Their convergence marks one of the century's greatest business opportunities.

AMORY B. LOVINS
Chairman and Chief
Scientist, Rocky
Mountain Institute

ENVIRONMENT

SUSTAINABLE DESIGN

The hundreds of millions of HP products in use worldwide collectively represent HP's greatest impact on sustainability. We continually challenge ourselves to improve the environmental performance of our products throughout their life cycle, design solutions that support digital transformation to a low-carbon economy, reduce the total cost of ownership and design our products to be accessible. Our goal is enhanced productivity and entertainment for customers, and improved environmental performance.

Environmental issues have been integral to our research and development programs since the early 1990s, and we launched our Design for Environment (DfE) program in 1992. DfE is central to our design strategy and helps us meet increasing customer demand for improved environmental performance. Our global network of more than 50 environmental product stewards works with design teams to decrease the impact of our products across the life cycle— including materials and energy used in manufacture, packaging packaging and distribution; energy and resources (such as paper) consumed during use, and how they are managed at end of life.

Industry standards

We regularly collaborate with other organizations to develop industry standards that encourage innovation, optimize environmental performance, and educate customers and make it easier for them to choose products. For example, HP participated in developing the standard that is the basis for the Electronic Products Environmental Assessment Tool (EPEAT®) for desktop computers, notebooks and monitors. We are involved in the standard-development

ENVIRONMENT

process and working-group forums that are drafting the next set of EPEAT standards for product types such as imaging equipment, televisions, servers and cell phones. HP is also working with the iNEMI Eco-Impact Evaluator for ICT Equipment project, which is developing a simple way to determine the key life cycle environmental impacts and improvement opportunities for information and communications technology products. (See Life cycle assessment for detail.) We support international expansion of the EPEAT registry and offer EPEAT-registered products in 38 of the 41 countries included in the global expansion.

ECOHIGHLIGHTS

Everyday Photo Paper, semi-gloss

ECO INFORMATION

• FSC certified fiber from well managed forests

• Recyclable in consumer collection systems that accept mixed paper

FSC
SCS-COC-002255
The mark of responsible forestry
© 1996 FSC.

www.hp.com/ecosolutions

HP provides a variety of convenient end-of-life options for your product, including buyback, free recycling and donation programs.

Eco-labels

HP offers many products that meet eco-label programs, including EPEAT, ENERGY STAR®, China's Energy Conservation Program, Germany's Blue Angel and Taiwan's Green Mark.

We introduced the HP Eco Highlights in 2008, helping customers understand the environmental attributes of a specific product, tool or service. The HP Eco Highlights label is available on more than 215 HP products.

Measuring environmental performance

Building on environmental design expertise refined over many years, HP is developing enhanced environmental performance metrics for its products. These metrics will complement and extend EPEAT criteria.

The objective is to develop tools that will enable product stewards and designers to readily assess

environmental performance of different products. Developing new standard measures that apply across the broad portfolio will provide decision support for product teams and enable comparisons against specific goals or other products. Initial metrics include carbon footprint and energy consumption, and recyclability.

Design for recyclability

We design HP products to be more easily recycled, using common fasteners and snap-in features and avoiding the use of glues, adhesives and welds where feasible. This makes it easier to dismantle products and to separate and identify different plastics.

The materials we choose can also enhance recyclability. For example, HP Illumi-Lite LED displays are mercury-free, which makes them easier to manage at the end of product life. Other HP notebooks are designed with a magnesium and aluminum chassis that replaces most of its plastic, making the product easier to recycle.

On average, new HP notebook PC products are more than 90 percent recyclable by weight,[1] and HP workstations and dc series desktop products are designed with a tool-less chassis for easy upgrade and recycling at end of life.

HP has a comprehensive research and development program focusing on "de-inking" printer paper for recycling. De-inking removes dirt, ink and other contaminants and is essential to produce high-grade recycled pulp. In partnership with independent research labs, HP has developed improved methods for assessing the deinkability of digital prints. We have also conducted research to understand and improve the performance of HP inkjet ink (including the role of HP Bonding Agent) and HP Indigo ElectroInk—both of which have demonstrated good deinkability.

HP is also researching the influence of paper design on the deinkability of inkjet and ElectroInk prints. For example, the additive typically used in HP ColorLok and HP ColorPro papers greatly enhances inkjet deinkability. Finally, HP Labs has identified a safer approach for the use of chemicals during the deinking process, and will publish these results for the benefit of the paper industry. (For details, visit http://www.hpl.hp.com/news/2009/jul-sep/deinking.html.)

[1] Per the definition used in the European Union WEEE regulations.

ENVIRONMENT

These descriptions explain how HP uses the following terms:

RECYCLING. Products are diverted from disposal to reclaim materials that can be used in new products either directly as parts or as raw materials after reprocessing, or for energy recovery.

RECYCLED CONTENT. Proportion of post-consumer recycled material in a new product or package.

RECYCLED MATERIAL. Material that has been saved from being disposed of as waste and is reprocessed as input to manufacture new products. It may either be waste from manufacturing processes or recovered material from products used by consumers.

Accessibility and aging

HP strives to create products, services and information that are accessible to everyone, including people with disabilities or seniors with age-related limitations. HP's commitment is reflected in our product and website design process, partnerships with assistive technology vendors, education of employees about accessibility regulations and best practices, and participation in efforts to update accessibility standards around the world.

Our product design teams explore ways to enhance accessibility, productivity and user comfort. Accessibility features on HP products may include buttons identifiable by touch, ports and switches positioned within easy reach, and large adjustable displays. Product examples include dual-hinge widescreen monitors that can be lowered closer to the desk surface for bi-focal, tri-focal or progressive lens wearers, and the Senior PC, which is configured to provide seniors easy access to e-mail and the Internet.

See our HP Accessibility website at http://www.hp.com/hpinfo/abouthp/accessibility/ for extensive additional information.

ENVIRONMENT

Reducing environmental impacts across the product life cycle

DESIGN

- DfE standards help products meet regulatory and customer requirements.
- Eco-labels demonstrate conformance with international environmental expectations and green procurement criteria.
- DfE techniques increase materials and energy efficiency and create more product and portfolio functionality with the same or reduced environmental impact.
- Recycled content reduces the use of virgin material.
- Design for recyclability features can facilitate disassembly and recycling.

RAW MATERIALS

- Materials reduction and use of recycled materials decrease virgin materials use.
- Reduction in the number of different material types used in a single product may help enhance recyclability and add value at end of life.
- Reduction in product size and weight decreases resource use.
- Recycled materials save virgin materials and divert waste from landfill.
- Substances restricted by HP's GSE are reduced or eliminated.

END OF LIFE

- Take-back options can divert waste from landfill, including asset recovery, donation, leasing returns, remarketing/refurbishment, trade-in and recycling.
- The ability to easily identify product materials can facilitate recycling and increase value at end of life.
- Design features can increase ease of disassembly, recycling and material reuse.

PRODUCT LIFE CYCLE

MANUFACTURING

- Supplier Code of Conduct helps suppliers to address key HP environmental requirements, including the General Specification for the Environment (GSE).
- Design for recyclability features typically enable easier product assembly.
- Efficient operations reduce energy use, greenhouse gas (GHG) emissions and waste from HP's and our suppliers' operations.
- Global ISO 14001 certification of HP manufacturing facilities helps establish effective environmental management processes.

USE

- Efficient product design, longer battery life and enhanced power management decrease energy consumption and reduce climate impact.
- Multi-function products generally reduce energy and materials use when compared with using several one-function products.
- Energy-saving product features may reduce total cost of ownership.
- HP printing products can help optimize energy and ink efficiency and provide reliable, high-quality performance, reducing paper waste.
- Products designed for reliability and upgradeability extend functional lifetime, saving IT rollover costs and reducing waste.

DISTRIBUTION

- Smaller, lighter products decrease GHG emissions and costs from transportation.
- Improved packaging designs increase the number of products per pallet and reduce packaging weight, decreasing product transport environmental burden.
- Ocean and rail transport allow for more energy-efficient shipments.
- Participation in several initiatives, including SmartWay, promotes industrywide reduction in environmental impacts from product transport.

ENVIRONMENT

RESEARCH AND DEVELOPMENT

HP's research and development (R&D) functions are charged with innovating the next generation of technology products and services, including those that promote sustainability, while creating value for HP and its customers.

HP Labs is our central research organization. Its goals are simple:

- Advance the state of the art, as evidenced through intellectual property (IP) generation in the form of publications and patents.

- Ensure our innovations reach customers through technology transfers to existing HP businesses, new business creation and IP licensing.

- Lead and work with others in the technology community through an Open Innovation approach.

HP Labs researchers have been pursuing sustainable IT since the early 1990s, with successes including the use of inkjet technology to cool computer chips more efficiently.

Sustainability is one of the eight key themes of HP's research strategy and is the focus of the Sustainable IT Ecosystem Lab (SIEL), created in 2008. The sustainability high-impact research area focuses on creating technologies, IT infrastructure, and new business models for the low-carbon economy.

For example:

- **BUILDING A BETTER DATA CENTER** The Sustainable Data Center's holistic design measures everything from the material and energy resources used to extract and manufacture equipment, to facility operation, to product disposal and reclamation. The aim is a data center that consumes net zero energy from non-renewable sources over its entire life cycle.

- **TOOLS FOR MEASURING ENVIRONMENTAL IMPACT** HP Labs is working on a breakthrough solution called Ecosystem Sustainability Assessment Tool. Its purpose is to enable product designers to make proactive decisions during design that reduce GHG emissions embedded in product materials and manufacture. This tool is being tested by HP's Personal Systems and Imaging and Printing product groups, and has the potential for deployment beyond IT.

- **NANOTECHNOLOGY INNOVATION** HP Lab's research in nanotechnology holds significant promise for electronics and photonics; the range of IT products that may benefit from such research includes anything used to gather, store, process and display information. Nanotechnology, developed with a mindful approach to materials used and careful adherence to applicable health and safety practices, has the potential to transform computing and other industries: enabling instant-on computing systems with fast, low-power, non-volatile memories; providing inexpensive but highly efficient solar cells; and creating a network of ultra-low-power sensors that could be used to monitor energy use. (See the case study on CeNSE in the Tech gallery, and our U.S. federal issue brief on this topic in the report online.)

- **REPLACING COPPER WITH LIGHT FOR IMPROVED ENERGY EFFICIENCY** The Photonic Interconnect project team is developing the technology to fit dozens, and eventually hundreds, of processors on server system chips using optical connections that are 20 times more energy efficient than technology on the market today. This will save companies vast amounts of power.

- **NEW DISPLAY TECHNOLOGIES AND PRINT ECOSYSTEM** HP Labs is developing flexible, inexpensive and portable low-power displays, e-paper surfaces and print-on-demand technology, all of which have significant potential to reduce print waste.

Visit HP Labs for additional information about innovation for the environment.

Making CeNSE

In just a few years, your house will warm up before you arrive home, a nearby bridge will notify a maintenance crew when a part needs replacement, and health officials will track the spread of viruses around the globe in real-time.

HP Labs' Central Nervous System for the Earth (CeNSE) project is helping to drive the transformation to a more sustainable world. CeNSE is a highly intelligent network comprising billions of nano-scale sensors that will feel, taste, smell, see, hear and measure what is going on in the world and communicate that information over fast, powerful computing networks for quick analysis and action. The goal: to prevent problems before they happen, and to keep small problems from becoming big, costly crises.

ENVIRONMENT

As part of the project, HP Labs is developing accurate, power-smart sensors that are up to 1,000 times more sensitive than existing technology. The sensors are so precise that they can hear footsteps, detect an ammonia or gas leak, feel the speed and volume at which traffic moves along a freeway, or sense wear and tear on vital equipment.

CeNSE leverages HP Labs' breakthrough innovations in nanotechnology, networking, business analytics and optimization (see sidebar for contributing HP technologies). HP expertise and technology will enable the sensors to be fabricated and mass-produced cost-effectively. The network's tremendous speed—typically 60 gigabytes of data per second—will depend on the development of new architectures and protocols that can quickly transport data under the most extreme conditions. CeNSE data will be collected by HP storage and computing power and made accessible to a new breed of business optimization, visualization applications and web services, making people and businesses safer, more secure and more efficient.

ON THE HORIZON

HP is teaming with customers in key industries to pilot and test CeNSE networks with up to a million nodes over the next three years. These pilot applications are expected to provide insight into the sensors and the data collected and test their operation in the real world.

CeNSE is expected to enter the marketplace in three to four years. The wide variety of business, environmental, health and safety applications make it a promising advancement for factory operations, oil and gas, merchandise tracking, large-structure integrity, virus tracking and energy management, among other things.

HP's long-term vision is to deploy networks of billions (and eventually trillions) of highly sensitive nano-scale sensors affordably, providing a quantity and quality of data that has never before been conceivable.

LIFE CYCLE ASSESSMENT

We continue to develop the use of life cycle assessment (LCA) to help us meet customer demand for products with enhanced environmental characteristics including materials, components and technologies. Analyzing a select number of products in great detail using LCA helps us understand the complexities of product environmental impacts.

LCA covers materials extraction, manufacturing, product use (energy consumption, supplies, media), end-of-life management and transport between all phases. An LCA may evaluate hundreds to thousands of material and process flows across multiple categories of environmental impact, such as global warming potential and depletion of natural resources.

HP has applied LCA thinking and tools in our design process for more than a decade and has published several LCAs focused on printing supplies since 1996. In early 2008, HP launched a program to promote LCA more broadly within HP, initially concentrating on printing equipment and processes. We use LCA tools to:

- Model and assess material and packaging choices

- Understand the potential of alternative technologies

- Develop tools to calculate product carbon emissions

- Assess which components and materials contribute the highest life cycle environmental impacts

- Support design for recycling assessments

ENVIRONMENT

Currently, the main focus of our LCA work is on product carbon footprinting—the contribution to climate change of a product over its life cycle. For example, HP conducted an LCA on an Officejet Pro inkjet all-in-one printer in 2008. The results highlight the extent to which paper use is the most significant contributor to climate change over the printer life cycle. This aligns with findings of independent research[1] across printer segments, which found that paper has the most significant climate change impact in all segments except personal inkjet printers. HP offers a range of products, software and services to improve printing efficiency and reduce paper waste, and HP sells paper produced from sustainable sources. These products, software and services make a significant contribution to cutting emissions from printing.

We are using LCA findings to develop metrics that help product designers compare alternative options and produce products with improved environmental performance across their life cycle. We already provide Carbon Footprint Calculators so that users can compare the greenhouse gas emissions from energy consumption during product use.

In 2009, we extended our LCA work, comparing a Scitex FB7500 flatbed signage printer with a competitive screen printer. We plan to publish on HP's website and in an external journal the peer-reviewed results—the first published LCA of comparative signage printing. The LCA demonstrates that digital printing on the Scitex FB7500 has a lower potential environmental footprint in terms of human health, ecosystem quality, climate change and resource impact categories than a conventional screen printer for print volumes less than 100 signs (see graph.)[2] The advantage stems from reduced media losses and ink waste in digital signage printers. Conventional screen printers typically waste materials in setting up (known as "make ready").

External collaboration

Making carbon footprinting useful for our customers requires a single, worldwide methodology based on internationally recognized standards. We are working with other industry leaders and third-party organizations to develop standards and methodologies to assess broader supply chain emissions and estimate product carbon footprints. Organizations and initiatives HP is actively participating in include:

- Founder-level membership in the Sustainability Consortium, which will create transparent data, proxies and methods to enable quantification of the sustainability performance of retail products.

Comparative life cycle impacts of a digital signage printer and a screen printer (printing 20 signs)*

Legend:
- HP Scitex FB7500
- Generic screen (LL)
- Generic screen (HL)
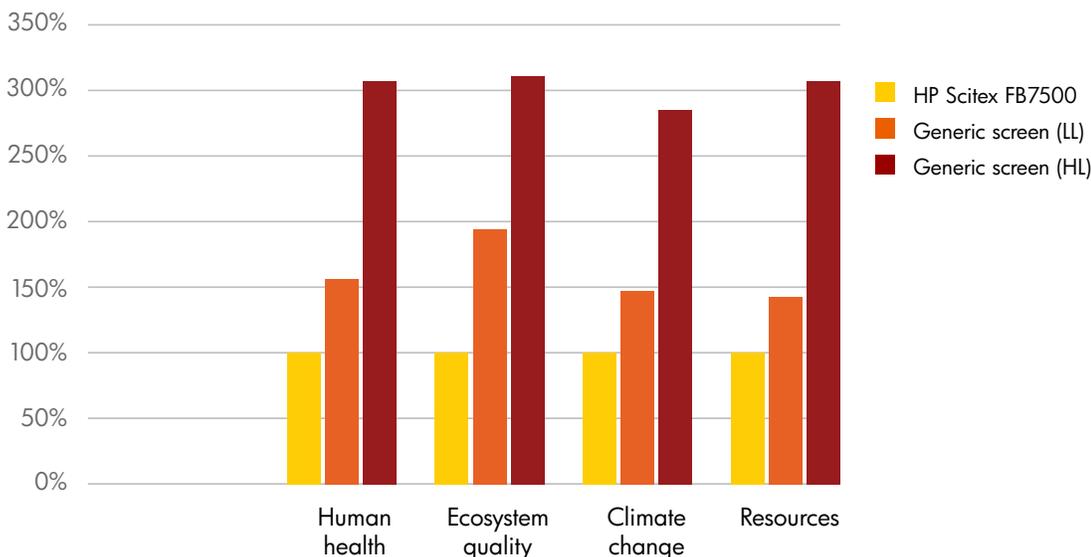
* LL and HL refer to screen printer Low Loss and High Loss during start-up. Low Loss assumes three signs lost from waste and High Loss assumes 40 signs lost from waste. This is the typical range of losses for the industry. Start-up losses result from media and ink waste associated with setting up inter-color registration for multicolor signs and achieving correct color gamut.

[1] Stobbe, Lutz, et al. "EuP Preparatory Studies 'Imaging Equipment' (Lot 4)" Task 1 though 8 Final Reports. Fraunhofer IZM. Berlin, Germany, 2007–2008.
[2] The comparison was conducted for 4-color, 46""x46" Coroplast point-of-purchase (POP) signage in the United States, and may not be relevant for all scenarios. The results are sensitive to printer speed and media losses.

ENVIRONMENT

- An environmental assessment methodology that uses product attributes to allow for relative benchmarking of ICT products, working with MIT, ENERGY STAR® and Carbon Trust.

- The environmental group World Wildlife Fund (WWF) to develop an assessment methodology for potential IT-enabled low carbon solutions.

- GHG Protocol standard development for Product Life Cycle Accounting and Reporting.

- GHG Protocol standard development for Scope 3 Corporate Accounting and Reporting.

- The International Electronics Manufacturing Initiative (iNEMI) Eco-Impact Evaluator for Information and Communications Technology (ICT) Equipment project. This project aims to provide a simplified means of determining the key environmental impacts and improvement opportunities of ICT products across the life cycle.

MATERIALS

Our materials choices for HP products affect our environmental performance. HP has a long history (see the timeline on page 74) of improving the use of materials in our products, and we continue to focus on several aspects:

- Being transparent about product material content

- Eliminating materials shown or likely to pose an environmental, health or safety risk

- Innovating design to use new materials with improved environmental performance

- Using recycled materials and materials that will be easier to recycle

These actions reduce costs, avoid substances of high concern and decrease energy use during manufacturing and distribution.

Material content

Our products comply with regulations regarding materials use, but customers increasingly want to know more about substances in products, even those unrestricted by regulation. We have shifted the emphasis from the substances that are excluded from our products to reporting specific materials that are included.

We comply with the REACH (Registration, Evaluation, Authorisation and Restriction of Chemical substances) legislation in the European Union (EU). REACH introduced a required process for capturing and tracking specific "substances of very high concern" (SVHCs) that exceed established European Chemical Agency (ECHA) thresholds. HP will meet all applicable REACH requirements and is committed to providing customers with information about the chemicals in our products as needed to comply with this legislation. HP is also working with industry and government to achieve a workable system that fulfils the goals of REACH. Part of this process requires HP suppliers to report listed substances in any materials they supply.

Substances of concern

HP has taken a proactive approach to evaluating materials and eliminating those that pose an environmental, health or safety risk. We may restrict or eliminate substances because of customer or legal requirements or because we believe it is appropriate based on a precautionary approach. We strive to replace legally permitted materials when scientific data has established a potential health or environmental risk and when less risky, commercially viable alternatives are available. We are working with others in the IT industry to ensure that the sourcing of metals used in HP products is not contributing to human rights violations associated with trade in minerals from the Democratic Republic of Congo. (See Human rights in minerals mining in Central Africa.)

We communicate materials restrictions to our design teams and to our manufacturing suppliers through our General Specification for the Environment (GSE), which prohibits or restricts the use of certain substances in HP brand products and in manufacturing. The GSE is integrated into our product development process and into supplier contracts.

We use active verification to ensure our specifications translate into our products. This includes risk-based data sampling and chemical analysis as required. We use supplier corrective action processes as needed to resolve any issues that arise.

REGULATIONS

HP believes that legislation such as the EU Restriction of Hazardous Substances (RoHS) directive plays an important role in promoting industrywide elimination of potentially hazardous substances. We support global harmonization of material restrictions because this enables faster adoption and achievement of the environmental benefits.

At times, HP goes beyond legal requirements by eliminating substances (such as lead and hexavalent chromium) on a worldwide basis. For example, HP was one of the first companies to apply the initial EU RoHS materials restrictions to our products worldwide. (See our compliance statement online.) We support and are committed to compliance with the revised requirements, known as RoHS 2, as well as China's legislation, known as China RoHS Phase II. HP contributed to the EU Stakeholder meetings to develop RoHS 2, providing technical information. We also provided a technical adviser—the only non-Chinese national involved—to help the Ministry of Information Technology draft the guidance document supporting the China legislation.

MATERIALS SUBSTITUTION

HP has committed to replace restricted substances only with materials that are better for the environment and human health, and when there is sufficient assurance of required volumes and we have enough time to design and qualify the new material into the product. To assess alternative replacement materials we now use the Green Screen, a hazard-based assessment framework developed by the nongovernmental organization Clean Production Action.

Since the pilot program began in 2007, HP has assessed more than 50 replacement materials for brominated and chlorinated flame retardants, phthalates, PVC and other substances of concern. We are the world's leading practitioner of the Green Screen tool, and the results of assessments have begun to inform decision making on key replacement materials. Based on the success and usefulness of this approach, the

Green Screen has been adopted as the primary tool for alternatives assessment to enable informed substitution for substances eliminated from HP products.

HP is also championing wider acceptance of the Green Screen within industry, the environmental NGO community and regulatory bodies. And to share information on common chemistries and help the entire electronics supply chain be able to select better replacement materials, we are working with Clean Production Action, the Lowell Center for Sustainable Production, and other partners to create an external repository for assessments.

We continued to make progress in 2009 in removing substances of concern from our products. For example, 64 percent of HP notebooks have moved to mercury-free LED backlighting. Our goal is to remove all mercury—a material commonly used in notebook screens—from our entire notebook line by the end of 2010. Newly introduced display products also have arsenic-free display glass.

HP offers commercial photo printing solutions such as the HP Photosmart ml1000 Minilab printer that reduce environmental impact compared with silver halide systems. (See Tech gallery.)

BFR AND PVC PHASE-OUT

In 2009 we introduced the HP Compaq 8000f Elite business desktop PC, which is free of brominated flame retardants (BFRs) and polyvinyl chloride (PVC)[1] in all internal and external components, including the keyboard, mouse and power supply. The HP Envy 13 Laptop and a configuration of the HP ProBook 5310m Notebook PC are also BFR/PVC-free[2] except for power supply and power cords.

We have already incorporated PVC- and BFR-free materials for printed circuit boards and plastics applications in several products, but high-performance applications continue to be a challenge. We are working with suppliers to develop and qualify acceptable materials and increase their availability.

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[1] HP Compaq 8000f Elite USDT Business PC is brominated flame retardant and polyvinyl chloride-free (BFR/PVC-free); meeting the evolving definition of 'BFR/PVC-free' as set forth in the "iNEMI Position Statement on the 'Definition of Low-Halogen' Electronics (BFR/CFR/PVC-Free)'". Plastic parts contain < 1000 ppm (0.1%) of bromine [if the Br source is from BFRs] and < 1000 ppm (0.1%) of chlorine [if the Cl source is from CFRs or PVC or PVC copolymers]. All printed circuit board (PCB) and substrate laminates contain bromine/chlorine total < 1500 ppm (.15%) with a maximum chlorine of 900 ppm (.09%) and maximum bromine being 900 ppm (.09%).

[2] HP ProBook 5310m is brominated flame retardant and polyvinyl chloride-free (BFR/PVC-free) on notebooks including Broadcom WLAN that are non-WWAN; meeting the evolving definition of 'BFR/PVC-free' as set forth in the "iNEMI Position Statement on the 'Definition of Low-Halogen' Electronics (BFR/CFR/PVC-Free)'". Plastic parts contain < 1000 ppm (0.1%) of bromine [if the Br source is from BFRs] and < 1000 ppm (0.1%) of chlorine [if the Cl source is from CFRs or PVC or PVC copolymers]. Power supply and power cords are not BFR/PVC-free. Service parts after purchase may not be BFR/PVC-free.

ENVIRONMENT

HP product proactive materials restriction/substitution timeline*

Remaining uses of BFRs and PVC in
new HP brand personal computing
products, complete in 2011

DfE programs
started

Ozone-depleting
substances

Cadmium

Lead in
PVC cables

Lead

Mercury elimination in
notebook products,
complete in 2010

PVC removed
from all
packaging

Bis (2-ethylhexyl) phthalate (DEHP)
Dibutyl phthalate (DBP)
Butylbenzyl phthalate (BBP)

1990   1995   2000   2005   2010   2015

PBB/PBDE
(including
DecaBDE)

PVC from
case plastics

Mercury/mercury compounds
(except bulbs)

Hexavalent
chromium

BFRs in external
case plastic parts

Polycyclic
aromatic
hydrocarbons
(PAH)

Antimony
Arsenic/arsenic compounds
Beryllium/beryllium compounds
Bismuth/bismuth compounds
Bisphenol-A
Mercury in bulbs
Nonylphenol
Other perfluorinated chemicals
Remaining uses of BFRs and PVC
Remaining uses of certain phthalates
Selenium/selenium compounds

* Dates refer to when proactively adopted materials restrictions were first introduced on an HP product, eliminating that material ahead of regulatory requirements. Materials in gray text beyond 2010 have been identified by stakeholders as potential materials of concern. Future possible restriction of those materials depends, in part, on the qualification of acceptable alternative materials. For a comprehensive list of HP's materials restrictions, including numerous materials restricted by HP on a worldwide basis in response to regional regulations, refer to HP's General Specification for the Environment at www.hp.com/hpinfo/globalcitizenship/environment/pdf/gse.pdf.

We will complete the phase-out of BFR/PVC in newly introduced personal computing products in 2011, as technologically feasible alternatives become readily available that will not compromise product performance or quality and will not adversely impact health or the environment, per the Green Screen mentioned above.

The timeline shows when substances were restricted by HP and identifies substances that HP is considering for restriction.

Dematerialization

HP helps customers improve resource use through enhancements in technology and product design and by delivering software and services that enable more efficient customer processes.

For example, the HP TouchSmart for business has an EPEAT® Silver registered design that uses 55 percent less metal and 37 percent less plastic than standard PCs and monitors. Due to their significantly smaller size, an HP Thin Client and its packaging is less than one-third the weight of a traditional desktop PC. (See Tech gallery.)

Our printing services and software help to reduce material consumption by saving paper. In addition, print-on-demand allows publishers to print smaller batches as needed, responding to demand rather than printing larger batches based on anticipated sales. (See Tech gallery and Enabling a low-carbon economy.) HP Smart Web Printing reduces paper usage by up to 45 percent[1] because it allows users to select, store and organize text and graphics from multiple web pages, then edit and print exactly what they see on the screen. Digitizing workflow and information management also saves paper by replacing paper-based documents.

Innovative materials

Materials innovation helps us to meet customer demand for safe, cost-effective products that have less impact on the environment and are easier to recycle.

For example, our HP Latex Printing Technology uses water-based HP Latex inks to print signs and graphics for both indoor and outdoor use. Unlike the inks for many competitors' products, HP Latex Inks require no hazard labeling and no special ventilation and are non-flammable and non-combustible, creating

[1] In HP-commissioned independent testing, HP Smart Web Printing used an average of 45 percent fewer pages than the web browser's print command alone.

ENVIRONMENT

a better working environment for operators. This technology can print on to a range of HP recyclable materials for certain applications instead of the usual vinyl media, which are generally considered not to be economically recyclable. For many of these media, HP also offers a free take-back and recycling scheme in the United States and 13 countries in Europe. For more detail, see videos about HP Latex Inks and HP signage products with reduced environmental impact.

We work with the electronics industry and our suppliers to identify new materials for potential use. For example, HP chairs the following projects of the International Electronics Manufacturing Initiative (iNEMI):

- Pb-Free Alloy Characterization, evaluating second-generation lead-free solder alloys

- iNEMI Test TIG, which leads various efforts, including the Board Flexure Standardization project, intended to drive standard test methodologies for qualifying the mechanical reliability of lead-free printed circuit assemblies

We are also jointly funding the U.S. Environmental Protection Agency's study on the relative environmental, health and safety impacts of current and alternative flame retardants in printed-circuit boards.

We believe nanotechnology holds promise for electronics applications in the long term and have researched this area since 1995. We also understand that everything has a footprint, and therefore we work to ensure the environmental benefit of these applications outweighs the potential environmental impact of creating, using, and eventually disposing (or reusing) the materials associated with this new technology. HP recognizes that since the properties of matter depend on size and shape at the nanoscale, consideration of potential health and safety issues of nanostructured

materials must be an integral part of any research program that seeks to bring such materials to market. Our Information and Quantum Science Research group at HP Labs in Palo Alto, California, has been a leader in research in this area. (See Research and development and HP's U.S. federal issue brief on this topic in the report online.)

Recycled materials

HP continues to expand the use of recycled materials in our products. (See how HP uses "recycled materials" and related terms on page 67.) In 2009 HP reached cumulative shipments of 555 million inkjet cartridges that used the "closed loop" recycling process. HP is the only company that recycles old cartridge plastic to make new Original HP inkjet print cartridges. We used 5,000 tonnes (11 million pounds) of recycled content resin (which is 75 percent recycled content, minimum 95 percent post-consumer) in our new Original HP inkjet print cartridges in 2009, slightly more than the amount we used in 2008, as well as an additional 180 tonnes (400,000 pounds) of 50 percent recycled content resin. (See Tech gallery.)

In 2009, we introduced the HP Deskjet D2600 Printer. It is made from 50 percent recycled plastic material and uses HP 60 ink cartridges, made from at least 50 percent recycled plastic including resin from returned HP cartridges. Additionally, the overall packaging for this printer is recyclable. (See case Tech gallery.)

In 2009 we exceeded our goal to triple the amount of recycled materials used in our inkjet printers relative to 2007, originally targeted for 2010. In 2009 we set a new goal to use a cumulative 100 million pounds (45,000 tonnes) of recycled plastic in our printing products by 2011 (with a 2007 baseline).

PACKAGING

We design packaging to cost-effectively protect our products while minimizing environmental impact. Our packaging guidelines help us balance factors such as the quantity, type and recyclability of materials used, as well as how the packaged product is transported.

Our strategy to reduce the total environmental footprint of HP's packaging and logistics includes plans to:

- Increase the use of sustainable and recycled content and the recyclability of materials used

- Eliminate materials of concern, prior to their regulation

- Decrease the amount and types of packaging material per product

- Work with suppliers to develop innovative new materials and processes

- Reduce the size and weight of our product packaging

We eliminated PVC from our packaging in 2007.

Using sustainable packaging materials

Where possible, we are shifting from plastic packaging to paper and molded pulp that have been recycled or certified as sustainable. Where plastic packaging is used, we are shifting toward recycled materials where available. For many products, we use molded pulp made entirely from post-consumer recycled and industrial paper waste, instead of expanded polystyrene. We have also replaced the 100 percent virgin fibers in retail packaging for consumer photo paper and some in-house marketing materials (such as brochures, flyers and presentation papers) with 100 percent recycled fibers that contain a minimum of 35 percent post-consumer recycled content.

Sometimes continuing to use plastic packaging minimizes environmental impact—for example, if molded pulp packaging would have to be significantly larger to adequately protect the product or significantly heavier than plastic for products shipped by air. Where we cannot use paper packaging, such as for large desktop PCs, we are increasingly using foam cushions that contain recycled plastic. Our aim is to switch to 100 percent recycled foam plastic cushions where possible.

In 2009 we launched an innovative way to protect HP Photosmart A640 Printer products, by packing them in reusable tote bags made from recycled plastic bottles. The bag protects the printers during shipping and on store shelves, and customers can use it to carry their new product home.

Reducing the size of packaging

We work to reduce the size of packaging for many products, to decrease the amount of paper and plastic we use, and to make product transport more efficient.

In 2009 we redesigned our packaging for large products such as LaserJet printers, saving 147 tonnes of corrugated fiberboard per year. For example, we now use our ClearView packaging to ship high-end printers. In place of a corrugated cardboard box and foam packaging, we use minimal foam supports and wrap the product in widely recyclable film. This reduces the volume and weight of packaging by 70 percent. ClearView won the Industrial Designers Society of America award for International Design Excellence and an AmeriStar award from the Institute of Packaging Professionals.

Redesigning several of our display products enabled us to reduce the packaging required to protect them. We have cut annual corrugated fiberboard use by 5,100

Packaging per product sold globally, 2005–2009 [average grams]*

	2005	2006	2007	2008	2009
PAPER	290	273	255	228	266
PLASTIC	48	53	55	42	38
TOTAL	338	326	310	270	304

Total weight used, 2005–2009 [thousand tonnes]*

	2005	2006	2007	2008	2009
PAPER	139	187	184	180	205
PLASTIC	23	36	40	37	34
TOTAL	162	223	224	217	239

* This does not include data from former EDS operations.

tonnes and expanded polystyrene and other plastic packaging by 2,200 tonnes as a result. At the same time, reducing packaging size decreases the number of sea containers required to transport the products.

In many cases we ship cartridges installed in the printer. This reduces the amount of packaging material and the size of the packaged product, and allows transport of more printers per pallet. This initiative reduces greenhouse gas (GHG) emissions by more than 3,100 tonnes of carbon dioxide equivalent (CO_2e) annually.

In January 2010, we introduced a design restriction in our General Specification for the Environment (GSE) stipulating that a box cannot be more than twice the volume of the product it contains. We are working with third-party packaging fulfillment vendors to identify and address challenges in meeting this guideline. We are also reducing the amount of paper delivered "in the box," such as warranties and manuals. (See Paper for more information.)

Performance

We track packaging material use by product line. We extrapolate data from Europe to provide the worldwide estimates below.

In 2008 and 2009 HP made shifts from plastic-based cushion to paper-based solutions. This increased average packaging weight, as paper-based solutions are typically heavier than plastic.

PAPER

As a leading supplier of imaging and printing equipment, HP has an impact on paper use. We sell paper and help customers to use it more efficiently. For example, HP Digital Publishing can eliminate much of the waste associated with conventional analog commercial printing (see below for more detail). We also use paper ourselves in our offices, manuals and product warranties, packaging and marketing materials.

We have introduced an Environmentally Preferable Paper Policy that details HP principles for buying, selling or using paper and paper-based product packaging. The policy outlines our aims to increasingly source paper from suppliers that demonstrate sustainable forestry practices, recycle paper when possible and reduce the tonnage of paper HP uses in our operations. In 2009, we launched a three

year, companywide plan to implement this policy, which will use a phased approach that targets the HP branded paper in the marketplace first. We have also established a goal that 40 percent or more of the HP branded paper sold will be Forest Stewardship Council (FSC) certified or have more than 30 percent post-consumer waste content by the end of 2011.

HP is engaging with several stakeholders, including the World Wildlife Fund (WWF) and the Paper Working Group to implement the policy.

As a first step in implementing the paper policy, in 2009 we joined the WWF's Global Forest and Trade Network (GFTN), a partnership that will help us to achieve our goals relating to the responsible sourcing of paper.

> "Every year, more than 30 million acres of natural forest are destroyed to meet the growing demand for wood and agricultural products. With this new relationship, HP is helping to protect the world's forests by sourcing and trading responsible forest products.

–SUZANNE APPLE, VICE PRESIDENT, BUSINESS AND INDUSTRY, WORLD WILDLIFE FUND

Responsible paper sourcing and sales

HP branded products make up more than 280,000 tonnes of printer and copier paper annually, including HP Everyday Papers, small- and large-format papers, photo media and other branded media products.

In 2009, HP embarked upon a major initiative to assess and improve the environmental performance of our paper supply chain. By joining forces with the GFTN, we have committed to progressively increase the amount of responsibly harvested fiber used in HP branded paper sold. We have also committed to progressively phase out paper produced using wood fiber from unwanted or unknown sources (we currently know the source of fiber for more than 99 percent by volume of HP branded paper sold).

The first stage in the collaboration was to conduct a baseline assessment of HP's paper supply chain and identify the environmental status of each type of HP Branded paper sold. We are also engaging closely

ECOHIGHLIGHTS

Everyday Photo Paper, semi-gloss

ECO INFORMATION

• FSC certified fiber from well managed forests

• Recyclable in consumer collection systems that accept mixed paper

FSC
SCS-COC-002255
The mark of responsible forestry
© 1996 FSC.

www.hp.com/ecosolutions

HP provides a variety of convenient end-of-life options for your product, including buyback, free recycling and donation programs.

with suppliers through audits to ensure that our products remain responsibly sourced and produced.

As of 2007, the HP Everyday Papers in North America are certified in accordance with Sustainable Forestry Initiative (SFI) standards, and in 2009

ENVIRONMENT

we extended forestry certification to all Everyday Papers sold in Asia Pacific and Latin America, which are certified in accordance to the Programme for the Endorsement of Forestry Certification schemes (PEFC). The Everyday paper portfolio also offers a 30 percent post-consumer content recycled grade, and certified grades containing mixed-source FSC fiber. In Europe, most of our Everyday Papers are certified under PEFC.

In 2009 we achieved our target to derive 100 percent of our consumer photo paper from sustainable forest certified suppliers. Our Everyday Photo Paper became the first HP photo paper to achieve FSC "chain of custody" certification (SCS-COC-002255), demonstrating that the fiber used to make it comes from a forest that is responsibly managed in accordance with the FSC's principles and criteria. The product is now our first paper to carry the HP Eco Highlights label. This photo paper is also recyclable in consumer collection systems that accept mixed paper.

HP is developing methods that improve the deinkability of printer paper for recycling. (Read about design for recyclability in Sustainable design.)

Chain of custody tracking system

FSC chain of custody (CoC) tracks FSC certified material through the production process—from the forest to the consumer, including all successive stages of processing, transformation, manufacturing and distribution (see graphic).

Services to customers

HP provides technology and services to make customers' printing and paper use more efficient.

HP Digital Publishing helps publishing industry customers minimize waste by switching from analog batch printing to digital on-demand printing. (See Tech gallery and Enabling a low-carbon economy.)

We help customers in other sectors to:

- Assess, understand and reduce unnecessary paper use with the HP Eco Printing Assessment service

- Set automatic duplex printing for entire print fleets

In 2009 HP became the first Platinum Patron of the Sustainable Green Printing Partnership (SGP), a nonprofit organization that works to make the print and graphic communications industry more sustainable.

- Capture documents electronically and send them by e-mail, reducing the need for hard copies and faxes

- Save money on paper and postage by using HP Exstream software to design statements, invoices and marketing materials, and to consolidate household mailings instead of sending individual statements

- Combine portions of numerous webpages onto one page using the HP Smart Web Printing tool, eliminating extra pages and right-edge clippings

- Eliminate the need for paper parcel labels (See Tech gallery.)

In 2009 we propagated Colorlok® technology that enables paper manufacturers to develop higher-quality recycled papers, and makes it possible for all papers to be used by customers for duplex printing with minimal show-through.

Optimizing paper use at HP

HP's Horizontal Print Transformation program, launched in 2005, is designed to transform the company's business document processes and print supply chain to reduce cost and increase effectiveness. Areas of focus include print and documentation processes in our offices, documents that accompany products and marketing materials. (See also Packaging.)

PAPER USED IN OUR OFFICES

We implement duplexing (double-sided printing) as standard in office printers across the company. In 2009 we also completed an initial goal to roll out HP Office Print across a substantial portion of the company to reduce significantly the number of printers and models in use at HP. This helped us standardize consumables procurement and reduce waste associated with printing, including paper. We use HP

Responsible Forest Management — Pulpmill — Pulp — Papermill — Paper — Distributor — Printer — FSC Certified Product / CERTIFIED

ENVIRONMENT
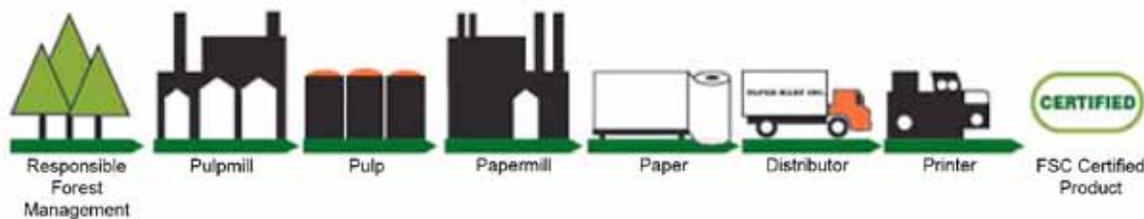
Everyday Papers for internal office printing and plan to increase the proportion of paper used internally that has been certified as derived from responsibly managed forests.

PAPER SHIPPED "IN THE BOX"

We are reducing the amount of paper shipped "in the box" with HP products, including manuals, guides and warranties. We are doing so by changing their specifications (for example, using smaller fonts and thinner paper), reducing the number of pages and, where legally permissible, switching to electronic delivery. These actions reduce transportation-related impacts while still ensuring our customers have access to these materials on an as-needed basis.

For example, in 2009 we reduced the font size and length of documents shipped with several product lines, including LaserJet printers and notebook PCs, and stopped printing warranty statements for HP Enterprise Servers products. In 2010 we will remove

warranties from our remaining desktop and notebook products (where legally permissible), and HP Enterprise Services will provide all software installation instructions electronically.

PAPER USE FOR COMMERCIAL AND PROMOTIONAL PURPOSES

We are working with our commercial print vendors to implement HP's paper policy. Our intent is for all HP sales and marketing materials to be printed on paper certified from sustainable forestry practices that contains post-consumer recycled content. In 2009, we printed all direct marketing catalogs for small and medium-sized businesses, homes and home offices on FSC-certified paper made from 30 percent post-consumer recycled fiber.

Most HP catalogs and brochures are printed only on demand, reducing the likelihood that documents will be printed that are not distributed.

PERSPECTIVE

HP demonstrates leadership by proactively evaluating materials and prioritizing for elimination those that pose an environmental, health or safety risk. This activity is reflected in the HP Global Citizenship Report goals for material phase-outs. HP also understands the benefit of reaching out to those nongovernmental organizations that advocate for safer materials to understand their concerns and the principles that inform their commitment to safer substitutes. HP works to integrate those principles, as feasible, into its business operations and to communicate the practical business and engineering challenges and benefits. HP also demonstrates leadership by engaging its peers and even competitors in the industry in collaborative activities to advance the use of safer materials. Such actions leverage effective change within the supply chain in ways that no one organization can do alone.

HP's Global Citizenship Report would benefit from including more data on HP's choice of materials with more benign profiles. The company could then communicate data on the relative amounts of such materials in its products and more effectively demonstrate how informed substitution of hazardous chemicals is an ongoing journey that is feasible and profitable.

LAUREN HEINE, PhD
Science Director
Clean Production Action

ENVIRONMENT

PRODUCT REUSE AND RECYCLING

Over a billion PCs are in use worldwide, and the number is expected to reach nearly 2 billion by 2014.[1] As the number of electronic products increases, so does the challenge of managing them responsibly when they are no longer wanted.

Reusing a product extends its life and maximizes its value. But eventually all IT equipment reaches the end of its useful life, and recycling services are then essential for responsible end-of-life management. Recycling minimizes environmental impacts associated with waste disposal and reduces the need for raw materials and energy to manufacture new products.[2]

HP is committed to increasing the volume of our products reused, recycled and diverted from landfill. We operate recycling services in 56 countries or territories worldwide. In the United States we also launched a buyback program in January 2009 that includes free recycling if an HP-branded system had no value for consumers. We estimate that we avoided 210,000 tonnes of carbon dioxide equivalent (CO_2e) emissions in 2009 through our recycling activities.[3]

We strive to develop and manage sustainable and cost-effective programs, and we are accountable for and transparent regarding the volume of products we reuse and recycle. To that end, we monitor and measure our vendors' performance to mitigate HP's risk as well as our customers', and to minimize the environmental, health and safety impacts of recycling. Our approach also helps us address regional and local legislation, such as the European Union Waste Electrical

HIGHLIGHTS IN 2009

30,000
the amount of hardware (3.6 million units) recovered for reuse and remarketing

112,000 TONNES
the volume of electronic products and supplies recovered for recycling, including 61 million print cartridges

51
the number of vendor audits in 24 countries completed, including 17 at reuse vendor sites and 34 at recycling facilities

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[1] Forecast: PC Installed Base, Worldwide, 2005-2014, October 2009 Update ", Gartner Research Paper No. G00172111, 2009.

[2] Throughout this report, product "reuse" or "remarketing" refers to the return to use of complete electronic products and component parts. "Recycling" refers to the processing of waste electronic devices and consumable items for recovery of materials or energy.

[3] According to the U.S. Environmental Protection Agency's Waste Reduction Model (WARM) Tool, CO_2e reductions from recycling are calculated per the following formula: 1.858 kg CO_2e/kg recovered electronic waste.

ENVIRONMENT

and Electronic Equipment (WEEE) Directive, requiring discarded electronic equipment to be recycled.

HP works with a network of vendors to process, resell and recycle products returned to us. We audit vendors to ensure they conform with our standards and policies as well as our Supplier Code of Conduct. (See Vendor audits for more information.) We are working with governments and nongovernmental organizations in developing countries to boost capacity to properly repair and recycle unwanted electronic equipment.

Businesses and consumers increasingly choose manufacturers that offer responsible options for used equipment. HP supports individual producer responsibility (IPR), in which all manufacturers share with

governments and customers the responsibility to manage IT products at the end of their useful lives.

We engage with governments to develop appropriate legislation. HP supported an IPR approach in the development of the European Union's Waste Electrical and Electronic Equipment Directive as well as legislation in countries in North America and Asia.

The export and dumping of electronic waste is increasingly recognized as posing a risk to environmental and human health. To avoid illegal dumping of electronic waste, HP does not allow returned products to be exported from developed countries to developing countries for recycling. HP's Policy on Export of Electronic Waste to Developing Countries has more information.

Product reuse and recycling at HP

CUSTOMER	ASSET RECOVERY SERVICES	OUTCOMES	
	Trade-in	REUSE (hardware only) 30,000 tonnes in 2009	REMARKET TO CUSTOMER
	Return for cash	RESPONSIBLE RECYCLING (hardware and cartridges) 112,000 tonnes in 2009	MATERIALS FOR OTHER PRODUCTS
	Leasing return		ENERGY RECOVERY
	Donation*		DISPOSAL (if applicable)
	Recycling		
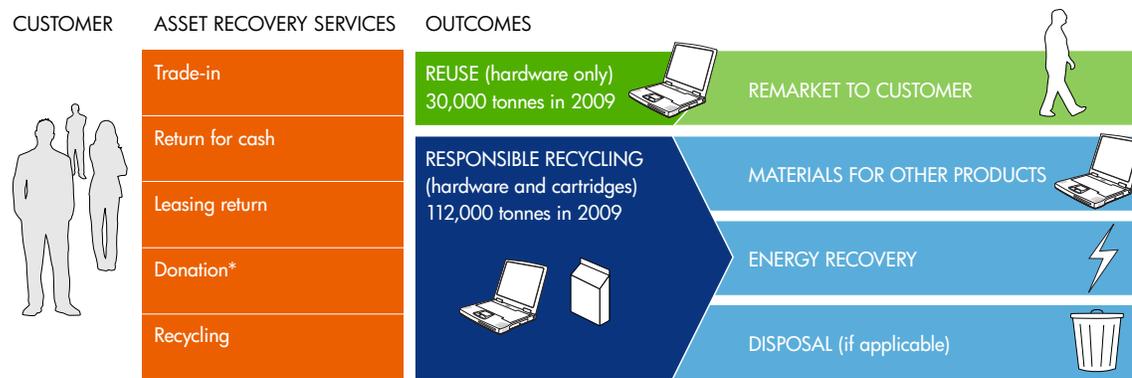
* The relationship is directly between customer and charity.

PROGRAMS

Hardware reuse

Product reuse programs extend the useful life of equipment, including at the end of leasing agreements when customers return products ranging from PCs to data center equipment. We also take back products as part of trade-in agreements and other commercial activities. The equipment is refurbished or remanufactured as appropriate, repackaged and resold. We offer remarketed products for most HP product lines, and follow strict processes to protect user data and to meet environmental requirements.

In 2009 we donated 5,500 HP computers reclaimed by our take-back program in India to over 1,000 schools in two states, Karnataka and Chennai. This contribution was recognized by an award from the

Indian IT industry trade body, NASSCOM, and included as a case study in a publication by leading Indian research organization TERI. In the United States, HP also offers product donation opportunities through a partnership with the National Cristina Foundation (NCF).

See more information about our leasing and reuse services and product return options online.

Hardware recycling

Products returned to us that are not suitable for reuse enter our recycling programs, along with equipment returned directly through HP recycling services. We offer hardware recycling services in 46 countries or territories worldwide. Consumer recycling

ENVIRONMENT

services vary by country, depending partly on local regulations. We make arrangements with commercial customers depending on the equipment involved and the circumstances. HP ensures customers' data security is protected for all products we take back.

In the United States we launched a consumer buy-back program in January 2009. The U.S. buy-back program covers IT equipment of any brand. Consumers can check online to see how much cash they could receive for their equipment. If the product has no monetary value, consumers can recycle HP and Compaq-branded products at no cost.

In 2009 we launched a new hardware recycling program in Brazil, and expanded our hardware take-back programs in Australia and New Zealand by establishing a network of drop-off points that allow customers to more easily return HP branded products for recycling.

In Europe we worked with other manufacturers to create the European Recycling Platform (ERP) in 2002 to provide pan-European take-back and recycling services. In 2009, ERP recycled nearly 33,000 tonnes of equipment on behalf of HP. In addition to ERP's recycling, in 2009 HP conducted many take-back events in Europe, including 15 in Germany.

Print cartridge recycling

We provide free recycling for HP print cartridges in 53 countries or territories covering more than 88 percent of global print cartridge sales. We offer customers several free, postage-paid return options at www.hp.com/recycle, including return labels and envelopes, bulk collection boxes and printable labels. In the United States, Canada and Puerto Rico, we also offer return labels in HP LaserJet toner cartridge packaging and online options. Additionally, in the United States and Canada HP offers in-store recycling options. Customers in other regions can use our website (www.hp.com/recycle) to order shipping labels or boxes online.

To reduce the amount of shipping material required for recycling returns, HP no longer includes return envelopes in HP ink cartridge packaging. However, HP will continue to accept ink cartridges returned in envelopes that customers have saved. Instead, we are moving toward in-store collection points where customers can deposit used cartridges when they come to buy new ones. In 2009 we continued our retail recycling program in collaboration with Staples, an authorized HP retail recycling location. HP customers can return their used HP inkjet cartridges and LaserJet toner cartridges to over 1,875 Staples locations in the Unites States and Canada.

The cumulative volume of cartridges returned and recycled reached 390 million pounds (177,000 tonnes) in 2009. This equates to more than 61 million LaserJet and inkjet cartridges returned and recycled worldwide in 2009, bringing the total to date to 320 million.

We design HP print cartridges to be recyclable and incorporate recycled material. Since we take back only our own cartridges, we can be certain about the material content, making it easier to process exhausted cartridges and reuse the material to manufacture new ones. In 2009, HP reached cumulative shipments of 555 million inkjet cartridges using plastic recycled from used HP cartridges—the first such "closed loop" process in the industry. (Read more about our use of recycled materials.)

HP does not offer remanufactured print cartridges because they do not meet our quality and reliability standards.

Read more about our reuse and recycling programs and see a list of recycling options by country in the report online.

Building capacity in developing countries

We aim to provide convenient and competitive product take-back that meets our reuse and recycling standards in all regions, but widely varying local capabilities and customer expectations require tailored solutions. Recycling infrastructure does not exist in every country, so we work with governments, nongovernmental organizations (NGOs) and other businesses to expand recycling capacity. In many countries, including China and India, an informal sector collects and processes electronic waste. We promote solutions that improve worker health and safety while also providing meaningful employment.

We have joined forces with the Digital Global Solidarity Fund and Swiss materials institute EMPA to address Africa's electronic waste problem. This collaboration aims to better understand the legislative and infrastructure needs required to reduce potential health and environmental hazards caused by improper disposal of electronic waste and to create jobs in disadvantaged communities. The project has carried out assessments of current electronic waste recycling operations in Kenya and Morocco and provided funding for a pilot recycling project in South Africa.

ENVIRONMENT

In 2009, HP began collaboration with the e-Waste Association of South Africa (eWASA) to establish infrastructure for the take-back and environmentally responsible management of unwanted electronic products in the country. The initiative will involve the government, manufacturers and consumers, following the principles of IPR.

We worked with an Indian NGO to develop a blueprint for sustainable electronic waste management in conjunction with existing collectors and recyclers, and in May 2009 launched a recycling program involving 15 facilities in nine Indian states. We aim to expand the project by increasing the number of drop-off points and the number of cities covered by the initiative.

PERFORMANCE

In 2009, HP made significant progress toward its reuse and recycling goals for 2010 despite economic pressures in some countries. Global recycling volume (weight) declined for the first time in our program history as customers held on to their products longer and increasingly extended their useful life. Additionally, while returned unit volumes continue to increase, returned unit average weights are decreasing. In this challenging environment, we recovered 314 million pounds (142,000 tonnes) of hardware and supplies, including:

- Approximately 3.6 million hardware units weighing 30,000 tonnes (66 million pounds) for reuse and remarketing, roughly 50 percent returned from business customers.

- Approximately 112,000 tonnes (248 million pounds) for recycling, including 61 million print cartridges. More than 50 percent of recycling by weight was returned by consumers.

We achieved a total reuse and recycling rate in 2009 of 16 percent of relevant HP hardware sales worldwide, compared with 17.5 percent in 2008.[1]

This progress means we have recovered a total of more than 2 billion pounds of electronic products (for reuse and recycling) and supplies (for recycling) since 1987.

We conducted 51 vendor audits against HP Reuse and Recycling Standards in 2009. (See Vendor audits for more detail.)

See the Data and Goals section for detailed product reuse and recycling performance information.

Product reuse and recycling, 2005–2009 [tonnes]*

	2005	**2006**	**2007**	**2008**	**2009**
Reuse of equipment	23,000	22,000	29,000	34,000	30,000
Recycling (computer hardware and supplies combined)	64,000	75,000	113,000	119,000	112,000
Total recovery (reuse plus recycling)	**87,000**	**97,000**	**142,000**	**153,000**	**142,000**
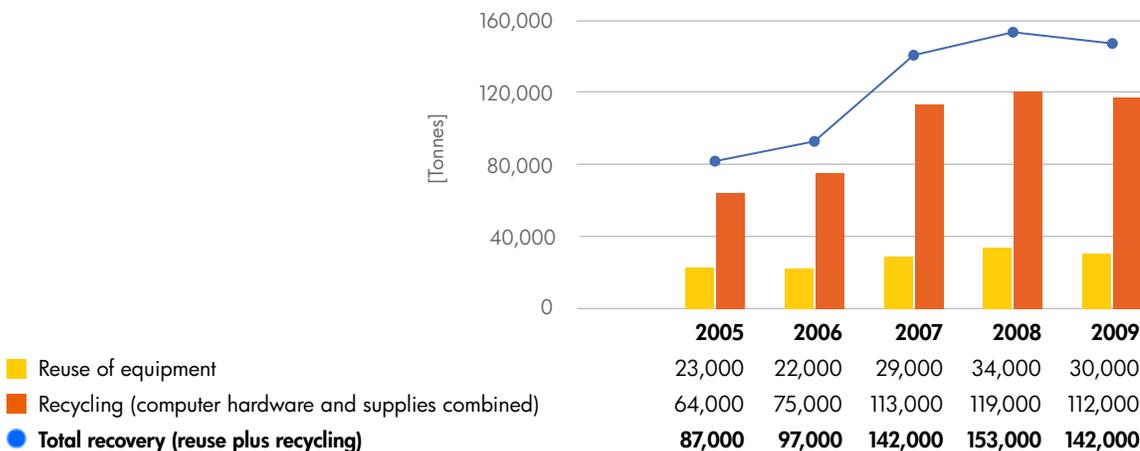
* 2009 reuse and recycling data includes operations formerly a part of EDS.

[1] The recovery sales percentage is based on the following methodology:
  - We calculate a ratio of the weights of hardware products returned for recycling against the weights of our product sales from seven years ago.
  - We calculate a ratio of the weights of hardware products returned for reuse against the weights of our product sales from three years ago.
  - The recycling and hardware refurbishment ratios are combined to provide an overall comparison to our product sales.

Beginning in 2008, we have decided not to include recycled consumables in our recovery sales percentage, since our stakeholders are primarily concerned about the rate for hardware. We do not expect that this change will have a material impact on the results. We have also made changes to our calculation methodology to be more consistent with others in our industry.

ENVIRONMENT

VENDOR AUDITS

HP uses a network of vendors to process, resell and recycle returned products. We require vendors to adhere to our Global Reuse and Recycling Standards that cover areas such as storage, handling and processing of returned equipment to prevent the release of harmful substances. HP does not allow the export of e-waste from developed to developing countries for recycling. (See HP export policy at http://www. hp.com/hpinfo/globalcitizenship/environment/commitment/goals.html.) We set our standards very high, relative to others in the industry. Unlike most companies in the industry, we also publish those standards for full transparency.

We audit vendors to ensure they conform to our standards, policies and Supplier Code of Conduct. Our auditing program also satisfies the Electronic Product Environmental Assessment Tool (EPEAT®) requirements, helping HP achieve silver and gold product registration status. Environmental Resources Management (ERM), a third party, conducts our audits, which include checks on downstream material flows based on shipment records and receipts. We strive to track all material to final disposition.

We have identified more than 500 recycling vendor locations around the world, 25 of which are qualified first-tier vendors, with the balance constituting part of their recycling networks. We require first-tier vendors to audit their sub-vendors to ensure they conform to our standards. ERM has audited each first-tier recycling vendor site. We work with our first-tier vendors to improve their performance and the performance of their downstream vendors.

If audits identify areas of nonconformance with our standards, vendors must create corrective action plans to show how they will conform, and act quickly to improve their performance.

2009 audits and findings

In 2009, ERM auditors assessed 17 reuse and 34 recycling vendor sites in 24 countries.

The 17 reuse vendor audits covered first-tier vendors who were not audited in 2008. In total, ERM auditors found 12 major gaps[1] and 207 minor gaps during the reuse audits. More issues were found in 2009 than in 2008 because we evaluated some marginal vendors that we consequently do not plan to use in the future. Environmental, health and safety issues made up the most common gaps found. (See below.)

We are unable to make direct year-to-year comparisons of our recycling audit results from 2008 and 2009, because in 2009 we conducted three types of audits that we had not performed in the previous year. These included:

- Nine audits of vendors yet to be used by HP being evaluated for potential future use[2]

- Eight observational audits of second-tier vendors conducted by first-tier vendors[3]

- Three audits to assess the processes developed by system management companies to train auditors, conduct audits and document audit results

The remaining 14 recycling audits included in the table below represent eight audits of vendors that were not previously audited and six re-audits of vendor sites to assess the corrective actions taken where major gaps were found in 2008. Three of the six re-audited vendor sites yielded no major gaps. These positive results are particularly significant as all three sites are in developing countries. Auditors also found no major gaps at five of the eight vendor sites that had not been previously audited, including one in a developing country.

Over the past two years, 60 vendors have submitted corrective action plans to HP describing how they are addressing the gaps identified during our audits. HP vendor managers monitor improvements to ensure conformance. In a few cases, we have stopped using vendors because of a lack of transparency or willingness to make the required changes.

We plan to conduct a similar number of reuse and recycling vendor audits in 2010. HP recycling audits will increasingly focus on assessing first-tier vendors' capability to independently audit their downstream vendors. This will help to prepare our vendors for future third-party certification of recycling standards. Evolving EPEAT requirements (see Sustainable design) will have a significant influence on the timing of this change.

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[1] Major gap: The finding represents a gap in a critical component for managing the overall issue; and/or the finding could pose a significant hazard to safety, health or environment.

[2] Since none of these vendors have yet recycled material for HP, we have not included them in our audit results.

[3] These observational audits used criteria developed by our first-tier vendors that are not comparable to the others.

ENVIRONMENT

Reuse vendor audits results, 2009

	AUDITS CONDUCTED 2009	MAJOR GAPS FOUND 2009	MINOR GAPS FOUND 2009	AUDITS PLANNED 2010
Asia Pacific and Japan	7	1	78	5
Europe, Middle East and Africa	1	0	8	6
Latin America	4	6	56	7
United States and Canada	5	5	65	2
TOTAL	17	12	207	20

Recycling vendor audits results, 2009

	AUDITS CONDUCTED 2009	MAJOR GAPS FOUND 2009	MINOR GAPS FOUND 2009	AUDITS PLANNED 2010
Asia Pacific and Japan	5	7	64	9
Europe, Middle East and Africa	1	0	11	8
Latin America	6	15	92	5
United States and Canada	2	0	17	0
TOTAL	14	22	184	22

Reuse vendor major and minor audit gaps, 2009 [% of total, by category]

Environmental, health and safety	41%
Security, logistics and asset tracking	24%
Insurance and business continuity	15%
Data destruction	7%
Management systems and practices	5%
Other	8%

Recycling vendor major and minor audit gaps, 2009 [% of total, by category]*

Environmental, health and safety	54%
Security, logistics and asset tracking	26%
Insurance and business continuity	10%
Management systems and practices	6%
Data destruction	3%

* Numbers do not add up to 100 percent due to rounding.

Read a statement from ERM, HP's third-party auditor for reuse and recycling vendor audits, in the report online.

ENVIRONMENT

EXTERNAL VERIFICATION

In 2009, HP completed its second round of reuse and recycling vendor audits under its expanded program guidelines. Our third-party auditing firm, Environmental Resources Management (ERM), assessed 17 reuse and 34 recycling vendors in 24 countries.

The guiding principles for HP's Reuse and Recycling Vendor Audit Program (Program) continue to be engaging with vendors to drive substantive improvements across the vendor base measured against the HP reuse and recycling standards, and to report outcomes and challenges of the Program with transparency.

As such, in 2009 ERM continued to support HP's expectations for a rigorous program that reaches beyond auditing to identify and realize meaningful opportunities to improve operations in the vendor network. This translated into actions in three key focus areas: ongoing audits, driving corrective actions, and knowledge transfer and capability building to address structural and systemic improvement opportunities in vendor-operated programs.

ONGOING AUDITS Vendor audits remain the basis for action by providing a measure of performance across full-spectrum environmental, health, safety and operations support topics. Audits include a "downstream material-flow" audit to check that material entering an HP tier-one vendor can be traced through the downstream vendor chain to final disposition.

CORRECTIVE ACTION PLANS EMPHASIZED To help make sure the audits are effective vehicles for change and improvement, HP emphasizes the equal importance of the post-audit corrective action process. As

such, a formal program is in place to help ensure the timely receipt of corrective action plans, to review their adequacy, and to prompt or remind vendors about their implementation commitments well ahead of formal, follow-up audits.

KNOWLEDGE TRANSFER AND CAPABILITY BUILDING INITIATED In 2009, we initiated a series of capability-building programs as a means of implementing systemic change in areas identified as high-priority improvement opportunities. Specifically, these focus on helping vendor networks improve their self-auditing on select topics and corrective action processes, and improving the rigor of programs that tier-one vendors have in place to manage their own downstream vendors. These programs will continue in 2010.

CHALLENGES As reported last year, information from the first-tier is well understood, but ensuring that detailed information is forthcoming from second-tier and third-tier vendor audits persists as the dominant challenge. Together with HP, ERM will continue to address the challenge by working directly with tier-one vendors on active management of their immediate downstream vendors, as described above.

DEBORA BONNER
Partner, Supply Chain and Sustainable Business Solutions
Environmental Resources Management

HP OPERATIONS

HP owns and leases facilities in approximately 170 countries, a global scale that brings obligations as well as opportunities to have a positive impact on communities and the environment. Managing our operations responsibly is a cornerstone of our commitment to environmental sustainability.

Our environment, health and safety (EHS) management system ensures we comply with regulations and meet company standards across all HP facilities. This includes 465 sites formerly owned and leased by EDS and integrated into HP during 2009.[1]

Our most material impact is our greenhouse gas (GHG) emissions due to energy use (See Climate and energy—Operations for detail). Other material environmental impacts from our operations are those associated with waste disposal, paper use, and water consumption.

Less significant issues include our emissions to air, legacy sites requiring remediation and impacts on biodiversity. HP's wastewater discharges are negligible.

Scope of this section

- Data are based on HP's fiscal year (ending October 31).
- In 2009, HP collected data from 414 sites (including all HP manufacturing sites and our largest office, warehouse, data center and distribution sites). This accounted for 83 percent of our total floor space of approximately 7.3 million square

meters. We extrapolated data from comparable facilities, primarily leased small office space, for the remaining 17 percent of floor space, unless stated otherwise.

- We are continuing to refine the process by which we collect data and calculate trends. Gathering and extrapolating data quarterly instead of annually will more accurately reflect changes in our operations.
- See a list of major operations in the report online.

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[1] The EDS operations, together with HP's legacy OS and Consulting & Integration business, are today known as HP Enterprise Services. EDS was acquired in 2008 and substantially integrated into HP in 2009.

ENVIRONMENT

MANAGEMENT AND COMPLIANCE

HP is committed to leading environment, health and safety (EHS) performance. We aim to provide products and services that are safe, to minimize their impact on the environment, to conduct our operations in an environmentally responsible manner, and to ensure that our employees can work without injury at our facilities. Our environmental, health and safety (EHS) management system helps us achieve our EHS objectives at all sites. At its core is our EHS Policy.

Legal compliance is HP's minimum requirement for EHS, and our internal EHS standards reflect this commitment. Our EHS management system ensures we have the processes needed to comply. We investigate any allegation of non-compliance with the law to determine the root causes and implement corrective action to prevent recurrence.

All our HP manufacturing operations worldwide are certified to ISO 14001, the international standard for environmental management systems.

To ensure that our EHS objectives continue to be met as we grow, we introduce our EHS management system to newly acquired companies as part of the integration process and require them to use our system.

Health, safety and wellness management is covered in the HP employees section of this report.

SUSTAINABLE BUILDING DESIGN

In 2009, we launched the Global Workplace Initiative to reduce the space we occupy, use resources more efficiently, decrease our climate impact and water consumption, and cut costs. The initiative has had the additional benefit of freeing up office buildings for other uses, so overall fewer offices worldwide need to be constructed.

We include sustainable design features such as renewable resources and efficient lighting and water systems in the design of new buildings and renovations. We also work to increase awareness of sustainability at each facility by providing project managers with a sustainable design checklist. The checklist presents a list of over 30 indicators that project managers can use to record the building's sustainability performance, identify areas for improvement and monitor progress over time.

The U.S. Green Building Council awards LEED® certification to buildings that have been designed to high environmental standards. We are working toward LEED certification for two of our facilities in Texas. We anticipate that one of them—our new 35,000 square meter data center in Hockley, near Houston and completed in early 2010—will be certified to the LEED Gold level. It features:

- Locally produced and recycled construction materials, plus wood certified as sustainable by the Forest Stewardship Council (FSC), low-emission adhesives, carpets and paint, and reflective roofing materials that reduce the need for cooling

- "Smart" energy-saving systems that will make the site 15 percent more efficient than a typical data center, and an on-site photovoltaic solar power system that will generate nearly 280,000 kWh of electricity annually, estimated to reduce the site's annual carbon footprint by up to 170 tonnes

- A system to use wastewater from the cooling process for landscaping, eliminating the need to extract any potable water or emit this wastewater downstream

- Bicycle racks and designated parking spaces for low-emission vehicles, to encourage low-impact commuting

On a smaller scale, we achieved LEED Silver certification for our 650-square-meter HP Customer Experience Center in Houston. The building uses locally sourced materials, and we reused furniture where possible. Over 60 percent of construction waste was diverted from landfill, more than twice the U.S. average.[1] We cut water use in restrooms by 40 percent compared with a typical design by replacing all toilet flushes and faucets with low-flow fixtures. Efficient lighting design reduced energy usage by 15 percent compared with

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[1] A recent study by McGraw-Hill Construction indicated only 28 percent of building-related construction and demolition debris was diverted from landfill in 2008. http://www.eponline.com/Articles/2009/11/19/Sustainable-Construction-Waste-Management-Most-Important-Green-Building-Practice.aspx

ENVIRONMENT

standard lighting. Building occupants now have better control over lighting and ventilation systems so they can turn them down or off when not needed.

In November 2009, we opened a sustainably designed call center in Rio Rancho, New Mexico, and are working toward LEED certification for another new call center facility in Conway, Arkansas, that is due to open in early 2010.

Much of HP's office space is carpeted. Carpet is resource-intensive to manufacture, bulky to transport, and can be difficult to recycle. To reduce these impacts we contracted InterfaceFLOR, a carpet company that shares our sustainability goals. Globally, 28 percent of InterfaceFLOR's total energy use for manufacturing comes from renewable sources. Interface manufactures carpet in every region, reduc-

ing the energy needed to transport carpets to HP sites worldwide. Under its ReEntry program, the company re-manufactures old carpet into new carpet, a product used extensively by HP. In 2009, we installed more than 240,000 square meters of InterfaceFLOR carpet in HP buildings worldwide.

We are increasingly introducing low-environmental-impact furniture to our offices, including the Steelcase Think® chair. The Think chair is made of up to 41 percent recycled material, is largely recyclable, and made of only materials that Steelcase tests show are safe to human health and the environment. It is designed for minimal overall impact on the environment during all phases of its life cycle, from the extraction of raw materials to production, shipping, use and end of life. We source furniture that has been locally manufactured to reduce the distance it must be transported.

WASTE AND RECYCLING

Our first priority is to eliminate waste in our operations. When this is not feasible, we strive to divert waste away from landfills to beneficial uses.

In 2009, we generated 124,476 tonnes of total waste, of which 95 percent was nonhazardous and 5 percent hazardous.[1] We diverted 89.4 percent of that combined amount from landfill, largely through recycling.

When disposal is necessary, HP has processes in place to confirm that waste is managed in an environ-

mentally responsible manner, for example by auditing vendors that dispose of hazardous waste for us.

Nonhazardous waste

Our nonhazardous waste primarily consists of paper, pallets, used electronic equipment (e-waste), metals and packaging. Read more about our programs to reuse and recycle our own e-waste and that of our customers in Product reuse and recycling.

Nonhazardous waste, 2005–2009 [tonnes]*

	2005	2006	2007	2008	2009
Americas	60,358	62,713	52,948	54,237	86,198
Europe, Middle East and Africa	20,365	23,291	20,104	17,204	18,186
Asia Pacific and Japan	21,844	20,488	16,223	20,391	13,264
Total	**102,567**	**106,492**	**89,275**	**91,832**	**117,648**
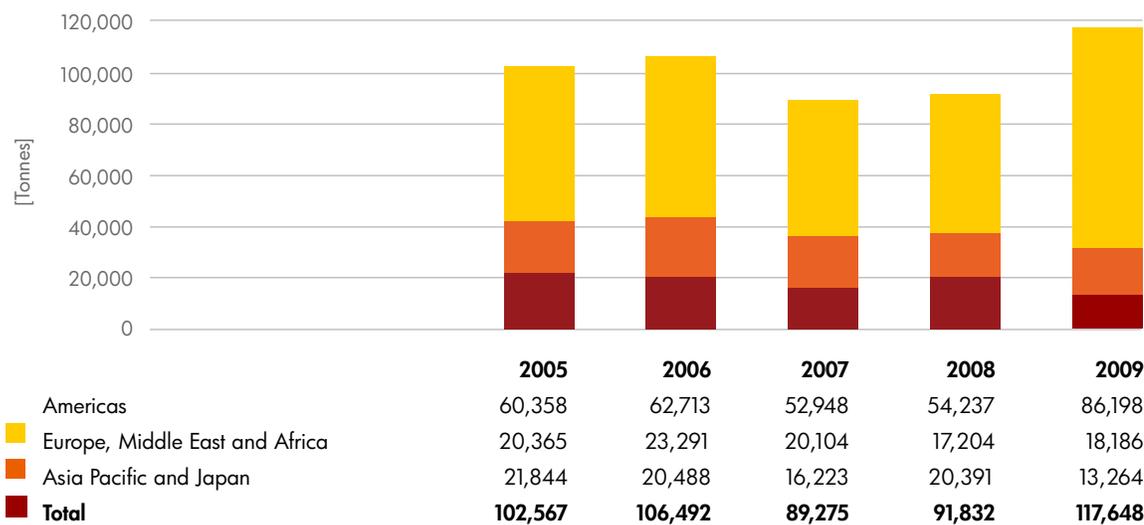
* Data for 2009 include waste from sites gained through the acquisition of EDS in 2008.

[1] Hazardous waste classification varies by country. For our ease of calculation, HP data includes some waste not considered hazardous in the country where it is generated.

ENVIRONMENT

HP generated 117,648 tonnes of nonhazardous waste in 2009, an increase due to company growth and the acquisition of EDS.

Paper is an important material for HP. We sell paper to customers and use paper in our offices and in packaging, marketing material, manuals and warranties included with our products. Paper and pallets made up 61.8 percent of the total nonhazardous waste we generated in 2009 and were the largest waste streams diverted from landfill.

We are committed to reducing the amount of paper we use, and ultimately dispose of, to reduce our environmental impact and save money. Read about our efforts to reduce paper use and source paper from sustainable sources in the Paper section, and how we are reducing our use of pallets in Product transport.

Global nonhazardous waste composition, 2009 [% of total]*

■ Incineration	4.7%
■ Landfill	11.2%
■ Recycled	
E-waste	8.3%
Metals	2.5%
Packaging materials	3.4%
Pallets	12.2%
Paper	46.0%
Other	6.1%
■ Reused	
Packaging materials	0.3%
Pallets	3.6%
Other	1.4%

* Total is less than 100% due to rounding.

Recycling programs

HP's worldwide recycling programs play an integral role in our efforts to divert waste from landfill. In 2009, we recycled, reused or incinerated for energy 104,497 tonnes of waste, achieving a nonhazardous landfill diversion rate of 88.8 percent and exceeding our target of 87 percent. As our operations continue to shift toward office and data center environments, sustaining the landfill diversion rate becomes increasingly difficult. In the United States, we saved nearly $5.1 million by reusing items and avoiding landfill fees, and generated $2.6 million in revenue by selling recyclable commodities such as desk recycling (paper and beverage containers), scrap metal, excess foam packaging and cardboard.

All HP employees can recycle paper, plastics and batteries at convenient recycling points within our buildings. We recycle glass, plastic and aluminum containers disposed of in our dining rooms and conference facilities.

We reclaim used carpet tiles from our offices and recycle them in partnership with InterfaceFLOR. See Sustainable building design to learn more.

Hazardous waste

HP generated 6,828 tonnes of hazardous waste in 2009.

Hazardous waste, 2005–2009 [tonnes]

	2005	2006	2007	2008	2009
■ Americas	2,159	2,192	2,356	3,379	2,470
■ Europe, Middle East and Africa	1,474	1,824	1,593	2,084	1,737
■ Asia Pacific and Japan	3,368	4,622	4,877	5,016	2,621
Total	**7,001**	**8,638**	**8,826**	**10,479**	**6,828**

ENVIRONMENT

Global hazardous waste composition, 2009 [% of total]*
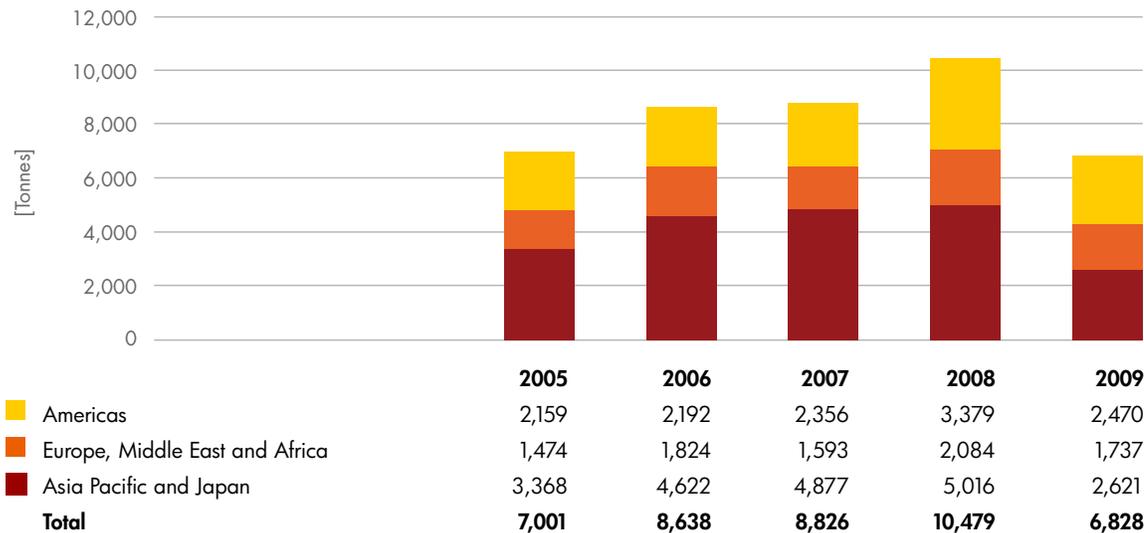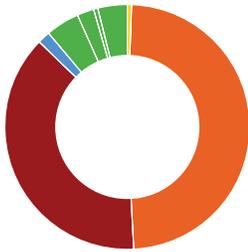
🟨	Landfill	0.7%
🟧	Incineration	48.6%
🟥	Treated	37.9%
🟦	Fuel blending	1.6%
🟩	Recycled	
	Back to HP	4.6%
	Batteries	2.1%
	Tubes and ballasts	0.7%
	Other	3.7%

* Total is less than 100% due to rounding.

WATER

Water usage

Although HP's operations are not water intensive, we recognize that water consumption is a growing concern globally.

In 2009, we used 7,647 million liters of water worldwide, predominantly for domestic use in buildings, cooling and landscape irrigation.

To take into account the integration of EDS sites after the acquisition in 2008, we are revising our water goal and are establishing a new baseline from which to measure our performance. This will replace our prior goal to reduce water use by 5 percent from 2007 levels by 2010.

Water-saving activities in 2009 included:

- Eliminating water waste during irrigation at our Mississauga, Canada, facility by installing a "smart" irrigation control system that automatically adjusts the watering schedule according to local weather conditions, and detects leaks and faulty valves. The new system cut water use by 40,000 liters per day—equivalent to 6 million liters over the summer watering season—and will save about $8,000 annually as a result.

- Switching to surface water for irrigation in Boise, Idaho, United States, which reduced our reliance on an underground aquifer. We delayed the start of the irrigation season until sufficient water was available in on-site ponds, and we no longer replenish ponds using groundwater.

See performance data, including regional breakdown, in the Data and Goals section.

Wastewater

Wastewater is not a material environmental issue for HP operations. The effluents we create are treated on-site or discharged to municipal sewage treatment. We have procedures in place to prevent unauthorized discharges of chemicals to wastewater systems.

EMISSIONS

HP operations' emissions to air (excluding greenhouse gases) are relatively low and not significant from a companywide viewpoint. We have equipment and processes in place to control emissions that do occur and report site emissions to relevant authorities.

Toxics release inventory

Our operations, primarily the manufacture of imaging and printing products, require the use of several chemicals listed on the U.S. Environmental Protection Agency (EPA) Toxics Release Inventory (TRI). We

ENVIRONMENT

Disposition by type of TRI material, 2006-2008 [tonnes][*],[**]

CHEMICAL			EMITTED TO AIR			DISCHARGED TO WATER (to sewer/off-site treatment facility)			SHIPPED OFF-SITE FOR RECYCLE/ENERGY RECOVERY			SHIPPED OFF-SITE FOR TREATMENT OR DISPOSAL			TOTAL		
			2006	2007	2008	2006	2007	2008	2006	2007	2008	2006	2007	2008	2006	2007	2008
N-methyl pyrrolidone			0.1	0.0	0.0	0.0	0.0	0.0	605.4	451.5	357.6	4.2	0.0	0.0	609.7	451.5	357.6
Nitric acid			0.7	0.5	0.5	0.0	0.0	0.0	0.0	9.6	0.0	62.7	21.9	5.9	63.4	31.9	6.4
Nitrates			0.0	0.0	0.0	32.6	12.3	9.3	0.0	0.0	0.0	0.0	0.1	0.0	32.6	12.4	9.3
Lead			0.0	0.0	0.0	0.0	0.0	0.0	10.1	7.1	8.3	0.0	0.0	0.0	10.1	7.1	8.3
Xylene			5.2	5.3	6.5	0.0	0.0	0.0	0.0	0.0	0.0	5.9	11.9	12.7	11.1	17.2	19.3
Glycol ethers			NA	NA	9.4	NA	NA	0.0	NA	NA	0.0	NA	NA	41.8	NA	NA	51.2
Ethylene glycol			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.0	3.2	0.0	0.0
All others			0.4	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.0	1.1	0.7	0.2
TOTAL			6.4	5.8	16.7	32.7	12.3	9.3	615.5	468.1	365.8	76.7	34.5	60.5	731.3	520.8	452.2

[*] The substances with global totals greater than 1 tonne are shown. TRI reports are due to the U.S. EPA July 1 each year, so the most recently completed reporting year is 2008.

[**] The increase in air emissions and TRI material shipped off-site for treatment or disposal (most notably of glycol ethers) from 2007 to 2008 is due to the integration of data from acquired operations. Data for these operations became available in 2008.

extend TRI reporting criteria to the five manufacturing sites worldwide that account for the vast majority of HP's TRI emissions.

TRI emissions from HP manufacturing operations decreased in 2008, and we expect this trend to continue. The primary reason is the elimination of processes that use many of these chemicals due to changes in business operations.

Ozone-depleting substances

HP facilities use ozone-depleting substances (ODS) in cooling and air conditioning systems only. Although these systems are sealed, leaks during operation and maintenance can result in emissions. We are replacing chlorofluorocarbons (CFCs) in our systems with hydrofluorocarbons (HFCs)—greenhouse gases that do not deplete the ozone layer.

We do not measure ODS emissions but rather estimate leakage using guidance from the Intergovernmental Panel on Climate Change.[1]

See performance data, including regional breakdown, in the Data and Goals section.

[1] See http://www.ipcc.ch/publications_and_data/ar4/wg1/en/ch2s2-10-2.html.

ENVIRONMENT

REMEDIATION

HP is committed to addressing chemical releases from historical site operations. We are involved in soil and groundwater remediation, and where necessary, we also clean up sites affected by the improper disposal and recycling of HP's wastes by third parties. HP is involved in soil and groundwater remediation at seven third-party sites that have been closed or are undergoing environmental monitoring.

We often build new operations on land that has previously been developed, including former industrial sites that may have environmental concerns. This reduces our expansion into undeveloped areas but means we may need to remediate some sites prior to use. In selected cases, we acquire sites that are contaminated, and we address the contamination as a part of site development.

We apply our environmental, health and safety (EHS) management system to prevent and respond to chemical spills at HP facilities. No significant spills occurred during 2009.

Biodiversity

HP's direct operational impact on biodiversity is minimal, because we build very few operations relative to our growth, and often build on land that has previously been developed. Our real estate, including acquisitions, is typically reduced year over year. However, we use significant amounts of paper each year, so we have an indirect impact on biodiversity through forestry. We strive to reduce the amount of paper we use, and only buy paper from suppliers that demonstrate environmental values and a commitment to sustainable forestry practices.

Read more about paper at HP in the Paper section.

ENVIRONMENT

TECH GALLERY

HP is committed to helping others be more efficient and productive, save money, and reduce their environmental impact. Our extensive portfolio provides our customers with new ways to save energy, resources and more. This gallery of more than two dozen products, services and solutions includes some of our most exciting innovations.

HP Advantage Series Widescreen Monitors

HP Advantage series widescreen monitors feature improved environmental design, providing more comfortable use while helping businesses cut costs and energy consumption.

The latest energy-saving features, such as low-power panels, enable the product to use up to 40 percent less energy than previous generations of HP products, and have helped the monitors achieve ENERGY STAR® qualification and the Gold rating in the Electronic Product Environmental Assessment Tool (EPEAT®).

The panels, cabinets and stands are brominated flame retardant (BFR)- and polyvinyl chloride (PVC)-free[1], and some of the monitors use up to 50 percent less mercury than previous HP models.

Corrugated cardboard packaging made from 25 percent recycled material protects the screens in transit. The new packaging design eliminates the need for traditional expanded polystyrene packaging cushions that are not readily recyclable in many communities. The monitors are available as a twin-pack option, further cutting energy and materials for packaging and transportation.

HP Auto-On/Auto-Off and Instant-on Technology

HP printer features help users save money and reduce greenhouse gas (GHG) emissions by cutting energy wasted when the printer is not in use.

HP Auto-On/Auto-Off technology automatically powers down printers after periods of inactivity so they use less than one watt of power. This can save a significant amount of energy: The U.S. Environmental Protection Agency estimates that customers waste up to 66 percent of energy related to equipment use by leaving devices on during nights and weekends.

Instant-on Technology saves additional energy and GHG emissions by virtually eliminating the warm-up period, enabling users to begin printing in just a few seconds. Users consume up to 50 percent less energy related to printing, compared with using printers without this technology.

HP estimates that for monochrome LaserJet products alone, Instant-on Technology helped customers avoid 1.3 million tonnes of carbon dioxide equivalent emissions in 2009, equivalent to removing more than 240,000 cars from the road for one year.

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[1] Meeting the evolving definition of BFR/PVC-free' as set forth in the "iNEMI Position Statement on the 'Definition of Low-Halogen' Electronics (BFR/CFR/PVC-Free)". Plastic parts contain < 1000 ppm (0.1%) of bromine [if the Br source is from BFRs] and < 1000 ppm (0.1%) of chlorine [if the Cl source is from CFRs or PVC or PVC copolymers]. All printed circuit board (PCB) and substrate laminates contain bromine/chlorine total < 1500 ppm (.15%) with maximum chlorine of 900 ppm (.09%) and maximum bromine being 900 ppm (.09%). Service parts after purchase may not be BFR/PVC-free.

Carbon Emissions Management Service

Global efforts to address climate change require many organizations to measure, report and reduce energy use and greenhouse gas (GHG) emissions. HP's Carbon Emissions Management Service, developed in collaboration with the business software provider SAP, enables businesses to respond to regulations requiring accurate reporting and to manage and reduce emissions. Users can calculate, record and analyze their carbon emissions across an entire organization.

This offering builds on HP's Carbon Emissions Management System (CEMS) for IT infrastructure. CEMS users apply HP's C-Counter (patent pending) to measure, monitor and store data related to energy use and GHG emissions in real time, over a period of eight weeks. This information can help businesses answer questions such as:

- Which business units have the highest IT GHG intensity?

- Are our IT systems appropriate for current and future business needs?

- Should we consolidate those systems? Do some need to be restructured or retired?

- How can we reduce GHG emissions?

HP works with each customer to develop its GHG emissions reporting capability and prepare an inventory of emissions. Accurate measurements enable users to manage energy use and emissions in every aspect of the IT infrastructure, from the desktop to the mainframe. For example, the Carbon Emissions Management Service enabled the Bank of Queensland to establish a baseline of its carbon impact and to set goals. The bank is on target to reduce carbon dioxide emissions by 33 percent by 2011, in compliance with the Australian government's National Greenhouse and Energy Reporting Act.

HP Carbon Footprint Calculator

The free online HP Carbon Footprint Calculator[1] helps customers understand and identify steps to reduce the environmental impact and cost of their computing and printing. The data is based on energy assessments specific to the customer's country or even state—and includes information for 146 countries.

The calculator allows users to either review individual products or compare one product against another to understand potential energy savings. For printers, it is possible to evaluate a whole fleet.
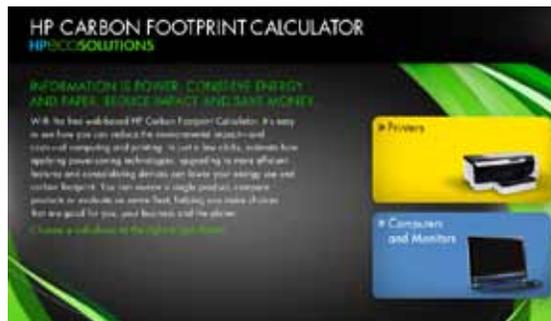
Customers can compare current and legacy individual HP products. The calculator shows the estimated energy use and cost, and the associated greenhouse gas (GHG) emissions. Sliders on the screen allow customers comparing printers to vary factors such as pages printed per year and the lifetime of the equipment and immediately see the estimated effect on energy use and other factors. PC users can input alternative power supplies, graphics cards and processors.

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[1] The Carbon Footprint Calculator generates estimates of energy consumption during use of a PC, monitor or printer, emissions of carbon dioxide equivalent (CO_2e) from production of that electricity, and CO_2e emissions from production of estimated volumes of paper consumed during printing (i.e., estimated CO_2e from electricity production and CO_2e from paper production). It is based on certain key assumptions and makes use of data and models generated by third parties. For more information visit: www.hp.com/go/carbonfootprint.

ENVIRONMENT

PRINTER FLEET ASSESSMENT

Business customers can work with HP to build a baseline estimate of their printing products' carbon footprint as a starting point for environmental improvements.

The assessment includes three simple steps:

1. Enter your country, region or (in some cases) state.

2. Provide basic data about your organization and your printer fleet.

3. Define your energy- and paper-saving practices, such as powering off equipment daily, the number of hours of printer use each week, and printing on both sides of paper.

The calculator shows your current energy consumption and associated greenhouse gas (GHG) emissions, paper use and annual cost. It then illustrates how HP business solutions can reduce your impact and save money. Alternatively, customers can opt for an advanced path that allows them to input the exact printers they use, resulting in more precise outputs that better reflect the customer's current situation.

CeNSE

HP's Central Nervous System for the Earth (CeNSE), a project of HP Labs, will revolutionize the way information is gathered, communicated and analyzed. CeNSE is a highly intelligent network of billions of nano-scale sensors that will feel, taste, smell, see and hear what is going on in the world and communicate that information over fast and powerful computing networks to be analyzed and acted upon in real time by a new breed of business applications and web services.
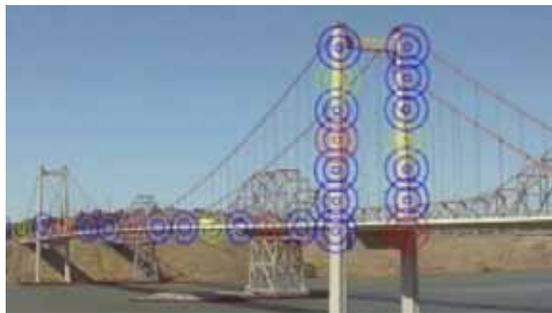
CeNSE will combine breakthrough innovations from HP Labs in nanotechnology, networking, business analytics and optimization in ways that could make people and businesses safer, more secure and more efficient.

The networks will be able to provide real-time information on the physical environment to improve the way governments, businesses and society respond to and manage environmental, biological and physical/structural changes. Small problems such as a worn steel rod can be fixed before they become big problems (the steel rod breaks), and other problems can be avoided altogether.

CeNSE will open up a new breed of business optimization applications using information ranging from operating capacity and merchandise tracking to environmental management and safety. The sensors will have the potential to "smell" a gas leak, monitor the speed and volume of freeway traffic, sense wear and tear on a bridge, or track the spread of the next flu virus. The result will be improved effectiveness and use of resources throughout the global economy. CeNSE could lead to ten-fold gains in production efficiencies and the ability to extend the life of manufacturing components by 50 percent.

HP aims to pilot CeNSE networks within the next three years and make them commercially available within four years.

HP Compaq 8000f Elite Business Desktop PC

The HP Compaq 8000f Elite Business Desktop PC features the latest energy-saving features, a significant reduction in substances of environmental concern and improved packaging. It is ENERGY STAR® qualified and registered EPEAT Gold with the Electronic Product Environmental Assessment Tool (EPEAT®).

This is the first Windows®-based desktop PC in the industry to be free of brominated flame retardants (BFRs) and polyvinyl chloride (PVC) from the wall to the mouse for every configuration sold. This means that all internal and

external components, including the keyboard and mouse, power supply are BFR/PVC-free.[1] Even the power cord is PVC-free[1], unlike the majority of desktop power cords on the market today.

Operating costs are kept to a minimum, with features such as a highly efficient electrical design, an energy-efficient power supply and client-based power management software tools. The HP Compaq 8000f Elite Series external power adapter delivers up to 87 percent power efficiency.

The HP Power Assistant provides an easy-to-use desktop application that allows users to control the PC's energy use by scheduling various power settings throughout the day. It provides real-time reporting of how various settings impact the PC's energy consumption and cost.

The environmental gains extend to the use of recycled and recyclable packaging materials. Packaging cushions that protect the PC during shipping are made from paper-based, 100 percent recycled molded pulp and are 100 percent recyclable.

To facilitate easier recycling at end of life, the tool-less chassis is easy to disassemble, and the product parts are up to 90 percent recyclable by weight.

HP Critical Facilities Services

HP Critical Facilities Services (CFS) provides leading consulting, design and technical innovation for data centers to transform computing performance and improve energy efficiency. The range of services includes:

- Consulting on data center strategy to help organizations decide the size and number of centers needed and where they should be located

- Professional analysis to develop innovative engineering design solutions

- Assurance services to enhance operational performance and reliability

- Advice on energy and sustainability as part of our Moving Toward Sustainability program

These services address the severe challenges data centers are facing as they struggle to meet growing demand for computing power while working to increase efficiency. Power and cooling is the number one challenge for data centers today,[2] with serious risks of limits on power availability halting data center operations at many companies. As requirements in this area for computing continue to grow, the optimization of energy use, the cost of energy and associated greenhouse gas emissions have become increasingly important. By 2011, annual spending on powering and cooling at U.S. IT sites is expected to exceed that of new server spending.[2]

HP CFS helps organizations to meet those challenges. We help clients upgrade and modernize current data centers, design and build next-generation facilities, and transform data centers to be energy- and space-efficient. For example, we have been integral to Citi's leadership in highly reliable and more environmentally sustainable data centers, including the world's first center (in Frankfurt, Germany) rated as platinum on the Leadership in Energy and Environmental Design (LEED®) rating system. HP CFS helped lower Citi's energy costs by 30 percent at a facility in Georgetown, Texas.

These projects require close collaboration between the design team, including architects and engineers, and also from the client. HP contributes deep expertise in energy analysis, life cycle costing, computational fluid dynamics modeling and building systems commissioning.

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[1] HP Compaq 8000f Elite USDT Business PC is brominated flame retardant and polyvinyl chloride-free (BFR/PVC-free), meeting the evolving definition of 'BFR/PVC-free' as set forth in the "iNEMI Position Statement on the 'Definition of Low-Halogen' Electronics (BFR/CFR/PVC-Free)'". Plastic parts contain < 1000 ppm (0.1%) of bromine [if the Br source is from BFRs] and < 1000 ppm (0.1%) of chlorine [if the Cl source is from CFRs or PVC or PVC copolymers]. All printed circuit board (PCB) and substrate laminates contain bromine/chlorine total < 1500 ppm (.15%) with a maximum chlorine of 900 ppm (.09%) and maximum bromine being 900 ppm (.09%).

[2] "Building, Planning, and Operating the Next -Generation Datacenter," IDC, 2008.

ENVIRONMENT

HP Deskjet D2600

The HP Deskjet D2600 Printer series combines ease of use with strong environmental performance. Designed as a simple printer for everyday projects, this desktop series also helps users save paper and energy. It decreases raw materials use as well, because both the printer and the ink cartridges are manufactured using recycled plastics.

The HP Deskjet D2600 requires 30 percent less energy than the previous model, reflecting HP's commitment to reduce greenhouse gas emissions throughout the life cycle of our products, and it is made using 50 percent recycled plastic.

Additionally, the printer uses HP 60 ink cartridges that are made from up to 70 percent recycled plastic captured from the HP inkjet "closed loop" recycling process, an industry first and only. Customers can return their empty ink cartridges to HP at no cost in 53 countries or territories through the HP Planet Partners program. The printer packaging is also completely recyclable.

HP Eco Solutions Print Console

The HP Eco Solutions Print Console is the industry's leading tool that enables customers to manage their individual desktop printer settings to reduce their environmental impact.

Available as of January 2010, it is a free download that provides PC users a central place on their desktop to control printer settings for energy, paper and supply use, saving resources and money.

The HP Eco Solutions Print Console sets a reminder to turn the printer off at night. It also reduces paper consumption by setting two-sided printing as the default, and automatically printing multiple pages on each side of the paper. EconoMode sets draft quality printing, saving toner.

Users receive information helping them understand the impact of their chosen settings. The HP Eco Solutions Print Console displays how much money, energy, paper, toner and carbon dioxide emissions can be saved annually, and instantly shows how changes will reduce emissions or divert waste from landfills.

The console also provides links to more information, and tools to reduce energy and paper waste such as the HP Carbon Footprint Calculator and HP Smart Web Printing.

The HP Eco Solutions Print Console is available with the HP LaserJet 2055 Printer.

HP Energy Efficiency Analysis

Data center energy efficiency has never been more important. Costs are rising, so better energy management is crucial. Concern about greenhouse gas emissions continues to increase, and demand for data center capacity is growing fast.

HP Energy Efficiency Analysis helps customers who want to make data centers more efficient. The service helps them calculate facilities' baseline energy efficiency and identify quantifiable ways to improve it, reducing costs and environmental impact.

ENVIRONMENT

This service compares an individual data center to its peers and to industry best practices, to identify sources of inefficiency as well as opportunities to eliminate them. The four-step process culminates in an analysis report that helps customers to:

- Understand mechanical and electrical inefficiencies

- Quantify their carbon footprint

- Identify operational and maintenance practices that impact efficiency, and identify how they can be improved

- Formulate a strategy to enhance efficiency and deliver good return on investment

HP has used these techniques to improve the efficiency of its own data centers, as well as those of its clients. (Read more about our achievements.)

HP Green IT Action Plan for Printing and Imaging

Assess the enterprise ▸ Analyze data and set goals ▸ Apply framework ▸ Develop action plan ▸ Gain org. commitment ▸ Manage the change ▸ Measure and revise

The HP Green IT Action Plan for Printing and Imaging is an industry first—the only step-by-step guide that provides IT leaders with practical advice for reducing the environmental impact of their printing and imaging environment while increasing productivity and lowering costs. The plan recommends a seven-step process (see graphic), which begins with an assessment, and offers a template to capture data about the type, location, age, functionality, service record and other characteristics of each imaging and printing device in use. That baseline data, combined with an evaluation of printing behaviors—such as when and why users print, if they frequently abandon print jobs, and whether they print on both sides of the paper—helps identify opportunities to improve efficiency and productivity.

After helping customers prioritize opportunities, the action plan outlines a proven strategic framework to apply to large-office printing:

- **OPTIMIZE INFRASTRUCTURE** Right-size and standardize with energy-efficient devices in the printing and imaging network to reduce printing costs, energy consumption and waste.

- **MANAGE THE PRINTING ENVIRONMENT** More efficiently manage—at the network level—printing and imaging to increase recycling of materials and save paper and other resources.

- **IMPROVE WORKFLOW** Leverage the power of multifunction printers and solutions that streamline document-intensive processes with digital alternatives to reduce environmental impact.

For each area, the action plan draws on best practices across the HP Managed Print Services portfolio, complemented by a case study of how HP helped 3M transform its printing and imaging and save more than $3 million over two years.

Interactive templates are included to help identify opportunities for reducing energy consumption, limiting wasted paper and increasing recycling rates. The action plan also goes beyond technical details, with tips and tools for developing a communications strategy to gain organizational commitment and ideas to help manage the change when implementing new printing and imaging solutions.

ENVIRONMENT

HP Halo solutions

Many employees of businesses and other organizations spend a significant amount of time traveling by plane. In addition to the major financial cost, this also has a sizable impact on the environment due to aircraft greenhouse gas (GHG) emissions.

HP Halo solutions, a suite of virtual meeting tools and complete end-to-end managed services, create a lifelike encounter and can eliminate the need for much of that travel. Through precisely designed rooms and the HP Halo Video Exchange Network (HVEN), a one-of-a-kind fiber-optic network that enables no-perceived-latency communication, HP Halo provides an experience with high-quality video and sound that makes remote meetings feel like they're in person. And, with the HP HVEN, meeting participants are able to easily connect not only to rooms within their own company, but to studios used by external partners, suppliers and vendors.

The savings can be sizable: If a team of four people uses an HP Halo studio instead of flying round-trip from New York to London, they can avoid the emissions of nearly five tonnes of carbon dioxide equivalent (CO_2e).[1]

If a global company eliminates 1,000 similar round trips for teams of four people, it avoids adding nearly 5,000 tonnes of CO_2e to the atmosphere—equivalent to taking more than 900 cars off the road for a year.

The amount of energy HP Halo itself uses is small relative to its benefits—the GHG emissions from one Halo studio in a year equal about ten tonnes CO_2e on average.

HP Halo is available for use by up to 12 people in each of four studios. This number can substantially increase if an HP Halo Collaboration Meeting Room is used, or decrease with an HP Halo Collaboration Center. HP Halo is currently in 27 countries on five continents.

HP Handheld sp400 All-in-One

The HP Handheld sp400 All-in-One is a scan-and-print solution that integrates a 2-D barcode imager, a paperless inkjet printer and wireless communication into a single device.

HP developed the device in collaboration with UPS, the world's largest package delivery company, where it is already in use in the UPS network of package centers. UPS uses the device to scan packages, send data wirelessly to a server, and print handling instructions directly onto packages without the need for a paper label. It is small and light enough to wear on the hand—much more convenient than moving trolleys loaded with thermal printers, PCs, monitors and keyboards, as was necessary previously.

By 2010, UPS expects to process more than 3 million packages per business day in the United States using the HP Handheld sp400 All-in-One. This device stands to save UPS more than $30 million in labor, capital and consumables costs over the next five years alone, while saving more than 1,200 tonnes of paper per year once it is fully deployed.

The HP Handheld sp400 All-in-One is ideal for distribution centers but has many other applications as well, such as airline services. It is powered by a rechargeable lithium-ion battery that delivers more than 5,000 scans and prints per charge.

[1] According to http://www.cleanairconservancy.org/calculator.php.

ENVIRONMENT

Dave Barnes, senior vice president and CIO of UPS, said: "The new HP handheld device means increased efficiency and effectiveness at a lower cost, with less waste. This is a perfect example of how technology helps to drive business solutions at UPS."

See an extended case study and video for more detail in the report online.

HP inkjet cartridges with post-consumer recycled plastics

HP's innovative recycling process makes it possible to use recycled plastics in many of our new Original HP inkjet print cartridges. The proprietary process utilizes multiple sources of plastic resin, from used water bottles to HP inkjet cartridges returned through our recycling program. This is an industry first—and we remain the only company to use this system.

The amount of recycled plastic in HP inkjet cartridges may vary from 30 to 70 percent of the total plastic used depending on product type.

Using recycled materials saves energy, avoids waste and keeps plastic out of landfills. Although it can be difficult to achieve consistent quality and reliability when using recycled plastics, HP's managers challenged the project's engineers, chemists and partners to develop recycled materials that met HP's high performance standards. After years of effort and dozens of trials, they achieved that objective.

Our goal for 2009 was to use more than 4,500 tonnes (10 million pounds) of recycled content resin (which is 75 percent recycled content, minimum 95 percent post-consumer) in our new Original HP inkjet print cartridges. We used 5,000 tonnes (11 million pounds), slightly more than the amount we used in 2008, as well as an additional 180 tonnes (400,000 pounds) of 50 percent recycled content resin.

Since HP began the pilot process in 2005, through the end of the 2009 fiscal year, HP used more than 20,000 tonnes (44 million pounds) of recycled plastic resin[1] in 760 million inkjet print cartridges.[2] Our goal is to use a cumulative total of 100 million pounds of recycled plastic in our printing products, including inkjet cartridges, between 2007 and 2011.

The Society of Plastics Engineers, a trade organization, recognized HP's efforts in this area by presenting HP with its most prestigious environmental stewardship award in 2008.

MagCloud

MagCloud, the new self-publishing web service from HP, is changing the way ideas, stories and images find their way into people's hands in a printed magazine format.

With MagCloud, photographers can create photo magazines for their next gallery exhibit, bands and celebrities can build buzz and connect with their fan bases, designers can create amazing brochures and catalogs, corporations can build a brand in style, and media companies can breathe new life into their valuable content catalogs. MagCloud delivers commercial-quality magazines printed on demand, doing its part to help reduce magazine waste. Last year, 2.3 billion magazines were wasted in the United States alone.[3]

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[1] At least 50 percent recycled plastic by weight, minimum 95 percent post-consumer.

[2] This is a large increase over the cumulative total HP announced in early 2008 (200 million inkjet print cartridges). HP has been working with suppliers to accurately account for the recycled content we use. In 2008, HP reconciled recycled plastic usage from one of our large resin suppliers; that usage is now included in HP's totals.

[3] "The Magazine Retail Sales Experience 2008," Harrington Associates.

ENVIRONMENT

Invented by HP Labs, MagCloud takes on the heavy lifting for publishers by providing automated ordering and print management services—all free of charge— and is currently available in the United States, UK and Canada (with plans to expand to other regions soon). Whether you order one or 100 copies, there are no up-front costs and no minimum orders, and the cost is only $0.20 a page (plus shipping). Think of HP MagCloud as a web-based marketplace where a new breed of magazine publishers can affordably turn their targeted content into beautiful printed magazines, and promote and sell their products to a broad range of readers. Or a place where existing media companies can repurpose print and online content to create targeted, special edition magazines printed on demand.

The service enables brands and content publishers to build and extend their community reach using highly targeted print products. Along with personalizing publications, on-demand publishing reduces the transport costs, waste and inventory issues associated with traditional magazine publishing, and all magazines are printed on FSC-certified 50 percent recycled paper (10 percent post-consumer, 40 percent pre-consumer).

HP Managed Print Services

HP Managed Print Services (MPS) enables organizations to reduce their energy and paper use and cut costs related to printing.

With MPS, HP helps customers assess their requirements, design an imaging and printing infrastructure tailored to their specific needs, and then acquire, install and manage the necessary equipment. MPS is a comprehensive, scalable suite of services that includes imaging and printing devices, software, supplies, support, professional services, and solutions—with flexible procurement, transition and management options to help companies meet their business and environmental goals.

Using MPS has enabled some HP customers to achieve energy savings of between 30 and 80 percent in their imaging and printing operations, and reduce paper consumption by millions of pages. In addition, MPS can help customers achieve more efficient workflows and increase recycling of used print supplies and old hardware.

HP MPS customer Viacom was able to achieve the following benefits:

- Anticipated cost reduction of 20 to 25 percent for printing and copying

- 50 percent reduction in the number of print, copy or fax devices

- 12.5 percent reduction in number of pages printed (projecting savings of more than 10 million sheets of paper)

- Energy use for printing slashed by more than 60 percent and CO_2e emissions reduced by about 380 tonnes.

Meanwhile, using MPS meant that our customer 3M:

- Reduced energy consumption by more than 75 percent, saving more than $1.2 million in energy costs

- Achieved a reduction of an estimated 8,240 tonnes of CO_2e emissions from energy and paper reductions

- Printed an estimated 353 million fewer pages over a three-year period

As part of our HP MPS portfolio, HP offers the HP Eco Printing Assessment for businesses interested in quantifying and reducing the energy consumption, wasted paper and greenhouse gas emissions from imaging and printing. After analyzing a representative sample of a customer's printing environment, HP then recommends best practices and identifies a roadmap of recommended changes, helping customers reduce costs and save resources.

HP Performance-Optimized Data center (POD)

The HP POD can be deployed within weeks instead of requiring months or even years to design, construct and install a traditional data center and IT. The HP POD can ship empty or fully integrated with tested IT from an HP factory in as little as six weeks, slashing the time for data center build-out. Available in both 20-foot (6-meter) and 40-foot (12-meter) designs, the HP POD uses industry-standard 19-inch (48-centimeter) racks, providing a vendor-neutral platform.

Aging data centers often run out of power and cooling capacity, especially with the power density and thermal output of today's smaller IT hardware. Faced with the need to expand data centers, companies are forced to build new space, with high costs and long lead times. Alternatively, HP PODs add space as it is needed, with short lead times. The 40-foot HP POD delivers the equivalent of 5,000 or more square feet (460 square meters) of traditional data center space.

In addition to lower acquisition costs, the HP POD is typically 20-40 percent more energy efficient than a typical data center, reducing energy cost and greenhouse gas emissions. It offers configurations optimized for availability and high IT density, enabling users to quickly upgrade or extend the capacity of their physical infrastructure. The weatherized design allows for installation either outside or inside a shelter.

Excellent energy efficiency is due to factors such as the following:

- Close-coupled cooling eliminates wasted cooling energy through complete hot air isolation and short, concise airflow paths. As a result, HP POD can achieve average rack densities of 27 kW or more per rack at an unmatched efficiency.

- Ability to actively control air pressure and temperature to maintain a warmer IT cold-aisle and reduce the chilled water temperature load.

- High-efficiency power distribution and the elimination of waste means power goes directly to the IT with extremely low overhead.

Together, these and other innovations result in a Power Usage Effectiveness (PUE) ratio of 1.25, compared with typical values of 1.7–2.0.

HP PODs may also provide a more energy-efficient solution to disaster recovery needs. With increasing energy and real estate costs, additional capacity for disaster recovery can be expensive. HP PODs can help by being easy to place in lower-energy-cost areas, reducing the expense of disaster recovery plans.

HP ProCurve

HP ProCurve networking products, including network management and switches, complement energy-efficient servers to save even more energy.

Designing energy-efficient products is only the first step in helping customers address their green IT needs through networking. Remotely managing and controlling the power delivery to the endpoints in the network is equally important to reduce the energy consumption of facilities.

With ProCurve Manager Plus (PCM+), users can schedule shutting off idle devices when they are not in use, realizing up to 73 percent in energy savings.

HP ProCurve Networking switches, which connect network segments and route data, may also help customers reduce their energy consumption.

ENVIRONMENT

Miercom, a leading independent test lab, awarded several ProCurve switches the Miercom Green certification, recognizing their excellent environmental performance. Comparing how many watts the switch consumes with the throughput it delivers, Miercom found that all eight ProCurve switches it analyzed performed better than the industry average. The HP ProCurve Switch 5406zl delivered the best energy performance with up to 45 percent savings.

HP Officejet Pro 8500 Premier All-in-One

The HP Officejet Pro 8500 Premier All-in-One Printer series delivers professional color documents using 50 percent less energy than color laser all-in-ones, helping small businesses cut print operating costs by up to 50 percent per page.[1]

This ENERGY STAR® qualified printer offers several features to save paper, including automatic two-sided printing and copying, a junk fax blocker[2], and the ability to fax to a network folder or email and scan to a computer. HP Smart Web Printing enables paper savings of up to 45 percent by optimizing printing from the web, allowing consolidation and organization of pages for simple, predictable web printing.

HP Officejet ink cartridges, used with this printer, also save money and resources, printing more pages with fewer cartridge replacements. Cartridge and packaging waste is reduced by 90 percent by weight,[3] and the carbon footprint is 50 percent lower compared with the Samsung CLX 3175FN.[4]

HP Photosmart ml1000d Minilab

HP offers dry printing solutions for commercial photo processing that reduce the environmental impact of standard photo printing. Whereas a typical silver-halide system discharges significant amounts of chemicals and water, HP Photosmart Microlab and Minilab printers are self-contained units that do not require a water source or drains, reducing the overflow of developer, fixer and wash water to municipal and private waste treatment facilities. These products also eliminate the need for operators to interact with and handle potentially hazardous chemicals.

HP Retail Photo Solutions supplies can be easily recycled after use, and HP provides free shipping materials and postage.

These systems have additional environmental benefits as well. The HP Photosmart ml1000d Minilab printer requires only ten minutes to start from standby mode, compared with an average of two hours for a typical silver halide wet lab. Overall, retailers experience a 64 percent savings in energy use as well as an average yearly decrease of 800 gallons of chemicals and water discharge.[5]

The HP Photosmart ml1000d Minilab is the first dry, retail inkjet minilab capable of producing traditional single-sided photo prints as well as duplex photo book pages and calendars.

The overall quality of the digital prints and the accuracy of the color won HP's Photosmart printers a Digital Imaging Marketing Association® (DIMA) Innovative Digital Product Award in 2008.

[1] Cost-per-page (CPP) and energy-savings claims are based, as of June 2008, on the majority of color laser all-in-ones costing less than $600 when using HP Officejet Pro products with high-capacity cartridges. Energy use is also based on the manufacturers' stated power consumption when printing. Test methods may vary.

[2] Requires caller ID service, not included. Price and service contract must be negotiated separately. Junk fax blocker available only in areas with caller ID services.

[3] Based on an internal comparison study using third-party provided Samsung data. Assumes the use of ColorLok paper and a high-capacity XL cartridge. Supplies waste includes cartridge and packaging waste only.

[4] Based on an internal comparison study, using third-party provided Samsung data, that conducted a use-phase evaluation and used the HP Imaging and Printing Assessment energy estimating method. Assumes the use of ColorLok paper and a high-capacity XL cartridge.

[5] Savings based on f/22 consulting data on HP vs. silver-halide systems. Assumes both photo finishing systems producing 1,250 prints per day, 360 days per year.

ENVIRONMENT

HP ProBook 5310m

The HP ProBook 5310m is the world's thinnest full-performance note-book. It offers advanced battery life and a configuration that is free from brominated flame retardants (BFRs) and polyvinyl chloride (PVC)[1] in line with HP's commitment to phase out those materials in newly introduced personal computing products by the end of 2011.

Thinner notebooks employ fewer materials in manufacturing, reducing the use of natural resources. They can also be protected with smaller and lighter packaging, which contributes to lower fuel consumption and green-house gas emissions during transportation, decreasing the overall carbon footprint of the product.

The 0.9-inch-thin, 3.7-pound notebook has a 13.3-inch diagonal LED high-definition (HD), energy-efficient display and a standard voltage processor for maximum productivity. Designed for professionals on the move, the notebook uses an Intel® Core™ 2 Duo SP9300 processor that provides all the power a user would expect from a full-performance PC, while delivering up to seven hours of battery life with the standard lithium-polymer bat-tery. An optional six-cell battery further increases battery life.

The HP ProBook 5310m is flexible enough to be scaled down to meet the needs of customers who don't require a full-performance standard voltage notebook. It is ideal for computing tasks such as e-mail, calendar and office applications, and it provides the ability to view HD content, create and consume content, and access the Internet.

HP ProLiant G6 server

HP ProLiant G6 servers deliver double the computing performance of the HP servers they replace while reducing energy consumption.

Advances in energy efficiency, virtualization and automation combine to provide more computing power for less energy. Energy-saving features include:

- **THE HP SEA OF SENSORS** A network of 32 smart sensors automatically tracks ther-mal activity across the server. The sensors dynamically adjust system components such as fans and memory to optimize system cooling and increase efficiency.

- **THE COMMON POWER SLOT DESIGN** A choice of four power supplies tailored to specific workloads enables customers to minimize power waste. Customers can achieve more than 92 percent energy efficiency in the majority of real-world configurations.[2]

- **HP DYNAMIC POWER CAPPING** This technology reallocates power and cooling resources in the data center by dynamically setting or "capping" the power drawn by servers. By precisely identifying power require-ments for each server and setting a limit based on that usage, customers can reclaim over-provisioned energy to improve data center capacity.

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[1] HP ProBook 5310m is brominated flame retardant and polyvinyl chloride-free (BFR/PVC-free) on notebooks including Broadcom WLAN that are non-WWAN; meeting the evolving definition of 'BFR/PVC-free' as set forth in the "iNEMI Position Statement on the 'Definition of Low-Halogen' Electronics (BFR/CFR/PVC-Free)'". Plastic parts contain < 1000 ppm (0.1%) of bromine [if the Br source is from BFRs] and < 1000 ppm (0.1%) of chlorine [if the Cl source is from CFRs or PVC or PVC copolymers]. Power supply and power cords are not BFR/PVC-free. Service parts after purchase may not be BFR/PVC-free.

[2] Energy efficiency based on HP testing.

ENVIRONMENT

HP SkyRoom

HP SkyRoom technology offers an affordable and convenient desktop collaboration alternative to business travel, saving time and the greenhouse gas (GHG) emissions associated with travel to meetings. It will typically be used for project collaboration by designers and engineers, for spontaneous meetings, and as a shared environment for small teams engaged in activities such as software training and project reviews.

Until now, video collaboration has required high-end technology in specially equipped rooms with limited desktop collaboration ability. HP SkyRoom avoids these difficulties and enables up to four colleagues in different locations to conduct a high-quality video conference at their desks while sharing rich media content such as 3-D graphics.

SkyRoom's core technology provides remote users a view and control of the presenter's desktop with simultaneous high-performance video conferencing. This combination provides professional-quality video conferencing and collaboration directly to workstations, desktops and laptops without the need for costly equipment upgrades. SkyRoom enables more organizations to benefit from virtual meetings and their potential to improve productivity, foster teamwork and speed decision making.

HP T300 Color Inkjet Web Press

The HP T300 Color Inkjet Web Press can help to reduce the environmental impact of printing books, direct mail material and other types of commercial printing. Our thermal inkjet technology delivers excellent print quality and productivity while decreasing waste, paper use and cost.

Digital on-demand printing using the Web Press can reduce much of the waste typically arising from offset printing. Paper waste is avoided in setup and change-over of print jobs. Printers can produce materials as needed rather than printing large volumes with significant overruns, storage and waste costs. This decreases climate impact as well, since paper use is the leading contributor to greenhouse gas emissions from the commercial printing process. (See Enabling a low-carbon economy for details.)

The Web Press offers additional environmental benefits. It uses HP water-based pigment inks and specially engineered HP Bonding Agent. These non-flammable materials emit very low levels of volatile organic compounds and contain no detected hazardous air pollutants.[1] Inkjet printing deposits colorant on the surface of the paper directly, without the need for electrostatic charging, and therefore avoids creation of ozone and potential ozone management issues. The ink and bonding agent drums are also recyclable. These advantages improve the working environment for printing operation employees, reduce the environmental impact of printing and help to address the storage, handling and waste disposal challenges often associated with traditional offset printing.

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[1] The inks were tested for hazardous air pollutants per U.S. Environmental Protection Agency Method 311 (testing conducted in 2008) and none were detected. HAPs are air pollutants that are not covered by ambient air quality standards but which, as defined in the Clean Air Act, may present a threat of adverse human health effects or adverse environmental effects.

ENVIRONMENT

HP thin client computers

HP was the first company to introduce thin client PCs that meet ENERGY STAR® 5.0 and Electronic Product Environmental Assessment Tool (EPEAT®) standards.

With overall fewer parts than traditional PCs, these computing devices completely eliminate moving parts such as fans and disk-based hard drives so they produce very little heat, reducing air conditioning demands and lowering failure rates— potentially saving resources by extending their operational lifetimes.

Due to their significantly smaller size, an HP thin client and its packaging is less than one-third the weight of a traditional desktop PC, with 40 percent less corrugated board packaging and more than 55 percent less foam. Up to 98 percent of the materials used in HP thin clients and their packaging are recyclable.

HP MultiSeat Solution is a thin computing solution that allows up to ten people to use a single PC simultaneously, each with individually supported and licensed Windows® access. This cost-effective solution expands access for education, growing businesses and emerging markets and reduces power consumption to as little as 2.3 watts per user, as compared with 80 to 120 watts for typical desktops.

HP TouchSmart 600 series PCs

The new HP TouchSmart 600 series features sleek, award-winning design and combines the best hardware and software in one elegant product that is at home in the living room or office.

HP TouchSmart 600 PCs offer innovative touchscreen technology and everything you need built in. They combine a 23-inch diagonal high-definition, widescreen display with a multitouch-enabled screen and a powerful, energy-efficient Intel® Core™ 2 Duo processor and hard drive in a single, integrated unit that includes a webcam, media reader and speakers.

Users can pinch, rotate, arc, flip, press or drag a finger across the screen to access information, entertainment, social networks and exclusive built-for-touch applications in a natural, intuitive way.

The HP TouchSmart 600 series also offers environmental benefits. Its components are over 90 percent recyclable, and having a single unit (rather than a standard PC and monitor) cuts down on resource use and avoids duplicating components such as power cords, power supplies and switches.

The HP TouchSmart 600 uses power-efficient chips and notebook technology, as well as power management to reduce energy consumption, heat and noise. Its power-saving technology could save users up to $75 per year.[1] In total, the HP TouchSmart 600 provides up to 45 percent energy savings compared with PCs without power management enabled.[2] Not only does this decrease energy consumption, but it also improves reliability by reducing heat output.

All HP TouchSmart PCs meet ENERGY STAR® 5.0 requirements and are EPEAT® Silver registered in the United States and Canada.

Additionally, HP TouchSmart 600 series PCs use a new packaging design that is 100 percent recyclable[3] and contains a minimum of 75 percent recycled materials.

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[1] HP Power Management Technology can save up to $75 per year per PC and monitor according to estimates by the U.S. Environmental Protection Agency. For more information see: http://www.energystar.gov/index.cfm?c=power_mgt.pr_power_mgt_faq.

[2] According to estimates made using EPA statistics comparing PCs with and without power management.

[3] 100 percent recyclable in the United States; recyclability may vary in other locations due to availability of recycling programs.

ENVIRONMENT

HP Web Jetadmin Eco Solutions Reports

HP Web Jetadmin is a web-based printer management software program that helps IT managers remotely configure and manage their network printers.

In June 2009, HP launched new Web Jetadmin Eco Solutions Reports. They allow users to measure and evaluate the environmental impacts of printing and imaging, develop ways to reduce those impacts and save money with consistent settings across all networked printers, and track performance over time.

Users can generate more than 15 types of Eco Solutions reports, such as:

- Total number of print jobs and a comparison between the amounts printed and managed digitally

- List of printers with the greatest paper usage, including the number of single- and double-sided pages

- Number of devices that have paper- and energy-saving features, including automatic duplex settings and Powersave

- Number of devices with digital sending capabilities
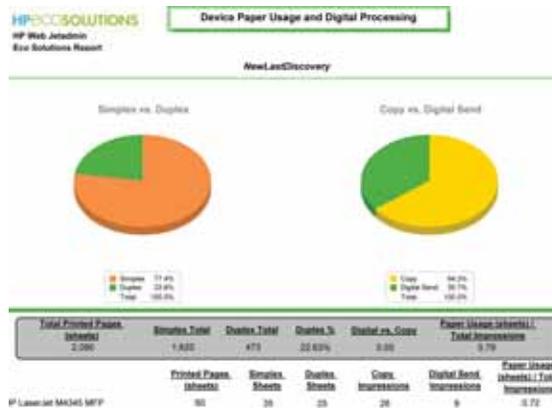
HP Z Workstations

The HP Z Workstations family, including the HP Z200, Z400, Z600 and Z800 workstations, continues the company's use of new technology designed to improve environmental impacts along with excellent performance, value and serviceability. These workstations are the culmination of more than 20 HP design innovations, including, on the HP Z600 and Z800 workstations, a self-checking power supply that can be removed from the system with no tools and plugged directly into the power cord, where an LED indicates whether or not the power supply is good, making them easier to service.

These workstations are aimed at power-intensive applications in industries such as graphic arts, broadcast, computer-aided design, engineering, medical imaging, and oil and gas exploration. HP Z Workstations save energy with the energy-efficient Intel® Xeon® processor and include 85 percent efficient power supplies—reducing both overall energy use and waste heat. The HP Z800 Workstation also has an option for an 89 percent efficient power supply.

The family includes the new HP WattSaver—an HP exclusive feature that manages power in the "off" state between 0.5 and 1 watt when activated by the customer, compared with 2 to 6 watts for a typical product. The HP Z Workstations immediately qualified for the Energy Star® 5.0 standard in July 2009.

All HP Z Workstations are more than 90 percent recyclable by weight, and the line achieved the Gold rating in the Electronic Product Environmental Assessment Tool (EPEAT®)—the highest rating available. HP SkyRoom, virtual collaboration and video conferencing software that can decrease the need for business travel, is included free on HP Z Workstations.

ENVIRONMENT

SOCIETY

At HP, we're creating innovative solutions to urgent societal challenges such as improving labor standards in the IT supply chain, protecting privacy in the digital age and making education more accessible and immersive. Find out how we're using the power of technology to bring people together, spark innovation and strengthen communities the world over.

See the report online at: www.hp.com/go/globalcitizenship

SOCIAL INNOVATION

"As one of the largest global communities, HP can make fundamental differences to how people live their lives. Innovative technology, a host of transferable skills in management and collaboration, and our amazing HP volunteers represent a potent force for change. At HP, innovation in education, entrepreneurship education and employee volunteerism were our primary focus areas in 2009. You'll find many amazing examples of our programs here. But it's not just about improving education in individual cases this month or this year; it's about leaving a legacy of real and lasting change."

–GABRIELE ZEDLMAYER, VICE PRESIDENT, OFFICE OF GLOBAL SOCIAL INNOVATION

SOCIETY

We apply our global reach, broad portfolio of products and services, and the expertise of our dedicated employees to support programs that align with our business goals and our citizenship commitment.

In 2010, we are expanding our definition of social innovation to include a commitment to healthcare in addition to a continued focus on innovation in education, entrepreneurship education and employee volunteerism.

In 2009, we focused our activities in three areas:[1]

- Innovations in education
- Entrepreneurship education
- Employee volunteerism and giving

In 2009, HP contributed approximately $52.2 million in cash, technology and services, representing 0.55 percent of our pre-tax profits, to support these three areas, bringing the total to more than $236 million over the past five years.[2]

Below is a map summarizing the geographical reach of our activities in 2009. (For more detailed data about our social investments, see Performance.)

Partial list of social investment locations during fiscal year 2009[*]

- ● Innovations in education
- ● Entrepreneurship education
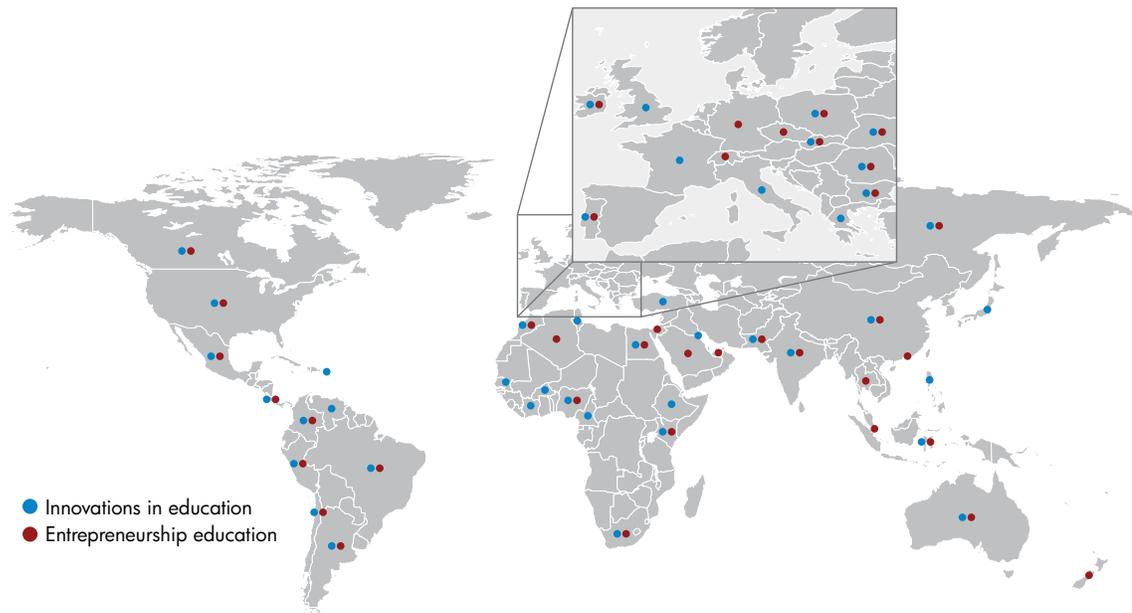
[*] Dots represent programs in that country. Could be multiple locations.

[1] All reporting on grant recipients' activities is based on the information provided by the grant recipients.

[2] Product donations are valued at the Internet list price. This is the price a customer would have paid to purchase the equipment through the HP direct sales channel on the Internet at the time the grant was processed.

SOCIETY

INNOVATIONS IN EDUCATION

Education is a potent catalyst for opportunity. It drives personal achievement, seeds groundbreaking ideas and fuels economic prosperity for individuals, communities and countries. This is why education has long been a priority of global citizenship at HP.

By helping apply technology in creative ways to extend and enrich teaching and learning, we are helping the next generation of leaders, innovators and workers develop the knowledge and skills they need to succeed in the global economy. We believe that when students apply technology to real-life projects that address pressing needs in their communities, learning is more relevant and meaningful. Moving into 2010, our education programs will have an even stronger focus on collaboration with pioneering leaders to address educational challenges in the most innovative ways.

In 2009, we contributed more than $30 million to bolster education worldwide through the programs described below. Through our HP Innovations in Education grants, more than 1,100 educational institutions in over 40 countries received HP grants, benefiting more than 110,000 teachers and students over the past five years.

HP Innovations in Education grants

The HP Innovations in Education program awards grants of cash, technology and professional development to promote uses of technology that transform teaching and learning. Through the program, we are working with administrators, key faculty and educational leaders at secondary schools, colleges and universities to encourage systemic and sustainable innovation in the classroom and beyond.

Grants given to secondary schools emphasize accelerating teacher development and improving student achievement while encouraging careers in sciences, technology, engineering and math. Beyond simply bringing HP technology into the classroom, we believe the greater opportunity is to fundamentally improve the classroom experience. By integrating HP technology in curricula, teachers and students can open up new avenues for connecting, collaborating and creating immersive learning environments.

In addition, the HP Innovations in Education program offers professional development tools, resources and events to help teachers share ideas and best practices in areas such as online learning, virtual worlds and simulations.

As with secondary schools, the HP Innovations in Education program for colleges and universities focuses on advancing insights and best practices at the intersection of teaching, learning and technology. Grants are awarded to support innovative approaches to curriculum, instruction, and the use of technology to enhance learning in math and science or other subjects key to technology careers.

To accelerate progress, we invite colleges and universities that receive grants to participate in a global network of educators who are designing the future of high-tech education.

> Watch a first-hand account in the online report from Jorge, a student at California State University, Los Angeles, who explains how HP Innovation in Education grants are giving engineering students like him new ways to learn.

YEAR IN REVIEW

In 2009, HP awarded Innovations in Education grants of HP products, professional development and funds to 140 secondary schools and higher education institutions worldwide.

Totals for each region are provided below, and a complete list of grant recipients is available in the online report.

In awarding grants, HP collaborates with partners like the International Society for Technology in Education (ISTE) to ensure that proposal reviews are fair, transparent and consistent. We also adhere to HP's Standards of Business Conduct and comply with all U.S. laws related to philanthropic giving.

ASIA PACIFIC AND JAPAN

In 2009, HP awarded 28 HP Innovation in Education grants to secondary schools and universities in Australia, China, India, Japan and Singapore, totaling approximately $3.1 million.

EUROPE, THE MIDDLE EAST AND AFRICA

Fifty schools and universities in 15 countries in Europe, the Middle East and Africa (EMEA) were each awarded HP Innovations in Education grants of HP tablet PCs, notebooks and printers, and cash, for a value of approximately $100,000 per grant.

SOCIETY

Among the HP Innovations in Education grantees in EMEA, a Russian school was selected for its program to teach disabled and disadvantaged students who are interested in engineering and ecology how to use computer and mobile technologies effectively.

In Kenya, a university is using its HP Innovation in Education grant to implement an eLearning platform that offers disadvantaged secondary school students greater access to lessons and instruction. Using the platform, university students are assisting in developing and delivering educational materials and mentoring secondary school students. The university also plans to develop an interactive eLearning environment focused on teaching computer studies.

Boise State University in Idaho provides an example of how HP Innovations in Education grants are helping to redefine the learning experience. The university received a grant in 2009, which it is using to dramatically expand how, where and when students learn. As an example, engineering students are tapping into HP blade servers to remotely develop and access learning modules and simulations. Having access to such powerful computing power is creating previously unavailable collaborative, interactive and customized learning environments. In addition, Boise State plans to make these learning environments available to local high schools and the broader community to foster interest in engineering and math.

LATIN AMERICA

In Latin America, HP awarded HP Innovation in Education grants totaling more than $2 million to 19 secondary education institutions and six colleges and universities in Argentina, Brazil, Chile, Colombia, Costa Rica and Mexico. Over the next two years, more than 16,500 students will have greater educational opportunities as a result.

CANADA AND THE UNITED STATES

In 2009, eight secondary schools in Canada received HP Innovations in Education grants totaling more than $800,000. The grants will help improve the educational experience for more than 4,000 students over the next two years.

In the United States, HP awarded a total of more than $9 million in HP Innovation in Education grants to 25 public and qualified private secondary schools. Each grant was valued at more than $270,000 in HP technology, cash and professional development. We also awarded ten grants, each valued at more than $270,000, to public and qualified private colleges and universities.

Visit our HP Global Social Innovation site for additional case studies and videos highlighting how HP grant recipients are using technology to transform teaching and learning.

Additional HP support of education

In 2009, we also supported several other initiatives focused on teaching and learning with HP products, technical expertise and cash.

HP INTERNATIONAL INSTITUTE OF TECHNOLOGY (HP IIT)

We renamed the HP Russian Institute of Technology (RIT) program that we launched in 2008 in connection with its expansion to Bulgaria, Poland and the Ukraine in 2009. Now known as the HP International Institute of Technology (HP IIT) program, it offers greater access to educational opportunities and technology training to approximately 3,000 math and science students at 20 participating universities. HP provides hardware, software, financial support and the expertise of HP employees, who work together with educators to develop and strengthen the training curricula designed to provide students with practical IT-related business skills.

UNESCO BRAIN GAIN INITIATIVE

An estimated 70,000 highly qualified African scholars and experts leave their home countries each year in pursuit of greater opportunity in developed countries. A collaboration between HP and the United Nations Educational, Scientific and Cultural Organization (UNESCO) is turning this "brain drain" into a "brain gain" by allowing university faculty and students to engage in real-time scientific collaboration from their home countries through grid technology and cloud computing.

HP and UNESCO launched the original pilot project in 2006, introducing universities in Algeria, Ghana, Nigeria, Senegal and Zimbabwe to grid technology. In 2009, we expanded the Brain Gain Initiative from five universities to 20 higher education institutions throughout the Middle East and Africa. Our goal is to connect 100 universities via grid technology by 2011,

SOCIETY

with the help of additional partners, enabling universities to share computing power and data storage, access remote laboratories and connect to the rest of the world. More than 5,000 students have benefited from this program to date.

One participating university, Cheikh Anta Diop University (UCAD) in Senegal, is using access to the European Enabling Grids for E-sciencE (EGEE) to enable students and faculty to do their research in Senegal while collaborating with scientists all over the world.

SANKYA PLUS EDUCATION PROGRAM

In 2009, HP and Rotary International continued the SANKYA Plus program, a collaboration that has connected more than 750 schools in India to an online knowledge center. The program makes virtual classroom sessions, simulated laboratory packages and other tools available to students who may otherwise have limited access to educational resources.

In 2009, we enhanced the SANYKA Plus program by partnering with the Bangalore Association for Science Education to launch the BASE-Sankya Learning Laboratory, a knowledge center for children at the Jawaharlal Nehru Planetarium in Bangalore, India. HP awarded a cash grant of approximately $150,000, in addition to providing HP technology to help establish the lab.

HP DIGITAL ASSIST

In 2009, we collaborated with the National Basketball Association (NBA) to launch HP Digital Assist, a program that combines sports and technology to give middle-school students more engaging and immersive learning experiences. More than 1,000 seventh- and eighth-graders from nearly 100 public middle schools in underserved communities throughout the United States participated in the program. Student teams received seed grants of HP technology to create digital media sports-themed projects demonstrating an understanding of math, science and/or reading comprehension. To view the list of winning teams and their projects, visit the HP Digital Assist website.

ENTREPRENEURSHIP EDUCATION

Part of HP's emphasis on education is cultivating tomorrow's entrepreneurs and skilled workers, who are crucial to driving future economic growth and job creation. We work with organizations that are helping recent graduates, young people and aspiring leaders acquire the IT skills and knowledge required to succeed in the global economy, launch businesses and help their local communities prosper.

In 2009, HP contributed $6.7 million to promote entrepreneurship education and training worldwide. Our entrepreneurship education programs and activities are summarized below.

HP Graduate Entrepreneurship Training through IT (GET-IT)

The HP Graduate Entrepreneurship Training through IT (GET-IT) program is working to provide young people with business and technology skills training they can use to start careers or launch their own

businesses. In partnership with the Micro-Enterprise Acceleration Institute (MEA-I) and the United Nations Industrial Development Organization (UNIDO), World ORT, and local training centers, HP has made the GET-IT program available in 30 countries in EMEA, particularly in low-income communities with high unemployment rates and limited job opportunities.

SOCIETY

GET-IT courses teach 16- to 25-year-olds practical hands-on IT solutions for daily business challenges in areas such as finance, management, marketing and technology management. In 2009, HP opened 30 GET-IT training centers in Africa and the Middle East, and Russia and Ukraine, bringing the total number of training centers to 100.

Young entrepreneurs who do not live near a GET-IT center can access training courses through www.get-it-city.net, an online portal that offers hands-on resources and tools to facilitate self-directed learning. For example, Blossom, a role-playing game launched in 2009, offers students the chance to manage their own virtual floral business.

Since the launch of GET-IT in 2007, the program has reached more than 100,000 young people through online and on-site training courses, with the goal of reaching half a million by the end of 2010.

HP Entrepreneurship Learning Program (HELP)

Microenterprises—very small businesses with fewer than five employees—are integral to creating jobs and strengthening local economies, particularly in emerging regions. A total of 9,890 micro-entrepreneurs and youth have participated in the HP Entrepreneurship Learning Program (HELP), since it was launched in 2007 to support the growth of small businesses across the Asia Pacific region. The program now includes 48 centers in ten countries, each targeting microenterprises and unemployed youth in their local communities.

In 2009, HP made 24 HELP grants with a combined value of approximately $1.55 million and expanded the reach and curriculum of HELP in China, India, Indonesia, Korea and Thailand.

Junior Achievement

Students in secondary schools worldwide are learning about managing a business through HP-sponsored Junior Achievement (JA) programs. HP is a long-time sponsor of JA, and many HP employees volunteer in JA tutorial and training programs. In 2009, HP again sponsored the HP Global Business Challenge, giving students the chance to assume the role of a corporate business leader.

In addition, HP and JA jointly conduct the HP Responsible Business Competition to encourage the development of business and work-readiness skills and teach the value of corporate social

In 2009, HP and JA expanded the reach of their programs through a Facebook application . The application challenges students to submit socially and environmentally responsible business ideas for the year 2020. Ideas that receive the most public votes will be shortlisted for judging by a panel of experts from HP and JA. Visit the HP JA Facebook page for more information.

responsibility among its student participants. The top award is given to the student company that does the best job at integrating strong financial performance, social responsibility, environmental excellence and innovation into their business plan and operations. This is HP and JA's flagship program, and has been running successfully in Europe since 2006. In 2009, the competition was extended to other regions. Winning student companies include:

- **EUROPE** A team from Lithuania won the top award for creating a suite of educational tools to help young children learn the principles of recycling. As part of the competition, 150 HP employee volunteers visited schools and advised the student companies on how to run a responsible business.

- **NORTH AMERICA** The winning company marketed and sold an environmentally friendly Eco-Tote made of 100 percent recycled material to replace plastic bags at grocery and retail stores. The innovative design eliminates the need for packaging, as the bag folds to form a small zip pouch for easy storage and re-use. In addition, the student company sold 800 Eco-Totes and donated more than 20 percent of its profits to a community charity, the Georgia Conservancy, while delivering a 250 percent return on investment to its investors.

- **LATIN AMERICA** The winning student company created a series of handmade greeting cards made from recycled paper. The company marketed and sold the cards in school and via Facebook, with a 125 percent return for investors.

HP and JA also partner to hold an online Responsible Business Ideas contest, during which teams submit ideas for a business that integrates social and environmental responsibility. Winners from this year's regional competitions include:

- **AFRICA** A Nigerian student company took first place with the idea to host a concert for students

SOCIETY

at their school to raise awareness about HIV/AIDS. The team planned to use the proceeds from the concert to introduce a recycling initiative in the school and wider community.

- **EUROPE** The winning team from Germany developed a concept for an online portal to connect those interested in solar power systems with others interested in renting out their roofs.

- **LATIN AMERICA** A student company from Mexico City developed a business plan to sell an intelligent pill case that used digital technology to remind users to take their medication. The company embraced social and environmental responsibility in its marketing, product sourcing, packaging and employee relations.

- **NORTH AMERICA** The winning student company applied an innovative business model that combines education and capitalism—which the students termed educapitalism. The company gives students a chance to learn business skills

by selling certified Fair Trade and organic coffee and running a campus retail operation. It also aims to sell packaged coffee to organizations in the community and offer coffee, tea and cocoa gift baskets.

Professional Education Program

In Brazil, students in technical colleges are receiving training in critical vocational IT skills as well as "soft" skills such as language, entrepreneurship and citizenship through HP's partnership with Servicio Nacional de Aprendizaje Industrial (SENAI), the largest professional education organization in Latin America. The two-year course is designed to prepare students for entry-level jobs that are key to Brazil's IT and economic growth. In 2009, 64 students participated in the program. School administrators report that students in the program are averaging scores nearly 20 percent higher than other students and achieving 25 percent higher attendance rates.

EMPLOYEE VOLUNTEERISM AND GIVING

HP encourages employees and retirees to get involved in their local communities, serving as mentors, volunteers and engaged citizens.

This year, with the addition of EDS employees after the acquisition in 2008, we have been able to broaden our impact. EDS employees brought a commitment to employee giving and volunteerism with them to HP, and we have adopted many of their programs.

Employee volunteerism

More than 4,500 HP employees donated over 52,000 hours of expertise to volunteer projects in local communities in 2009.

Many HP employees find volunteer opportunities that match their skills through HP VolunteerMatch, an online service available through the HP intranet. Employees can view a wide range of opportunities, from assisting the American Red Cross to restoring damaged habitats and threatened native species. Currently available to employees in Canada, Costa Rica, the United States and Puerto Rico, employees in HP's other locations will have access to VolunteerMatch in the near future.

Examples of 2009 volunteer projects from around the world include:

BYRON NELSON CHAMPIONSHIP GOLF TOURNAMENT

In 2009, we continued a longstanding EDS program through HP's sponsorship of the Byron Nelson championship golf tournament, a premier PGA TOUR event held annually in Irving, Texas. More than 300 HP employees volunteered their time at the event, which raised approximately $4.4 million. Since its inception in 1968, the Byron Nelson championship has raised more than $112 million to help thousands of troubled and at-risk children and their families.

HP FOREST

This year, 150 HP employees from Costa Rica volunteered to plant trees as part of the HP Forest: Oxygen from Costa Rica to the World program. This three-year-old initiative supports HP's efforts to address climate change. To date, 735 HP employees have participated in this program, with a goal to plant a total of 6,000 trees.

SOCIETY

> "Great companies like HP give their employees opportunities to contribute to the places where they live and work. There are numerous ways to give back—and many members of HP's legal team do so by using our professional expertise and unique skill set to make a positive impact in our communities.

–MIKE HOLSTON, GENERAL COUNSEL AND EXECUTIVE VICE PRESIDENT

HABITAT FOR HUMANITY

In the Philippines, HP formed a special partnership with Habitat for Humanity. HP funded and HP employees participated in building ten homes in Caloocan City, Metro Manila. In honor of this partnership, Habitat for Humanity named the street where the houses are located "Hewlett-Packard Lane."

HP ISRAEL DOING WELL DAY

HP Israel teamed up with the nongovernmental organization MATAN to serve local communities. More than 300 HP employees took part in charitable activities that focused on three areas: financially distressed people, children in danger and the environment.

HP LEGAL PRO BONO WORK

In 2009, the HP legal team set a goal of involving at least one-half of its U.S. employees in pro bono work at an average of 20 hours per person per year. The team focuses on the needs of low-income individuals and the organizations that serve them. Projects included free legal clinics for the homeless, credit counseling and employment law counseling, and assisting veterans with preparing and filing their claims with the U.S. Department of Veterans Affairs.

JAPAN JOB SHADOW PROGRAM

In August 2009, 21 HP employees based at the HP Ogikubo office were matched with 21 secondary school students for a one-day job shadow program. The students followed the HP employees, learning about the day-to-day experience of working at HP.

RETIREE VOLUNTEERISM

HP has approximately 79,000 retirees, many of whom remain involved in HP's volunteer efforts. Our ranks of retirees grew by nearly one-third in 2009, as we welcomed 19,000 EDS retirees into our organization. Each year, HP retirees volunteer thousands of hours to support local charities and schools around the world.

In 2009, HP teamed with Civic Ventures to pilot the Encore Fellows program, which allows HP retirees to take the professional expertise they gained at HP to the nonprofit sector. Nine fellows received a stipend of $25,000 each for a year of work. The HP fellows are putting their talents toward projects ranging from after-school programs for low-income students to working for environmental organizations.

Employee giving

The Hewlett-Packard Company Foundation provides employees in the United States with one-to-one cash matching for gifts to qualified nonprofit organizations, up to $1,000 per employee per fiscal year. In 2009, HP employees in the United States donated cash totaling approximately $3.4 million, matched by a total of $2.3 million from the Hewlett-Packard Company Foundation. In addition, U.S. employees can also donate HP technology to qualified charitable organizations or schools. Employees contribute 25 percent of the product list price, up to $5,000, and HP contributes the remaining cost. In 2009, the value of the products donated by HP employees in the United States totaled approximately $1.4 million.

Disaster relief

In 2009, HP employees, HP and the Hewlett-Packard Company Foundation made donations of money, equipment and expertise in response to natural disasters in the Asia Pacific region, including the Victorian bushfires in Australia, floods in India, the earthquake in Indonesia, Typhoon Ketsana (Ondoy) in the Philippines, the tsunami in Samoa and Typhoon Morakot in Taiwan.

For example, when Typhoon Ketsana (Ondoy) hit the Philippines and Vietnam, the event not only caused hundreds of deaths, hundreds of thousands of injuries and extensive property damage, but many of our employees, customers and partners were severely affected by the disaster as well. The Hewlett-Packard Company Foundation responded by making an immediate donation of $350,000 to the American Red Cross. HP and the Hewlett-Packard Company Foundation initiated relief efforts to assist affected employees in the region, including rehabilitation

SOCIETY

initiatives, shelter assistance and house cleanups led by employees and the country leadership team. An additional $400,000 was donated to the Asia Pacific disaster relief efforts later that same month.

PANDEMIC FLU (H1N1) RESPONSE

Following the initial outbreak of H1N1 in Mexico in April 2009, HP donated 150 laptops that were used by mobile health centers to report and document suspected cases of the virus across the country. The HP laptops allowed for improved communication among healthcare providers and the creation of alerts that were distributed to the public. Over the course of the outbreak, more than 500,000 people were evaluated by Mexican health centers.

PERFORMANCE

The total value of our social investments, including contributions from HP's business units for social projects, was approximately $52.2 million in 2009, an increase of approximately $6 million compared with 2008.

Social investments, 2005–2009* [million $U.S.]

	2005	2006	2007	2008	2009
OVERALL					
Total	$45.3	$45.6	$47.1	$46.2**	$52.2
Percentage of pre-tax profits	1.3%	0.63%	0.51%	0.44%	0.55%
TYPE					
Cash	$18.0	$17.5	$20.6	$18.6	$17.2
Products and services***	$27.3	$28.1	$26.5	$27.5	$35.0

* Data excludes contributions to the HP Company Foundation and employee donations but includes HP's match contributions.

** Due to rounding of this total, the sum of the constituent parts of this figure listed under the types of investments below does not match this figure.

*** Product donations are valued at the Internet list price. This is the price a customer would have paid to purchase the equipment through the HP direct sales channel on the Internet at the time the grant was processed.

Social investments by region, 2009* [million $U.S.]

REGION	AMOUNT
United States	$26.1
Americas (not including the United States)	$4.5
Europe, Middle East and Africa	$6.8
Asia Pacific and Japan	$6.0

* Regional numbers represent corporate global social investments and exclude contributions by business groups.

SOCIETY

We currently report employee volunteerism and contributions data from U.S. employees. The following amounts are in addition to the numbers reported immediately above:

Employee giving in the United States, 2007–2009

	2007	2008	2009
Employees participating in our U.S. Employee Giving Program	5,700	6,700	5,384
Value of cash donated by U.S. employees [million $U.S.]	$3.0	$3.6	$3.4
Value of cash from Hewlett-Packard Company Foundation matched funds [million $U.S.]	$2.0	$3.0	$2.3
Value of products donated by U.S. employees [million $U.S.] *	$1.9	$1.5	$1.4
Value of products from HP matched funds [million $U.S.]*	$6.5	$4.7	$4.2
Total value of cash and products donated including HP and HP Company Foundation matched funds [million $U.S.]**	$13.4	$12.8	$11.3

* Product donations are valued at the Internet list price. This is the price a customer would have paid to purchase the equipment through the HP direct sales channel on the Internet at the time the grant was processed.

** Hewlett-Packard Company Foundation cash matching began in 2007.

PERSPECTIVE

A recent World Economic Forum report states entrepreneurship education is a crucial foundation for economic development, playing an essential role in shaping attitudes, skills and behavior from the primary level up.

Junior Achievement believes that students can learn these entrepreneurship capabilities. The keys to acquiring the knowledge, skills and self-confidence to be entrepreneurial involve both understanding of the concept and, importantly, direct experience in a pre- "real world" setting.

The vehicle for delivering entrepreneurship education involves partnerships between education authorities around the world and corporations like HP. Through its global infrastructure and talented employees, HP brings real-world knowledge and skills plus mentoring and role modeling so vital to unleashing entrepreneurial instincts in young people. JA serves as the catalyst in creating public/private partnerships through direct engagement with global education authorities, well-designed curricula for all levels, training of corporate volunteers, and our Company Program that provides real-world experience. Annu-

ally, nearly 10 million young people in 123 countries benefit from this experience.

Challenges to scaling entrepreneurship education globally are political and technological:

• HP can play an important role in gaining access to education authorities/systems globally when policies and politics inhibit educational innovation.

• Short-term, technology can be of value in building online content and web capability. Longer term, HP could be of tremendous value in creating social networks to connect JA students around the world; "virtualizing" volunteers— making them ubiquitously available to students, creating on-line business games and competitions, and creating digital video archives of notable business innovators.

Key measures, short-term, involve understanding attitudes, skills and behaviors pre- and post-JA experience assessments. In the longer term, they focus on conducting longitudinal assessments to gauge employment success, company start-ups, applied innovation and career satisfaction.

SEAN C. RUSH
President and CEO
JA Worldwide

SOCIETY

ETHICS AND COMPLIANCE

" We know that actions speak louder than words. We must make decisions and behave in ways that we can be proud of, that reflect our commitment to doing the right thing. "

–MARK HURD, CHAIRMAN, CEO AND PRESIDENT

How we do things is as important as what we do. Being honest and accountable at all times earns the confidence and support of investors, customers and other stakeholders, and inspires pride and loyalty in our employees. Each year, we receive ethics-related inquiries from different stakeholders. If handled properly, this provides HP an opportunity to build trust and create business opportunities, while avoiding the possible negative impacts of failing to do so.

Since HP was founded in 1939, we have fostered a culture built on trust, respect and dignity for all. Our shared values and objectives guide our work. We adhere to laws and regulations that apply to our business wherever we operate, and our stringent internal standards, policies and processes often go beyond these requirements. Our ethics and compliance office provides the oversight, support and resources to maintain our culture of integrity, and is reinforced by numerous compliance functions across the business, including the privacy office, U.S. public sector compliance, global trade, anti-corruption and environmental functions.

Everything we do and say counts. We can't rest on our past successes—we create our reputation each and every day. We work diligently to maintain a

HP NAMED ONE OF THE WORLD'S MOST ETHICAL COMPANIES

2009 WORLD'S MOST ETHICAL COMPANIES
WWW.ETHISPHERE.ORG

In recognition of our commitment to ethical leadership and global citizenship, the Ethisphere Institute named HP one of the 2009 World's Most Ethical Companies. Companies in over 100 countries and 35 industries were nominated, and only 99 selected.

strong ethical culture globally, regardless of cultural norms, customs, or the absence of laws and regulations. Our Standards of Business Conduct (SBC) apply to all employees, everywhere we do business.

SOCIETY

In countries where ethics issues are more likely to arise, we conduct additional training and audits to ensure our standards are met. We integrate new employees into our ethics and compliance culture as soon as they join the company.

OUR APPROACH

Our long-established culture of uncompromising integrity is the foundation of all our decisions and earns the trust and respect of our employees, customers, partners, suppliers, regulators and investors.

Our Standards of Business Conduct (SBC) serves as our compass, and sets non-negotiable expectations for our behaviors, decisions and actions—every time, all the time. Employees use the SBC for guidance in tough situations such as using sensitive information appropriately, avoiding conflicts of interest and rejecting bribery and corruption. Designed to be clear, engaging and easy to navigate, the SBC is available in more than 20 languages. A version has also been adapted for contingent workers. Our Supplier Code of Conduct describes the social and environmental standards we expect from many of the companies that provide our goods and services. We also have a business Partner Code of Conduct covering areas such as risk management and fair sales and marketing practices.

Board responsibilities

The board of directors has four primary responsibilities relating to ethics and compliance:

- Provide oversight of ethics and compliance at HP
- Set and enforce the "tone at the top"
- Encourage a company culture of ethical conduct and compliance
- Establish procedures and a forum for review of significant ethics complaints

The board has 11 members, with Mark Hurd serving as chairman, chief executive officer and president. The other ten members are independent directors, as defined by the listing standards of the New York Stock Exchange and HP's Corporate Governance Guidelines. Marc L. Andreessen, a software pioneer whose leadership has helped shape the Internet, joined the board in September 2009.

The board's Audit Committee guides HP's ethics and compliance program and is a direct resource for the chief ethics and compliance officer. Robert Ryan is the chairman of the Audit Committee as well as HP's lead independent director. G. Kennedy Thompson serves as the independent director responsible for reporting to the board on HP's compliance with legal and ethical requirements related to how we conduct investigations.

In November 2009, the HP Board of Directors formed a new Public Policy Committee, which assists the Board in fulfilling its responsibilities for generally overseeing HP's policies and processes relating to HP's public policy, government affairs and global citizenship activities. (See Governance and management.)

See also information regarding HP's director independence, board committees and composition, and director compensation in the report online.

Chief ethics and compliance officer and organizational structure

Ethics and compliance is a principle objective of HP's Legal and Government Affairs organization. Our chief ethics and compliance officer is responsible for

SOCIETY

overseeing and implementing our ethics and compliance program. He reports directly to the general counsel and the independent director responsible for HP conducting investigations legally and ethically.

The chief ethics and compliance officer also chairs the ethics and compliance committee, which is made up of senior HP executives, including the general counsel, chief financial officer and head of human resources.

HP's compliance council is also chaired by the chief ethics and compliance officer. Other members include the chief privacy officer and senior leaders from HP's businesses, legal and compliance functions, including the head of internal audit. This council oversees related compliance council boards including those for compliance-related IT projects, market knowledge, and privacy and personal data protection.

To further strengthen our overall ethics and compliance structure, in 2009 we expanded our ethics and compliance liaison network and reinforced collaboration across organizations. Senior employees in each business group, function and region serve as ethics and compliance champions. They engage with senior regional and business management teams and compliance functions to ensure local issues are identified and addressed.

Compliance activity

HP's compliance office develops and enforces processes, policies and standards to ensure our compliance functions, businesses and global functions can effectively identify and address legal and regulatory risks. It provides the oversight, support, resources and executive visibility needed to ensure all employees follow compliance-related procedures. It oversees the activities of compliance functions across the company, such as the privacy and global trade offices, and works closely with other risk functions, such as internal audit and enterprise risk management, to ensure the infrastructure is in place for compliance functions to work effectively.

In 2009, the compliance office further developed its processes for assessing enterprise-wide compliance risk and prioritizing where the company should invest its resources in this area. These processes involve:

- Identifying, assessing and prioritizing risks

- Engaging with the people responsible for specific risks

- Developing and implementing mitigation plans

The compliance office assessed and rated over 40 compliance functions based on HP's Ten Standards

Ethics and compliance organization structure

of an Effective Compliance Function. We also created new tools and activities to support enterprise-wide compliance. These include:

- A roles and responsibilities matrix to reinforce shared responsibility for compliance across the businesses and regions

- A community forum for members from each compliance function

- A risk function coordination group to align the efforts of the ethics and compliance office, internal audit, enterprise risk management and the Sarbanes-Oxley team

The SBC compliance team handles all significant ethics and compliance internal investigations worldwide. (See Reporting concerns.)

ETHICAL SALES AND MARKETING

Ethical practices in sales and marketing is an important compliance area. HP's Partner Code of Conduct sets our requirements for legal compliance and fair sales and marketing practices for any party selling HP products and services.

SOCIETY

HP's Global Case Management System links our various investigative functions in a common, worldwide database. The system provides management with access to incident details, and allows functions to interact efficiently while protecting personally identifiable information.

Communication and training

Every person at HP is expected to be personally accountable for everything they do—regardless of job description. We trust our employees to do the right thing by encouraging them to speak up, ask questions and report anything that doesn't seem right.

In 2009, we enhanced our training and awareness program to keep ethics and compliance top-of-mind. Examples include:

- HP's mandatory ethics and compliance annual refresher course. This is a 90-minute online training session on the SBC and other key policies and procedures. This year, HP's general counsel introduced and endorsed the training via video. The training included lessons learned from actual incidents, and referred to a new resource guide that links to key documents and websites. We also expanded the content of our mandatory ethics and compliance course for new hires.

- A new series of online videos called Integrity Minutes. These short narratives depict ethics and compliance issues as they might appear in real workplace situations. They are designed to help HP employees learn, remember and apply important behaviors in their daily work. A video message from a senior HP leader follows each series to reinforce the messages and ensure employees understand how they apply to them.

- Two *Leaders on Ethics* videos; the start of an ongoing series in which HP senior managers provide guidance on company policies and appropriate workplace behaviors. They reinforce the importance of ethical conduct and compliance with the law.

- The *Ethics Bulletin*, a quarterly communication available to all employees. Each bulletin presents two ethics and compliance issues that occurred at HP, with personal details removed, and explains how they were resolved. It also discusses lessons learned and provides links to pertinent sections of the SBC and corporate policies. The bulletins help raise awareness of the SBC and emphasize the various channels employees can use for assistance.

HP's 2009 Voice of the Workforce (VoW) survey included several questions on ethics and compliance, as noted in the following table.

STATEMENT	PERCENTAGE OF VOW RESPONDENTS THAT AGREED (DOES NOT INCLUDE NEUTRAL RESPONSES)
My manager is committed to treating all employees equitably (i.e., regardless of race, color, religion, sex, disability, age, sexual orientation or national origin).	89%
My manager speaks openly and honestly, even when the news is bad.	84%
Ethical standards guide decision-making in my organization.	76%
I feel comfortable reporting unethical behavior or practices without concern for retaliation.	76%

SOCIETY

REPORTING CONCERNS

HP maintains a transparent, open-door work environment so employees can raise ethics and compliance issues without fear of retaliation.

Employees can seek guidance on ethics and compliance issues from several internal resources: our SBC; the accompanying quick reference guide and training module; our corporate policy directory; and the ethics and compliance website.

We offer several channels for raising concerns about potential misconduct. We encourage employees to follow our Open Door Policy and talk first to their manager or the next level of management, if issues arise. Alternatively, employees can submit concerns to internal ethics and compliance experts or their regional or business ethics and compliance liaisons.

HP's ethics and compliance office provides formal, confidential communication channels for employees and third parties to report potential violations of law, company policy or the SBC. These include a confidential, round-the-clock, toll-free helpline that operates globally and can handle calls in numerous languages. This line is also available to third parties via our company website and partner and supplier portals. Reporting can be anonymous, if preferred. (See sidebar.)

HP promptly investigates and responds to alleged violations. The person submitting a concern will generally receive a response within two business days. Investigation teams may be local, regional or corporate, depending on the allegation. The teams may also include members of the human resources, legal, IT security, privacy, global security and internal audit functions, depending on the expertise needed. The legal department oversees all escalated, corporate-led investigations. The details and results of investigations are treated as confidential to the extent reasonably practical.

In 2009, we received approximately 900 allegations through the formal reporting mechanisms managed by the Global Ethics Team or other compliance reporting channels. This compares with approximately 1,000 in 2008. The table shows the topics to which these allegations related. All were investigated, and we addressed those where we found substance. As a result, we took corrective action with approximately 350 employees, compared with approximately 475 in 2008.

Breakdown of items reported to the Global SBC team or other compliance functions, 2007–2009

	2007	2008	2009
Human resources	37%	31%	34%
Misuse of assets	20%	15%	20%
Fraud	12%	16%	15%
Channel	9%	12%	4%
Conflicts of interest	7%	9%	6%
Confidentiality	4%	3%	6%
Customer	1%	1%	2%
Reporting	1%	2%	4%
Competition	0%	1%	1%
Other	9%	10%	8%

How to report a concern

If you want to report an ethics concern, please contact us:

E-MAIL: corporate.compliance@hp.com

PHONE: From anywhere in the world, call the Guide-Line, 24 hours a day. Translation is available and callers can remain anonymous, except where anonymous reporting is prohibited by local law.

From the U.S. and Canada: 800-424-2965

Outside the U.S. and Canada:
1. Go to the AT&T Access Codes page (see link in report online)
2. Find your country in the alphabetical listing
3. Dial the AT&T Direct® Code
4. When prompted, dial 800-424-2965

MAIL: HP Ethics and Compliance Office
5400 Legacy Drive
Plano, TX 75024

PERSPECTIVE

HP has developed a comprehensive ethics and compliance program that addresses both reputation and legal risks to the organization. It emphasizes an appropriate balance between building a culture of integrity emphasizing HP's shared values while addressing compliance-based risks both internally as well as through its supply chain and with its business partners.

HP's global market presence makes it important that country and/or regional executives be charged with decentralized responsibility for the successful implementation of ethics and compliance risk management. Culture is what drives behavior in organizations. Employees see what's recognized and rewarded by their managers, and behave accordingly. Local accountability is essential to ensure HP's culture develops deep roots worldwide.

KEITH T. DARCY
Executive Director,
Ethics and Compliance
Officer Association

SOCIETY

SUPPLY CHAIN RESPONSIBILITY

HP is the world's largest information technology (IT) company and has the industry's most extensive supply chain. We have more than 700 production suppliers (responsible for product materials, components, and manufacturing and distribution services) working in more than 1,200 locations worldwide (see Audit findings), and thousands of nonproduction suppliers that provide goods and services not used to produce our electronic products. We take the challenge of raising social and environmental standards in our supply chain seriously and lead the IT industry in monitoring our suppliers and helping to build their capabilities. Our efforts are central to HP's leadership on labor practices, human rights and the environment, and strengthening our business and our suppliers' businesses.

HP acts as a force to improve lives in the communities where we work, and we expect our suppliers to make the same commitment. Our priorities are to protect workers' rights and dignity, ensure health and safety standards, minimize environmental impacts, and uphold high standards of business ethics. Since we launched our supply chain social and environmental responsibility (SER) program in 2000, we have achieved widespread commitment to these values in our supplier base.

Our experience has shown that improving supply chain SER performance requires sustained commitment. Our relationships with suppliers are typically long term, which helps us work effectively with them. We work with over 95 percent of our high-risk suppliers' facilities, focusing on:

- Integrating social and environmental requirements into our sourcing operations

HP SUPPLY CHAIN FACTS

700+

production suppliers with approximately 1,200 locations and thousands of nonproduction suppliers

300,000+

workers at audited sites that produce HP products

3.5 PRODUCTS EVERY SECOND

HP ships approximately 3.5 products every second. In 2008, for example, we shipped over 100 million printers, PCs and servers.

SOCIETY

- Helping suppliers build their SER competencies by directly engaging workers and management

- Collaborating with nongovernmental organizations (NGOs), governments and industry peers to inform, validate and improve our efforts

- Reporting fully and transparently the aggregated results of supplier audits, remediation efforts and training.

During 2009, we sharpened our focus on building the capabilities of our suppliers, which we view as an essential follow-up to audits.

We have continued working closely with suppliers to calculate the energy they consume and the corresponding greenhouse gas (GHG) emissions. See the Product manufacturing section for more information.

This is the third consecutive year that we are disclosing our supplier list, which accounts for over 95 percent of our supplier spend and remains a leading industry practice.

HP's Electronic Industry Code of Conduct and General Specification for the Environment

In 2003, HP was the first electronics company to publish a Social and Environmental Responsibility Supplier Code of Conduct. In 2004, we co-led the development of the Electronic Industry Code of Conduct (EICC), the standard applied across the industry's global supply chain. HP endorses the EICC in its entirety. We have supplemented the EICC with additional requirements specific to freedom of association (standard A7). We refer to this supplemented code as HP's Electronic Industry Code of Conduct (HP's EICC). All new and existing suppliers must conform to HP's EICC.

HP's suppliers must also comply with our General Specification for the Environment, which contains HP's global product content requirements including restricting or prohibiting certain chemical compounds or materials in HP brand products or manufacturing processes.

[1] Zero-tolerance items are the most serious type of major nonconformances. These include underage workers (below the legal age for work or apprenticeship), forced labor, health and safety issues posing immediate danger to life or serious injury, and violation of environmental laws posing serious and immediate harm to the community.

SOCIETY

STRATEGY

We launched our supply chain social and environmental responsibility (SER) program in 2000 with a long-term vision of cooperation throughout the supply chain to improve standards of labor management, human rights and environmental performance. Our strategy to achieve this is multi-faceted. It includes:

- **PROACTIVE ENGAGEMENT** Through collaborative assessments, improvement plans and capability-building initiatives, we help suppliers achieve their own independent, robust internal governance to ensure continued improvements. We also collaborate internally to ensure the importance of SER is understood throughout the HP sourcing community.

- **TRANSPARENCY** We work openly with non-governmental organizations (NGOs) and other interested parties to communicate our challenges and progress, and ensure we target the right issues. We also publicize the results of our audits and a list of our suppliers.

- **MEANINGFUL RESULTS** Our audit program reveals issues requiring attention and helps us monitor suppliers' performance, ensuring we achieve long-term results.

We believe that higher labor and environmental standards lead to higher-quality products. They also protect our reputation and assure the continuity of our lines of supply by ensuring SER issues do not adversely affect a supplier's production capability. The program creates efficiencies that can decrease cost and strengthens partnerships for HP.

Suppliers often question whether they can meet HP's SER standards and cost requirements. We believe that our sourcing needs should not result in nonconformances to our code or violations of the law. Lasting change takes time, however, as suppliers must not only build their management capability but also often challenge a prevailing culture.

Our program, markets and supply chain are always evolving, so new issues and trends constantly emerge. We stay on top of developments, adapting and enhancing our program to meet its changing needs. For example, in 2009, HP revised our Supply Chain SER Policy to highlight the importance of supplementing regulatory compliance with continual improvement in environmental performance. We require suppliers to promote efficient use of energy and other resources and minimize the use of hazardous materials.

We expect several important trends to influence our future strategy:

- Introduction of super codes (the Global Social Compliance Program base code, for example), which are broader than industry-level codes of conduct

- Increased focus on SER by retailers (see Proactive engagement for more information)

- Incorporation of SER standards in bilateral and multilateral trade agreements

- Increased focus on traceability through many levels of the supply chain (see more in Proactive engagement)

- Increased focus by HP on more difficult issues as our SER program begins to expose deeper underlying problems

- Increased attention on the role of business in respecting and promoting human rights

Internal collaboration and governance

Our supply chain SER governance system defines responsibility and reporting across relevant HP businesses and functions. All HP businesses support our supply chain SER program through the Supply Chain Board, which meets monthly and reports directly to the HP Executive Council.

It is imperative that HP's procurement teams understand SER issues and consider them in day-to-day sourcing and supplier management decisions. These teams receive regular training in how to assess the SER risk associated with a potential supplier. Supply chain SER is included in the Supplier Evaluation, Contract Development and Execution Management phases of HP's Procurement Management Process, which defines how our procurement organizations worldwide manage production suppliers. Compliance with our Procurement Management Process is audited internally and by external organizations that certify HP's quality system (ISO 9000).

HP uses a High-Performance Supplier Scorecard (HPSS) to evaluate and improve production suppliers' performance. The scorecard has multiple performance categories weighted according to importance, such as business (including SER), cost, quality, supply and technology. The scorecard rating system allows

SOCIETY

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│              HP Executive Council                 │
│   (Includes CEO and heads of each HP business     │
│                    unit)                          │
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                         │
┌─────────────────────────────────────────────┐    ┌──────────────────────────────┐
│            Supply Chain Board                 │----│  Trusted Advisory Network     │
│  (Supply Chain Sr. VPs from each HP business  │    │         (outside HP)          │
│                   unit)                       │    └──────────────────────────────┘
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         │                        │
┌──────────────────────────┐     ┌──────────────────────┐
│  Supply Chain SER Program │     │                      │
│ (Sponsored by Supply Chain│     │     Procurement       │
│          Board)           │     │    Organizations      │
└──────────────────────────┘     │                      │
   │                             └──────────────────────┘
   │  ┌──────────────────────────────┐         │
   │  │ Business and implementation   │         │
   │  │ support:                      │----     │
   │  │ • SER Business Unit Liaisons  │         │
   │  │   (assigned by Supply Chain   │         │
   │  │    Board)                     │         │
   │  └──────────────────────────────┘         │
   │                                            │
   │  ┌──────────────────────────────┐    ┌──────────────────────┐
   │  │ Audit team members from:      │    │  Supplier Companies   │
   └--│ • Global Procurement Services │    └──────────────────────┘
      │ • Environment, Health and     │
      │   Safety                      │
      └──────────────────────────────┘
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us to rank a supplier's management capacity as well as its SER performance against HP's Electronic Industry Code of Conduct (EICC). SER issues account for 10 percent of suppliers' HPSS score. HP reviews scorecards regularly to identify issues and trends to address. Suppliers can also rate HP through our reverse scorecard, which focuses on our order and supplier management processes.

Strategic audit program

Audits verify conformance with HP's EICC and establish whether the supplier has systems to promote continued conformance. Audit results also enable HP to identify and focus on the most pertinent issues for specific types of suppliers, sites, countries and regions. We believe that audits are most strategic when they are collaborative and constructive. Experience shows that achieving cooperation from suppliers is essential because it creates an environment for lasting improvement. For this reason, we usually announce our audits in advance even though we know this can allow a supplier to present an artificially positive picture (which happens, but rarely). We believe our audit methodology is robust enough to produce accurate findings, and we find that announcing audits usually allows us to build a good relationship.

Investigative audits are an exception. These are usually in response to a serious, credible allegation where we believe the supplier may try to hide the real situation. See Proactive engagement for an example.

Where we have a strong collaborative relationship, we have started to partner with some of our sup-

pliers to demonstrate how HP conducts the audit process by jointly auditing their suppliers (our second-tier suppliers).

HP's principles of a strategic audit:

- The **philosophy** of the audit is a joint and collaborative effort between the supplier and the audit team.

- The **purpose** of the audit is to determine the level of conformance with HP's Electronic Industry Code of Conduct.

- The **objective** of the audit is to identify areas for continuous improvement and to focus our efforts appropriately.

Third-party monitoring

Third-party monitoring is a valuable component of our program, providing independent oversight of our supplier auditing efforts. HP engages third-party audit firms, including Environmental Resources Management (ERM) and Verité, to conduct verification audits of our suppliers, including suppliers associated with a specific allegation in non-governmental organization (NGO) reports. ERM's validation statements are available in the report online.

We validate our findings with the results of third-party audits; we have found that they usually correspond to the findings of HP's internal audits. The quality of third-party monitoring is critical to ensure the effectiveness of this validation. The Electronic Industry Citizenship Coalition (EICC) is working to develop

a certification process to ensure a consistently high standard for all industry-sponsored audits. When available, all third-party auditors will need this certification before auditing suppliers on behalf of EICC members. HP's internal auditors will also go through the same certification process.

Capability building

We encourage lasting improvement in suppliers' SER performance by building their capability to understand and manage the issues they encounter. HP collaborates with local NGOs and training groups to deliver programs that address concerns raised by audit results and stakeholders. Engaging locally ensures our programs address key local challenges, while improving our relationships.

Our biggest programs to date have been:

- **FOCUSED IMPROVEMENT SUPPLIER INITIATIVE (FISI) (2006–2008)** Monthly social and environmental management training sessions. FISI connected suppliers with resources, skills and a network of experts to facilitate systematic improvement in SER management.

- **FIRE SAFETY AND EMERGENCY PREPAREDNESS TRAINING (2009)** See Proactive engagement for more information.

- **HERPROJECT (2008–PRESENT)** A health training program to improve awareness and access to health care for women. See Proactive engagement for more information.

- **CENTRAL EUROPE SUPPLIER RESPONSIBILITY (CESR) PROJECT (2006–2008)** Training and workshops to improve the SER performance of HP's small and medium-sized sub-tier suppliers.

- **MULTI-STAKEHOLDER CAPABILITY BUILDING IN CHINA (2007)** Led by the Foreign Investment Advisory Service (FIAS), a department of the World Bank, the initiative brought together suppliers, NGOs and leading companies in an effort to raise standards in the electronics sector in southern China.

REACH OF CAPABILITY-BUILDING PROGRAMS

The table below shows the reach of training and capability-building programs to HP's first-tier suppliers. In addition, HP has trained over 100 second-tier suppliers through programs conducted jointly with our first-tier suppliers. To date, suppliers representing 60 percent of total spending have benefited from at least one program. Our capability-building programs in China, such as the Focused Improvement Supplier Initiative and worker training at Chicony (see Proactive engagement), have helped raise awareness of SER issues at the participating factories. Audit results have subsequently showed decreases in nonconformances relating to awareness of HP's Electronic Industry Code of Conduct and labor management systems. Auditors are now also having deeper conversations about fire safety and training as a result of our related program in China (see Proactive engagement).

PROGRAM	SUPPLIERS COVERED TO DATE [% of total spend, rounded to nearest 5%]
At least one capability-building activity	60%
At least one version of the Focused Improvement Supplier Initiative (FISI)	55%
Fire safety and emergency preparedness training (See Proactive engagement for more information.)	30%
HERproject (Mexico and China) (See Proactive engagement for more information.)	20%
Central Europe Supplier Responsibility (CESR) project	15%
Multi-Stakeholder Capability Building in China led by the Foreign Investment Advisory Service (FIAS)	15%

SOCIETY

SUPPLIER MANAGEMENT SYSTEM

HP's supply chain social and environmental responsibility (SER) program is based on a four-phase supplier management system that aims to build suppliers' capabilities (see graphic below). Over the past seven years, all of our key production suppliers have completed the introduction and assessment stages. These first two stages now comprise mainly new suppliers. Suppliers move to the validation phase based on risk assessments (see below), before entering the capability-building phase, where we develop programs to address key training needs, ensuring lasting performance improvement. Currently, we concentrate our efforts on validation and continual improvement. Our experience is that suppliers' performance improves most in these two stages.

In 2009, we expanded our program to include many more nonproduction suppliers. We have targeted 24 global strategic suppliers, ten high-risk suppliers in Latin America and 27 high-risk suppliers in Asia Pacific. Since the start of this initiative, 90 percent of our targeted nonproduction suppliers have signed SER agreements and completed SER assessments (See Assessment in graphic below).

The following sections explain each step in the four-phase supplier management system.

Phase 1: Introduction

HP assesses potential suppliers according to our risk-based approach outlined below. This helps us establish the appropriate level of participation in our program for a supplier. Once the assessment is complete, we confirm the SER requirements in our contract.

Phase 2: Assessment

HP requests that high-risk suppliers complete a self-assessment questionnaire to identify potential SER performance risks. Self-assessments help suppliers understand our expectations for conformance to HP's Electronic Industry Code of Conduct.

HP reviews and provides feedback on the self-assessment, and suppliers create and implement an improvement plan, if required.

Four-phase supplier management system*

INTRODUCTION	ASSESSMENT	VALIDATION AND IMPROVEMENT	CAPABILITY BUILDING
• HP conducts preliminary risk assessment • SER requirements confirmed in contract	• Suppliers complete self-assessment • HP review and feedback	• On-site audits • Corrective actions, if required • Follow-up audits, if required	• Identify key education areas • Build suppliers' capability in key areas by building their skills, toolset and expertise

[Number of suppliers reaching each phase, cumulative] — line chart from 2003 to 2009 with y-axis from 0 to 800. Legend: Introduction, Assessment, Validation and improvement, Capability building.

* The gap between introduction and assessment represents sites that are low risk based on the company or country they are in. The gap between assessment and validation represents sites whose self-assessments indicate they are low risk. The increases in introduction and assessment in 2009 are largely due to the expansion of our program to nonproduction suppliers.

Phase 3: Validation and Improvement

VALIDATING CONFORMANCE

HP believes that auditing will always remain a critical part of supplier engagement.

We have developed a network of local internal auditing teams, backed by independent verification. We do not rely on supplier certification to external standards, because standards can vary among certified companies, and suppliers without certification can have equally rigorous SER management systems. Instead, we use three types of audits:

- Audits conducted by HP employees
- Audits conducted by an external organization to verify the results of HP audits or to investigate allegations
- Joint audits by an external organization on behalf of HP and other Electronic Industry Citizenship Coalition member companies

RESPONDING TO NONCONFORMANCE

We rank nonconformance to HP's Electronic Industry Code of Conduct (EICC) using standard ISO guidelines.

- **MAJOR NONCONFORMANCE** A significant failure in the management system that affects its ability to ensure that conditions conform to HP's EICC or General Specification for the Environment.

- **ZERO-TOLERANCE MAJOR NONCONFORMANCE** The most serious type of major nonconformances are zero-tolerance items, which include underage workers (below the legal age for work or apprenticeship), forced labor, health and safety issues posing immediate danger to life or serious injury, and violation of environmental laws posing serious and immediate harm to the community. If such an item is uncovered, our zero-tolerance policy requires auditors to escalate it immediately. The issue must then be rectified within 30 days of the original audit. HP returns between 30 days and 90 days after the audit days to confirm resolution of the issue.

- **MINOR NONCONFORMANCE** Not a systemic problem and typically an isolated finding, such as an overdue corrective action from an internal audit or a procedure that has not been revised to reflect a change in regulations. Suppliers have between 180 and 360 days to address minor nonconformances.

- **OBSERVATION** Not considered a nonconformance to HP's EICC. It recognizes there could be better monitoring or documentation processes.

HP requires suppliers to provide a detailed corrective action plan addressing all identified nonconformances within 30 days of receipt of the site audit report. Suppliers need to demonstrate to us that they have addressed major nonconformances within 180 days. They can do this by delivering to us appropriate documentation or other evidence of resolution. For major nonconformances that require physical checks, we return to all audited sites within two years. We typically see substantial reductions in nonconformances between initial and follow-up audits. See more in Audit results.

Phase 4: Capability building

We believe that remaining engaged with suppliers and providing support is the best way to help them improve their long-term performance.

If a supplier rejects the continual improvement approach, we emphasize that we will not tolerate serious or repeated violations of HP's Electronic Industry Code of Conduct and will terminate the relationship. Terminating a contract can mean the loss of jobs, so we prefer to collaborate with suppliers to improve factory conditions. See the Proactive engagement section for more information.

Risk-based implementation

We conduct risk assessments to prioritize implementation of our supply chain SER. Our first-tier suppliers (see diagram on next page) select and manage their own suppliers (second-tier suppliers).

The risk factors we use to prioritize suppliers are:

- **LOCATION RISK** is higher in some locations than others.

- **PROCUREMENT CATEGORY** Risk is higher in some procurement categories, such as manufactured parts, components and real estate construction services, and lower in others, such as software licensing, marketing services or telecom services.

- **COMPANY INFORMATION** Information from previous audits, press articles, incidents or accidents may impact our assessment of supplier risk.

SOCIETY

Risk-based approach to supply chain social and environmental responsibility

■ Over 500 low-risk suppliers introduced and/or assessed but not audited

■ 153 suppliers audited through 2009; 43 will be re-audited in 2010

■ 18 new suppliers will be audited in 2010

First-tier suppliers

Second-tier suppliers
HP will train first-tier suppliers to audit second-tier suppliers

Third-tier suppliers
HP and our first-tier suppliers will train second-tier suppliers to manage their suppliers

PROACTIVE ENGAGEMENT

HP started our supply chain social and environmental responsibility (SER) program to make a real and lasting difference to the way our suppliers operate. Our training and development programs aim to instill practices that will prevent SER violations in the long term. These require a sustained effort, and we accept that challenge willingly.

Our audit program sometimes reveals compliance issues at our suppliers. We investigate these thoroughly and formulate remedial actions. When solutions require industrywide collaboration, HP is proactive in facilitating agreement and action among a wide range of organizations.

This section gives examples of how HP's proactive engagement around the world addresses concerns related to:

- **LABOR** (labor disputes, labor migration, grievance processes and excessive working hours across China and the rest of Asia Pacific)

- **HEALTH AND SAFETY** (emergency preparedness in China and women's reproductive health in Latin America)

- **ENVIRONMENT** (strengthening policies, promoting environmentally preferable materials, and reducing the impact of product manufacturing)

- **HUMAN RIGHTS IN MINERALS MINING IN CENTRAL AFRICA**

Industry collaboration

A consistent message from multiple customers has a bigger impact on suppliers. This can come from collaboration within one industry or from partnerships across industries. Participants benefit by sharing knowledge and resources, standardizing tools and processes, avoiding duplication, and developing consistent approaches.

ELECTRONICS INDUSTRY COLLABORATION

Two of the most significant supply chain partnerships are organized by the Electronic Industry Citizenship Coalition (EICC) and the Global e-Sustainability Initiative (GeSI). The EICC and GeSI are developing tools to monitor and improve supply chain SER performance across the ICT sector. HP has contributed significant resources and leadership to both initiatives since 2005. See Supplier SER Requirements for more on the EICC.

We also contribute to specific EICC initiatives. We co-led the development of a carbon emissions reporting framework for suppliers and led the EICC Validated (shared) Audit Process. HP also contributed to training tools for procurement managers and efforts to understand the electronics industry's supply of metals. See Human rights for more information.

In May 2009, HP joined representatives from civil society organizations and other EICC and GeSI members at a roundtable in Amsterdam to share information and expertise about the industry's supply chain. Organized by electronics industry pressure groups makeITfair and Good Electronics, the event aimed to help participants develop common strategies to bring about lasting improvements in labor conditions.

THE GLOBAL SOCIAL COMPLIANCE PROGRAMME

HP also collaborates with companies from other sectors, having been a member of the Global Social Compliance Program (GSCP) since 2007. Along with

SOCIETY

leading brands from the retail, clothing and food sectors, HP works with the GSCP to deliver a consistent approach to continually improve labor and environmental conditions across multiple sectors globally. In 2009, HP helped develop the GSCP's site environmental requirements tool and an equivalence process to encourage the sharing of audit reports, with the aim to reduce duplication in supply chain auditing and assurance.

THE RESPONSIBLE SUPPLY CHAIN MANAGEMENT LABORATORY

HP, along with L'Oréal, Titan and Volkswagen, has led the Portal for Responsible Supply Chain Management since 2007. The site provides tools and information to support practitioners in developing their own approach to SER in the supply chain. Nearly 16,000 people have visited the portal so far, at an average of around 2,000 visitors per month. The most frequent visitors are from the UK, the United States, China, Germany, India and Hong Kong. The portal launched a Chinese version in June 2009.

THE SUSTAINABILITY CONSORTIUM

HP is a founding member of the Sustainability Consortium, an independent organization made up of industry, retailers, governmental and nongovernmental organizations, and academic partners that are developing the science, data and methodologies to support a framework for measuring and communicating sustainability attributes for consumer products. HP believes several elements of this initiative are valuable to HP and our customers. The scope of sustainability attributes considered will include not only product environmental attributes but also supplier practices, including labor and health and safety management. The work and information is intended to be used worldwide and will leverage existing standards and systems, such as EPEAT® and ENERGY STAR®. It is intended to be for all consumer products, not just electronics, and will be based on an open, transparent and accessible database. Finally, the involvement of major retailers will create demand for the Sustainability Consortium system and information.

LABOR

Some of the most common nonconformances to HP's Electronic Industry Code of Conduct (EICC) relate to the labor and labor management systems provisions. As a result, several of our capability-building programs focus on these areas.

Asia Pacific

LABOR RELATIONS DISPUTES

In 2008, Good Electronics made allegations of serious labor relations disputes against one of HP's second-tier hard disk drive suppliers in Thailand. Workers at the factory had attempted to form a trade union, but management at the factory intervened to prevent it, culminating in 71 union activists being dismissed and the union being deregistered. After international pressure from HP and others, Thailand's labor courts overturned the deregistration. Subsequently, HP and our first-tier supplier organized discussions between the union and the second-tier supplier that led to the dismissed workers being reinstated.

However, in spring 2009 the union submitted a letter of complaint to HP and two of its first-tier suppliers alleging labor rights violations and a breach of the

agreement. Further discussions followed, and HP and its first-tier suppliers launched a program to resolve the communications problems between the second-tier supplier's management and the union. The program involves ongoing communication training and regular talks between the two parties. Good Electronics considers the current situation to show "favorable" signs of constructive industrial relations.

The lessons from these incidents were shared with others. HP, with other companies in the region, organized a supplier conference to share open and constructive discussions of workplace and labor relations challenges specific to Thailand. The conference also featured discussions surrounding the global economic crisis and associated pressures on labor relations in the electronic industry. Topics included "government support for dealing with labor disputes" and "roles and responsibilities of management and trade unions."

Approximately 135 industry representatives from 56 companies attended. HP worked on the event with three major hard disk drive manufacturers who are members of the Electronic Industry Citizenship Coalition and the hard disk drive industry association.

SOCIETY

INTERNATIONAL LABOR MIGRATION

Many companies throughout Southeast Asia employ foreign workers through labor agencies. These workers are vulnerable to poor conditions and discrimination because they are unfamiliar with local laws and regulations.

HP's decision to withdraw business with a supplier in Thailand brought a specific case to light. The exit process revealed Burmese workers at the factory who were allegedly working in Thailand illegally. Previous audits from 2006 had not uncovered any issues with migrant workers, so this information was new to HP. A local NGO demanded benefits such as equal treatment for these workers akin to those that Thai workers would have received. HP has worked with the supplier and its other customers to help these workers receive appropriate compensation. The NGO is satisfied with progress to date, and we continue to meet with them and the factory on a regular basis to ensure full resolution of the issue.

In response to concerns about migrant labor in our supply chain such as this, in 2009 we joined Business for Social Responsibility and other leading brands in the IT and retail sector on a project to share best practices in managing migrant labor in Malaysia. The project also aims to create a global framework standard for suppliers to evaluate their migrant worker labor policies and practices. In 2009, the group canvassed Malaysian stakeholders from civil society, suppliers and government, to understand their concerns relating to migrant labor. In July 2009, a workshop in Kuala Lumpur also helped identify best practices. The standard, which will be developed in conjunction with international labor organizations, will be released in 2010. Once it has been finalized, HP will explore how to disseminate the tools to suppliers in areas presenting higher risks of labor issues among migrant labor.

UNACCEPTABLE WORKING CONDITIONS

We collaborate with our suppliers on audits. Sometimes, however, unannounced audits are needed to uncover serious issues.

In February 2009, the National Labor Committee (NLC) in the United States released "High Tech Misery in China," a report detailing human rights and environmental problems at a Chinese supplier to HP and other brands.

After the NLC reported its findings, HP made clear to our first-tier supplier in this case and the second-tier supplier that our expectations regarding conformance to HP's Electronic Industry Code of Conduct extend

to all our suppliers, not just those that are first tier. Utilizing the Electronic Industry Citizenship Coalition's audit process, we collaborated with several other major information technology companies that were also customers of the first-tier supplier to perform a comprehensive third-party audit of the second-tier supplier, within two weeks of the NLC report's publication. The second-tier supplier's management cooperated throughout the process, giving the auditors unrestricted access to workers, staff, records and the facility.

The audit identified several nonconformances, some of which reflected the issues identified in the NLC report. The supplier in question subsequently developed a comprehensive corrective action plan (CAP) to address the nonconformances. A follow-up audit revealed improvements in many areas, but also showed that further corrective actions were required. HP continues to work through our first-tier supplier to help the second-tier supplier conform with the Electronic Industry Code of Conduct, including quarterly reviews of its progress in addressing the audit findings.

Greater China

WORKER-MANAGEMENT COMMUNICATION

Effective worker communication is part of HP's Electronic Industry Code of Conduct because an informed workforce, good communications and an effective feedback system are essential for efficient operation in any organization and result in better decision making, greater employee understanding and commitment and improved industrial relations. Results of our supply chain SER audits in China reveal that workers may not know how to report human rights or labor violations and fear retribution for doing so. The provision of accessible and confidential grievance mechanisms provides workers with a channel for reporting concerns and is a key component of human rights management.

In 2009, HP completed a pilot worker training project with two suppliers, Chicony and Delta, to improve worker-management communication. Our nongovernmental organization partner is Students and Scholars Against Corporate Misbehavior (SACOM), a Hong Kong-based worker training NGO. SACOM is supported by its training partners Labor Education & Service Network (LESN) and Chinese Working Women Network (CWWN).

The training was designed to help workers understand their labor rights and to give them a channel for communicating concerns about their working

environment. It also aimed to ensure that HP's EICC reaches workers as well as management at our supplier factories. Our training focused on:

- Raising labor rights awareness

- Establishing worker hotlines and teaching employees to manage them

- Resolving labor issues, with tailored instruction for worker representative committees

- Counseling skills and techniques for organizing communications programs.

Approximately 4,500 workers have been trained or are in training, and in one case workers were introduced to an independently run hotline to report concerns. During the pilot period, workers reported a broad range of concerns which were communicated anonymously to factory management to be resolved. HP has adapted the pilot project for other factories in China (see photo) and will continue to implement similar programs in 2010.

The project has been recognized by the UN Special Representative of the Secretary General on business and human rights as a good example of a company providing non-judicial grievance mechanisms. The Harvard Law School is now assessing HP's pilot against the principles for grievance mechanisms described by the UN Special Representative. The principles require that such mechanisms be legitimate, accessible, predictable, equitable, rights-compatible, transparent and based in dialogue and/or mediation. The Harvard analysis will be available early in 2010 and will help HP to determine next steps in the implementation of similar projects.

EXCESSIVE WORKING HOURS

HP considers excessive working hours, as all major nonconformances, unacceptable. We are working to eliminate all instances, but the issue continues to be a challenge, particularly in China. We have learned, however, that some suppliers with these nonconformances are much closer to conformance than others. Understanding suppliers' progress toward conformance helps us develop the best path for continuous improvement.

In 2009 we piloted key performance indicators (KPIs) to help us with this. They focused on eleven sites at six suppliers where audits revealed excessive working hours. We asked those suppliers to record their one-month and three-month averages as well as the number of workers in each month working more than permitted by HP's Electronic Industry Code of Conduct. This helped us understand the distribution

In September 2009 SACOM and its partner organization, Bread for All, a Swiss development NGO, published a press release stressing the importance of the program in improving communication at the two factories.

Jenny Chan, SACOM's chief coordinator, commented: "These two pilot cases show that workers' feedback is significant in helping senior managers understand the demands and grievances of the workers. While moving towards worker-based corporate social responsibility is a very long process that requires much deeper commitments from all parties, we believe this initial experiment is a good starting point for more innovative and pro-labor training programs to come, in China and in other countries."

of overtime since 2008. The KPIs helped us identify spikes and dips in overtime more easily, so we were also able to base discussions of the root causes of excessive working hours on the data.

By tracking instances of excessive hours and a lagging average, we have been able to address particular cases. In 2010, we will integrate these KPIs into our corrective action plans for suppliers with excessive working hour nonconformances in all regions. We expect 25 percent of our high-risk suppliers (by spend) with working hours nonconformances to be reporting against these by the end of 2010 (see Goals).

Latin America

HP-TRAINED LABOR AGENCIES IN MEXICO

Supply and demand in Mexico's electronic industry changes rapidly. The industry copes with these

fluctuations through outsourcing, a process which is now widespread—some of HP's suppliers use up to 70 percent of temporary contract workers. Labor agencies that supply these workers rarely undergo the same audits as our production suppliers, so there is a danger these workers operate without recourse to appropriate social benefits.

Awareness of these issues on the part of some of HP's production suppliers in Mexico has already resulted in them reducing their use of contract workers, while others have started hiring contract workers directly. HP works with these suppliers to ensure appropriate practices.

HP Guadalajara also uses labor agencies to hire temporary workers. We have been part of an industrywide initiative in Mexico, along with members of the Electronic Industry Citizenship Coalition and Mexico's electronic industry group CANIETI, to conduct third-party assessments of labor agencies. Training organization CADELEC scores the agencies according to the provisions of the Electronic Industry Code of Conduct and gives comprehensive training to the agencies on the areas in which they do not score well. Three of HP's labor agency suppliers have been through this assessment. Two of them have been through the subsequent training and will be re-assessed to measure improvement in 2010. The third will participate in training in 2010. HP has also conducted modified on-site audits of five of our labor agency suppliers. The audits revealed a lack of appropriate management processes and limited knowledge of social and environmental responsibility practices. HP has already addressed some serious issues, including discrimination, and NGOs have acknowledged improvements.

For information on recognition of HP's work in Mexico, see the Awards page in the report online.

HEALTH AND SAFETY

Some of the most common nonconformances to HP's Electronic Industry Code of Conduct (EICC) relate to the health and safety provisions. As a result, several of our capability-building programs focus on this area.

Greater China

FIRE SAFETY AND EMERGENCY PREPAREDNESS TRAINING

Emergency preparedness, particularly with regard to fire safety, is one of the most common nonconformances identified during our audits. The three most common problems relate to:

- Inadequate procedures for emergency preparedness

- Inadequate firefighting equipment installation and checking

- A lack of knowledge of electrical safety

HP has made conformance with the fire safety and emergency preparedness provision of HP's EICC a priority due to fires reported at Chinese factories. Our global risk management, regional procurement, and supply chain social and environmental responsibility (SER) teams are collaborating on projects to reduce that risk.

HP Fire Safety & Emergency Preparedness Training 2009

SOCIETY

We believe that practical and professional training is needed to enhance suppliers' knowledge and skills for fire prevention. In 2009, our supply chain SER program introduced fire safety and emergency preparedness training. External training institute WSP (a global provider of environmental, health and safety, and risk consulting services) led the training and taught suppliers how to introduce firefighting equipment and procedures, management systems, effective preventative measures and fire law reviews (all are common issues identified in our audits). HP held two workshops in Shenzhen and Kunshan lasting two days, which 48 suppliers attended.

HP also added a specific fire safety module to our audit protocol for 15 audits in 2009. The additional detail encourages auditors to have deeper conversations with factory managers about fire safety and to give suppliers the understanding and tools to use in the future.

Latin America

HEALTH OF WOMEN WORKING IN THE ELECTRONICS INDUSTRY

The Health Enables Returns project (HERproject) was launched by Business for Social Responsibility (BSR) in 2007, based on research funded by the David and Lucile Packard Foundation. The research revealed that the general and reproductive health needs of women working in the electronics industry were going unmet at a time when they had begun to make up a larger proportion of the manufacturing workforce in emerg-

ing economies. Those needs related to issues such as breast cancer, diabetes, hypertension, human papilloma virus, cervical cancer, obesity, nutrition, and family planning and reproductive health education, especially for single mothers.

In 2008, HP joined the project in Mexico, initiating a health training program in two supplier factories. The program helps female workers meet their health needs by improving their awareness and access to services through partnerships between companies, factories and local nonprofit service organizations. The training involved health assessments of female workers followed by peer health educator (PHE) training. In 2009 BSR reported that the project was very effective. Some of its findings were:

- Impacts on workers' health knowledge and behavior and attitudes toward the factory were very pronounced at one factory, moderate at the other.

- Production management at one supplier was very satisfied by the positive impact on health, workplace satisfaction and reduced turnover generated by the program without disrupting production. Management at the other supplier had a more qualified response, noting the increased health awareness and the interest among men to participate in such a program, but regretting difficulties related to project execution.

HP extended the program in late 2009 to two sites in China owned by HP suppliers. We expect more sites to participate in 2010. BSR published a report on the HERproject in 2010 that includes a case study about the work done at one of the HP suppliers in Mexico.

ENVIRONMENT

Our most recent audits have found a high rate of conformance to the environmental provisions of HP's Electronic Industry Code of Conduct (EICC). The exception is hazardous substances handling, which remains a significant, though much improved, issue. The improvements are in part due to our collaborative auditing approach, which facilitates the dissemination of best practices. See the Strategy section to learn more about our collaborative philosophy, or see how our auditors work in practice to improve handling of hazardous substances in our Perspectives of an HP auditor feature. We have concerns that environmental risks exist among our second-tier suppliers and further tiers in the supply chain, and we have been evaluating the best approach to address these risks.

Strengthening our SER policy

In 2009, HP strengthened our SC SER policy by adding a provision focused on continual environmental performance improvement. Previously, the policy related only to compliance with applicable laws and regulations. The performance improvement approach encourages suppliers to achieve sustained improvement in their environmental performance, going beyond necessary compliance, which also means it is better aligned with HP's EICC.

The provision focuses on suppliers' need to promote efficient use of energy and other resources, minimize the use of hazardous materials, promote reuse and recycling, and reduce emissions to air, soil and water.

SOCIETY

Greenhouse gas reduction in the supply chain

HP recognizes the importance of energy efficiency among our suppliers. We have expanded our carbon accounting beyond our own operations, and we became the first major IT company to publish its aggregated supply chain greenhouse gas (GHG) emissions in 2008. We have continued working with suppliers to gather data on energy use and GHG emissions in product manufacturing and to establish expectations about energy efficiency in their operations. See Product manufacturing for more information.

Materials restrictions

HP has taken a proactive approach to evaluating materials and eliminating those that pose an environmental, health or safety risk. We may restrict or eliminate substances because of customer or legal requirements or because we believe it is appropriate based on a precautionary approach. We strive to replace legally permitted materials when scientific data has established a potential health or environmental risk and when less risky, commercially viable alternatives are available. We communicate materials restrictions to our design teams and to our manufacturing suppliers through our General Specification for the Environment (GSE), which prohibits or restricts the use of certain substances in HP brand products and in manufacturing. The GSE is integrated into our product development process and into supplier contracts. See Materials for more information.

HUMAN RIGHTS IN MINERALS MINING IN CENTRAL AFRICA

Human rights violations associated with the mining of certain metals used in our products are one focus of our supply chain social and environmental responsibility (SER) program. In particular, reports of human rights violations related to the trade in minerals from the conflict zones in the Democratic Republic of Congo (DRC) continued to cause concern in 2009.

The specific metals under discussion are gold, tin, tantalum and tungsten. To varying degrees, these metals are used in components commonly found in electronic products. Tantalum is arguably the most significant metal on the list for the electronics sector because a high proportion of the metal's consumption occurs in the production of capacitors for electronic equipment. Tin, while used pervasively in electronic products in the form of solder, has other significant industrial uses. All four metals are used by other industries, such as automotive, aerospace and jewelry. In the case of gold, products from other industries represent the majority of its use. In addition to being used broadly, none of the metals is exclusively mined in the eastern DRC or even in Africa.

Although these issues are far removed from HP, typically five or more tiers from our direct suppliers, our Supply Chain Social and Environmental Responsibility Policy compels us to address them. The electronics

industry can't solve this issue alone, but we believe that our existing supply chain SER program provides the platform for tackling this issue. We expect suppliers to conduct their worldwide operations in a manner that does not result in labor or human rights violations, including operations that contribute to the direct financing of armed conflict.

Since 2001, we have sought assurances from capacitor suppliers that they are not using tantalum sourced from the DRC. Our suppliers have repeatedly confirmed that they were not. In 2010, we will work with our suppliers to further investigate and attempt to trace the origin of the tantalum used.

In 2007, we surveyed our notebook suppliers about the origins of a number of metals, including gold and tin. Suppliers of hard disk drives, optical disk drives, batteries, printed circuit boards and assembled notebooks indicated that gold was present in their products. They reported the sources of gold to be Australia, Canada, China, Hong Kong, Indonesia, Japan, North America, Russia, South Africa and Taiwan. Of these, Australia, China, Russia, South Africa and the United States are recognized as major gold producers.

These suppliers, as well as those producing LCDs, indicated that tin was present in their products. They

reported the sources of tin to be China, Germany, Indonesia, Japan, Korea, Malaysia, Singapore, Taiwan and Thailand. Of these, China, Indonesia, Thailand and Malaysia are all included on the lists of nations with the top tin reserves.

We are pleased that our suppliers have cooperated with us to provide what information they could. Despite this feedback, there is no certification mechanism currently available that can assure us that the metals used in our products are not sourced from mineral trade associated with the conflict in the DRC. HP is working alongside other industries to drive the creation of such a mechanism, and in 2010 we will work with our suppliers to further investigate and attempt to trace the origin of the tantalum used. We believe that it is our responsibility to create awareness and encourage accountability in our supply chain, and we will continue to do so until a credible certification process is established.

HP is also engaged actively in the Electronics Industry Citizenship Coalition (EICC) and the Global e-Sustainability Initiative (GeSI) working groups on extractives issues and is participating in projects aimed at better understanding and developing systems of assurance for metals supply chains in the electronics sector (especially tantalum). Other efforts exist within specific metals industries such as tin, as well as the jewelry sector and the mining industry. The electronics industry is following developments in those initiatives to ensure that there is an effective cross-industry solution for sourcing minerals responsibly. HP and our suppliers contributed to an EICC/GeSI metals supply

chain mapping exercise in 2009. The lessons from that exercise will be published in early 2010, and HP will combine these with our own research to expand our understanding of the sources of metals in our products.

In October 2009, HP, Dell, Intel, Motorola and Philips co-hosted a multi-industry forum on metals extraction issues. More than 40 attendees discussed potential industry actions to address the reported role of the mineral trade in financing armed conflict in the eastern DRC. Follow-up meetings between different industries and stakeholders are already taking place as a result.

HP is actively engaged in working with stakeholders, from the U.S. federal government, nongovernmental organizations and the U.S. Congress to other industries, to address the serious challenge of "conflict mineral" sourcing in the DRC. HP strongly supports the primary goal of the Conflict Minerals Trade Act: the development of an effective, workable, cross-industry solution to meet the unique challenges posed by the sourcing of materials derived from conflict minerals in the DRC.

Human rights pertain to HP in a wider context than just our supply chain. The Human rights page details our range of activities to promote human rights not only in our supplier base but also with our employees, through our community engagement activities that improve access to information technology and educational assistance around the world, and through our privacy programs.

TRANSPARENCY

Being open and honest about successes and challenges helps us build stakeholders' trust in our supply chain social and environmental responsibility (SER) program. We were the first in our sector to publish a list of our suppliers, and we continue to do so. We

also publish our audit results at a regional as well as global level, and we regularly invite independent experts to provide perspectives on our supply chain SER program, which we include in this report.

- Stanford University's Graduate School of Business report on the benefits and challenges for suppliers of implementing HP's SER program.

- Supply Chain Management Review article "Toward a More Responsible Supply Chain: the HP Story" in the July/August 2009 issue

- Launch of project by the UN Special Representative of the Secretary-General on business and human rights to pilot principles for company-level grievance mechanisms

- Accountability for Minerals in the Eastern DRC : HP Huffington Post Blog, November 2009

- Business for Social Responsibility Conference Summary 2009: Traceability and Responsibility: How Far Does Corporate Responsibility Extend Down Your Supply Chain?

- Coverage of HP worker training model in China

SUPPLIER LIST

We were the first electronics company to publish a list of our suppliers in our FY07 Global Citizenship Report. View our list of our production suppliers, as of the end of FY09, in the report online.

AUDIT FINDINGS

● Locations with audits
● Locations without audits

Americas	Europe, Middle East and Africa	Asia Pacific
20% of total spend	5% of total spend	75% of total spend
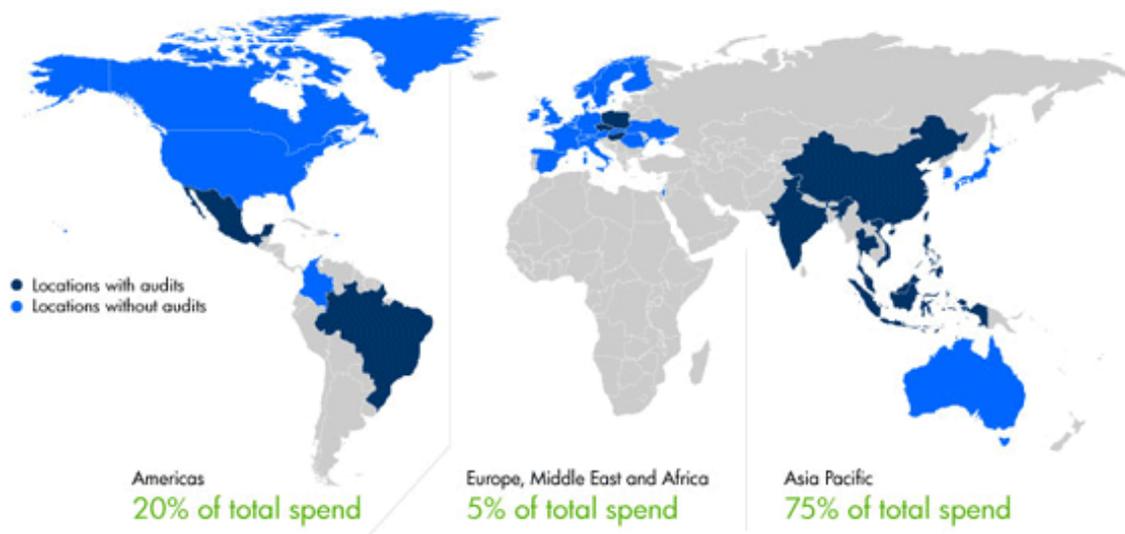
In 2009, HP conducted 104 supplier site audits, bringing our total since 2005 to 590. Seventy-eight of our 2009 audits were follow-up audits to measure progress in reducing nonconformances found during initial reviews.

SOCIETY

EICC PROVISIONS	NONCONFORMANCES (rate in sites audited)*		
GENERAL	**MAJOR**	**MINOR**	**TREND****
EICC awareness	0%	1-10%	decreasing
Compliance with laws	0%	1-10%	no change
Supplier management program	1-10%	11-25%	decreasing
LABOR	**MAJOR**	**MINOR**	**TREND**
Freely chosen employment	1-10%	1-10%	no change
Child labor avoidance***	1-10%	11-25%	no change
Working hours	26-50%	1-10%	decreasing
Wages and benefits	11-25%	11-25%	decreasing
Humane treatment	1-10%	1-10%	no change
Nondiscrimination	1-10%	1-10%	decreasing
Freedom of association	1-10%	1-10%	no change
LABOR MANAGEMENT SYSTEM	**MAJOR**	**MINOR**	**TREND**
Overall	11-25%	1-10%	no change
HEALTH AND SAFETY	**MAJOR**	**MINOR**	**TREND**
Occupational safety	1-10%	11-25%	decreasing
Emergency preparedness	11-25%	11-25%	decreasing
Occupational injury and illness	1-10%	11-25%	decreasing
Industrial hygiene	11-25%	11-25%	decreasing
Physically demanding work	1-10%	11-25%	decreasing
Machine safeguarding	1-10%	1-10%	no change
Dormitory and canteen	1-10%	11-25%	decreasing
ENVIRONMENTAL HEALTH AND SAFETY MANAGEMENT	**MAJOR**	**MINOR**	**TREND**
Overall	1-10%	1-10%	no change

(table continued)

SOCIETY

EICC PROVISIONS	NONCONFORMANCES (rate in sites audited)*		
ENVIRONMENTAL	MAJOR	MINOR	TREND
Environmental permits and reporting	1-10%	1-10%	decreasing
Pollution prevention and resource reduction	0%	1-10%	no change
Hazardous substances	11-25%	11-25%	decreasing
Wastewater and solid waste	1-10%	1-10%	no change
Air emissions	1-10%	1-10%	decreasing
Product content restrictions	See Materials section		
ETHICS	MAJOR	MINOR	TREND
Business integrity	1-10%	1-10%	no change
No improper advantage	0%	1-10%	no change
Disclosure of information	0%	1-10%	no change
Intellectual property	1-10%	1-10%	no change
Fair business, advertising and competition	1-10%	1-10%	no change
Protection of identity	0%	1-10%	no change
Community engagement	0%	1-10%	no change

* These data reflect the results of HP's last site audit and do not show supplier corrective actions not yet validated by HP through a follow-up audit. Sites with follow-up audits tend to have higher initial levels of nonconformance than other audited sites.

** Increases are generally caused by auditing additional suppliers or facilities.

*** A major nonconformance in the underage worker provision of HP's Electronic Industry Code of Conduct does not necessarily indicate the presence of child labor. For example, an auditor may uncover inappropriate working conditions for young workers (16–18 in China), or insufficient management systems and age checks to prevent child workers from being employed. These would be considered a major nonconformance, but do not necessarily signify the presence of workers under the legal minimum (16 in China). While there were instances of underage worker nonconformances uncovered in 2009, the child labor zero tolerance provision was not triggered.

SOCIETY

Asia Pacific findings

LOCATION	INITIAL AUDITS	FOLLOW-UP AUDITS	WORKERS AT SITE AUDITED
Indonesia	0	2	3,000
Malaysia	2	1	4,000
Philippines	4	1	4,000
Singapore	1	3	1,000
Thailand	2	5	45,000
Total	9	12	57,000

In 2009, we conducted nine initial and 12 follow-up audits at 21 sites in Indonesia, Malaysia, the Philippines, Singapore, Thailand and Vietnam, and our first audit in India. The major issues identified during our audits included working hours, emergency preparedness and hazardous substances handling. Incidences of these have, however, greatly diminished since prior audits of the facilities.

Other improvements have come in the areas of occupational safety and nondiscrimination. For more information on HP's work to address nondiscrimination, particularly with regard to labor migration issues, see Proactive engagement.

WORKING HOURS

Audits in 2009 showed substantial improvements in the incidences of working hours nonconformances, but the problem remains one of the most common in our audits in Asia Pacific. In 2010, we will expand our key performance indicators to suppliers that have a nonconformance in this provision, allowing us to better track their situation and to work with them to address this challenge. For more on our key performance indicators, see Proactive engagement.

SOCIETY

EICC PROVISIONS	NONCONFORMANCES (rate in sites audited)*		
GENERAL	MAJOR	MINOR	TREND**
EICC awareness	0%	1-10%	decreasing
Compliance with laws	0%	1-10%	no change
Supplier management program	1-10%	11-25%	decreasing
LABOR	MAJOR	MINOR	TREND
Freely chosen employment	1-10%	11-25%	no change
Child labor avoidance	0%	1-10%	no change
Working hours	11-25%	11-25%	decreasing
Wages and benefits	0%	1-10%	decreasing
Humane treatment	0%	1-10%	decreasing
Nondiscrimination	1-10%	1-10%	decreasing
Freedom of association	0%	0%	no change
LABOR MANAGEMENT SYSTEM	MAJOR	MINOR	TREND
Overall	1-10%	0%	decreasing
HEALTH AND SAFETY	MAJOR	MINOR	TREND
Occupational safety	1-10%	11-25%	decreasing
Emergency preparedness	11-25%	1-10%	decreasing
Occupational injury and illness	1-10%	11-25%	decreasing
Industrial hygiene	1-10%	11-25%	decreasing
Physically demanding work	1-10%	11-25%	no change
Machine safeguarding	1-10%	1-10%	no change
Dormitory and canteen	0%	11-25%	decreasing
ENVIRONMENTAL HEALTH AND SAFETY MANAGEMENT	MAJOR	MINOR	TREND
Overall	1-10%	0%	no change

(table continued)

SOCIETY

EICC PROVISIONS	NONCONFORMANCES (rate in sites audited)*		
ENVIRONMENTAL	MAJOR	MINOR	TREND
Environmental permits and reporting	0%	0%	decreasing
Pollution prevention and resource reduction	0%	0%	decreasing
Hazardous substances	11-25%	11-25%	decreasing
Wastewater and solid waste	1-10%	1-10%	no change
Air emissions	0%	1-10%	no change
Product content restrictions	See Materials section		
ETHICS	MAJOR	MINOR	TREND
Business integrity	0%	0%	no change
No improper advantage	0%	0%	no change
Disclosure of information	0%	0%	no change
Intellectual property	0%	0%	no change
Fair business, advertising and competition	0%	0%	no change
Protection of identity	0%	0%	no change
Community engagement	0%	0%	no change

* These data reflect the results of HP's last site audit and do not show supplier corrective actions not yet validated by HP through a follow-up audit. Sites with follow-up audits tend to have higher initial levels of nonconformance than other audited sites.

** Increases are generally caused by auditing additional suppliers or facilities.

SOCIETY

Greater China

LOCATION	INITIAL AUDITS	FOLLOW-UP AUDITS	WORKERS AT SITE AUDITED
China	7	44	208,000
Taiwan	1	0	12,000
Total	8	44	220,000

In 2009, we conducted seven initial and 44 follow-up audits at 52 sites in Greater China. The major issues identified during the most recent audits included working hours, emergency preparedness, wages and benefits, industrial hygiene, labor management systems, and hazardous substances handling, although this last provision was also among the most improved. We also found improvements in dormitory and canteen provisions, Electronic Industry Code of Conduct awareness, and supplier management program.

See Perspectives of an HP auditor for more information on these provisions, and insight into how HP auditors find and address these problems.

WORKING HOURS

Working hours continue to be the most common social and environmental responsibility challenge among suppliers in China. Several sites began 2009 with reduced working hours. However, the economic recovery throughout the year meant many suppliers were short of staff as their business began to rapidly increase.

In 2009, HP piloted key performance indicators for 11 sites that had major nonconformances against the working hours provision. The pilot aims to better track, understand and address the problem. See Proactive engagement for more information.

SOCIETY

EICC PROVISIONS	NONCONFORMANCES (rate in sites audited)*		
GENERAL	MAJOR	MINOR	TREND**
EICC awareness	0%	11-25%	decreasing
Compliance with laws	0%	1-10%	no change
Supplier management program	1-10%	26-50%	decreasing
LABOR	MAJOR	MINOR	TREND
Freely chosen employment	1-10%	1-10%	no change
Child labor avoidance***	11-25%	26-50%	no change
Working hours	51%+	1-10%	increasing
Wages and benefits	26-50%	26-50%	decreasing
Humane treatment	11-25%	1-10%	no change
Nondiscrimination	11-25%	11-25%	no change
Freedom of association	1-10%	1-10%	no change
LABOR MANAGEMENT SYSTEM	MAJOR	MINOR	TREND
Overall	26-50%	11-25%	increasing
HEALTH AND SAFETY	MAJOR	MINOR	TREND
Occupational safety	11-25%	11-25%	no change
Emergency preparedness	26-50%	26-50%	no change
Occupational injury and illness	11-25%	26-50%	no change
Industrial hygiene	26-50%	26-50%	no change
Physically demanding work	11-25%	26-50%	decreasing
Machine safeguarding	1-10%	11-25%	no change
Dormitory and canteen	11-25%	26-50%	decreasing
ENVIRONMENTAL HEALTH AND SAFETY MANAGEMENT	MAJOR	MINOR	TREND
Overall	11-25%	1-10%	increasing

(table continued)

SOCIETY

EICC PROVISIONS	NONCONFORMANCES (rate in sites audited)*		
ENVIRONMENTAL	MAJOR	MINOR	TREND
Environmental permits and reporting	11-25%	1-10%	no change
Pollution prevention and resource reduction	0%	1-10%	no change
Hazardous substances	26-50%	26-50%	decreasing
Wastewater and solid waste	1-10%	1-10%	no change
Air emissions	1-10%	1-10%	decreasing
Product content restrictions	See Materials section		
ETHICS	MAJOR	MINOR	TREND
Business integrity	1-10%	1-10%	no change
No improper advantage	0%	1-10%	no change
Disclosure of information	0%	1-10%	no change
Intellectual property	1-10%	1-10%	no change
Fair business, advertising and competition	1-10%	1-10%	no change
Protection of identity	0%	1-10%	no change
Community engagement	0%	1-10%	no change

* These data reflect the results of HP's last site audit and do not show supplier corrective actions not yet validated by HP through a follow-up audit. Sites with follow-up audits tend to have higher initial levels of nonconformance than other audited sites.

** Increases are generally caused by auditing additional suppliers or facilities.

*** A major nonconformance in the underage worker provision of HP's Electronic Industry Code of Conduct does not necessarily indicate the presence of child labor. For example, an auditor may uncover inappropriate working conditions for young workers (16–18 in China), or insufficient management systems and age checks to prevent child workers from being employed. These would be considered a major nonconformance, but do not necessarily signify the presence of workers under the legal minimum (16 in China). While there were instances of underage worker nonconformances uncovered in 2009, the child labor zero tolerance provision was not triggered.

SOCIETY

Central Europe

LOCATION	INITIAL AUDITS	FOLLOW-UP AUDITS	WORKERS AT SITE AUDITED
Czech Republic	1	4	3,000
Hungary	0	4	2,000
Poland	1	1	2,000
Total	2	9	7,000

In 2008, we conducted two initial and nine follow-up audits at 11 sites in the Czech Republic, Hungary, the Netherlands and Poland. The major issues identified during the most recent audits included emergency preparedness, which also showed the most improvement from prior audits, and occupational safety. We also found substantial improvements relating to physically demanding work, for which there were no major nonconformances.

SOCIETY

EICC PROVISIONS	NONCONFORMANCES (rate in sites audited)*		
GENERAL	MAJOR	MINOR	TREND**
EICC awareness	0%	11-25%	decreasing
Compliance with laws	0%	1-10%	no change
Supplier management program	1-10%	11-25%	decreasing
LABOR	MAJOR	MINOR	TREND
Freely chosen employment	0%	0%	no change
Child labor avoidance	0%	0%	no change
Working hours	0%	0%	decreasing
Wages and benefits	0%	0%	decreasing
Humane treatment	0%	0%	no change
Nondiscrimination	0%	0%	no change
Freedom of association	0%	0%	no change
LABOR MANAGEMENT SYSTEM	MAJOR	MINOR	TREND
Overall	0%	0%	decreasing
HEALTH AND SAFETY	MAJOR	MINOR	TREND
Occupational safety	11-25%	26-50%	no change
Emergency preparedness	11-25%	26-50%	decreasing
Occupational injury and illness	0%	1-10%	no change
Industrial hygiene	11-25%	11-25%	increasing
Physically demanding work	0%	26-50%	decreasing
Machine safeguarding	1-10%	1-10%	increasing
Dormitory and canteen	0%	1-10%	no change
ENVIRONMENTAL HEALTH AND SAFETY MANAGEMENT	MAJOR	MINOR	TREND
Overall	0%	0%	decreasing

(table continued)

SOCIETY

EICC PROVISIONS	NONCONFORMANCES (rate in sites audited)*		
ENVIRONMENTAL	**MAJOR**	**MINOR**	**TREND**
Environmental permits and reporting	0%	0%	no change
Pollution prevention and resource reduction	0%	1-10%	decreasing
Hazardous substances	1-10%	26-50%	no change
Wastewater and solid waste	0%	0%	no change
Air emissions	0%	0%	no change
Product content restrictions	See Materials section		
ETHICS	**MAJOR**	**MINOR**	**TREND**
Business integrity	0%	0%	no change
No improper advantage	0%	0%	no change
Disclosure of information	0%	0%	no change
Intellectual property	0%	0%	no change
Fair business, advertising and competition	0%	0%	no change
Protection of identity	0%	0%	no change
Community engagement	0%	0%	no change

* These data reflect the results of HP's last site audit and do not show supplier corrective actions not yet validated by HP through a follow-up audit. Sites with follow-up audits tend to have higher initial levels of nonconformance than other audited sites.

** Increases are generally caused by auditing additional suppliers or facilities.

SOCIETY

Latin America

LOCATION	INITIAL AUDITS	FOLLOW-UP AUDITS	WORKERS AT SITE AUDITED
Brazil	4	7	7,000
Mexico	3	6	11,000
Total	7	13	18,000

In 2009, we conducted seven initial and 13 follow-up audits at 20 sites in Mexico and Brazil. The major issues identified during the most recent audits included labor management systems, emergency preparedness, working hours and hazardous substances handling. We found the biggest improvements in occupational safety, physically demanding work, supplier management program, and occupational injury and illness.

In 2010, we will expand our working hours key performance indicators pilot to this region and work with suppliers that have a nonconformance to better track, understand and address the problem. See Proactive engagement for more information on the pilot in China.

SOCIETY

EICC PROVISIONS	NONCONFORMANCES (rate in sites audited)*		
GENERAL	MAJOR	MINOR	TREND**
EICC awareness	0%	1-10%	no change
Compliance with laws	0%	1-10%	no change
Supplier management program	1-10%	26-50%	decreasing
LABOR	MAJOR	MINOR	TREND
Freely chosen employment	0%	0%	no change
Child labor avoidance	0%	11-25%	no change
Working hours	26-50%	11-25%	increasing
Wages and benefits	0%	1-10%	no change
Humane treatment	0%	1-10%	no change
Nondiscrimination	1-10%	1-10%	increasing
Freedom of association	0%	1-10%	no change
LABOR MANAGEMENT SYSTEM	MAJOR	MINOR	TREND
Overall	26-50%	1-10%	no change
HEALTH AND SAFETY	MAJOR	MINOR	TREND
Occupational safety	1-10%	26-50%	decreasing
Emergency preparedness	26-50%	11-25%	no change
Occupational injury and illness	1-10%	26-50%	decreasing
Industrial hygiene	1-10%	11-25%	decreasing
Physically demanding work	0%	26-50%	decreasing
Machine safeguarding	11-25%	11-25%	no change
Dormitory and canteen	1-10%	1-10%	increasing
ENVIRONMENTAL HEALTH AND SAFETY MANAGEMENT	MAJOR	MINOR	TREND
Overall	11-25%	11-25%	no change

(table continued)

SOCIETY

EICC PROVISIONS	NONCONFORMANCES (rate in sites audited)*		
ENVIRONMENTAL	MAJOR	MINOR	TREND
Environmental permits and reporting	1-10%	1-10%	decreasing
Pollution prevention and resource reduction	0%	1-10%	no change
Hazardous substances	26-50%	11-25%	increasing
Wastewater and solid waste	0%	0%	decreasing
Air emissions	0%	0%	no change
Product content restrictions	See Materials section		
ETHICS	MAJOR	MINOR	TREND
Business integrity	0%	0%	no change
No improper advantage	0%	0%	no change
Disclosure of information	0%	0%	no change
Intellectual property	0%	1-10%	no change
Fair business, advertising and competition	0%	0%	no change
Protection of identity	0%	11-25%	no change
Community engagement	0%	0%	no change

* These data reflect the results of HP's last site audit and do not show supplier corrective actions not yet validated by HP through a follow-up audit. Sites with follow-up audits tend to have higher initial levels of nonconformance than other audited sites.

** Increases are generally caused by auditing additional suppliers or facilities.

SOCIETY

RESULTS

Audits are only one element of our program. To read more about how we drive continual improvement, see the Strategy section.

Since we began auditing, major nonconformances have been reduced across all of HP's Electronic Industry Code of Conduct (EICC) sections. EICC provisions with the most and least issues vary substantially from region to region. See Audit findings for our detailed results.

The chart below shows that as suppliers advance through HP's supply chain social and environmental responsibility (SER) program, their performance improves markedly. We believe this continual improvement is due to our validation system, with its focus on collaborative audits and corrective actions, and our efforts to build our suppliers' capabilities.

Distribution of findings in all first audits, penultimate audits and most recent audits, 2005–2009*

[Percent of findings]

NO NONCONFORMANCES

- No nonconformances
- Minors
- Majors

First audit

Penultimate audit

Most recent audit
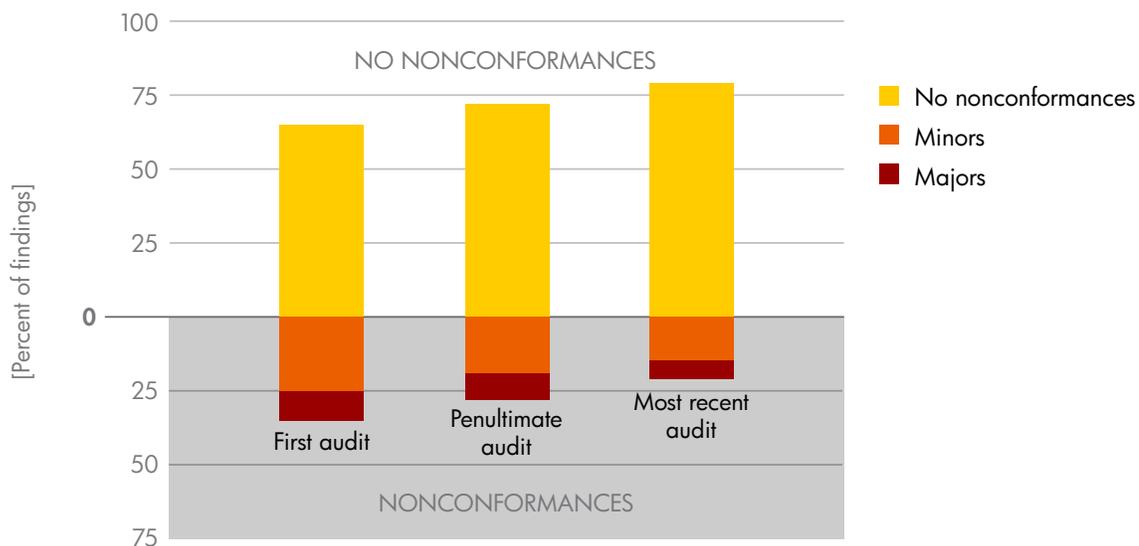
NONCONFORMANCES

* See a definition of nonconformance types on page 132.

SOCIETY

The chart below also shows the effectiveness of our validation and improvement process, which involves auditing sites, requiring corrective actions, and re-auditing to verify that nonconformances have been addressed. Across all provisions, nearly 75 percent of major nonconformances identified in initial audits have been subsequently addressed. The chart also demonstrates that nonconformances have been easier to address in some sections of the code than others.

Major nonconformances reduced by EICC section, 2005–2009[*]

Section	Percentage
General	~95%
Ethics	~90%
Health and safety management system	~85%
Labor management system	~85%
Environment	~75%
Health and safety	~68%
Labor	~50%

[*] Based on follow-up audits where nonconformances were previously identified.
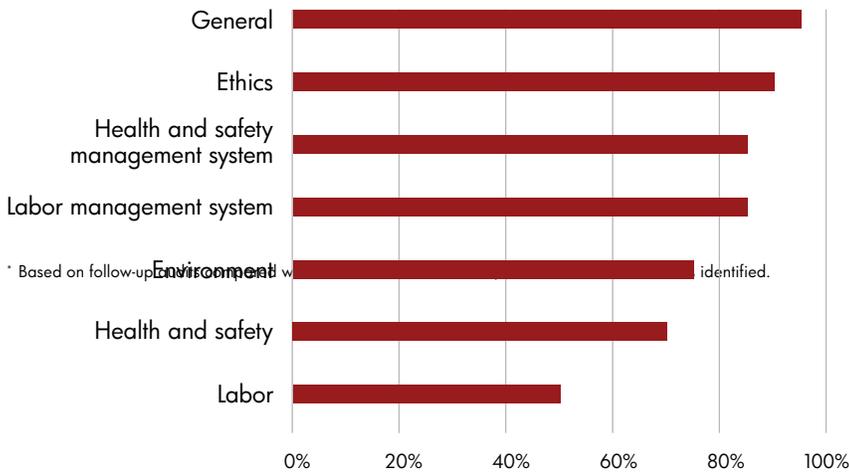
The chart below shows the distribution of major nonconformances at audited facilities across the provisions of HP's EICC. It shows that two sections of HP's EICC account—labor and health and safety—account for the majority of major nonconformances.

For details about other issues identified in audits and HP's response by region, see the Proactive engagement section.

Distribution by EICC section of major nonconformances in most recent audits of suppliers worldwide, 2008–2009

- Health and safety
- Labor
- Environmental
- Labor management system
- General
- Environmental, health and safety
- Ethics
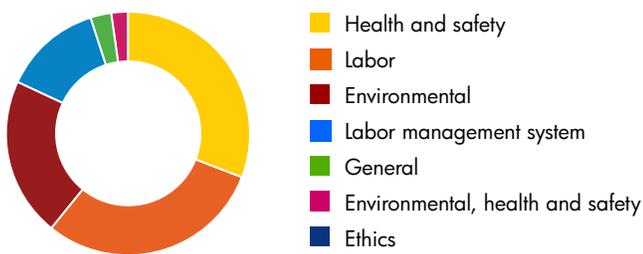
SUPPLIER SER REQUIREMENTS

The following Supplier SER Requirements apply to any Supplier doing business with HP and are part of any contract with an HP legal entity that obligates Supplier to comply with HP's Social and Environmental Responsibility (SER) requirements or policies including the Supplier Code of Conduct. For purposes of this section the term "Supplier" refers to any party that provides goods or services for HP's internal use or in connection with a product that is sold, provided or marketed by HP.

Supplier represents and warrants that it will:

1. Comply with all applicable laws and regulations and require their suppliers to do the same (including labor agencies)

2. Read and understand HP's Supply Chain Social and Environmental Responsibility Policy

3. Conform to the expectations and standards in HP's Electronic Industry Code of Conduct (a.k.a. Supplier Code of Conduct in certain agreements)

4. Comply with applicable environmental specifications and requirements set forth in HP's General Specification for Environment

Promptly upon request by HP, Supplier agrees that it will:

1. Review and sign HP's Supplier Social and Environmental Responsibility Agreement

2. Complete the Information and Communications Technology (ICT) Supplier Self-Assessment Questionnaire

3. Obtain HP's review and feedback of the ICT Supplier Self-Assessment Questionnaire and create an improvement plan with defined timeline and metrics

4. Cooperate in periodic onsite audits

5. Provide clear and accurate reporting to HP

INSTRUCTIONS TO COMPLETE AND SUBMIT THE ONLINE SUPPLIER SELF-ASSESSMENT QUESTIONNAIRE, IF REQUESTED BY HP

Print the questionnaire for review and preparation and then complete and submit the questionnaire online using the EICC internet database — "Electronics—Tool for Accountable Supply Chains (E-TASC)". For information about E-TASC and how to join and upload questionnaires, please review the information on the E-TASC website.

- EICC/GeSI Self Assessment Questionnaire
- E-TASC website

End of Supplier SER Requirements. Please see below for additional information concerning HP's SER Program Policies and Standards.

Supply Chain SER Program Policies and Standards

Strong and appropriate standards are essential to improving conditions in the IT supply chain. In 2003, HP developed our industry's first social and environmental responsibility supplier code of conduct. Recognizing that setting consistent industry standards sends a stronger message and enables our suppliers to implement those standards more efficiently, in 2004, we helped lead the development of the Electronic Industry Code of Conduct (EICC). HP endorses the EICC in its entirety.

HP has supplemented the EICC with additional requirements specific to Freedom of Association. We refer to this supplemented code as HP's Electronic Industry Code of Conduct (HP's EICC), which is sometimes referred to as the Supplier Code of Conduct in certain supplier agreements. All new and existing suppliers must conform to HP's EICC

Fundamental to HP's EICC is the understanding that suppliers, in all of their activities, must operate in full compliance with the laws, rules and regulations of the countries in which they operate. The code further requires that suppliers:

- adopt sound human rights practices and treat workers fairly and with dignity and respect

- provide a safe and healthy working environment for their workers

- conduct business operations in a way that protects and sustains the environment

- maintain management systems that measure, improve and communicate their company's labor, health and safety, and environmental performance

- uphold the highest standards of ethics

We ask that suppliers pursue a policy of continuous improvement in this area and be forthright in sharing information with us. In selecting and retaining qualified suppliers, HP will show preference to suppliers that meet or exceed our expectations.

SOCIETY

The specific standards in HP's EICC are:

LABOR STANDARDS

- freely chosen employment
- child labor avoidance
- working hours
- wages and benefits
- humane treatment
- non-discrimination
- freedom of association

HEALTH AND SAFETY STANDARDS

- occupational safety
- emergency preparedness
- occupational injury and illness
- industrial hygiene
- physically demanding work
- machine safeguarding
- dormitory and canteen

ENVIRONMENTAL STANDARDS

- environmental permits and reporting
- pollution prevention and resource reduction
- hazardous substances
- wastewater and solid waste
- air emissions
- product content restrictions

MANAGEMENT SYSTEM ELEMENTS

- statements of company commitment
- management accountability and responsibility
- legal and customer requirements
- risk assessment and risk management
- performance objectives with implementation plans and measures
- training
- communication
- worker feedback and participation
- audits and assessments
- corrective action process
- documentation and records

ETHICS STANDARDS

- business integrity
- no improper advantage
- disclosure of information
- intellectual property
- fair business, advertising and competition
- protection of identity
- community engagement

RELATED INFORMATION (see links in the report online)

- Case study
- Supply chain SER policy
- Supplier agreement
- HP's Electronic Industry Code of Conduct
- General Specification for Environment
- Hardware recycling standards
- Supplier frequently asked questions

SOCIETY

PERSPECTIVES

Perspectives of an HP Auditor

View a photo essay of HP employee Lily Ouyang and two of her fellow auditors on a typical two-day supplier audit in China, on the next page.

MIT Sloan School of Management study

Main findings regarding the effectiveness of HP's supply chain social and environmental responsibility (SER) program

In 2009, an interdisciplinary team of Massachusetts Institute of Technology researchers launched a project to evaluate the effectiveness of HP's supply chain SER program. The research entails a quantitative analysis of HP's audit records and field interviews in seven countries: China, the Czech Republic, Hungary, Malaysia, Mexico, Singapore and Thailand. To date, MIT researchers have found that among electronics companies, HP has had a formative role in improving labor and environmental standards—through its own program and in conjunction with the Electronics Industry Citizenship Coalition (EICC).

HP's collaborative approach to labor and environmental conformance has been most effective where HP auditors have developed extended relationships with specific suppliers. For example, one large supplier of hard disk drives based in Asia stated that HP auditors helped it better understand the importance of a labor management system (LMS) and how to use such a system to improve both its operations and its working conditions. HP auditors helped the supplier understand how an LMS can track hours worked by employees, allowing the company to know which workers were eligible for overtime and which had already worked their limit.

As a result, the supplier shifted to a 60-hour work week with higher wages. This brought the company into full conformance with HP's Electronic Industry Code of Conduct, while keeping its employees happy. The supplier further stated that this was only possible with HP and not with other companies that insisted on using third-party auditors who had little interest in helping the supplier actually improve its operations.

Suppliers in China, Eastern Europe and Mexico echoed this sentiment, describing how much they learned from HP's collaborative approach and how the interventions by HP's auditors helped them improve their operations as well as solve difficult labor and environmental issues.

In addition to its auditing program, HP has invested in a number of capability-building/training programs for its suppliers. For example, programs in Central and Eastern Europe targeted second-tier, small- and medium-sized enterprises that generally supply HP's first-tier suppliers with packaging materials and plastic molds. These capability-building programs emphasized the importance of sustainable employment and environmental practices, and provided guidelines on how to establish their own labor, health, safety and environmental management systems.

In Asia and Mexico, HP-sponsored training programs (for first- and second-tier suppliers) focused on overcoming employment discrimination, understanding labor rights and tackling excess overtime. All participating suppliers reported that these trainings increased their awareness of various issues.

Despite HP's proactive approach, certain challenges persist in its supply chain. These appear to be byproducts of broader, structural features of the electronics industry that are not unique to HP. High demand volatility, short product life cycles and steep price competition create significant manufacturing challenges for suppliers throughout the supply chain and influence the facilities' employment and environmental practices. Suppliers often perform better against these challenges when there is strong institutional support from robust regulatory frameworks or public institutions—for example, well-enforced labor laws—and private organizations that assist in code enforcement. Without these institutions, manufacturing challenges are often met through excessive working hours or reliance on agency workers.

In summary, the MIT research has shown that HP's commitment to its SER program and the Electronic Industry Code of Conduct has had a strong and positive impact on its suppliers and the electronics industry more generally. Yet this impact, at times, is limited by endemic features of the industry and the national settings in which a supplier is located.

RICHARD M. LOCKE
DEPUTY DEAN
Sloan School of Management, Alvin J. Siteman (1948), Professor of Entrepreneurship, Professor of Political Science, Massachusetts Institute of Technology

SOCIETY

PERSPECTIVES OF AN HP AUDITOR
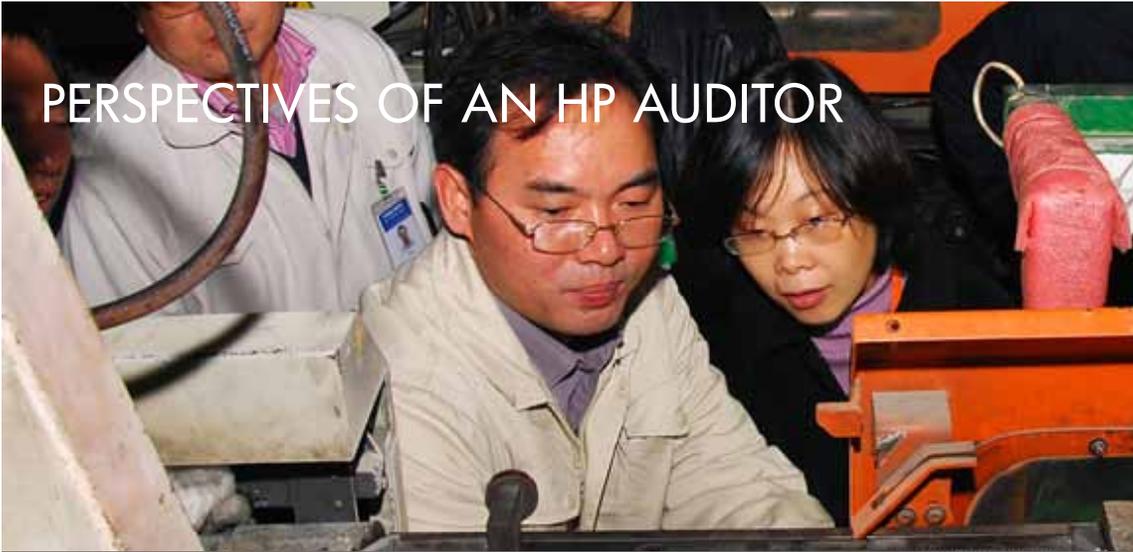
My name is Lily Ouyang. I'm an environmental health and safety auditor for HP in China. I've been working for HP since 2003. When HP started auditing suppliers in 2004, I spent four years training our EHS auditors. Then I became a full-time auditor in 2008.

These photos follow me and two of my fellow auditors on a typical two-day supplier audit. They were taken with the kind permission of our supplier in December 2009 and show how we interact with factory management and workers. I am grateful to the management for allowing us to document one of our regular audits.

We start every audit with an opening meeting. The group includes our audit team (in this case me and my colleagues Emily Wang and Ivy Liu, who are responsible for assessing the labor, ethics and management systems sections of HP's Electronic Industry Code of Conduct) and factory management. In this meeting, we go over HP's social and environmental responsibility program and remind factory management of the standards we expect from their facility. It's really important for us to have a good relationship and to clearly convey our expectations with the management at this meeting, because it encourages them to take our recommendations on-board.

SOCIETY

Management leads us on a tour of the factory, but we have access to any parts of the facility we want to see. We make sure to look everywhere, behind doors and in rooms that the managers may not guide us to.

While I walk through the factory, I speak to managers and workers. Here, for example, I am telling a worker that this cleaning agent should be properly labeled as hazardous, and that the work station needs a notice showing correct emergency procedures for working with the chemical. Because these oversights were a relatively isolated incident, it was a minor nonconformance. This assures that the supplier will address this issue in their corrective action plan, which HP will verify in its follow-up audit. I also ask if they know the correct equipment to wear to protect against the chemical. These conversations help indicate whether the correct training is being provided.

SOCIETY

Audits can encourage good practices. When we worked with this management team at a different factory, we recommended that they install a barrier to prevent flooding if tanks in the wastewater treatment facility leaked. They've taken our advice and built a small curb around this tank.

Working for long periods over a conveyor belt presents an ergonomics risk. In this situation the risk for workers was too high because the conveyor belt was not at a comfortable height, so I advised the management team to better address these situations and to adopt practices like job rotations to minimize the risk of strains. This factory received a minor nonconformance for physically demanding work because it lacked a system to manage ergonomics risks and had not trained its workers to control them.

SOCIETY

There are some circumstances that show management is on the right track, but not quite there yet. Here, for example, an enclosure reduces the sound from a very noisy stamping machine, which is a positive step. However, there is someone working inside the enclosure temporarily, which defeats the purpose. This observation will appear in HP's final audit report.

Fire safety is an issue we monitor in our audits. I often ask workers whether they know how to safely leave the factory if there is a fire, to check whether fire safety training is being given properly. I also check that the right information is adequately visible so workers can follow the correct procedures. On this audit, the chart provided was satisfactory. Read more about our efforts in fire safety on our Proactive engagement—Health and safety page.

SOCIETY

We don't just inspect factory floors, but also communal areas such as canteens and workers' dormitories. This site is typical of other factories and also has recreational spaces, such as badminton courts and libraries. On-site health clinics are also common in larger facilities.

These machines are large rice cookers. The steam escaping is quite hot and shows that one is broken. I'm recommending to the kitchen manager that they stop using the broken device and put up a barrier to protect workers from being scalded. This problem will be noted as an observation on HP's audit report.

SOCIETY

A worker explains to me how vegetables are cleaned (this must be done three times using fresh water). I've been on other audits where water is used more than once to wash vegetables, so it becomes dirty. In this kitchen, they change the water every time and use three different tanks, one after the other. I also asked the kitchen manager what else the tanks were used for, to check that meat or poultry were not cleaned in the same place as vegetables. On this occasion, everything was done appropriately.

I know that it can be difficult for workers to tell me the truth in front of their bosses, so we always spend several hours talking to them without their supervisors around. In this photo, my colleagues are talking to a small group of workers that they selected at random from a production line of 75.

SOCIETY

We want workers to be honest with us, but often they are suspicious that we will report to management what they've said. I find the best way to develop a good relationship with workers is to spend a few minutes developing rapport by asking them about their background and interests outside work. That's what my colleague Emily is doing here.

We also take individual workers aside for private discussions. This sometimes reveals additional information. Here, Ivy is asking questions such as:

- Do you know about the Electronic Industry Code of Conduct?
- How many hours did you work last month?
- Have you suffered inhumane treatment?
- Do you know how to calculate your salary, including overtime?
- Do you feel comfortable speaking to management?
- Do you have adequate hot water in your dormitory?

These interviews corroborated findings from the factory tour and the document review (next slide).

SOCIETY
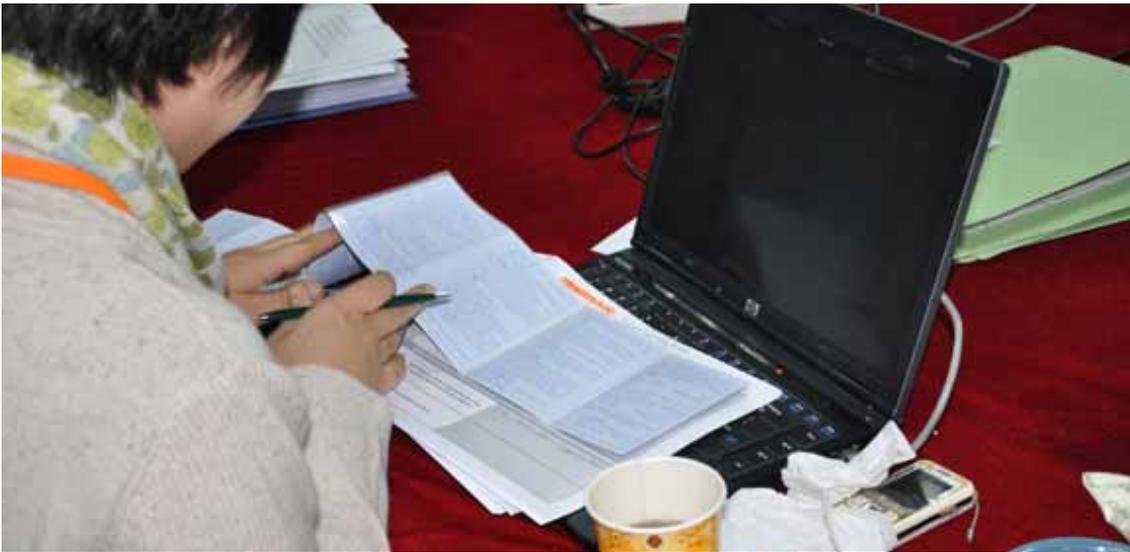
We need three pieces of corroborating information to ensure there are no nonconformances in each provision of HP's Electronic Industry Code of Conduct. These can include items such as discussions with workers, documentation about training courses, or evidence of policies and procedures in employee handbooks as pictured here. HP needs to ensure employees are properly informed of their rights and given access to grievance procedures.

We finish each audit with a meeting with senior site management, production supervisors, and local social and environmental responsibility staff. I find it's helpful to have them hear directly from us the details of any nonconformances we expect to feature in the audit report, because they will be responsible for addressing them. Our audit report is then delivered to the factory within 30 days.

SOCIETY

SUPPLIER DIVERSITY

Our supplier diversity program offers suppliers that would not typically approach HP the opportunity to join our global supply chain. We promote diversity among our suppliers because they bring fresh ideas, offer innovative products and processes, and contribute to the economic strength of their communities.

A diverse supplier base also helps us gain a competitive advantage and supports our global citizenship efforts. In 2009, we estimate that around $10 billion worth of business required HP to demonstrate our supplier diversity efforts.

At the beginning of 2009, we integrated the procurement functions of HP Enterprise Services (formerly EDS) and HP, combining the supplier diversity programs of both. EDS's small business program has helped HP enhance our work in public sector small business subcontracting. EDS had deep experience in this area, and HP has drawn on that experience to more effectively collaborate with small businesses and deliver substantial results for our government customers.

HP recognizes the influence we have beyond our first-tier suppliers, and we encourage action throughout the supply chain. To understand whether our efforts to promote supplier diversity are creating more diverse sub-tier suppliers, we have collected information about how much our top 100 first-tier suppliers spend with second-tier suppliers. This will help us to understand their supplier diversity initiatives and to encourage cooperation on promoting diverse suppliers. This figure represents a baseline for us to improve on in 2010.

If you are a Prime supplier to HP and we have asked you to participate in our Tier II Supplier Diversity Reporting Initiative, please log in at https://cvmas21.cvmsolutions.com/HP/

HP broadened our definition of a minority business in 2009. The main category of businesses our supplier diversity program supports are minority-owned, woman-owned, veteran-owned and small businesses. For the first time, we have included lesbian, bisexual, gay and transgender-owned (LBGT-owned) businesses in the definition. Through our new sponsorship of, and collaboration with, the National Gay and Lesbian Chamber of Commerce (NGLCC), we will maintain a pipeline of potential LBGT-owned suppliers. In 2009, we also increased our sponsorship of women-owned businesses.

Attracting minority-owned businesses large enough to supply HP can be difficult, and this is accentuated by our efforts to consolidate our supply chain. However,

Register your interest in becoming a supplier to HP (see link in the report online).

our mentor-protégé program helps smaller businesses grow and become more effective at bidding for HP contracts and for contracts at other companies.

Global supplier diversity

Supplier diversity is mandatory for fulfilling contracts with the U.S. government and with most U.S. states and municipalities, as well as some U.S. commercial customers. HP has maintained a Corporate Supplier Diversity Program Office for more than 40 years in the United States and belongs to more than 20 supplier diversity organizations in the United States, Canada and Europe.

We continue to expand our supplier diversity program in Canada and Europe, and we are working with governments and others to establish appropriate regional definitions of diversity that reflect local society and culture. In 2009, we continued our financial sponsorship of the Canadian Aboriginal Minority Supplier Council (CAMSC) and UK-based organizations Minority Supplier Development-UK (MSD-UK) and WEConnect UK, a nongovernmental organization that increases opportunities for women-owned businesses to compete in the global value chain. In addition we sponsored and participated in various sourcing events.

In South Africa, our supplier diversity program is part of our strategy to comply with Black Economic Empowerment regulations. Through the HP Business Institute, established in 2008, we make substantial investments in the skills development of black employees as well as new graduates seeking to enter the information and communications technology industry. The institute will train 1,800 people within seven years and will boost HP's overall investments in broad-based black economic empowerment (B-BBEE) to more than R150m (more than U.S. $21 million). In 2009 HP achieved a Level 2 Contributor status against the South African Department of Trade and Industry's Codes of Good Practice for B-BBEE. Our certified score of 89.07 percent, externally verified by KPMG, represents HP's performance against the seven pillars of B-BBEE. This reiterates our commitment to transformation in the IT sector and the broader South African economy.

SOCIETY

Additionally, the HP Microenterprise Development Program provides start-up assistance and training in business and IT skills to entrepreneurs and businesses around the world with fewer than five employees. See the Entrepreneurship education section for details.

Connecting diverse suppliers

HP hosts events with local business councils and participates in national events that introduce diverse suppliers to potential customers. In 2009, procurement professionals participated in more than 20 such events in Canada, the UK and the United States.

HP Connect Supplier Diversity Summits are effective forums for minority-owned suppliers to meet HP buyers and other businesses. In 2009 we held a U.S. public sector-focused HP Connect session in Washington, DC. This event brought representatives from 22 prescreened small businesses to HP's Herndon, Virginia, campus to gain insight into doing business with HP and to meet segment leaders from the HP Enterprise Services organization.

In the United States, we collaborate with SCORE (Service Corps of Retired Executives) to sponsor the multi-city Business Matchmaking Program, which offers small businesses the opportunity to participate in governmental and major corporate procurement opportunities. In 2009, we sponsored and participated in Business Matchmaking sessions in Boston,

Chicago, Dallas, New York and San Francisco. Since its inception in 2003, the Business Matchmaking program has enabled more than 75,000 small-business sales appointments resulting in several billion dollars in contracts.

Diverse resellers

In addition to promoting diversity in our supply chain, we advance diversity among our resellers through mutually beneficial relationships. Through our HP PartnerONE Diversity network, we provided marketing and sales support to more than 100 diverse resellers in 2009. The support comes in the form of marketing subsidies, discounted products and visibility on a diverse reseller locator.

Performance

In 2009, our total U.S. spending with small and diverse businesses increased by 7 percent, despite consolidation in our overall supply chain. This is mainly due to our integration of EDS's spend in our total figure for the first time. However, it also reflects HP's focus on supplier development. We aim to nurture and grow diverse suppliers even as we reduce our total number of suppliers, so that they continue to be strongly represented in our supply chain.

We again exceeded our targets for total spending with small businesses and woman-owned small businesses.

U.S. supplier diversity purchasing results*, **, *** **[U.S.$ millions]**

	2006	2007	2008	2009
Total small businesses	$3,510	$3,106	$3,365	$3,691
Minority-owned small businesses	$1,150	$670	$842	$807
Woman-owned small businesses	$380	$440	$476	$534

* All figures are for U.S. purchases from U.S.-based businesses.

** Data is for the 12-month period ending September 30 of the year noted.

*** 2009 data includes HP Enterprise Services (formerly EDS) spending. Data prior to 2009 does not.

SOCIETY

HUMAN RIGHTS

Demonstrating respect for human rights remains a key challenge for society and business—one to which HP is fully committed.

The role of business in respecting human rights is currently being shaped by the work of John Ruggie, professor and special representative of the United Nations secretary-general on business and human rights. In 2008, Professor Ruggie published his main report: Protect, Respect and Remedy: a Framework for Business and Human Rights. HP supports the framework and accepts our corporate responsibility to use our size and influence to promote human rights in the business community.

Our commitments in this area are outlined in HP's Human Rights and Labor Policy.

Respect for human rights is integrated into many aspects of our business. Areas where human rights considerations most directly impact HP's practices are summarized below, with links to other sections in this report for additional information.

Our employees

Our values and Standards of Business Conduct (SBC) require integrity and ethical behavior. HP's Human Rights and Labor Policy commits us to the fair treatment of all employees wherever we operate. We adhere to the United Nations Universal Declaration of Human Rights (UDHR) and respect employees' rights to organize in labor unions in accordance with local laws and established practice. Our diversity policies require that every employee is treated and treats others with dignity, respect and courtesy. We do not under any circumstances tolerate discrimination or harassment. Our clear commitment to promoting human rights, as well as our leadership in other global citizenship areas, is key to retaining and recruiting employees.

HP offers several channels for raising concerns about potential misconduct. We encourage employees to follow our Open Door Policy and talk first to their manager or the next level of management if issues arise. Alternatively, employees can submit concerns to internal ethics and compliance experts or their regional or business ethics and compliance liaisons.

HP's Ethics and Compliance Office provides formal, confidential communication channels for employees and third parties to report potential violations of law, company policy or the SBC. These include a confidential, round-the-clock, toll-free helpline that operates globally and can handle calls in numerous languages. This line is also available to third parties via our company website and partner and supplier portals. Reporting can be anonymous, if preferred. See Reporting concerns for more detail.

For more information, see HP employees.

Our supply chain

Our Supply Chain Code of Conduct is underpinned by international labor and human rights standards. For example, we believe workers at supplier facilities have the right to freely chosen employment and the right to associate freely and join or be represented by works councils or labor unions on a voluntary basis and bargain collectively as they choose. Workers also have the right to a workplace free of harassment and unlawful discrimination.

Areas of recent focus in this area for HP include working to address minerals mining in conflict zones and improving worker-management communications (including access to grievance mechanisms) in our supply chain.

For full details of our supply chain social and environmental responsibility program and specific audit findings, see Supply chain responsibility.

Education

Our long-term commitment to social innovation and community engagement enables us to provide improved access to information technology and educational assistance around the world. HP supports programs and organizations that align with our business goals and our commitment to enrich communities where we work and live. We focus our social investments on education, in schools and universities, and through programs that promote entrepreneurship. Our support to organizations worldwide is made through a combination of cash and technology.

See Social innovation for more information.

Privacy

The information age has created an environment where the collection of information is ubiquitous and the global flow of data is constant. At HP we strongly believe that people have a right to privacy and personal data protection. These are of prime importance to our customers, fundamental to good business and achievable in the digital age.

Privacy issues are complex and interconnected. Businesses, governments and civil society are collaborating to uphold the principles of fair information practices in the light of 21st century technology. When we meet with regulators, we encourage cross-border collaboration governed by clear and consistent rules that companies can understand and implement. We support governments and industry in their efforts to help individuals understand privacy risks and control how their information is used.

See Privacy for details of our approach and activity.

HP HUMAN RIGHTS DECLARATIONS

HP endorses and works to uphold the following statements of human rights:

- The United Nations Universal Declaration of Human Rights (UDHR)

- Rights outlined in the principles of the UN Global Compact

HP's policies also reflect the International Labour Organization's (ILO) Fundamental Conventions

Promoting business and human rights

BUSINESS LEADERS INITIATIVE ON HUMAN RIGHTS

HP played a key role in the Business Leaders Initiative on Human Rights (BLIHR), a group of 13 global companies that came together to advance respect for human rights in business. BLIHR completed its work plan in 2009 by creating tools to enable companies to act on human rights commitments, including the following:

- The BLIHR Guide helps companies integrate human rights policy and strategy into business plans. The guide includes case studies from BLIHR members about human rights issues, including four from HP.

- The BLIHR Matrix is an interactive online tool that companies can use to assess human rights issues in the context of globally recognized human rights standards such as ILO conventions.

HP, together with a group of other leading companies, was a founding member of the Global Business Initiative on Human Rights, a follow-up initiative to BLIHR launched in 2009. Over the next two years, the Global Business Initiative aims to provide a platform for companies from different sectors in both the developing and developed world to learn about integrating respect for human rights into the management of their businesses and to show leadership on the issue.

HP participated in the first Global Business Initiative event in New Delhi, India, in 2009. The roundtable

SOCIETY

was attended by about 100 representatives from business, civil society and government from India and South East Asia. HP shared its experience delivering capability-building training for suppliers in that region. HP plans to participate in additional events in 2010.

HUMAN RIGHTS ASSESSMENT

During 2009, HP conducted a preliminary human rights assessment using the matrix that we helped to develop within the BLIHR initiative. The BLIHR assessment covers seven business areas: business conduct, community, employment, products and services, supply chain, workplace conditions and security. The process highlighted areas for further investigation, which will inform our future work. In 2010, HP plans to conduct a more in-depth review of our human rights policies.

PERSPECTIVE

Human rights are relatively new on the agenda of most businesses. Yet their relevance to companies is compelling, as criticism, campaigns and lawsuits over alleged harm to human rights increasingly pose risks to companies' reputations, operations, staff recruitment and retention, and their bottom line.

In 2008, the UN Human Rights Council unanimously welcomed the "protect, respect and remedy" framework I put forward for better managing the human rights challenges posed by, and faced by, companies. It comprises the state duty to protect against human rights abuses by business; the corporate responsibility to respect human rights; and greater access by victims to effective remedy.

The corporate responsibility to respect human rights requires a process of human rights due diligence: that a company's policies or other public commitments adequately incorporate human rights; that it periodically assesses its human rights impacts; that it integrates the results and operational implications across its decision-making; and that it tracks and reports on its performance. This takes leadership from the top and an alignment of staff incentives across the company. And it involves engagement with those at risk of being impacted and avenues for them to raise concerns.

Only with such a process in place can a company know and show that it is respecting human rights. I am gratified to see more and more companies now working to ensure they can meet this baseline expectation.

PROFESSOR JOHN RUGGIE
Special representative of the UN secretary-general for business and human rights

SOCIETY

HP EMPLOYEES

Our employees are integral to the success of our business. Their talent, expertise and skills drive everything from how we innovate products and manage our supply chain to how we connect with customers and collaborate with partners. Recruiting and retaining the best people is a key competitive advantage, and we strive to create a supportive, motivating work environment where all employees can flourish.

Much of our focus in 2009 was on integrating those who joined HP through the acquisition of EDS, which increased our number of employees to 304,000[1]. This section represents our combined workforce. In some cases, this makes it difficult to compare data or progress in 2009 with previous years, which we have noted.

Our employment policies apply globally and reflect our commitment to fair treatment of all employees wherever we operate. At a minimum, we comply with local laws, but our own policies often set a more demanding standard:

- **BEST WORK ENVIRONMENT POLICY** Defines the standards of personal conduct that we expect employees to meet to contribute to a positive, productive work environment

- **OPEN DOOR POLICY** Reflects our commitment to open communications and a workplace where each person's voice is heard

- **HUMAN RIGHTS AND LABOR POLICY** Commits us to fair treatment of all employees wherever we operate

We provide channels to report policy violations anonymously, and we fully investigate all issues raised.

In this section we describe our commitment to employees in the following areas:

- Diversity
- Compensation and benefits
- Employee engagement
- Employees and global citizenship
- People development
- Work-life programs
- Health, safety and wellness

[1] As of October 31, 2009

SOCIETY

DIVERSITY

A workforce comprising people of diverse ages, capabilities, cultures, ethnicities and experiences promotes creativity and innovation. We believe it is also key to understanding and reflecting the values and demographics of our customers, and vital to attracting and retaining the best employees.

We promote ethnic and gender diversity throughout our global organization, organized into four regions: the Americas; Asia Pacific and Japan (APJ); and Europe, the Middle East and Africa (EMEA). We measure the representation of women at HP globally and the ethnic diversity of our U.S. workforce.

Our efforts to support diversity at HP include:

- Recruiting a diverse range of people and developing them as leaders

- Building an inclusive work environment where the contributions of each individual are valued

- Helping employees navigate their work and personal commitments while meeting the business needs of HP

For additional information about our diversity efforts, see our Diversity and Inclusion website.

Policies

Integrating the EDS organization into HP in 2009 was aided by the values shared between the two companies, including a commitment to workforce diversity.

Our diversity policies help foster an inclusive work environment. We expect and require every employee to treat others and to be treated with dignity, respect and courtesy. We do not under any circumstances tolerate discrimination or harassment based on such factors as race, age, sex, national origin, disability, gender identity expression or sexual orientation. We comply with diversity laws as basic minimum requirements, and our policies often set a higher standard.

We encourage employees to speak up. Employees worldwide can report suspected discrimination or harassment by contacting their local employee relations representative or through our confidential and anonymous 24-hour GuideLine. In the United States and Canada, the GuideLine number is 1- 800-424-2965. For employees outside of North America, we publish hotline numbers on our intranet.

Our vice president for People Development and vice president of Global Talent Organization have overall responsibility for compliance with these policies. Our vice president and chief ethics and compliance officer has overall responsibility for the GuideLine service.

Our approach

We promote and drive diversity at HP in several ways. We make efforts to expand our workforce diversity by proactively recruiting best-in-class diverse talent, embedding diversity into all core people development processes and by sponsoring key development programs to prepare diverse top talent for career advancement and professional growth. We also strive to build an inclusive work environment by leveraging leadership across regions and business groups to drive and promote diversity, as well as engage employees through local employee resource groups.

Activities in 2009 included:

- **PARTNER WITH DIVERSITY ORGANIZATIONS.** In the United States we provided funding and products for Management Leadership for Tomorrow (MLT), which addresses the underrepresentation of minorities in business leadership positions. We placed five MLT fellows in either internship or full-time job opportunities.

- **ATTRACT A WIDE RANGE OF RECRUITS BY WORKING WITH STRATEGIC EXTERNAL PARTNERS.** For example, we have been partnering with Simmons School of Management for more than 15 years and have been an elite sponsor of its esteemed leadership conference. The annual conference, held in Boston, brings together approximately 3,000 women from a wide range of industries, professions and experiences. The event is structured as a development conference and features world leaders, business executives and visionaries, journalists and celebrities to discuss the compelling issues of our time and share business experiences that illustrate world-class business leadership.

- **EXPAND DIALOGUE AND INVOLVEMENT THROUGH EMPLOYEE RESOURCE GROUPS (ERGS).** Our ERGs bring together employees with common interests and backgrounds. HP has 115 ERGs worldwide, representing aspects of diversity including gender, ethnicity or national origin, sexual orientation, age and disability.

- **PROVIDE INTERNAL DEVELOPMENT OPPORTUNITIES.** We offered a variety of internal development opportunities across the regions. For example, in EMEA we conducted a virtual

SOCIETY

leadership series for keytalent women, including external leadership experts, dialogue with senior leaders and mentoring. In India, we celebrated International Women's Day. The event, attended by more than 300 female employees, focused on career choices, mentoring and the implications of diversity for HP India. In the Americas, we sponsored the Society of Hispanic Professional Engineer's Executive Leadership program, a five-day program designed to develop leadership excellence, strategic thinking and planning in

preparation for executive roles. Key talent from HP as well as other leading technology companies participated.

Performance

We track gender diversity globally and ethnic diversity in our U.S. workforce. The charts below detail our performance over the past five years. The data below for 2009 include employees integrated from EDS, but not for prior years.

Worldwide workforce demographics, 2005–2009 [women as a percentage of total employees]*

REGION	2005	2006	2007	2008	2009
Americas–employees	31.8%	31.4%	31.0%	30.8%	35.0%
Americas–managers	26.6%	26.0%	25.3%	25.2%	28.3%
Asia Pacific and Japan–employees	29.6%	29.6%	30.0%	30.9%	32.5%
Asia Pacific and Japan–managers	18.3%	18.4%	18.6%	20.2%	21.2%
Europe, the Middle East and Africa–employees	27.4%	27.7%	28.4%	28.1%	30.0%
Europe, the Middle East and Africa–managers	16.5%	17.0%	17.6%	18.5%	20.0%
Worldwide–employees	29.9%	29.9%	30.0%	30.1%	32.9%
Worldwide–managers	21.7%	21.7%	21.5%	22.0%	24.3%

* 2009 data excludes Brazil.

Global new hires, 2005–2009 [as a percentage of total]*,**

	2005	2006	2007	2008	2009
Female	32.2%	31.9%	31.8%	34.9%	35.6%
Male	67.8%	68.1%	68.2%	65.1%	64.4%

* 2009 data excludes Brazil.
** 2009 data reflects the time period 1/01/09–11/30/09.

Male	Female	White	All minorities	Black	Hispanic	Asian	Native Hawaiian or Other Pacific Islander	Two or more races	Native American
OFFICIALS AND MANAGERS									
70.25%	29.48%	84.47%	15.53%	3.78%	4.11%	7.16%	0.01%	0.06%	0.42%
TOTAL: 12.58%									
PROFESSIONALS									
65.95%	34.05%	76.30%	23.70%	5.31%	4.69%	12.87%	0.07%	0.23%	0.52%
TOTAL: 71.75%									
TECHNICIANS									
81.90%	18.10%	73.48%	26.52%	11.63%	6.63%	6.96%	0.18%	0.33%	0.80%
TOTAL: 9.78%									
SALES WORKERS									
61.24%	38.76%	81.11%	18.89%	6.66%	8.30%	2.18%	0.00%	1.42%	0.33%
TOTAL: 1.00%									
OFFICE AND CLERICAL									
20.07%	79.93%	63.51%	36.49%	18.97%	8.22%	7.69%	0.21%	0.67%	0.72%
TOTAL: 6.69%									
CRAFTWORKERS (SKILLED)*									
100.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TOTAL: 0.00%									
OPERATIVES (SEMI-SKILLED)									
63.43%	36.57%	56.72%	43.28%	14.93%	11.94%	14.18%	0.00%	0.00%	2.24%
TOTAL: 0.34%									
LABORERS									
48.72%	51.28%	49.17%	50.83%	13.98%	20.75%	15.94%	0.00%	0.00%	0.15%
TOTAL: 1.91%									

(table continued)

SOCIETY

Male	Female	White	All minorities	Black	Hispanic	Asian	Native Hawaiian or Other Pacific Islander	Two or more races	Native American
SERVICE WORKERS									
88.89%	11.11%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TOTAL: 0.01%									
TOTAL									
64.84%	35.16%	76.02%	23.98%	6.74%	5.21%	11.14%	0.08%	0.26%	0.55%
TOTAL: 100.00%									

* There are only three people in this category.

U.S. new hires, 2005–2009 [as a percentage of total]

	2005	2006	2007	2008	2009
White	62.5%	69.8%	69.0%	67.2%	65.0%
All minorities	25.6%	28.4%	30.1%	32.4%	34.5%
Black	5.5%	6.1%	6.8%	8.1%	11.2%
Hispanic	6.1%	6.4%	6.3%	6.9%	7.1%
Asian	13.7%	15.6%	16.5%	15.7	12.5%
Native American	0.3%	0.3%	0.5%	0.6%	0.7%

* 2009 data excludes Brazil.
** 2009 data reflects the time period 1/01/09–11/30/09.

View our 2005, 2006, 2007 and 2008 U.S. workforce demographics data in the report online.

Executive diversity

In 2009, 17.0 percent of our top executives in the United States (vice president level and above) were women, compared with 17.2 percent in 2008. In the United States, minorities constituted 17.3 percent, compared with 12.9 percent in 2008.

COMPENSATION AND BENEFITS

We reward talented employees who deliver exceptional results. We believe that recognizing and rewarding excellent performance is the best motivation.

Total Rewards, our compensation and benefits program, states that:

- Our success depends on rewarding employees who achieve exceptional results.

- We reward strong company and individual performance with performance-based pay.

- Our managers differentiate rewards based on business unit results and individual performance.

- Employees have the opportunity to become shareholders (through stock purchase programs).

- For more information, see HP's 2009 Annual Report.

- Our pay and benefits are competitive with relevant markets and can be differentiated by business, function and job classification.

In addition to base and performance-related pay and stock ownership, we offer a number of benefits everywhere we operate. These may include:

- Health plans

- Income protection (insurance to protect income in case of injury or illness)

- Retirement and savings packages

For more information, see the Health, safety and wellness section of this report.

Reductions in employee compensation and benefits

In 2009, we reduced employee compensation and benefits to increase flexibility in the company's cost structure and create value for our customers, employees and shareholders over the long term. The changes include:

- Reduced the CEO's base pay by 20 percent, Executive Council members' base pay by 15 percent, other executives' base pay by 10 percent, exempt employees' base pay by 5 percent, and non-exempt employees' base pay by 2.5 percent.

- Capped HP matching contributions under the HP 401(k) plan at a maximum of 4 percent of eligible employee contributions for all U.S. employees. Matching contributions will be discretionary based on company performance, determined on a quarterly basis.

We also ended a program allowing participants in the HP Share Ownership Program to purchase HP shares at a discount to fair market value.

Workforce reductions and severance packages

This year, we continued to implement the plan announced following the acquisition of EDS in 2008 to reduce our workforce by approximately 25,000 over a four-year period. As of our fiscal year-end, over 19,000 positions had been eliminated as part of this plan. This program was designed to streamline the combined company's services business and to better align the structure and efficiency of that business with HP's operating model. In addition, in 2009 we initiated a restructuring plan to improve the effectiveness of several other business groups. As of our fiscal year-end, approximately 2,100 positions had been eliminated due to this program.

We encourage eligible employees who are workforce reduction (WFR) impacted to seek alternative positions via HP's redeployment program. In addition, we offer career transition support services such as resume writing and interviewing skills assistance. Employees leaving HP as the result of WFR are eligible for severance benefits in line with local program parameters.

SOCIETY

EMPLOYEE ENGAGEMENT

HP's culture is based on ongoing communications and open, honest dialogue. Not only do communications about HP's business and strategy help our employees understand how their work contributes to our overall success, but asking for employees' feedback gives us an opportunity to factor their input into our business decisions.

Employee feedback

We ask our employees for formal feedback through the annual Voice of the Workforce (VoW) global survey, as well as through regular "pulse surveys" on specific issues. Employees can ask questions of HP business group and function leaders at any time through the Ask HP service.

In 2009, we conducted several regular surveys, including:

- **MONTHLY TRANSITION EXPERIENCE SURVEYS AND ONBOARDING SURVEYS**
  We conducted monthly surveys to measure the experience of new employees during their first year with the company. Feedback is used to identify potential areas for continual improvement of the employee onboarding processes.

- **EDS INTEGRATION SURVEYS**
  We conducted various integration surveys for EDS employees, ranging from monthly sample surveys to measure communication effectiveness to post-wave evaluations of the migration process. We used the survey feedback to improve communication and information dissemination processes.

- **HR MANAGER COMMUNICATION SURVEY**
  We surveyed managers that received HR communications to get feedback and recommendations for improvements.

- **ENTERPRISE BUSINESS QUARTERLY PULSE SURVEY**
  We surveyed the pre-acquisition EDS audience as part of the wider quarterly survey in March.

- **VOICE OF THE WORKFORCE SURVEY**
  In a year marked by a doubling of our workforce and tremendous economic volatility, conducting our annual VoW survey was especially important. In fact, we significantly modified the survey in an effort to deepen our insights and to ensure that we can act on the feedback we heard from employees.

SPREADING SUSTAINABILITY IN BRAZIL

HP Brazil is inspiring employees to develop new ways to be more environmentally responsible, with a new Green Awards program. Launched in June by the HP Brazil Green Team, the Green Awards program recognizes and rewards employees who make environmental improvements inside HP Brazil and spread the idea of sustainability. Employees can participate in the program by accessing an online tool that allows them to nominate others and redeem awards for prizes if they are nominated. More than 80 employees received a Green Award in 2009.

Beyond gathering valuable insights we can apply in making business decisions, the results of the VoW survey help us gauge employee satisfaction and respond to any questions they raise during the survey. Our CEO and Executive Council read employees' anonymous written comments and address many of them openly during employee communication sessions. Senior managers assess the data to gauge progress and identify issues requiring further attention. We then set targets at the business group level and share results and next steps with employees at the work group level.

In 2009, almost 190,000 employees (71 percent of active employees when the survey was administered) participated in the VoW survey. It was available online in 25 languages, and the confidentiality of respondents is strictly protected.

Results of the 2009 survey were reviewed by the board of directors and at the executive vice president level. Managers are trained on how to review the results, share and address them with their team and use them to set goals.

Recognition programs

Recognizing our employees for their contributions keeps them motivated and engaged. In 2009, we launched Recognition @ HP to help managers

SOCIETY

recognize HP employees for their leadership, innovative thinking and service excellence. The program emphasizes day-to-day non-monetary recognition, in addition to more formal recognition. Managers can use the internal Take 5 blog to share ideas for recognizing and rewarding team members.

Retiree engagement

Our nearly 79,000 HP retirees are important ambassadors for HP, and we keep them connected and up to date about the company through engagement programs, frequent communications and events such as an annual briefing on company strategy, innovation and highlights from the prior year. The HP retiree community comprises retirees not only from HP but retirees of acquired companies including Agilent, Compaq, Digital Equipment Corporate and now Electronic Data Systems (EDS).

We host a website offering access to information about retiree benefits, available services and upcoming retiree events. In addition, HP retirees connect through social media such as Facebook, LinkedIn and Yahoo Groups. Retirees and alumni can also become active member of the HP Alumni Association (HPAA), which has more than 17,000 registered members worldwide.

Retirees are involved at many HP sites as mentors and as volunteers at HP company stores. We also organize and sponsor events and encourage retirees to continue to represent HP through community volunteerism. Every year, HP employees and retirees volunteer thousands of hours to support local charities and schools worldwide. (For more information, see Employee volunteerism and giving.)

EMPLOYEES AND GLOBAL CITIZENSHIP

It is vital that our employees understand and support our global citizenship programs. We regularly share progress, highlight volunteer opportunities and host educational events on environmental sustainability and social innovation, as well as provide training in areas such as HP Eco Solutions advocacy, ethics and privacy.

In addition, we offer employees resources and tips on subjects such as saving energy and helping local schools apply for HP educational grants. More than 50 employee councils at HP sites around the world support local implementation of corporate initiatives, including global citizenship.

Following are examples of how HP employees engaged with and promoted global citizenship in 2009. (See Employee volunteerism and giving for additional examples.)

HP Sustainability Network

The HP Sustainability Network helps employees learn about and share environmental practices that benefit both the company and the planet. There are currently 26 chapters across all of our regions. Fourteen of those chapters were added in 2009. Projects vary from chapter to chapter, but include conducting on-site energy audits, eliminating the use of polystyrene foam cups at work and creating organic gardens on HP campuses.

Each year the Sustainability Network and other local teams organize Earth Day, United Nations World Environment Day, Earth Hour and Green Week events on HP campuses. In 2009, more than 20 offices in ten countries worldwide organized local events for employees to recognize and celebrate these days. Activities included information fairs, bike tune-up clinics, free hardware recycling and tree planting.

SOCIETY

Environment@HP

Our internal Environment@HP website educates employees about environmental issues such as climate change and encourages them to reduce their impact at work and at home.

On the site, employees can find out how to get involved with their local HP Sustainability Network, tap into training opportunities, get updates on new HP employee and customer programs, and find resources for measuring and reducing their environmental impact in the workplace and at home. For example, employees can borrow an HP Green Home Kit, a set of tools to evaluate indoor temperature, energy consumption and water use.

Power to Change@Work

In 2009, HP launched the Power to Change campaign to encourage employees and customers to turn off their PCs when not in use to save energy. T he campaign used an online community, referral networks and a collective tally of savings to illustrate that small changes can make a large impact. During the campaign, more than 32,000 people—5,800 of whom were HP employees—downloaded a desktop widget, also available free to the public, helping them track energy savings generated by powering down PCs when not in use.

HP employees also use the Power to Change website to connect with and recruit additional participants around the world. Collectively, HP employees have successfully referred 3,700 friends and family to join the campaign.

In addition, 14 HP sites across four continents representing 30,000 employees joined the Power to Change@Work Challenge, which encouraged employees to save energy by turning off conference room lights and office equipment. More than 100 volunteers conducted two energy audits four months apart, checking lights and equipment in 7,000 cubes and 1,100 conference rooms. The HP San Diego campus led all the other competing sites and achieved a 48 percent reduction in lights and equipment left on after hours.

Green Advocates training program

HP in Canada encourages participation in the Green Advocates training program, which educates and empowers employees to become ambassadors of the company's environmental initiatives.

By completing a variety of training modules throughout the year, employees become familiar with the HP Eco Solutions portfolio and learn about topics such as environmental management systems, energy efficiency and climate change, HP Eco Highlights labels and the concept of carbon footprints. After training, employees are better equipped to address the environmental issues that are top-of-mind for our customers and partners. Since the program launched in 2008, over 180 employees in Canada have become Green Advocates.

Eco Solutions Advocate program

HP launched the Eco Solutions Advocate program for U.S. employees in 2009. The program educates HP employees about environmental issues and HP's commitment to environmental sustainability, and provides employees with the resources they need to talk with customers about HP's environmental stewardship and solutions. To date, 69 employees have requested training to be an HP Eco Solutions Advocate.

Learn more about global citizenship in EMEA, by watching this video (see link in the report online).

SOCIETY

PEOPLE DEVELOPMENT

In this time of economic volatility, the strength of HP's business speaks volumes about the talent, expertise and experience of our global workforce of over 300,000. We have a longstanding commitment to recruit and hire exceptional people and to provide them with opportunities to build their capabilities and excel in their roles. Organizational leaders are accountable for developing employees, and high performers have the potential for unlimited career growth at HP.

Our approach

We apply an integrated employee development framework based on external and internal benchmarking. The framework uses an array of third-party, manager- and self-assessment tools to help employees plot the next move in their career path—possibly across functions, geographies or working with a different customer segment—and to develop insights to potential career trajectories. Our developmental programs roughly break down into a 70/20/10 ratio. Seventy percent of our programs—our top priority—are on-the-job learning opportunities, such as job rotations, cross- functional team experiences and special projects. We believe learning by doing is the most effective way to build skills and accelerate development, and we encourage employees to build and hone their capabilities through hands-on experience.

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About 20 percent of our programs focus on relationship-based learning through coaching, mentoring and learning communities. These programs are highly dependent on team leaders, who are given the training and tools to develop their teams effectively, and who are measured on the growth of their people.

The remaining 10 percent of our developmental programs are delivered through formal learning, such as face-to-face training programs, live virtual training and interactive, self-directed web resources.

Our formal learning programs take advantage of technology to bring training to the desktop.

Eighty- three percent of our training courses are delivered by videoconference or online. We use face-to-face training sessions to teach and assess complex skills, and when there is a geographical concentration of participants. But we have found that technology-based training yields significant benefits: it can reach more employees, increase access to learning opportunities and save millions of dollars annually in travel expenses while decreasing associated greenhouse gas emissions.

In addition, technology-based learning better accommodates the needs of a workforce with differing development needs, enables each employee access at the right time and right place, and enhances learning and retention.

To complement HP-based training, we also support employees in pursuing external educational opportunities such as conferences, seminars and technical certifications, as well as training at accredited institutions.

Learn more on our Training and Development site (see link in the report online).

Leadership development

We invest significantly in leadership development as we see excellence in leadership as a key driver of our business success.

Global Talent comprises three tightly integrated organizations dedicated to this mission. Talent Management provides the assessment data and insights to identify high-potential leaders within the company and to spotlight areas where additional learning or resources may be needed. The Executive and Leadership Development (ELD) organization is responsible for designing HP's major corporate-wide leadership development programs, while the Learning and Development organization provides the capabilities and infrastructure for ELD to deliver its learning solutions globally.

As with our broader programs, nearly all of our leadership development programs emphasize learning by doing. For example, we often leverage projects with significant business impact as opportunities to build and strengthen the leadership skills of high-potential employees. The projects provide invaluable immersive learning experiences that cannot be equaled in a classroom, while supporting the business goals of HP. These projects are sponsored by senior leaders of the company.

SOCIETY

In fact, most leadership development programs tap senior HP leaders as faculty. This strategy of leaders teaching leaders has strong support within HP. In a typical year, more than 500 executives, mostly directors and vice presidents, provide training and other developmental support for HP's leadership programs.

Leadership development at HP is also closely aligned with our business priorities. As a result, the leadership curriculum is regularly revised to adapt to dynamic business conditions and provide realistic training scenarios. For example, our HP Financial Acumen development program is updated with current HP financial data and includes sophisticated simulations that allow participants to explore and learn to manage the financial levers of their respective HP business.

We have three categories of leadership development programs:

- Foundational programs targeting those at a certain level or making career transitions, such as becoming a manager.

- Skills-based programs that emphasize HP's Leadership Standards, which define the expectations for all HP leaders. Many of these skills can be improved through targeted skills-based learning solutions. For example, we have recently implemented a series of modular virtual-classroom solutions called Experienced Manager Excellence.

- Select talent development programs for individuals with particularly high potential for accelerated development and increased responsibility within the company. These programs, called Key Talent, are highly experiential, include senior HP leader faculty and sponsors, and are tied to HP business priorities.

In addition to these formal learning opportunities, we also offer always-on leadership learning through our Leadership Development Central Portal, which offers quick tips, podcasts and online courses targeted at specific levels of employees and specific HP Leadership Standards.

WORK-LIFE PROGRAMS

Many of our employees take advantage of work-life options offered by HP. In our annual Voice of the Workforce survey, our work-life programs have been consistently identified as very popular among employees. We offer:

- **FLEX TIME** Working a normal eight-hour workday, but adjusting start and departure times to accommodate personal schedules and needs. Approximately 80 percent of our workforce takes advantage of this option.

- **PART TIME** Working reduced hours on an ongoing or temporary basis. Almost 2 percent of employees work part-time. This program helps us meet the needs of an aging workforce. For example, in Denmark employees over 55 can move to 80 percent working hours, enabling us to hire more young graduates without increasing our costs.

- **TELEWORK** Working full-time from home rather than at an HP site. About 28 percent of employees are teleworkers.

- **FLEXWORK** Occasionally working from home but primarily based on HP premises.

Flexible work arrangements have also helped us reduce our real estate costs and the environmental impact of our operations, while improving employee productivity. (See more information about our Global Workplace Initiative in Climate and energy – Operations.)

We have other programs that vary by country to help employees achieve work-life balance, including:

- Adoption resources and assistance
- Dependent care resources
- Education resources
- Family and medical leave
- New parent leave

For additional details about work-life programs, visit the HP Benefits website (see link in the report online).

In 2009, HP was named one of the best companies to work for by Working Mother Magazine. The magazine profiled one of our employees, Jill Goozen, who spoke of how telecommuting and flex time help her make it to her daughter's school events while she manages her busy work schedule.

SOCIETY

HEALTH, SAFETY AND WELLNESS

Protecting our employees' health, safety and wellness is a natural extension of our commitment to make HP a great place to work. We take seriously our responsibility to provide a safe working environment and recognize that employees are most productive when they are healthy.

Our emphasis is on preventing work-related injuries and illnesses. Our wellness programs raise awareness of health issues and encourage employees to adopt healthy lifestyles, and we tailor our safety programs to minimize hazards in specific work environments.

We administer our health, safety and wellness (HSW) programs as part of a comprehensive environmental, health and safety (EHS) management system that meets or exceeds applicable regulatory requirements globally. This system is aligned with the internationally recognized Occupational Health and Safety Assessment Series standard OHSAS 18001 as well as the ANSI Z10 (American National Standard), OSHA VPP (U.S. Department of Labor) and ILO-OSH 2001 standards. Four HP sites in Ireland, Scotland, Singapore and the United States are registered to OHSAS 18001.

Integrating the EDS organization into HP was a significant focus in 2009. Many former EDS employees predominantly work on-site with customers, where HSW policies and conditions are beyond our direct monitoring and influence. Given the risks associated with the H1N1 virus, we increased emphasis on educating all HP employees in how to protect themselves through simple preventative health measures. (See the section below on pandemic flu preparedness for more details.)

Health and wellness

We promote health and wellness through online educational materials, travel health advice and health-awareness activities. We also provide access to health benefit programs and promote healthy lifestyles.

Our global benefits policy applies to all HP employees. Depending on their location and other variables, employees can be eligible for programs including medical, dental, vision, disability and life insurance.

To increase participation in the programs, U.S. employees and their covered domestic partners who complete a health risk questionnaire, participate in self-guided health education and enroll in a lifestyle improvement program may receive funding from HP to purchase additional health and wellness benefits. In 2009, 82 percent of HP employees took part in the program, and 78 percent of former EDS employees participated.

Health, safety and wellness training and communications

We emphasize the importance of health, safety and wellness from the first day of employment. Our HSW training programs include:

- General education, such as employee orientation that provides an overview of our policies and advice on preventing and responding to workplace injuries. Employees take a required online refresher course annually.

- Job-specific training that covers hazards relating to work environments or responsibilities. For example, HP provides Working at Non-HP Business Locations courses for customer engineers and their managers to increase awareness of EHS risks at locations outside of HP and educate these employees on taking the appropriate measures to reduce those risks.

- Ergonomics training, such as our online Safety and Comfort Guide, to reduce the risk of injuries and illnesses related to handling materials and day-to-day office work.

Training for many courses is provided in multiple languages to meet the needs of our diverse global workforce.

Our EHS intranet site includes resources and key information for employees, including:

- Self-audits that help sites assess how well employees are managing health and safety risks.

- A system that enables employees to search for information about how to handle chemicals safely.

- Information on emergency and disaster planning, prevention, response and recovery.

PANDEMIC FLU (H1N1) PREPAREDNESS

In response to the H1N1 influenza pandemic in 2009, we took extensive proactive measures to keep our employees healthy and to minimize the impact of the virus on our operations and supply chain. Our preparedness planning and efforts have been very successful in preventing any business interruptions.

In accordance with public health experts, including the World Health Organization (WHO), the U.S. Centers for Disease Control (CDC) and various country Ministries of Health, we took the following precautions:

- Provided employees with information on influenza A (H1N1)

- Launched internal communications campaigns to promote personal hygiene and disease prevention

- Established site risk levels and provided workplace precautions such as hand sanitizer at major entry and exit points, according to the respective site risk level

- Directed employees to work from home as appropriate

These efforts are part of HP's ongoing commitment to prepare for pandemic flu. Since 2005, we have conducted simulations to assess how an outbreak of flu or other infectious diseases could affect HP, and we have developed and regularly assessed contingency plans to protect our employees and minimize business disruption. We provide frequently asked questions, tips for staying healthy, links to many resources, and online training on hand hygiene and respiratory etiquette in eight languages.

INFECTIOUS DISEASES

In some countries, infectious diseases can present a serious risk to our employees. We provide medical benefits so that our employees have access to appropriate immunizations, make travel health advice available and raise awareness about precautions such as proper hygiene and other measures to prevent illness. We respond to reports of specific infection risks by providing affected groups of employees with information and access to health professionals to address questions confidentially.

SLIPS, TRIPS AND FALLS

Slips, trips and falls are among our common causes of lost workdays (see table on the next page), so we publish an online health advisory to raise awareness of the most common types and how to avoid them. It includes practical tips for keeping safe in office and manufacturing areas and advice on avoiding accidents in icy conditions. We also conduct regular inspections to identify potential hazards and use preventative measures in day-to-day housekeeping.

HEALTH, SAFETY AND WELLNESS TRAINING AND COMMUNICATIONS

We implemented two new EHS online training courses in 2009 for new and ongoing employees. These courses are part of HP's companywide Ethics and Compliance training and awareness program.

We also published regular health alerts, such as those related to H1N1, to keep employees informed about local conditions, access to pertinent information and recommendations regarding preventative measures.

Our HP Safety and Comfort Guide is available to all employees and customers, in 34 languages. The guide offers assessment strategies and recommendations to reduce ergonomic risk factors.

We conduct quarterly global employee surveys to measure the effectiveness of our HSW program. In 2009, 78 percent of employees surveyed indicated that ease of finding information on HP health and wellness programs met or exceeded their expectations, with 23 percent indicating these services are of high importance. Ninety-three percent rated workplace and job safety as meeting or exceeding expectations, with 69 percent indicating this is of high importance.

Performance

HEALTH AND SAFETY METRICS

We record and investigate work-related injuries and illnesses to identify and eliminate their root causes and to assess the effectiveness of our management systems. In 2009, we introduced a new HSW data collection and tracking system, which tracks injury trends at the site and corporate levels. This system reflects the International Labour Organization Code of Practice on Recording and Notification of Occupational Accidents and Diseases.

Our primary metric is the lost workday case rate (the number of work-related injuries that result in time away from work per 100 employees working a full year). We also measure recordable injuries and illnesses and incidents requiring medical attention beyond first aid. These include incidents both with and without lost time.

Please note that the following metrics do not include newly integrated EDS employees.

SOCIETY

Lost workday case rate, 2005–2009*
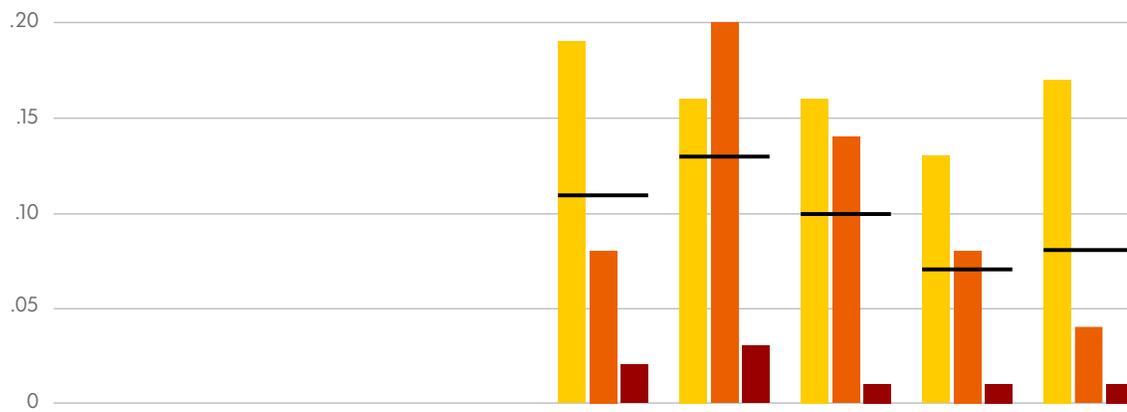
	2005	2006	2007	2008 **	2009
Americas†	0.19	0.16	0.16	0.13	0.17
Europe, Middle East and Africa††	0.08	0.20	0.14	0.08	0.04
Asia Pacific and Japan†††	0.02	0.03	0.01	0.01	0.01
Global rate	**0.11**	**0.13**	**0.10**	**0.07**	**0.08**

 * Lost workday case rate is the number of work-related injuries that result in time away from work per 100 employees working a full year.

 ** U.S. industry average in 2008: 0.3 (latest data available).

 † Includes data from Canada, Colombia, Puerto Rico and the United States.

 †† Includes data from Austria, Germany, Israel, Italy, Spain and the United Kingdom.

 ††† Includes data from Australia, India and Singapore.

Leading causes of lost workdays, 2009

Slips, trips and falls	29%
Ergonomics—materials handling	18%
Ergonomics—office environment	12%
Struck by/against	12%
Automobile accidents	9%
Caught in/between	4%
Other	16%

SOCIETY

In 2009, the proportion of lost workdays caused by materials handling decreased to 18 percent from 27 percent in 2008.

Recordable incident rate, 2007–2009*
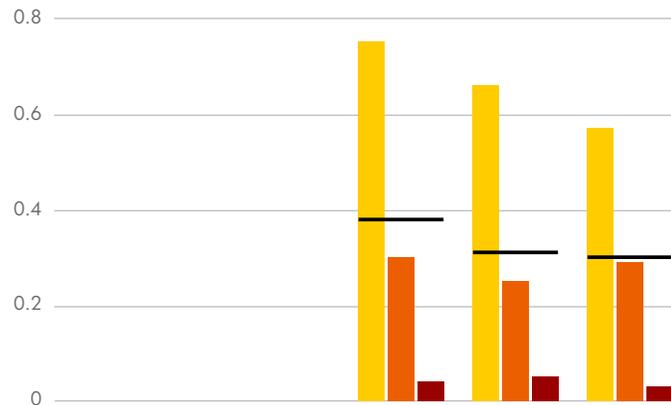
	2007	2008**	2009
🟨 Americas†	0.75	0.66	0.57
🟧 Europe, Middle East and Africa††	0.30	0.25	0.29
🟥 Asia Pacific and Japan†††	0.04	0.05	0.03
— **Global rate**	**0.38**	**0.31**	**0.30**

* Recordable incident rate is the number of lost-time and no-lost-time cases requiring more than first aid per 100 employees working a full year.

** U.S. industry average in 2008: 1.0 (latest data available).

† Includes data from Canada, Puerto Rico and the United States.

†† Includes data from Belgium, France, Germany, Ireland, Israel, Italy, Poland, Spain and the United Kingdom.

††† Includes data from Australia, Japan and Singapore.

Leading causes of recordable cases without lost time, 2009

Ergonomics—office environment	29%
Slips, trips and falls	22%
Ergonomics—materials handling	13%
Struck by/against	12%
Automobile accidents	10%
Other	14%

SOCIETY

PRIVACY

The information age has created an environment where the collection of information is ubiquitous and the global flow of data is constant. Complex systems enable businesses to combine and analyze this data, and to provide ever more efficient, convenient and personalized services.

However, the data used to create these tailored products and services may also reveal more about a customer than they want an organization to know. And yet it is increasingly hard for individuals to understand or control the use of their personal information.

A global discussion is underway about the future of data privacy. Fresh concepts for organizational accountability and data use are drawing attention. Businesses, governments and civil society are collaborating to uphold the principles of Fair Information Practices in light of 21st century technology.

Privacy is fundamental to human dignity and autonomy. At HP, we strongly believe that privacy is of prime importance to our customers, fundamental to good business and achievable in the digital age. HP works hard to understand and respond to the risks that the misuse of technology poses to privacy. We continue to advocate a collaborative approach and remain heavily involved in the development of new frameworks for addressing the evolving issues of personal data and its appropriate use.

Privacy issues are complex and interconnected. Working with others is essential. When we meet with regulators, we encourage cross-border collaboration governed by clear and consistent rules that companies can understand and implement. We support governments and industry in their efforts to help individuals understand privacy risks and control how their information is used.

LEADING THE WAY IN PRIVACY POLICY

- HP's Chief Privacy Officer joined an international group of experts from government, industry and academia in the Galway Project, an initiative led by The Centre for Information Policy Leadership with Ireland's data protection commissioner to define the essential elements of an accountability model. This work is meant to pave the way for new frameworks that ensure organizations are accountable for the collection, use and sharing of information—and that the risks created by that use are taken into account.

- HP's chief privacy officer co-authored Privacy by Design: Essential for Organizational Accountability and Strong Business Practices published in November 2009, in which HP's accountability approach is used as a case study.

- HP scientists co-authored the research paper Accountability as a Way Forward for Privacy Protection in the Cloud, which proposes a combination of procedural and technical methods for resolving privacy and security risks in cloud computing.

For more information, read the HP Global Master Privacy Policy (see link in the report online).

SOCIETY

APPROACH

HP's approach to privacy is built on a model of accountability. We seek to create a chain of accountability for the information we handle, ensuring responsibility for data privacy and security at every stage of the process. HP teams work together to oversee and manage our privacy efforts, and collaborate with external partners to advance privacy protection worldwide.

Accountability approach to privacy

HP's privacy accountability model is a decision-making framework that helps business units make informed choices about the risks associated with collecting and handling data. An accountability approach demonstrates a company's commitment to privacy and goes well beyond mere legal compliance. When the people handling data are accountable, practices are transparent, and ethics as well as contractual agreements, regulations and international provisions, and culture are taken into consideration. Our model builds on that foundation by considering decisions in light of our company values, customer expectations and potential risks to ensure we are fully accountable for our actions.

We developed the model with The Centre for Information Policy Leadership (CIPL), and work with this organization, regulators and advocacy groups to encourage wider adoption.

Monitoring compliance

HP monitors compliance with its privacy policies using internal assessments, customer and employee feedback, and internal audits. Our privacy team works closely with the internal audit function to align with their approach. All suppliers and third-party vendors that handle HP customer and employee personal data are contractually bound to comply with the applicable portions of our privacy policies. In our HP Enterprise Services business, we define our obligations in our proposals and client contracts.

Privacy and Data Protection Board

HP's Privacy and Data Protection Board provides companywide oversight for privacy and personal data protection. Board members are from the Privacy, Legal, Information Technology, Security, Internal Audit, Internet, HP Labs, Human Resources and Government Affairs functions, as well as from each business unit and region.

At quarterly meetings, board members discuss strategy and high-level priorities, assess programs, launch projects, and resolve any issues identified though our ongoing monitoring programs or escalated to their level. The board regularly invites external experts to discuss privacy trends and developments. Members work throughout the year on sub-teams that handle specific privacy issues. For example, as a result of the board's work, all company laptops are required by policy to have full-disk encryption to mitigate the risk of theft or loss.

The board enables HP to manage data comprehensively in a seamless and integrated way, and its shared risk assessment and decision-making model sets a standard for governing all forms of data in the future. In 2009, we met our goal to extend the Privacy Data Protection Board to all regions.

Privacy and our products and services

We design privacy and data protection into new products and services guided by comprehensive, companywide privacy standards for product and service development. This builds consumer trust.

For corporate customers, HP's Secure Advantage portfolio offers hardware, software and services that help protect data throughout its use—on a desktop/laptop computer or printer or stored in a data center. Privacy features incorporated into the portfolio include:

- Software that asks the user whether or not they want to be notified when updates are available, rather than sending notices automatically.

- Disk encryption that helps protects the data on each drive, including in case the disks are lost or stolen, with minimal impact on performance.

- Automated encryption devices to increase protection.

HP scientists that support our privacy team continue to work on several collaborative research projects on privacy. For example, they lead Ensuring Consent and Revocation (EnCoRe), a partnership of six organizations with the goal of making it safe and easy for people to give and withdraw consent for their data to be used. HP scientists and engineers are working

SOCIETY

with 11 other companies in a second project called Privacy and Identity Management for Community Services (PICOS), to create confidence in the safety of sharing data in online communities. Project members are identifying privacy, trust and identity management issues in online communities and plan to design and build mobile communication tools to address these. (See additional examples in the report online.)

External policy development

Around the world, the protection of privacy is undergoing the greatest change since the 1980s. Public policy and regulation are rapidly evolving, with extensive activity occurring to handle the challenges posed by new technologies and the globalization of information they enable.

Policy-makers in every region are pushing for change. For example, the French Commission Nationale de l'Informatique et des Libertés (National Commission for Information and Freedom) performs on-the-spot audits of companies' data-handling procedures and makes public examples of bad practices. In the United States, the Federal Trade Commission is considering the expansion of its role in privacy and data protection. The Asia-Pacific Economic Cooperation forum continues to influence global privacy policy with its groundbreaking work in cross-border data flows (see below).

Companies, advocates and regulators realize nobody fully understands how new and future technologies will affect privacy. Social networking, user-generated content, business analytics and pervasive tracking of consumer behavior all challenge us to consider whether our approach is genuinely responsible. Regulators know they need to focus on both end results and how those results are achieved because new technology can quickly render any specified method out of date. Regulating outcomes, however, calls for a common framework upon which all companies can build their approach to data protection. HP is working with industry groups on the development of this outcomes-based framework.

In 2009, we continued to participate in the Asia-Pacific Economic Cooperation (APEC) Data Privacy Pathfinder project. As part of this project, APEC has developed a privacy framework to guide data flows within the countries that border the Pacific Ocean. Accountability agents will hold businesses accountable for their privacy promises, and a regional accreditation system will improve and simplify compliance across many jurisdictions.

In 2009, HP joined other U.S. companies including Experian, Google, IBM, Microsoft, Oracle and Proctor & Gamble in testing a draft self-assessment questionnaire for companies to complete as part of participation in APEC's cross-border framework. TRUSTe, a leading Internet privacy advocate, independently reviewed the related supporting materials and checked that the companies' privacy policies are consistent with APEC's privacy principles.

We also continued to work with the European Commission as part of the European Union Article 29 Working Party to develop practical solutions for advancing the concept of Binding Corporate Rules.

In the United States, HP's chief privacy officer is on the board of directors of the Business Forum for Consumer Privacy. Co-founded by HP, Microsoft and eBay, the forum comprises 25 companies collaborating to develop new frameworks and provide educational support to governmental authorities as they develop unifying privacy legislation in the United States.

As the chair of the executive committee and member of The Centre for Information Policy Leadership, HP's chief privacy officer supports this pre-eminent think-tank's strategic development of new, innovative frameworks and solutions for privacy and its presentations and publications advising regulators and privacy leaders. HP also participates in work on topics such as behavioral targeting as a member of the Center for Democracy and Technology's Anti-Spyware and Behavioral Marketing task forces.

SOCIETY

PERSPECTIVE

HP continues to play a major leadership role in privacy and data protection. Their program, which focuses on accountability and responsible decision making, takes into account the challenges of a globally networked Internet age. HP has defined the criteria for measuring corporate privacy citizenship through its actions in 2009. For example, the Privacy Team in HP Labs is sharing the technology behind the company's privacy accountability tool with the APEC Privacy Subgroup. This will make it possible for countries with even small privacy agencies to encourage local companies to strengthen their privacy practices. This is just one instance of HP's leading by example. Others include HP's presenting at the Federal Trade Commission Privacy roundtables, building new privacy concepts based on use and obligations in the Business Forum for Consumer Privacy, and taking a global privacy conversation into practical next steps for the Galway project launched in Ireland. Their collaborative work with regulators, advocates, industry and policy leaders promotes a higher standard of organizational accountability.

Leadership from responsible companies like HP remains critical in ensuring innovation continues while the rights of individuals are protected. HP truly demonstrates that leadership comes from actions, not words.

MARTIN E. ABRAMS
Senior Policy Advisor and
Executive Director
Centre for Information
Policy Leadership
Hunton & Williams

SOCIETY

PUBLIC POLICY

Communicating our views to national and regional governments and regulators is an important part of business. We aim to make a thoughtful and productive contribution to a broad array of policies that impact the IT sector worldwide. We believe an economy based on innovation is a key to sustainable growth, and that policymakers ought to provide incentives that promote research and development. Our public policy work complies with all applicable laws and our Standards of Business Conduct.

We consider potential impacts on all stakeholders before taking a public policy position, to ensure it does not conflict with our global citizenship objectives. For example, we are increasing business in developing economies through open trade. Yet there is often little infrastructure in these countries to recycle or safely dispose of end-of-life equipment. We work with governments and industry to develop suitable regulations, policies and standards, and adapt our take-back programs to address these countries' needs.

In November 2009, the HP Board of Directors formed a new Public Policy Committee, which assists the Board in fulfilling its responsibilities for generally overseeing HP's policies and processes relating to HP's public policy, government affairs and global citizenship activities. (See Governance and management.)

Policy initiatives in 2009

Our public policy work focuses on the areas summarized below. More detail on these and other areas is available in our global issue briefs (see links in the report online).

INNOVATION AND COMPETITIVENESS

HP must remain innovative and competitive to provide value to our shareholders, and so our technology continues to improve the way people live and work. Our global public policies all support an "innovation economy," and include:

- **INTELLECTUAL PROPERTY RIGHTS** Society is best served by patent systems that encourage knowledge-based economies. HP holds 33,000 patents worldwide and invested approximately $2.8 billion in R&D in 2009. We support prompt action by governments to reform patent systems, to improve patent quality and decrease disruptions to innovation caused by speculative litigation.

- **COMPETITIVENESS** Innovation and sustainable growth strengthen the economy, help companies succeed in the global marketplace, benefit people and improve quality of life. HP supports public policies that enable these benefits, such as favorable tax treatment, appropriate regulation and R&D incentives. In 2009, HP lobbied the U.S. government to implement or preserve tax provisions that enable U.S.-based global companies to remain competitive. We support comprehensive international corporate tax reform, including efforts to close loopholes that lead to inequality, such as tax havens. We are also seeking opportunities to access federal government stimulus spending for recharging the economy. HP executives met with the U.S. chief information officer and chief technology officer during the year.

- **EDUCATION** Technologists, policymakers and educators must collaborate to reduce global inequalities in education. We work with educators to create country-led programs that meet current and future needs. For example, we are working with the Japanese government to develop programs that teach young people to use IT effectively and creatively, to secure the future of the IT industry in the country. (See also Social innovation.)

- **MARKET ACCESS** Sixty-four percent of HP's sales were outside the United States in fiscal year 2009. Open trade is vital to our success and enables us to expand our product and service offerings globally, spurring innovation and economic growth and improving employment opportunities in developed and developing countries alike. We support comprehensive and progressive bilateral and regional trade agreements that include commitments to liberalization and transparency in government procurement, services and standards.

ENVIRONMENT

HP is committed to reducing its own environmental impact, as well as that of its customers, partners and suppliers. We advocate energy-efficient technologies and the concept of individual producer responsibility (IPR) for electronic waste, an approach that makes producers responsible for recycling their own products at the end of their life. HP is also engineering products with reduced energy and materials use through its design for the environment program.

- **CLIMATE CHANGE** Companies, governments and people worldwide must work together to address the challenges climate change poses. Energy efficiency and climate change took priority during 2009, due to the global focus on the United Nations Climate Change Conference in Copenhagen, as well as the development of proposed U.S. climate change legislation. HP advocates the transformation to a low-carbon economy and signed the Copenhagen Communiqué on climate change. We promote the role that IT can play in reducing energy use and support similar activity from others, such as the European Commission's Energy Efficiency Forum. (See Climate and energy – Collaboration.)

- **ENERGY EFFICIENCY** Energy security and costs increasingly affect society and the economy. We work to improve energy efficiency in our products

and operations not only to comply with worldwide legislation, but also because we recognize this as the cleanest, quickest and cheapest way to lower our energy usage costs and that of our customers. We work extensively with governments to help shape product energy-efficiency legislation. (See also Changing the energy equation and Tech gallery.)

- **ELECTRONICS RECYCLING** Rapid improvements in technology lead to frequent replacement of electronics, creating a growing surplus of unwanted equipment. Manufacturers share with governments and customers the responsibility to treat electronic products responsibly at the end of their useful life. We support individual producer responsibility, which holds producers responsible for recycling their products after collection. As well as our recycling programs in developed countries, we run recycling pilots in emerging markets to develop a blueprint for wider recycling. (See Product reuse and recycling – Programs for more details.)

HEALTHCARE

Cumbersome, outdated record keeping makes healthcare inefficient and costly. Applying the full benefits of IT to healthcare systems, underpinned by regulations to protect consumer and patient privacy, will dramatically improve healthcare administration. While HP seeks opportunities to help improve healthcare systems globally, the U.S. system in particular is in need of a fundamental reform to improve access, quality of care, cost control, and overall performance and effectiveness. In 2009, HP executives met with the U.S. chief technology officer at a session on healthcare and IT, where we were able to explain HP's capabilities. (See also Changing the healthcare equation.)

Industry coalitions and association memberships

We often communicate our public policy positions through industry associations. These organizations provide a collective industry voice to reach government officials more efficiently. We list the major associations we belong to on our Government Affairs website.

We also participate in standards bodies and industry coalitions. For example, we are collaborating to develop industry standards for energy efficiency and supply chain responsibility that will improve performance globally and support fair competition.

SOCIETY

Political engagement

Interested employees can participate in public debate through the HP Government Affairs Network. Members of this voluntary network receive regular updates on policy issues of importance to HP. In the United States, we encourage members to express their views on pending legislation to elected officials.

In 2009, HP contributed $1,052,400 to state and local candidates, political memberships/sponsorships, and ballot measure campaigns in the United States. These contributions were consistent with our policy positions, corporate political guidelines and applicable rules and laws.

U.S. law prohibits corporate contributions to federal political candidates. However, eligible employees can make voluntary donations to the HP Political Action Committee (PAC) (and EDS PAC for legacy EDS eligible employees). The HP and EDS PACs are separate legal entities that contribute to bipartisan campaigns

for U.S. congressional candidates who share our policy views. In 2009, the HP and EDS PACs contributed a combined $260,000. HP does not make political contributions outside the United States.

See historical data in our Data and Goals section.

Learn more on our Government Affairs website (see link in the report online):

- Policies for corporate and PAC political contributions

- Criteria and responsibilities for approving political contributions

- List of candidates receiving corporate or PAC contributions in 2009 (excludes HP Enterprise Services)

- List of section 527 organizations[1] receiving contributions from HP in 2009 (excludes HP Enterprise Services)

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[1] The term "527 organization" refers to a U.S. political organization that is not regulated by the Federal Election Commission. These organizations are created under Section 527 of the Internal Revenue Code.

SOCIETY

ECONOMIC IMPACTS

Like all companies, many aspects of HP's day-to-day business affect our stakeholders financially. We have a direct impact through our financial transactions with various groups, such as:

- Suppliers through our purchase of goods and services
- Employees through wages paid
- Customers through sales
- Governments through tax payments
- Communities through social investment
- Investors through dividends and our financial performance

A healthy, efficient business has the financial strength and flexibility to capitalize on opportunities and create value for all these groups.

Our transactions with stakeholders can also indirectly affect individuals and businesses, as well as local and wider economies. As the money we spend circulates through the economy, our activities continue to have an impact. In addition, HP products and services increase productivity, potentially boosting companies' profitability and strengthening the wider economy.

Although financial transactions have been regulated for centuries, there is little guidance for measuring overall economic contribution. We quantify some aspects and describe others more generally. The table outlines our direct and indirect economic impacts on each group. (See also the Data and Goals section and our financial statements.)

HP's economic impacts

GROUP	DIRECT ECONOMIC IMPACTS	INDIRECT ECONOMIC IMPACTS
SUPPLIERS	HP spends money on products, materials, components and services from suppliers around the world.	Our spending creates jobs in supplier companies. Suppliers and their workers pay taxes and support their local economies. Suppliers may also pay dividends to their investors.
EMPLOYEES	Compensation and benefits are a significant proportion of HP's expenses. We invest in training and development, which expands employees' opportunities.	Employees pay taxes and generate further economic activity by spending the money they earn.

(table continued)

SOCIETY

GROUP	DIRECT ECONOMIC IMPACTS	INDIRECT ECONOMIC IMPACTS
CUSTOMERS	HP's net revenue was $114.6 billion in fiscal year 2009.	Offering reliable, high-quality products benefits our customers. Our products and services also improve productivity, which may increase customers' contribution to society through business expansion and increased taxes paid.
LOCAL, STATE AND NATIONAL GOVERNMENTS	Local, state and national governments benefit from taxes paid by HP and our employees.	Taxes paid enable government spending and programs.
LOCAL, REGIONAL AND NATIONAL COMMUNITIES	Social investment ($52.2 million in 2009), support for nongovernmental organizations and employee giving all benefit communities.	These activities in turn support further economic activity by, for example, improving education and therefore employment opportunities.
INVESTORS	Shareholders receive dividends, and the value of their shares may grow. (See the link to chart in Performance.)	Investors may pay taxes on dividends and on stock gains.

The socioeconomic value of IT

The information technology (IT) sector provides more people greater access to more—and better—information than ever before, wherever, however and whenever they need it. This is creating important new ways of providing services for a sustainable society, and has wide-ranging benefits for all. For example:

- Although the IT industry is responsible for about 2 percent of the world's greenhouse gas (GHG) emissions, our products and services also have the potential to help significantly reduce the other 98 percent of emissions. (See Enabling a low-carbon economy.)

- Healthcare administration is often based on outdated, inefficient systems. Bringing the full benefits of IT to these systems will dramatically improve healthcare provision, making it more affordable, improving the quality of care and enabling wider use of advanced technologies.

- Economic prosperity is directly linked to educational opportunity, which many people lack. Technology can make learning far more relevant and exciting to children, extend educational opportunities to more people in more places, and harness the collective intelligence of the brightest thinkers, wherever they are.

- IT improves access to communications, especially in the developing world. This makes it easier to find, use and share valuable information, which can improve health, welfare and economic prosperity.

- IT enables people to work from different locations and join meetings by video or conference calls. This can reduce the cost and environmental impacts of travel and help employees balance their work and personal lives.

- The Internet and mobile technologies support democracy and expression by giving voice to people who could not easily publicize their views and experiences otherwise.

Many of these services require personal data to be entered and transmitted online and stored digitally. This requires robust procedures to keep data secure. Read more about how HP protects customer privacy.

We also consider and work to reduce the energy costs and environmental impacts of the infrastructure required to provide these services. See Climate and energy – Products, services and software use for more information.

SOCIETY

Performance

The Data and Goals section summarizes HP's economic performance. (See our financial statements online for more detail.)

Compared with FY08, HP's revenue decreased by 3 percent in FY09 to $114.6 billion. Non- Generally Accepted Accounting Principles (GAAP) diluted earnings per share (EPS) increased 6 percent to $3.85.[1] On a GAAP basis, diluted EPS decreased 3 percent to $3.14.

HP's interactive stock chart includes information about the company's share performance.

Please visit our annual report and 10K to view HP revenue by business segment and by region.

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[1] Fiscal year 2009 non-GAAP diluted EPS excludes $0.71 per diluted share of adjustments on an after-tax basis related primarily to the amortization of purchased intangible assets, restructuring charges, acquisition-related charges, and in-process research and development charges. HP's management uses non-GAAP EPS to evaluate and forecast HP's performance before gains, losses or other charges that are considered by HP's management to be outside of HP's core business segment operating results. HP believes that presenting non-GAAP diluted EPS, in addition to GAAP diluted EPS, provides investors with greater transparency to the information used by HP's management in its financial and operational decision making. HP further believes that providing this additional non-GAAP information helps investors understand HP's operating performance and evaluate the efficacy of the methodology and information used by management to evaluate and measure such performance. This additional non-GAAP information is not intended to be considered in isolation or as a substitute for GAAP diluted EPS.

DATA AND GOALS

INDEX

Environment

Society

ENVIRONMENT

DATA

Operations[1,2]

	2005	2006	2007	2008	2009
ELECTRICITY USE [million kWh]				3,972	3,653
Americas				2,417	2,187
Europe, Middle East and Africa				879	862
Asia Pacific and Japan				677	604
NATURAL GAS USE [million kWh]				468.7	393.3
Americas				295.7	262.0
Europe, Middle East and Africa				153.2	125.0
Asia Pacific and Japan				19.8	6.3

(table continued)

	2005	2006	2007	2008	2009
ENERGY USE [million kWh]	4,730			4,441	4,046
VOLUNTARY PURCHASES OF RENEWABLE ENERGY [million kWh energy and renewable energy credits, in addition to the renewable energy available by default in the power grid]				101.9	131.0
GREENHOUSE GAS EMISSIONS [tonnes CO_2e]	2,273,800			2,165,500	1,951,000
Americas				1,327,400	1,154,000
Europe, Middle East and Africa				338,800	336,900
Asia Pacific and Japan				499,300	460,100
PFC EMISSIONS [tonnes CO_2e][3]	13,605	15,337	13,489	11,627	3,114
Americas	10,959	12,841	12,921	11,385	3,069
Europe, Middle East and Africa	0	0	0	33	44
Asia Pacific and Japan	2,646	2,497	568	209	0
PFC EMISSIONS [as a % of 1995 emissions]	NA	59%	52%	45%	12%
PFC EMISSIONS, BY TYPE [tonnes CO_2e][3]	13,605	15,337	13,489	11,627	3,114
C_2F_6	NA	5,097	3,808	3,120	1,030
CF_4	NA	6,456	6,395	6,091	1,522
SF_6	NA	2,958	2,559	1,701	346
NF_3	NA	139	153	181	77
CHF_3	NA	545	371	384	110
C_3F_8	NA	112	16	8	0
C_4F_8	NA	29	187	141	29
GHG EMISSIONS FROM HP EMPLOYEE BUSINESS COMMERCIAL AIR TRAVEL [tonnes CO_2e]	279,000	289,000	289,000	320,000	214,000
GHG EMISSIONS FROM HP AIR FLEET [tonnes CO_2e]	NA	NA	14,300	21,600	13,400
GHG EMISSIONS FROM HP AUTO FLEET [tonnes CO_2e]					
United States and Canada	86,600	89,400	87,200	81,900	73,900

(table continued)

DATA AND GOALS

	2005	2006	2007	2008	2009
Europe, Middle East and Africa	70,600	85,400	71,400	85,000	63,700
Asia Pacific and Japan[4]	NA	NA	2,500	2,000	800

[1] Some subtotals may not add up exactly to total due to rounding.

[2] Total energy use and greenhouse gas emissions data for 2005 reflect the reset baseline including EDS and other acquisitions since 2005. All data on this tab for 2008 and 2009 include EDS and all other acquisitions. Revised calculations for 2006 and 2007 were not performed. 2005-2007 data for employee business air travel, air fleet and auto fleet are HP only. EDS data for 2008 have been modified compared to data previously reported to exclude customer-owned and operated facilities.

[3] These data are based on the calendar year.

[4] 2007 value includes data from Hong Kong, Korea, Japan and Taiwan. 2008 value includes data from Japan and Korea.

Product packaging[1]

	2005	2006	2007	2008	2009
PACKAGING PER PRODUCT SOLD GLOBALLY [average grams]	338	326	310	270	304
Paper	290	273	255	228	266
Plastic	48	53	55	42	38
TOTAL WEIGHT OF PACKAGING USED [thousand tonnes]	162	223	224	217	239
Paper	139	187	184	180	205
Plastic	23	36	40	37	34

[1] Does not include data from former EDS operations.

Product reuse and recycling[1]

	2005	2006	2007	2008	2009
TOTAL CUMULATIVE RECYCLING - COMPUTER HARDWARE AND SUPPLIES COMBINED [tonnes]	340,000	420,000	530,000	650,000	760,000
TOTAL ANNUAL RECYCLING - COMPUTER HARDWARE AND SUPPLIES COMBINED [tonnes]	64,000	75,000	113,000	119,000	112,000
TOTAL ANNUAL REUSE OF EQUIPMENT [million pounds, approximate]	50	48	63	75	66
TOTAL REUSE AND RECYCLING COMBINED, BY YEAR [million pounds, approximate]	190	210	313	338	314
NUMBER OF COUNTRIES/REGIONS/ TERRITORIES WITH HP RETURN AND RECYCLING PROGRAMS	42	45	52	53	56
TOTAL RECYCLING, BY REGION [tonnes]					

(table continued)

DATA AND GOALS

	2005	2006	2007	2008	2009
Americas	27,200	29,300	30,200	36,000	37,500
Europe, Middle East and Africa	34,200	41,600	76,500	76,700	69,300
Asia Pacific and Japan	2,200	4,000	6,100	6,700	5,600
TOTAL RECYCLING, BY TYPE [tonnes]					
Hardware	52,000	60,600	95,800	98,600	90,500
HP LaserJet print cartridges[2]	11,100	13,600	15,000	19,000	20,100
HP inkjet print cartridges	440	700	2,000	1,8503	1,800
HP LASERJET PRINT CARTRIDGE RECYCLING					
% of LaserJet market covered by program	87%	88%	88%	90%	90%
Materials recycled into new products	60%	63%	59%	76%	80%
Energy recovery	40%	37%	41%	24%	20%
HP INKJET PRINT CARTRIDGE RECYCLING					
% of inkjet market covered by program	80%	88%	89%	88%	88%
Materials recovered for recycling	56%	60%	53%	59%3	64%
Energy recovery	24%	23%	21%	38%3	31%

[1] Cumulative recycling totals include all hardware and supplies returned to HP for processing; with ultimate dispositions including recycling, energy recovery, and, where no suitable alternatives exist, responsible disposal. Hardware recycling data from Europe, the Middle East and Africa and HP LaserJet recycling data are calendar year. The remaining data is based on the HP fiscal year. 2009 data includes operations formerly a part of EDS. Subtotals may not add up to totals due to rounding.

[2] Includes cartridges returned by customers and cartridges from HP internally. 2008 figure is based on year-end estimate.

[3] When calculating our 2009 performance statistics, we recognized a discrepancy with our 2008 inkjet returns and material recovery efficiency figures. The 2008 figures presented here are more representative.

HP operations[1,2]

	2005	2006	2007	2008	2009
NONHAZARDOUS WASTE [tonnes]	102,567	106,492	89,275	91,832	117,648
Americas	60,358	62,713	52,948	54,237	86,198
Europe, Middle East and Africa	20,365	23,291	20,104	17,204	18,186
Asia Pacific and Japan	21,844	20,488	16,223	20,391	13,264
NONHAZARDOUS WASTE LANDFILL DIVERSION RATE [% of total produced]	87.8%	88.2%	88.4%	91.3%	88.8%
Americas	89.8%	88.2%	87.3%	90.9%	89.8%
Europe, Middle East and Africa	82.2%	87.4%	90.6%	90.6%	85.3%

DATA AND GOALS

	2005	2006	2007	2008	2009
Asia Pacific and Japan	87.3%	89.3%	89.4%	93.0%	88.7%
GLOBAL NONHAZARDOUS WASTE COMPOSITION, 2009					
HAZARDOUS WASTE [tonnes]	7,001	8,638	8,826	10,479	6,828
Americas	2,159	2,192	2,356	3,379	2,470
Europe, Middle East and Africa	1,474	1,824	1,593	2,084	1,737
Asia Pacific and Japan	3,368	4,622	4,877	5,016	2,621
GLOBAL HAZARDOUS WASTE COMPOSITION, 2009					
OZONE DEPLETION POTENTIAL OF ESTIMATED EMISSIONS [kg of CFC-11 equivalent]	4,358	3,935	6,690	4,543	4,407
Americas	4,280	3,850	2,886	2,776	3,573
Europe, Middle East and Africa	55	30	25	32	70
Asia Pacific and Japan	23	55	3,778	1,735	764
WATER CONSUMPTION [million liters]	8,136	8,358	7,359	7,225	7,647
Americas	4,550	5,044	4,518	4,297	4,615
Europe, Middle East and Africa	1,308	969	713	831	1,001
Asia Pacific and Japan	2,278	2,345	2,128	2,096	2,031
DISPOSITION BY TYPE OF TRI MATERIAL [tonnes] (See Emissions section)					

[1] Some subtotals may not add up exactly to total due to rounding.

[2] Data for 2009 include sites gained through the acquisition of EDS in 2008. Data prior to 2009 are HP only.

GOALS

Operations

YEAR	GOAL
2012	Double voluntary purchases of renewable energy to 8 percent by 2012 (in addition to the renewable energy available by default in the power grid).
2013	HP will reduce the greenhouse gas emissions from HP-owned and HP-leased facilities by 20 percent under 2005 levels by the end of 2013 on an absolute basis.[1]

[1] This goal is independent of organic business growth and will be accomplished by reducing the worldwide energy footprint of HP facilities and data centers, investing in energy efficiency, and switching to renewable energy sources. This goal replaces our previous goal to reduce energy consumption and the resulting GHG emissions from HP-owned and HP-leased facilities worldwide to 16 percent below 2005, by 2010. We had already decreased the energy used in HP operations by more than 9 percent through 2008, so following the acquisition of EDS, we set an interim target to reduce energy consumption in our facilities by 7 percent (the remaining percentage in the goal) below 2008 levels by the end of 2010. We decreased energy consumption 9 percent in 2009 compared with 2008, capitalizing on opportunities for real estate consolidation and energy efficiency due to the acquisition. We are working to ensure we maintain these gains through 2010. HP uses the guidelines set forth in the GHG Protocol (www.ghgprotocol.org) to inventory corporate emissions.

DATA AND GOALS

Product manufacturing

YEAR	GOAL
2009	Work with first-tier suppliers to approach their suppliers about greenhouse gas (GHG) emissions reporting. **PROGRESS:** Suppliers representing 29 percent of HP's material and manufacturing spend estimated their suppliers' emissions.
	Report aggregated GHG emissions from HP's largest first- and second-tier suppliers. **PROGRESS:** HP's aggregated emissions from suppliers representing 86 percent of our material and manufacturing spend were 4.1 million metric tonnes of CO_2e.
	For those suppliers reporting GHG emissions, establish multi-year goals for supplier renewable energy use and reduction of GHG emissions. **PROGRESS:** Approximately two-thirds of suppliers reporting emissions to HP had established GHG reduction goals, which varied in size and timing. Typical reduction goals were 3 to 4 percent per year.
	Collaborate with the Electronic Industry Citizenship Coalition (EICC) to launch an online supply chain GHG emissions reporting system that would enable consistent calculation of emissions based on factory energy use data. **PROGRESS:** Achieved.
2010	Report aggregated GHG emissions from HP's largest first- and second-tier suppliers representing more than 85 percent of first-tier and 40 percent of our second-tier material and manufacturing spend.
	Report supplier GHG emissions reduction progress in year-over-year comparison.
	Co-lead the environmental sustainability work group of the EICC to increase adoption and use of the EICC supply chain GHG emissions reporting system.

Product transport

YEAR	GOAL
2009	Increase use of rail in North America to 30 percent for our Southern California resellers for imaging and printing products, up from 21 percent in 2008. **PROGRESS:** Despite a decrease in large orders that easily convert from truck to rail shipments, we increased our use of rail in this area to 26 percent.
	Increase use of rail in Europe, Middle East and Africa region by 15 percent. **PROGRESS:** Achieved a 19 percent use of rail with the majority of truck to rail conversions occurring in the inbound lanes.
	Extend the SmartWay approach to other regions outside of North America. **PROGRESS:** HP is collaborating with the U.S. Environmental Protection Agency SmartWay team and other governmental organizations in the European Union and Asia Pacific to extend SmartWay initiatives to those regions in 2010.
2013	Reduce CO_2e emissions from product transport by 180,000 tonnes compared with 2008, through network enhancements, mode changes and route optimization across our global supply chain.

DATA AND GOALS

Product use

YEAR	GOAL
2011	HP will reduce the energy consumption of HP products[1] and associated greenhouse gas (GHG) emissions to 40 percent below 2005 levels by the end of 2011. This replaces the 2010 goal to reduce combined energy consumption and associated GHG emissions of HP operations and products to 25 percent below 2005 levels by 2010, which HP has already met.
	Representative product categories have their own goals, including the following goals for HP's high-volume printer, and desktop and notebook PC families: • By 2011, HP will improve the overall energy efficiency of HP ink and laser printing products by 40 percent, relative to 2005.[2] • By 2011, HP will save customers 1 billion kWh of electricity through a variety of product design strategies in HP's high-volume HP desktop and notebook PC families, relative to 2008.[3]

[1] The average energy consumption of HP products is estimated using high-volume product lines representative of the overall shipped product volume. Energy consumption has been estimated in 2005 and annually since. The high-volume product lines include notebook and desktop computers, inkjet and LaserJet printers, and industry-standard servers.

[2] Efficiency is defined in terms of kWh (using the Total Electricity Consumption Method/pages per minute). These families represent more than 32 percent of inkjet printers and more than 45 percent of LaserJet printers shipped in 2005. HP updated this goal from the goal included in the FY07 Global Citizenship Report, which targeted a 30 percent improvement in energy efficiency by 2010, relative to 2005.

[3] Energy savings calculated by comparing average 2008 product ENERGY STAR® TEC (total energy consumption) value to average 2011 product ENERGY STAR TEC value multiplied over 2005 volume.

Materials

YEAR	GOAL
2010	Remove all mercury from HP's entire notebook line by the end of 2010. **PROGRESS:** At the end of 2009, 64 percent of notebook platforms were free of mercury.
	Triple the amount of recycled materials used in our inkjet printers, relative to 2007. **PROGRESS:** We met this goal in 2009 and introduced a new goal for 2011 (see below).
2011	As technologically feasible alternatives become readily available that will not compromise product performance or quality, and that will not adversely impact health or the environment, we will complete the phase-out of BFR and PVC in newly introduced personal computing products in 2011.[1] **PROGRESS:** HP has introduced several new computing products this year that are BFR/PVC-free.[1]
	Use a total of 100 million pounds (45,000 tonnes), cumulatively from 2007, of recycled plastic in HP printing products.
	Apply the European Union (EU) Restriction of Hazardous Substances (RoHS) 2 substance and exemption requirements voluntarily outside the EU (and European Free Trade Association) on a worldwide basis within 6 months of each of the EU's various legal compliance dates for virtually all HP branded products in the scope of EU RoHS 2, except where it is widely recognized that there is no technically feasible alternative (as indicated by an exemption under the EU RoHS Directive).

(table continued)

YEAR	GOAL
2012	Remove bis (2-ethylhexyl) phthalate (DEHP), dibutyl phthalate (DBP) and butyl benzyl phthalate (BBP) from HP products.

[1] Meeting the evolving definition of 'BFR/PVC-free' as set forth in the "iNEMI Position Statement on the 'Definition of Low-Halogen' Electronics '(BFR/CFR/PVC-Free)'." Plastic parts contain < 1000 ppm (0.1%) of bromine [if the Br source is from BFRs] and < 1000 ppm (0.1%) of chlorine [if the Cl source is from CFRs or PVC or PVC copolymers]. All printed circuit board (PCB) and substrate laminates contain bromine/chlorine total < 1500 ppm (.15%) with a maximum chlorine of 900 ppm (.09%) and maximum bromine being 900 ppm (.09%).

Paper

YEAR	GOAL
2009	100 percent of HP's consumer photo paper will derive from sustainable-forest certified suppliers in 2009. **PROGRESS:** Achieved.
	Deploy HP's paper policy in the assessment of HP's paper product supply chain. **PROGRESS:** We have assessed the major suppliers of HP branded papers that constitute 99 percent by volume of the paper we sell.
2011	40 percent or more of HP-branded paper sold will be Forest Stewardship Council-certified or have more than 30 percent post-consumer waste content by the end of 2011.

Product reuse and recycling

YEAR	GOAL
2009	Integrate EDS reuse and recycling volume using HP standards. **PROGRESS:** EDS reuse and recycling volume is included in HP reporting for 2009. HP reuse and recycling standards are fully applicable to all HP organizations, now including EDS.
	Conduct 55 on-site vendor audits against HP reuse and recycling standards. **PROGRESS:** Our third-party auditors assessed 17 reuse and 34 recycling vendor sites in 24 countries.
2010	Recycle 2 billion pounds (900,000 tonnes) of electronic products and supplies by the end of 2010 (since 1987).
	Reuse 450 million pounds (200,000 tonnes) of electronic products by the end of 2010 (since 2003). **PROGRESS:** A total of 1.68 billion pounds of electronic products and supplies has been recycled, and a total of 345 million pounds has been reused. In sum, more than 2 billion pounds have been recovered.

HP operations

YEAR	GOAL
2009	Continue to divert at least 87 percent of solid (nonhazardous) waste from landfill globally through the end of 2009. **PROGRESS:** Achieved a diversion rate of 88.8 percent.
2010	Reduce water consumption by 5 percent, compared with 2007.[1]
	Continue to divert at least 87 percent of solid (nonhazardous) waste from landfill globally through the end of 2010.

[1] To take into account the integration of EDS sites after the acquisition in 2008, we are in the process of revising our water goal and are establishing a new baseline from which to measure our performance. The new goal will replace this goal.

SOCIETY

DATA

Supply chain responsibility

	2005	2006	2007	2008	2009
SUPPLIERS ENGAGED [total, cumulative][1]	451	543	601	631	716
AUDITS CONDUCTED [total including re-audits, cumulative] (detailed audit results online)	85	211	354	486	590
AUDIT FINDINGS (See Supply chain responsibility—Audit findings section)					

[1] Updates compared to data reported last year are due to changes in HP's supplier base.

Supplier diversity

	2005	2006	2007	2008	2009
PURCHASING RESULTS [million $U.S.][1,2,3]	451	543	601	631	716
TOTAL SMALL BUSINESSES [million $U.S.]	$3,011	$3,510	$3,106	$3,365	$3,691
MINORITY-OWNED SMALL BUSINESSES [million $U.S.]	$1,052	$1,150	$670	$842	$807
WOMEN-OWNED SMALL BUSINESSES [million $U.S.]	$407	$380	$440	$476	$534

[1] All figures are for U.S. purchases from U.S.-based businesses.
[2] Data is for the 12-month period ending September 30 of the year noted.
[3] 2009 data include HP Enterprise Services (formerly EDS) spending. Data prior to 2009 do not.

Diversity

	2005	2006	2007	2008	2009
NUMBER OF EMPLOYEES [approximate]	150,000	156,000	172,000	321,000	304,000[1]
WORLDWIDE WORKFORCE DEMOGRAPHICS [women as a % of total employees][2]					
Worldwide-employees	29.9%	29.9%	30.0%	30.1%	32.9%
Americas	31.8%	31.4%	31.0%	30.8%	35.0%
Europe, Middle East and Africa	27.4%	27.7%	28.4%	28.1%	30.0%
Asia Pacific and Japan	29.6%	29.6%	30.0%	30.9%	32.5%
Worldwide-managers	21.7%	21.7%	21.5%	22.0%	24.3%
Americas	26.6%	26.0%	25.3%	25.2%	28.3%
Europe, Middle East and Africa	16.5%	17.0%	17.6%	18.5%	20.0%
Asia Pacific and Japan	18.3%	18.4%	18.6%	20.2%	21.2%
GLOBAL NEW HIRES [% of total][2,3]					
Female	32.2%	31.9%	31.8%	34.9%	35.6%
Male	67.8%	68.1%	68.2%	65.1%	64.4%
U.S. WORKFORCE DEMOGRAPHICS (See HP employees—Diversity section for detailed data)					
U.S. NEW HIRES [% of total]					
White	62.5%	69.8%	69.0%	67.2%	65.0%
All minorities	25.6%	28.4%	30.1%	32.4%	34.5%
Black	5.5%	6.1%	6.8%	8.1%	11.2%
Hispanic	6.1%	6.4%	6.3%	6.9%	7.1%
Asian	13.7%	15.6%	16.5%	15.7%	12.5%
Native American	0.3%	0.3%	0.5%	0.6%	0.7%

[1] As of October 31, 2009.

[2] 2009 data excludes Brazil.

[3] 2009 data reflects the time period 1/01/09–11/30/09.

Health, safety & wellness

	2005	2006	2007	2008	2009
LOST WORKDAY CASE RATE [global rate][1]	0.11	0.13	0.10	0.07	0.08
Americas[2]	0.19	0.16	0.16	0.13	0.17
Europe, Middle East and Africa[3]	0.08	0.20	0.14	0.08	0.04
Asia Pacific and Japan[4]	0.02	0.03	0.01	0.01	0.01
RECORDABLE INCIDENT RATE [global rate][5]	NA	NA	0.38	0.31	0.30
Americas[6]	NA	NA	0.75	0.66	0.57
Europe, Middle East and Africa[7]	NA	NA	0.30	0.25	0.29
Asia Pacific and Japan[8]	NA	NA	0.04	0.05	0.03

[1] Lost workday case rate is the number of work-related injuries that result in time away from work per 100 employees working a full year.
[2] Includes data from Canada, Columbia, Puerto Rico and the United States.
[3] Includes data from Austria, Germany, Israel, Italy, Spain and the United Kingdom.
[4] Includes data from Australia, India and Singapore.
[5] Recordable incident rate is the number of lost-time and no-lost-time cases requiring more than first aid per 100 employees working a full year.
[6] Includes data from Canada, Puerto Rico and the United States.
[7] Includes data from Belgium, France, Germany, Ireland, Israel, Italy, Poland, Spain and the United Kingdom.
[8] Includes data from Australia, Japan and Singapore.

Social innovation

	2005	2006	2007	2008	2009
SOCIAL INVESTMENTS, TOTAL [million $U.S.][1]	$45.3	$45.6	$47.1	$46.2[2]	$52.2
% OF PRE-TAX PROFITS[1]	1.3%	0.63%	0.51%	0.44%	0.55%
SOCIAL INVESTMENTS, BY TYPE [million $U.S.][1]					
Cash [million $U.S.]	$18.0	$17.5	$20.6	$18.6	$17.2
Products and services [million $U.S.][3]	$27.3	$28.1	$26.5	$27.5	$35.0
SOCIAL INVESTMENTS, BY REGION [million $U.S.][1,4]					
United States	NA	$34.9	$30.3	$25.8	$26.1
Americas (not including the United States)	NA	$2.9	$5.0	$4.0	$4.5
Europe, Middle East and Africa	NA	$5.5	$7.2	$6.6	$6.8
Asia Pacific and Japan	NA	$2.3	$4.5	$4.6	$6.0
EMPLOYEE GIVING IN THE UNITED STATES					
EMPLOYEES PARTICIPATING IN HP U.S. EMPLOYEE GIVING PROGRAM	NA	NA	5,700	6,700	5,384

(table continued)

DATA AND GOALS

	2005	2006	2007	2008	2009
TOTAL VALUE OF CASH AND PRODUCTS DONATED INCLUDING HP AND HEWLETT-PACKARD COMPANY FOUNDATION MATCHED FUNDS [million $U.S][5]	NA	NA	$13.4	$12.8	$11.3
Value of cash donated by U.S. employees [million $U.S]	NA	NA	$3.0	$3.6	$3.4
Value of cash from Hewlett-Packard Company Foundation matched funds [million $U.S]	NA	NA	$2.0	$3.0	$2.3
Value of products donated by U.S. employees [million $U.S][3]	NA	NA	$1.9	$1.5	$1.4
Value of products from HP matched funds [million $U.S][3]	NA	NA	$6.5	$4.7	$4.2

[1] Data excludes contributions to the HP Company Foundation and employee donations but includes HP's match contributions.

[2] Due to rounding of this total, the sum of the constituent parts of this figure listed under the types of investments below does not match this figure.

[3] Product donations are valued at the Internet list price. This is the price a customer would have paid to purchase the equipment through the HP direct sales channel on the Internet at the time the grant was processed.

[4] Regional numbers represent corporate global social investments and exclude contributions by business groups.

[5] Hewlett-Packard Company Foundation cash matching began in 2007.

Public policy

	2005	2006	2007	2008	2009
CONTRIBUTIONS TO U.S. STATE CANDIDATES AND BALLOT MEASURE CAMPAIGNS [$U.S.][1]	$126,589	$731,440	$888,416	$1,035,650	$1,052,400
HP POLITICAL ACTION COMMITTEE CONTRIBUTIONS [$U.S.]	85	211	354	486	590

[1] Local, state or city campaigns.

[2] Reflects combined HP Political Action Committee and EDS Political Action Committee contributions.

Economic impacts

	2007	2008	2009
NET REVENUE [million $U.S.]	$104,286	$118,364	$114,552
NET INVESTMENT IN PROPERTY, PLANT AND EQUIPMENT [million $U.S.]	$2,472	$2,565	$3,200
RESEARCH AND DEVELOPMENT SPENDING [million $U.S.]	$3,611	$3,543	$2,819
NUMBER OF PATENTS (TOTAL)	31,000	32,000	33,000
401(K) EXPENSE [million $U.S.][1]	$481	$548	$568
PENSION AND OTHER POST-RETIREMENT FUNDING [million $U.S.]	$315	$251	$569

(table continued)

DATA AND GOALS

	2007	2008	2009
EMPLOYEES WITH STOCK-BASED AWARDS	99,000	109,000	91,000
ADVERTISING COST [million $U.S.]	$1,100	$1,000	$700
TAX PROVISION (BENEFIT) (U.S. FEDERAL) [million $U.S.]	$868	$1,091	$1,003
TAX PROVISION (NON-U.S.) [million $U.S.]	$1,156	$837	$800
STATE PROVISION (BENEFIT) [million $U.S.]	($111)	$216	($48)
CASH TAXES PAID FOR INCOME TAXES [million $U.S.]	$956	$1,136	$643
CASH DIVIDENDS DECLARED PER SHARE	$0.32	$0.32	$0.32
TOTAL DIVIDEND PAYMENTS [million $U.S.]	$846	$796	$766
SHARE REPURCHASES	$10,887	$9,620	$5,140

[1] HP match and expenses for employee 401(k) retirement accounts.

GOALS

Ethics and compliance

YEAR	GOAL
2009	Deploy targeted compliance training around practices, policies and processes. **PROGRESS:** Our Lessons Learned training targeted senior managers. Our Integrity Minutes video series and Leaders on Ethics videos provided training on specific practices for the broader workforce. In addition, we conducted country- and organization-specific training on subjects identified as potential risks to the company.
	Fully integrate EDS into HP's Standards of Business Conduct (SBC). **PROGRESS:** Operations in the majority of countries had transitioned to HP's SBC by February 2009, and 94 percent of HP Enterprise Services (EDS) employees completed HP's SBC training. However, operations in six countries had not yet transitioned by the end of 2009, and efforts continue to complete the integration.
	Reduce the number of SBC investigations closed with substantive findings. **PROGRESS:** The total number of SBC investigations closed with substantive findings did not decrease, mainly due to the large increase in employee numbers following the acquisition of EDS. However, we did reduce the proportion of cases closed with substance per employee.
	Decrease cycle time for investigation of SBC cases. **PROGRESS:** We did not achieve this goal due to the challenges of integrating 140,000 new employees into our ethics and compliance culture following the acquisition of EDS, as well as addressing new ethics risks and cases relating to the expanded services business.
	Drive newly created compliance standards to minimize HP's compliance risk. **PROGRESS:** We assessed HP's numerous compliance functions based on these standards.

(table continued)

YEAR	GOAL
2010	Aggressively manage top legal risk areas by continually monitoring, prioritizing and escalating identified issues.
	Continually improve the effectiveness of ethics and compliance initiatives through frequent, engaging, and quality training and communications.
	Increase the speed and efficiency of ethics and compliance investigative processes.

Supply chain responsibility

YEAR	GOAL
2009	Develop supplier training program for fire preparedness.
	P**ROGRESS:** Complete.
	Reduce fire hazards by increasing emergency preparedness of ten suppliers.
	PROGRESS: 48 suppliers participated.
	Roll out Health Enables Returns project in China.
	PROGRESS: Two suppliers in China are participating.
2009 (cont'd.)	Expand supply chain social and environmental responsibility (SER) program beyond production suppliers to engage and assess 50 high-priority nonproduction suppliers.
	PROGRESS: 55 nonproduction suppliers have been engaged through signed SER agreements and completed SER assessments. Corrective action plans with these suppliers are in development.
	Pilot SER key performance indicators with five suppliers.
	PROGRESS: Six suppliers have participated in our working hours key performance indicators pilot in China.
2010	Suppliers representing 30 percent of high-risk production spend have implemented an effective process to ensure that their suppliers are implementing the Electronic Industry Code of Conduct.
	Suppliers representing 25 percent of high-risk production spend will report on key performance indicators.
	Extend the program for suppliers of strategic and high-risk nonproduction services from assessment to initial validation.
	Extend supplier capability-building programs to address more key risk areas and major geographies.
	Establish migrant labor guidelines to share with suppliers in Southeast Asia, Eastern Europe and Latin America.
	Pilot conflict minerals tracing study for select computing product parts.
2012	Suppliers representing 75 percent of high-risk production spend will report on key performance indicators.
	Develop supply chain SER programs that HP suppliers representing 75 percent of high-risk production spend will use with their suppliers.

DATA AND GOALS

Supplier diversity

YEAR	GOAL
2009	Expand the HP Mentor-Protégé Supplier Diversity Program through the addition of three suppliers. **PROGRESS:** Achieved.
	Determine baseline second-tier spend with an initial 100 suppliers, and set targets for future years. **PROGRESS:** Achieved.
	Continue to grow the program outside of the United States with initial diverse supplier events in Asia. **PROGRESS:** Achieved. HP reported on spending in Canada, determined baseline minority-owned supplier expenditure in the UK, and became a corporate member of WEConnect International.

Diversity

YEAR	GOAL
2009	Achieve 30 percent female participation in our employee leadership development programs. **PROGRESS:** We exceeded this participation rate goal.
	Achieve 20 percent nonwhite participation in our employee leadership development programs in the United States, with a particular focus on Latinos and African Americans. **PROGRESS:** We exceeded this participation rate goal.
2010	Continue to achieve 30 percent female participation in our employee leadership development programs.
	Continue to achieve 20 percent nonwhite participation in our employee leadership development programs in the United States.

DATA AND GOALS

People Development

YEAR	GOAL
2009	Increase participation in Key Talent @hp programs to more than 300 employees. **PROGRESS:** Standard director-level and vice president–level Key Talent programs were canceled during 2009 to better manage expenses during the global recession. However, 286 managers and individual contributors attended a locally delivered program called Key Talent @hp for Managers and Individual Contributors.
	Design and execute locally driven Key Talent programs (in addition to the centrally driven Key Talent programs). **PROGRESS:** Although the centrally driven Key Talent programs were canceled for 2009, HP held nine locally driven events around the world, reaching a total of 286 high-potential learners.
	Launch a Key Talent alumni network. **PROGRESS:** This program was launched and has been well received. Network membership now numbers more than 550 Key Talent alumni.
	Reach 6,000 managers (20 percent of the total HP manager population) in the Leading for Results II Program. **PROGRESS:** This program was deferred for 2009, but will be reinstated in 2010.
	Achieve an 85 percent overall satisfaction score in the New Manager Excellence @hp program. **PROGRESS:** Scores have consistently been above 85 percent in terms of overall satisfaction by the managers who participated.
	Achieve a 90 percent completion rate for new hires taking the New HP Employee Onboarding Program, and achieve an average score of 85 percent for relevance and quality in post-program surveys. **PROGRESS:** HP has been committed to achieving this goal; however, we have been unable to collect completion data to accurately report on our progress in 2009.
2009 (cont'd.)	Receive two external awards for specific initiatives or overall leadership development efforts. **PROGRESS:** HP was recognized by the Hay Group as being one of the top companies in the world for leaders (#9) and received two awards from the American Society for Training and Development for the creativity and effectiveness of its leadership development programs.

DATA AND GOALS

Privacy

YEAR	GOAL
2009	Shape the global privacy landscape through external influence and leadership.
	• Take a leadership role in the APEC privacy framework.
	PROGRESS: HP tested a draft self-assessment questionnaire for companies to use in APEC's cross-border approach.
	• Take a leadership role in the Article 29 Working Party framework for Binding Corporate Rules.
	PROGRESS: This work continued in 2009.
	Advance the accountability model framework.
	• Engage external stakeholders in reviewing the Accountability Decision Tool.
	PROGRESS: HP met with regulators in Canada, France, Ireland and the United States to explain the accountability approach.
	Expand the reach and effectiveness of HP's internal privacy governance.
	• Extend the Privacy and Data Protection Board membership.
	PROGRESS: We extended board membership to all regions in 2009.
	• Continue assessing top privacy issues in the Privacy and Data Protection Board and deploy projects to address gaps in those areas.
	PROGRESS: As a result of the board's work, all company laptops are required to have full-disk encryption to mitigate the risk of personal data being compromised due to theft or loss of the laptop.
	Improve operational efficiencies to meet growing demands.
	• Improve HP's ability to assess issues, monitor compliance and perform formal audits for privacy.
	PROGRESS: Our privacy team worked closely with Internal Audit and the Ethics and Compliance Office to test new approaches to risk assessment, mitigation, monitoring and compliance.
2010	Shape the global privacy landscape through external influence and leadership.
	• Maintain a leadership role in the Asia-Pacific Economic Cooperation forum.
	• Enhance direct relationships with nongovernmental organizations and key regulators.
	Advance our ability to demonstrate accountability in our business practices.
	• Deploy the internal accountability tool.
	• Certify for Binding Corporate Rules (BCRs) in the European Union.

DATA AND GOALS

Social innovation

YEAR	GOAL
2009	Launch more than 130 HP Innovations in Education grant-supported projects worldwide that showcase the future of learning. **PROGRESS:** HP launched 153 projects in 28 countries.
	In Asia Pacific and Japan, award ten new grants and reinvest in 16 previous grant recipients through the HP Microenterprise Development Program. **PROGRESS:** HP made 24 grants, three of which were awarded to establish new centers.
	Expand the HP Responsible Business Competition to ten countries in the Americas. **PROGRESS:** Introduced in eight countries: Argentina, Brazil, Chile, Colombia, Costa Rica, Mexico, Peru and United States.
	Integrate EDS employees in ongoing volunteer efforts, and leverage best practices from EDS to recognize and support global volunteerism. **PROGRESS:** Launched HP Global Volunteer Days in Fall 2009, leveraging the best practices of the EDS Global Volunteer Day and HP Volunteer Days.
	Educate and facilitate global employee base on strategic volunteer opportunities (e.g., Junior Achievement). **PROGRESS:** More than 4,500 HP employees donated almost 52,000 hours of expertise to volunteer projects in local communities in 2009. For example, 281 employees volunteered globally for the HP Responsible Business Competition in partnership with Junior Achievement.
	Ensure consistency in matching funds commitment from the Hewlett-Packard Company Foundation for U.S. employee cash giving program. **PROGRESS:** Hewlett-Packard Company Foundation continued its commitment to match U.S. employee contributions during the charitable giving campaign.
2010	Drive structural, systemic improvements in health access and delivery that will have a significant and sustainable impact.
	Drive IT transformation on a national level with the ministries of health in emerging markets to fundamentally improve the efficiency and effectiveness of health delivery.
	Improve access and delivery of health services by accelerating the implementation of e-Health to underserved communities.
	Launch new award initiative to recognize global pioneers in education innovations.
	Launch a new catalyst grant program to support collaborative ventures in science, technology, engineering and mathematics (STEM) education in collaboration with other thought leaders in education.
	Work with partner organizations to reach 500,000 students globally through HP entrepreneurship training programs by the end of 2010.[1] **PROGRESS:** Since the launch of GET-IT and HELP in 2007, the program has reached more than 100,000 young people through blended online and on-site training courses.
	Increase skilled volunteerism related to professional services (e.g., programs such as the HP legal pro bono program).

(table continued)

DATA AND GOALS

YEAR	GOAL
2010 (cont'd.)	Increase employee use of VolunteerMatch for purposes of tracking and reporting volunteer hours.
	Invite newly integrated EDS employees to participate in the HP cash matching program.
	Develop a detailed disaster response strategy including plans for how technology can better help relief workers.

[1] Former HP entrepreneurship education initiatives GET-IT (Europe, Middle East and Africa) and HELP (Asia Pacific and Japan) are merged underneath one program umbrella in 2010 to meet one global objective.

DATA AND GOALS

ABOUT THIS REPORT

HP's comprehensive global citizenship website (www.hp.com/go/globalcitizenship) describes the company's global citizenship policies and programs, as well as our performance through the 2009 fiscal year (ended October 31, 2009). It is our primary communication to people who want in-depth information about our global citizenship efforts and progress. Our audience includes customers, industry analysts, socially responsible investors, nongovernmental organizations, employees and corporate responsibility specialists.

This PDF includes the sections of our website that form our Global Citizenship Report 2009. This is HP's ninth annual Global Citizenship Report. Previous reports are available from the Downloads page.

We also produced a shorter print and PDF version that illustrates how our global citizenship efforts create value for enterprise customers, with relevant links to our website.

Our global citizenship website has five main sections, as this graphic illustrates:

COMMITMENT	GLOBAL ISSUES	ENVIRONMENT	SOCIETY
Letter from CEO Mark Hurd	Information explosion	Environmental sustainability	Social innovation
HP profile	Energy	Climate and energy	Ethics and compliance
Global citizenship strategy	Healthcare	Sustainable design	Supply chain responsibility
Stakeholder engagement	Education	Supply chain responsibility	Human rights
Customers	Supply chain	Product reuse and recycling	HP employees
Investors		HP operations	Privacy
Timeline		Tech gallery	Public policy
Policies		Eco Solutions	Economic impacts
About this site		Eco labels	
		Material safety data sheets	

TAKE ACTION

- Recycle
- Calculate your carbon footprint
- Report ethics concerns
- Feedback

We update our global citizenship website based on changes to our business, emerging issues, stakeholder feedback, external standards such as the Global Reporting Initiative, benchmarking of industry reports and assessment of reporting trends.

Reference pages

See the following reference pages online for quick access to commonly requested information:

- Assurance
- Awards
- Data and Goals section
- Goals dashboard
- Perspectives summary
- Policies
- Tech gallery
- Site map

Scope, dates and measures

- The information in this report covers all HP operations but does not cover joint ventures.

- Performance data in this report include sites gained through the acquisition of EDS in 2008, unless otherwise stated.

- All references to years are to HP's fiscal year, which ends October 31, unless otherwise stated.

- All references to dollars are to U.S. dollars.

- "Tonnes" refers to metric tonnes. (One metric tonne is equivalent to 2,205 pounds.)

Metrics and goals

The metrics and goals in this report are established by the HP teams responsible for measuring and achieving them, in consultation with internal, and in some cases external, stakeholders, and with reference to leadership practices. This ensures our metrics provide a

meaningful and balanced picture of our performance, and that our goals are realistic yet challenging.

A global company of HP's size faces various challenges when measuring its performance. Data collection from hundreds of sites is complex, and it takes time to standardize new measures globally. This can make it difficult to find and implement measures appropriate for the whole company. We continue to work on standardizing our measurement systems and metrics.

Another challenge is to report performance beyond our immediate operations. For example, we must make assumptions when estimating the energy consumed by products during their use and the resulting greenhouse gas emissions, or the percentage of HP products sold that are recycled.

Wherever possible, we describe the context for performance data so readers can understand any limitations and draw appropriate conclusions.

Your feedback

We welcome and take stakeholder feedback seriously, positive or critical, and consider it when reviewing policy and strategy and reporting our performance. We invite all readers to provide feedback on this report and our global citizenship activities using our online form.

ASSURANCE

We realize that many readers seek assurance that the information we provide represents an accurate and complete reflection of our performance. Our approach combines external verification of selected content, other forms of external review and assessment by HP's internal audit group.

External verification

We provide external verification for information in two focus areas:

- **GREENHOUSE GAS (GHG) EMISSIONS.** In addition to our internal review, we commission independent auditor Bureau Veritas Certification to verify our GHG emissions measurements and annual reporting under the GHG measurement and reporting protocols of the World Resources Institute and World Economic Forum (WEF). Bureau Veritas Certification also verified the approach and calculation of our 2008 California GHG emissions using the protocols from the California Climate Action Registry.[1] See details regarding the CCAR verification of our 2008 data online. We will commission a review of our 2009 GHG emissions data as well. (See Reporting and verification.)

- **PRODUCT REUSE AND RECYCLING.** In 2009, we continued our program of auditing product reuse and recycling vendors. Our third-party auditors, Environmental Resources Management (ERM), assessed 17 reuse and 34 recycling vendor sites in 24 countries. (See Vendor audits.)

Other external reviews

As part of HP's global ISO 14001 and site OHSAS 18001 registrations, we utilize independent, accredited auditors Bureau Veritas Certification and BSi Management Systems. In addition, qualified professionals conduct internal audits of the environmental, health and safety management systems at our larger operations, and we report the results to senior management.

Internal audit

HP Internal Audit focuses primarily on financial processes and associated controls. However, compliance and ethics, privacy, and environment, health and safety may be evaluated, depending on the nature of the operation being audited.

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[1] Because of the timing required for the verification process, the data verified lags the report year by one year.

GRI INDEX

We considered the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines (G3) when preparing this report. HP self-declares this report to GRI Application Level B, as stated in the table below.

GRI GUIDELINES APPLICATION LEVEL		C	B	A
Self-declared			X	

KEY	
■	Full coverage
⊟	Partial coverage
☐	No coverage

GRI GUIDELINE		COVERAGE	LOCATION WITHIN REPORT (pages without numbers are available in the report online)
VISION AND STRATEGY			
1.1	Statement from the most senior decision-maker of the organization about the relevance of sustainability to the organization and its strategy.	■	"Letter from CEO Mark Hurd" on page 4
1.2	Description of key impacts, risks, and opportunities.	■	"Global citizenship strategy" on page 7 "Stakeholder engagement" on page 11 Performance and challenges are described throughout the report
ORGANIZATIONAL PROFILE			
2.1	Name of the organization.	■	"HP profile" on page 5
2.2	Primary brands, products, and/or services.	■	"HP profile" on page 5
2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures.	⊟	"HP profile" on page 5
2.4	Location of organization's headquarters.	■	"HP profile" on page 5
2.5	Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report.	■	"HP operations" on page 87
2.6	Nature of ownership and legal form.	■	"HP profile" on page 5
2.7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).	■	"HP profile" on page 5

(table continued)

ABOUT THIS REPORT

GRI GUIDELINE		COVERAGE	LOCATION WITHIN REPORT (pages without numbers are available in the report online)
2.8	Scale of the reporting organization.	◱	"HP profile" on page 5
2.9	Significant changes during the reporting period regarding size, structure, or ownership.	◱	"About this report" on page 218 "HP operations" on page 87
2.10	Awards received in the reporting period.	■	News and awards
REPORT PARAMETERS			
3.1	Reporting period (e.g., fiscal/calendar year) for information provided.	■	"About this report" on page 218
3.2	Date of most recent previous report (if any).	■	Downloads
3.3	Reporting cycle (annual, biennial, etc.).	◱	"About this report" on page 218
3.4	Contact point for questions regarding the report or its contents.	■	Feedback
3.5	Process for defining report content.	■	"Global citizenship strategy" on page 7 "About this report" on page 218
3.6	Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers).	◱	"About this report" on page 218 "Supply chain responsibility" on page 126 "HP operations" on page 87
3.7	State any specific limitations on the scope or boundary of the report.	■	"About this report" on page 218
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations.	◱	"About this report" on page 218
3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report.	■	"Data and goals – Environment" on page 199 Noted in relevant sections as appropriate
3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g., mergers/acquisitions, change of base years/periods, nature of business, measurement methods).	■	"Operations" on page 48 Noted in relevant sections as appropriate

(table continued)

ABOUT THIS REPORT

GRI GUIDELINE		COVERAGE	LOCATION WITHIN REPORT (pages without numbers are available in the report online)
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	■	"Climate and Energy – Operations" on page 48 "HP operations" on page 87 Noted in relevant sections as appropriate
3.12	Table identifying the location of the Standard Disclosures in the report.	■	"GRI index" on page 220
3.13	Policy and current practice with regard to seeking external assurance for the report. If not included in the assurance report accompanying the sustainability report, explain the scope and basis of any external assurance provided. Also explain the relationship between the reporting organization and the assurance provider(s).	■	"Assurance" on page 219
GOVERNANCE			
4.1	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight.	■	"Our approach" on page 121 "Governance and management" on page 9
4.2	Indicate whether the Chair of the highest governance body is also an executive officer (and, if so, their function within the organization's management and the reasons for this arrangement).	▣	"Our approach" on page 121
4.3	For organizations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members.	■	"Our approach" on page 121
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	■	"Investors" on page 21
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organization's performance (including social and environmental performance).	▣	Director compensation and stock ownership guidelines
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided.	▣	"Our approach" on page 121

(table continued)

ABOUT THIS REPORT

GRI GUIDELINE		COVERAGE	LOCATION WITHIN REPORT (pages without numbers are available in the report online)
4.7	Process for determining the qualifications and expertise of the members of the highest governance body for guiding the organization's strategy on economic, environmental, and social topics.	◪	Corporate governance guidelines
4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.	■	"Global citizenship policies" on page 28 "Ethics and compliance" on page 120
4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles.	◪	"Our approach" on page 121 "Governance and management" on page 9
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.	◪	Corporate governance guidelines
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization.	◪	"Materials" on page 72
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.	■	"Letter from CEO Mark Hurd" on page 4 "Supply chain responsibility" on page 126 "Product manufacturing" on page 55 "Collaboration" on page 63 "Management and compliance" on page 88 "Approach" on page 190 "Health, safety and wellness" on page 185
4.13	Memberships in associations (such as industry associations) and/or national/ international advocacy organizations.	■	"Affiliations and memberships" on page 16
4.14	List of stakeholder groups engaged by the organization.	■	"Stakeholder engagement" on page 11

(table continued)

ABOUT THIS REPORT

GRI GUIDELINE		COVERAGE	LOCATION WITHIN REPORT (pages without numbers are available in the report online)
4.15	Basis for identification and selection of stakeholders with whom to engage.	■	"Stakeholder engagement" on page 11
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	■	"Stakeholder engagement" on page 11 "Trusted Advisory Network" on page 15
4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting.	■	"Stakeholder engagement" on page 11
PERFORMANCE: ECONOMIC			
	Management approach disclosures	▬	"Economic impacts" on page 196
EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments. (Core)	▬	"Data and goals – Environment" on page 199
EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change. (Core)	▬	"Climate and energy" on page 45
EC3	Coverage of the organization's defined benefit plan obligations. (Core)	▬	"Data and goals – Environment" on page 199
EC4	Significant financial assistance received from government. (Core)	□	
EC5	Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation. (Additional)	□	
EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation. (Core)	■	"Supplier diversity" on page 169
EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation. (Core)	□	
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement. (Core)	▬	"Social Innovation" on page 110

(table continued)

ABOUT THIS REPORT

GRI GUIDELINE		COVERAGE	LOCATION WITHIN REPORT (pages without numbers are available in the report online)
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts. (Additional)	▣	"Economic impacts" on page 196
PERFORMANCE: ENVIRONMENTAL			
	Management approach disclosures	■	"Climate and energy" on page 45
			"Sustainable design" on page 65
			"Product reuse and recycling" on page 80
			"Management and compliance" on page 88
			"Supply chain responsibility" on page 126
EN1	Materials used by weight or volume. (Core)	▣	"Packaging" on page 75
			"Paper" on page 77
EN2	Percentage of materials used that are recycled input materials. (Core)	▣	"Materials" on page 72
EN3	Direct energy consumption by primary energy source. (Core)	■	"Energy use" on page 48
EN4	Indirect energy consumption by primary source. (Core)	■	"Energy use" on page 48
EN5	Energy saved due to conservation and efficiency improvements. (Additional)	■	"Energy use" on page 48
EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives. (Additional)	■	"Products, services and software use" on page 58
			"Tech gallery" on page 94
EN7	Initiatives to reduce indirect energy consumption and reductions achieved. (Additional)	■	"Energy use" on page 48
EN8	Total water withdrawal by source. (Core)	▣	"Water" on page 91
EN9	Water sources significantly affected by withdrawal of water. (Additional)	☐	
EN10	Percentage and total volume of water recycled and reused. (Additional)	☐	

(table continued)

ABOUT THIS REPORT

GRI GUIDELINE		COVERAGE	LOCATION WITHIN REPORT (pages without numbers are available in the report online)
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high bio-diversity value outside protected areas. (Core)	◨	HP's direct operational impact on biodiversity is minimal because we build very few operations relative to our growth, and often build on land that has previously been devel-oped. Our real estate, including acquisitions, is typically reduced year over year. Therefore, we have elected to not report on this indicator.
EN12	Description of significant impacts of activities, products, and services on bio-diversity in protected areas and areas of high biodiversity value outside protected areas. (Core)	◨	"Remediation" on page 93
EN13	Habitats protected or restored. (Additional)	☐	
EN14	Strategies, current actions, and future plans for managing impacts on biodiver-sity. (Additional)	◨	"Remediation" on page 93
EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk. (Additional)	☐	
EN16	Total direct and indirect greenhouse gas emissions by weight. (Core)	■	"Greenhouse gas emissions" on page 52 "Travel" on page 54
EN17	Other relevant indirect greenhouse gas emissions by weight. (Core)	■	"Greenhouse gas emissions" on page 52 "Travel" on page 54
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved. (Additional)	■	"Energy use" on page 48 "Greenhouse gas emissions" on page 52 "Travel" on page 54 "Product manufacturing" on page 55 "Product transport" on page 56 "Products, services and software use" on page 58
EN19	Emissions of ozone-depleting substances by weight. (Core)	■	"Emissions" on page 91

(table continued)

ABOUT THIS REPORT

GRI GUIDELINE		COVERAGE	LOCATION WITHIN REPORT (pages without numbers are available in the report online)
EN20	NOx, SOx, and other significant air emissions by type and weight. (Core)	◪	HP does not report on this indicator because its emissions in this area are insignificant given our current operations.
EN21	Total water discharge by quality and destination. (Core)	◪	Wastewater is not a material environmental issue for HP operations. The effluents we do create are treated on-site or discharged to municipal sewage treatment.
EN22	Total weight of waste by type and disposal method. (Core)	■	"Waste and recycling" on page 89
EN23	Total number and volume of significant spills. (Core)	■	"Remediation" on page 93
EN24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally. (Additional)	☐	
EN25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff. (Additional)	☐	
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation. (Core)	■	"Products, services and software use" on page 58 "Sustainable design" on page 65 "Tech gallery" on page 94
EN27	Percentage of products sold and their packaging materials that are reclaimed by category. (Core)	■	"Product reuse and recycling" on page 80
EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations. (Core)	☐	
EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce. (Additional)	■	"Product transport" on page 56 "Travel" on page 54
EN30	Total environmental protection expenditures and investments by type. (Additional)	☐	

(table continued)

ABOUT THIS REPORT

GRI GUIDELINE		COVERAGE	LOCATION WITHIN REPORT (pages without numbers are available in the report online)
PERFORMANCE: LABOR PRACTICES AND DECENT WORK			
	Management approach disclosures	■	"Supply chain responsibility" on page 126

"Human rights" on page 171

"HP employees" on page 174

"Diversity" on page 175

"Health, safety and wellness" on page 185 |
LA1	Total workforce by employment type, employment contract, and region. (Core)	▬	"HP employees" on page 174
LA2	Total number and rate of employee turnover by age group, gender, and region. (Core)	□	
LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations. (Additional)	□	
LA4	Percentage of employees covered by collective bargaining agreements. (Core)	□	
LA5	Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements. (Core)	□	
LA6	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs. (Additional)	□	
LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region. (Core)	■	"Health, safety and wellness" on page 185
LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases. (Core)	■	"Health, safety and wellness" on page 185
LA9	Health and safety topics covered in formal agreements with trade unions. (Additional)	□	

(table continued)

ABOUT THIS REPORT

GRI GUIDELINE		COVERAGE	LOCATION WITHIN REPORT (pages without numbers are available in the report online)
LA10	Average hours of training per year per employee by employee category. (Core)	◨	
LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings. (Additional)	◨	"People development" on page 183
LA12	Percentage of employees receiving regular performance and career development reviews. (Additional)	☐	
LA13	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity. (Core)	■	"Diversity" on page 175
LA14	Ratio of basic salary of men to women by employee category. (Core)	☐	
PERFORMANCE: HUMAN RIGHTS			
	Management approach disclosures	■	"Human rights" on page 171 "Supply chain responsibility" on page 126
HR1	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening. (Core)	☐	
HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken. (Core)	■	"Supplier management system" on page 131 "Audit findings" on page 141
HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained. (Additional)	☐	
HR4	Total number of incidents of discrimination and actions taken. (Core)	◨	"Audit findings" on page 141
HR5	Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights. (Core)	■	"Audit findings" on page 141

(table continued)

ABOUT THIS REPORT

GRI GUIDELINE		COVERAGE	LOCATION WITHIN REPORT (pages without numbers are available in the report online)
HR6	Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor. (Core)	■	"Audit findings" on page 141
HR7	Operations identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of forced or compulsory labor. (Core)	■	"Audit findings" on page 141
HR8	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations. (Additional)	□	
HR9	Total number of incidents of violations involving rights of indigenous people and actions taken. (Additional)	□	
PERFORMANCE: SOCIETY			
	Management approach disclosures	■	"Management and compliance" on page 88 "Our approach" on page 121 "Public policy" on page 193
SO1	Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting. (Core)	▬	"HP operations" on page 87
SO2	Percentage and total number of business units analyzed for risks related to corruption. (Core)	□	
SO3	Percentage of employees trained in organization's anti-corruption policies and procedures. (Core)	▬	"Our approach" on page 121
SO4	Actions taken in response to incidents of corruption. (Core)	□	
SO5	Public policy positions and participation in public policy development and lobbying. (Core)	■	"Public policy" on page 193
SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country. (Additional)	■	"Public policy" on page 193

(table continued)

ABOUT THIS REPORT

GRI GUIDELINE		COVERAGE	LOCATION WITHIN REPORT (pages without numbers are available in the report online)
SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes. (Additional)	☐	
SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations. (Core)	☐	
PERFORMANCE: PRODUCT RESPONSIBILITY			
	Management approach disclosures	■	"Products, services and software use" on page 58 "Sustainable design" on page 65 "Product reuse and recycling" on page 80
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures. (Core)	☐	"Sustainable design" on page 65 "Life cycle assessment" on page 70 "Materials" on page 72
PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes. (Additional)	☐	
PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements. (Core)	▭	HP provides a wide range of information related to many of its products, including materials safety data sheets (MSDS), product environmental information, eco-labels, technical regulations and certificates, and disassembly documents to tell recyclers how to dismantle our products.
PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes. (Additional)	☐	
PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction. (Additional)	☐	

(table continued)

ABOUT THIS REPORT

GRI GUIDELINE		COVERAGE	LOCATION WITHIN REPORT (pages without numbers are available in the report online)
PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship. (Core)	◨	HP has various policies regarding its advertising practices. The policies require that advertisements and marketing collateral are fair, factual and complete. Advertising claims must be formally substantiated with current factual data before publishing.
PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes. (Additional)	☐	
PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data. (Additional)	☐	
PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services. (Core)	☐	

UNITED NATIONS GLOBAL COMPACT

HP is a signatory to the United Nations Global Compact, a voluntary initiative relating to human rights, labor, the environment and anti-corruption. Our chairman, chief executive officer and president, Mark Hurd, references our support for the Global Compact in his executive letter. The table below links to the sections of this website that address the Global Compact's ten principles.

PRINCIPLE	INFORMATION IN REPORT
HUMAN RIGHTS	
Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights.	"Human rights" on page 171 "Supply chain responsibility" on page 126 "HP employees" on page 174 "Privacy" on page 189
Principle 2: Make sure that they are not complicit in human rights abuses.	"Human rights" on page 171 "Supply chain responsibility" on page 126

(table continued)

ABOUT THIS REPORT

PRINCIPLE	INFORMATION IN REPORT
LABOUR STANDARDS	
Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	"Human rights" on page 171 "Supply chain responsibility" on page 126
Principle 4: the elimination of all forms of forced and compulsory labour;	"Human rights" on page 171 "Supply chain responsibility" on page 126
Principle 5: the effective abolition of child labour; and	"Human rights" on page 171 "Supply chain responsibility" on page 126
Principle 6: the elimination of discrimination in respect of employment and occupation.	"Human rights" on page 171 "Supply chain responsibility" on page 126 "Diversity" on page 175
ENVIRONMENT	
Principle 7: Businesses should support a precautionary approach to environmental challenges;	"Materials" on page 72
Principle 8: undertake initiatives to promote greater environmental responsibility; and	"Supply chain responsibility" on page 126 "Environmental sustainability" on page 43
ENVIRONMENT (cont'd.)	
Principle 9: encourage the development and diffusion of environmentally friendly technologies.	"Climate and energy" on page 45 "Sustainable design" on page 65 "Operations" on page 48
ANTI-CORRUPTION	
Principle 10: Businesses should work against all forms of corruption, including extortion and bribery.	"Our approach" on page 121 "Supply chain responsibility" on page 126

ABOUT THIS REPORT