



# Global Citizenship Customer Report 2008



## GLOBAL CITIZENSHIP ACROSS THE ENTERPRISE

### CURB YOUR DATA CENTER'S APPETITE

How to increase energy efficiency with HP solutions and best practices

### THE CASCADE EFFECT

Responsible supply chain management—why HP's approach matters to your business

### WHAT'S NEXT: CITY 2.0

Envisioning opportunities in a low-carbon, resource-constrained world

### THE IMPERATIVE TO PROTECT PRIVACY

How is your enterprise responding? From policy to technology, HP shares its strategy

HP's annual **GLOBAL CITIZENSHIP REPORT** describes the company's policies, programs, performance and goals across the wide spectrum of issues that make up global citizenship. We designed this version with our enterprise and public sector customers in mind. It features HP solutions and best practices to help organizations respond to urgent business challenges and opportunities.

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**YOU CAN ALSO DOWNLOAD THIS DOCUMENT** at [hp.com/go/customer](http://hp.com/go/customer). Our comprehensive web report ([hp.com/go/report](http://hp.com/go/report)) includes extensive details and performance data on issues described in this report, as well as others.

**SHARE YOUR THOUGHTS**  
Transparency and dialogue are cornerstones of global citizenship at HP. If you have questions or would like to offer feedback on this year's report, please complete our online survey at [hp.com/go/report/feedback](http://hp.com/go/report/feedback)

# Q&A WITH MARK HURD



## How does global citizenship contribute to HP's success?

Global citizenship helps our success because it's important to our customers. Customers care about HP's efforts in areas like climate change and human rights. They also value ways we can help them be more successful. That could mean an energy-efficient data center that cuts costs while reducing their carbon footprint, or a centrally managed printing environment that increases productivity and saves resources. Global citizenship also strengthens our own business in such areas as increasing efficiency, protecting privacy and maintaining trust with our stakeholders.

## What were HP's notable achievements in global citizenship in 2008?

We met or made substantial progress toward nearly all of our global citizenship goals. Here are few achievements that rose to the top: We cut our global greenhouse gas (GHG) emissions from operations 4% compared with 2007 in absolute terms and 13% normalized to revenue. We led our industry in reporting GHG emissions of our first-tier suppliers, representing more than 80% of our total product manufacturing spend. We audited 142 suppliers at 246 facilities for compliance with our code of conduct, and incidences of nonconformance, such as discrimination practices, have been substantially reduced. Additionally, we contributed over \$46 million in cash and products to transform education through technology, train entrepreneurs and support communities.

## How does global citizenship help HP serve its customers?

I'll give you an example. We worked with UPS on an innovative device that prints labels directly on packages. By eliminating paper labels, it will create millions in operational cost savings and save over 1,200 tonnes of paper a year. Additionally, our asset recovery programs help enterprises responsibly process old IT equipment while capturing residual value. Beyond environmental initiatives, protecting privacy is another important aspect of global citizenship, and we've integrated advanced security technologies across our portfolio. These and other solutions support our strategic commitment to deliver business benefits while helping build a better world.

## What roles do HP employees play in supporting global citizenship at HP?

Our employees are the energy behind our global citizenship initiatives; they contribute substantial time, energy and money to help communities. More broadly, they reflect the global scope of our business—our efforts to increase the diversity of our workforce will be a growing source of innovation and strength. With the addition of EDS, we've grown to more than 300,000 people, and I can't think of an organization with deeper talent or ability to improve how people live and work.

A handwritten signature in black ink, appearing to read 'Mark Hurd'.

**Mark Hurd**  
Chairman, CEO and President

For extended Q&A with Mark Hurd, see [hp.com/go/report](http://hp.com/go/report)

# GLOBAL CITIZENSHIP AT HP



Global citizenship covers a lot of ground at HP. It is more than a label, larger than a program, greater than any single organization. Global citizenship is a corporate objective, embodied by our employees and rooted in values that have been core to HP since it was founded in 1939. It encompasses our commitment to hold ourselves to higher standards of integrity, contribution and accountability as we balance and align our business goals with our impact on society and the environment.

Few companies have the capabilities of HP to affect meaningful and lasting change. Our portfolio of products, services and solutions is at the forefront of the IT industry. Our operations, infrastructure and influence extend world-wide. Our 321,000 employees<sup>1</sup> include some of the most ingenious minds of our time. Their talent and expertise are unparalleled. And our stakeholder relationships are collaborative, helping us understand and respond to issues and opportunities.

We focus our efforts on five areas: ethics and compliance, human rights and labor practices, environmental sustainability, privacy and social investment. Together, these span our regions and business units, influencing our priorities, operations, product development and brand differentiation.

Our work in these areas also yields insights and best practices that guide us in serving our customers. For example, we are applying what we learn to advance human rights in the IT industry's supply chain, designing products and services with smaller environmental footprints, safeguarding customer and employee privacy, and transforming teaching and learning through innovative uses of technology.

Global citizenship will continue to be vital to HP's success and the success of our customers. As the world responds to unprecedented economic, environmental and social challenges, our commitment will help us guide our business, develop innovative solutions and create business value.

Global citizenship benefits HP, our customers and the communities where we live and work. Below are examples of impact from 2008.



**PARTNERING TO RESEARCH CLOUD COMPUTING**

HP teamed with Intel Corporation and Yahoo! Inc. to launch Open Cirrus, an open source testbed jointly hosted by three universities in Germany, Singapore and the United States that will research cloud computing on an unprecedented scale.

RUSSIA



**DEVELOPING NEXT-GENERATION IT WORKERS**

HP is helping establish technology centers at 12 Russian universities that are focused on building practical IT-related business skills. About 1,500 students have been admitted to the program, with internships at HP Labs available to top performers.

↓ 125 TONNES



**TRANSFORMING DATA CENTERS**

SPAR-Austria, with 1,600 groceries in Austria, adopted HP solutions to cut data center power use by 10-15% (260,000 kWh), equal to 125 tonnes of CO<sub>2</sub>e emissions, freeing capacity that avoided the expense of a new facility.

\$1.84 MILLION



**CULTIVATING SMALL BUSINESS SUCCESS**

Twenty-three nonprofits in Asia Pacific received grants valued at \$80,000 each through the HP Microenterprise Development Program. Since 2007, the program has aided over 1,000 entrepreneurs with business training and HP equipment.

↓ 66%



**CENTRALIZING PRINTING AND IMAGING MANAGEMENT**

Using HP Managed Print Services, Viacom will reduce its printed pages by 12.5% annually, which is forecast to cut energy consumption of its printing fleet by over 66% and save more than 10 million sheets of paper.

CHINA



**EMPOWERING WORKERS IN CHINA**

HP joined with SACOM and its training partner to educate over 1,800 workers at Chicony, an HP supplier, about labor rights and to establish an information hotline for workers.



**SUPPORTING COMMUNITIES**

HP donated technology worth \$500,000 to advance pediatric services at the Lucile Packard Children's Hospital in California. The Hewlett-Packard Company Foundation also provided a \$500,000 grant supporting research to enhance patient care.

MEXICO



**PROMOTING HEALTH AMONG WOMEN WORKERS**

Working with two suppliers in Mexico, HP and Business for Social Responsibility were the first in the IT industry to launch HERproject, a shared effort between multinationals, factories and nongovernmental organizations to improve women's reproductive health awareness and access to services.



**COLLABORATING TO STRENGTHEN PRIVACY**

Invited by the U.S. Department of Commerce and the Federal Trade Commission, HP joined the Asia Pacific Economic Cooperative Privacy sub-group to help develop rules protecting the cross-border flow of data.

# RAISING STANDARDS IN THE GLOBAL IT SUPPLY CHAIN

HP has one of the largest supply chains in the IT industry, comprising over 600 suppliers and 1,200 sites worldwide. Many of these sites are in developing countries, which have higher incidences of ethical, environmental and human rights violations. HP is responding by promoting higher standards, building capabilities and monitoring performance throughout its global supply chain.

## Going beyond compliance to building capabilities

HP's supply chain social and environmental responsibility (SER) program is based on a four-phase management system. Over the past six years, all of HP's key product materials, components, and manufacturing and distribution services suppliers have completed the first two phases, which include HP's initial evaluation and a supplier's self-assessment. Suppliers enter the third phase, which includes on-site audits, based on their risk for nonconformance. Through 2008, HP had conducted initial and follow-up audits of 142 suppliers at 246 of what it considers "high-risk" supplier sites, which takes into account location, manufacturing processes, the type of contractual relationship and past performance.

In the fourth phase, HP engages with suppliers to build their capabilities. HP works with local nongovernmental agencies to identify areas for improvement, collaborate with supplier teams, foster dialogue and share best practices. While its emphasis is on assisting suppliers, HP has a zero tolerance policy on issues such as forced labor or working conditions that pose risk of serious harm, and requires immediate corrective action.

Most suppliers have embraced HP's program. A growing number recognize that investments can cut energy use and waste processing costs, while health and safety programs can reduce accident rates and boost productivity and morale. According to Vic Lee, administration director of Chicony Electronics, an HP supplier in China, "The training provided through the HP program helps our workers understand their rights and obligations. Though it has some impact on the hours of production, establishing a culture of social and

environmental responsibility will help us meet higher standards and be more competitive."

## Providing greater transparency

In April 2008, HP became the first IT company to release a list of its top suppliers, representing more than 95% of the supply chain procurement spending associated with its products. HP believes offering greater transparency will encourage other companies to do more to promote supply chain responsibility.

In another industry first, in September 2008 HP announced the greenhouse gas emissions attributed to its first-tier suppliers representing more than 80% of its product manufacturing spend. Their aggregated emissions totaled approximately 3.5 million tonnes of carbon dioxide equivalent (CO<sub>2</sub>e).<sup>2</sup>

## Yielding business benefits

Through its SER program, HP has improved working conditions and environmental performance at supplier sites worldwide while lowering the risk of disruptions to its supply chain from controversial or prohibited activities.

HP's work benefits customers as well. Purchasing from a leader in responsible supply chain management signals alignment of a company's actions with its values and can protect its reputation against charges of human rights or environmental violations. Higher standards can also increase worker productivity and safety, which may contribute to lower prices for customers.

## PROTECTING HUMAN RIGHTS

HP is a member of the **Business Leaders Initiative on Human Rights (BLIHR)**, which works with leading global companies across industries to protect human rights. Members of **BLIHR** set examples for other companies by finding practical ways to apply the **United Nations' Universal Declaration of Human Rights** within a business context.



“While helping companies strengthen their workers’ commitment to good health, HP is providing tools and training that are improving workplace standards and people’s lives.”

—PHILLIP LIU, PLANT MANAGER, PEGATRON TECHNOLOGY, MEXICO

*regarding HP’s support of the HERproject, a program promoting women’s reproductive health at supplier facilities in Mexico and China*

**REDUCTION IN MAJOR NONCONFORMANCES BY CATEGORY  
(in latest audits compared to initial audits)**

HP has conducted 480 audits of supplier sites since 2005, and tracked reductions in major nonconformances in all seven sections in the Electronic Industry Code of Conduct.



**USING THE CASCADE EFFECT  
TO ENGAGE SMALLER SUPPLIERS**

Focusing on large suppliers is not sufficient to raise social and environmental standards in the global supply chain. Second- and third-tier suppliers must also be included for greatest impact. Because of their size, these suppliers often lack the resources or expertise to proactively meet higher social and environmental standards.

Recognizing this, in 2008 HP published guidelines to help multinationals raise the performance of smaller suppliers, which are often contracted by first-tier suppliers on their behalf. The guidelines were jointly developed with the Danish Commerce and Companies Agency and were based on a study of HP suppliers in Eastern Europe.

The study examined how HP’s supply chain SER program equips first-tier suppliers to assess and train their own suppliers on effective management systems, occupational health and safety issues and environmental practices. This cascade effect of engaging smaller suppliers is key to how HP is driving rigorous standards throughout the IT supply chain.

**Promoting advances across industries**

The guidelines proposed by HP include integrating management systems into operations, following written requirements with audits, maintaining dialogue and engaging suppliers in capability-building activities. The guidelines also call for multinationals to develop shared codes of conduct—and possibly perform joint audits—to ease the burden on suppliers of meeting numerous sets of requirements.

HP is the first IT company to publish such a comprehensive strategy for responsible supply chain management. “We encourage other leading companies to adopt these guidelines. Having a common approach for engaging the entire supply chain will help make rapid and substantial progress in raising social and environmental standards worldwide,” says Judy Glazer, director of global social and environmental responsibility operations at HP.

Download the full report, “Small Suppliers in Global Supply Chains,” by visiting [hp.com/go/customer/URLs](http://hp.com/go/customer/URLs)

**HOW DO YOUR IT VENDORS MEASURE UP?**

**ASK YOUR VENDORS THE FOLLOWING QUESTIONS TO EVALUATE THEIR SUPPLY CHAIN RESPONSIBILITY:**

- 1 Does your company have a supplier code of conduct?
- 2 If your company has such a code, who is required to meet it?
- 3 How do you confirm that labor rights, such as avoiding excessive overtime, are protected in facilities that make your products?
- 4 How do you demonstrate that your products are made in facilities where health and safety is a priority?
- 5 How do you ensure suppliers design and manufacture your products to limit environmental impacts?
- 6 How do you identify and resolve supplier nonconformance?
- 7 How does your company help suppliers build their capabilities?
- 8 Who is accountable for the social and environmental performance of your company’s supply chain?

# ENVIRONMENTALLY SUSTAINABLE IT ACROSS THE ENTERPRISE

In all industries, enterprises are adopting environmentally focused IT solutions to reduce costs and create efficiencies. Many are turning to HP, long a leader in products and services designed with the environment in mind. Below are HP solutions that can improve energy efficiency, cut greenhouse gas emissions and conserve resources—all while improving performance and saving money.



## TURN ON POWER MANAGEMENT

All HP PCs and monitors ship with energy-saving settings enabled. Using power management can save up to \$75 per desktop computer and monitor each year.<sup>3</sup>

## CONVERT TO ENERGY-EFFICIENT PCs

HP was the first leading PC maker to offer desktops with 80% efficient power supplies, required under stringent ENERGY STAR® 4.0 guidelines. HP lab tests found that PCs equipped with these power supplies and other ENERGY STAR 4.0 hardware requirements can reduce total system power use by more than half.<sup>4</sup>

## LIGHTEN UP

Notebook PCs and flat-panel displays use fewer raw materials in manufacturing and less packaging to ship. Flat-panel HP TouchSmart IQ 500 series PCs, which feature an integrated PC and monitor, use 55% less metal and 37% less plastic than standard PCs and monitors.<sup>5</sup>

## PRINT IMMEDIATELY OUT OF POWERSAVE MODE

HP estimates that for monochrome LaserJet products, the energy saved by using Instant-on Technology between 1993 and 2007 avoided nearly 6.5 million tonnes of CO<sub>2</sub>e emissions, the equivalent of removing 1.4 million cars from the road for a year.



## CURB POWER-HUNGRY DATA CENTERS

A typical 2,000-square-meter data center consumes as much power annually as a 40,000-square-meter office building. See page 8 for ways to reduce your data center energy use by as much as 60%.

## MEET VIRTUALLY INSTEAD OF FLYING

Using HP Halo to eliminate 1,000 commercial flights between New York and London for one person can prevent more than 1,200 tonnes of CO<sub>2</sub>e emissions—and save \$2 million in airfare.<sup>7</sup> HP SkyRoom will bring high-definition collaboration to the desktop, making virtual meetings even more accessible to a larger number of people.

## RECYCLE IT EQUIPMENT AND PRINT SUPPLIES

The plastics and metals in IT equipment can be used in new products, lowering demand for raw materials and diverting waste from landfills. To date, HP has recovered 157,500 tonnes of print cartridges through its Planet Partners return and recycling program. See page 9 for HP's reuse and recycling services for IT equipment.

## TAKE CONTROL OF YOUR PRINTING AND IMAGING

By centrally managing your printing fleet with HP Web Jetadmin software, you can set device sleep and wake modes. And to save even more money, turning off imaging and printing devices outside of business hours can help lower energy costs associated with office equipment by up to 66%.<sup>6</sup>

## MEASURE YOUR PRINTING CARBON FOOTPRINT

Use the online HP Carbon Footprint Calculator for printing to assess the impact of your printer fleet or to compare product-specific energy usage. Visit [hp.com/go/customer/URLs](http://hp.com/go/customer/URLs)

## HP Managed Print Services saves more than \$3M at 3M

Partnering with HP through a Managed Print Services agreement has saved 3M more than \$3 million in two years in the U.S. alone. The new printers use less power than the devices they replaced, and are set to default to duplex printing. So 3M saves both energy and paper. In addition, 3M participates in the HP Planet Partners Recycling Program, recycling 100% of its print cartridges.

Read the 3M case study and download "A Green IT Action Plan for Printing and Imaging," at [hp.com/go/customer/URLs](http://hp.com/go/customer/URLs)

# REDUCE, RECLAIM AND EXTEND: THE ENERGY-EFFICIENT DATA CENTER

With mounting pressure to meet computing demand while lowering costs, interest in improving the energy efficiency of data centers—which can represent nearly 40% of an enterprise's energy use—is on the rise.<sup>8</sup> HP recommends taking a holistic approach. Here's how.

**4 INCREASE SERVER EFFICIENCY**  
New blade servers include energy-efficient processors and power supplies, small form-factor drives, active fan technology and low-power memory. For example, the HP ProLiant BL460c G5 server cuts energy use by up to 25% over HP's previous model, yielding up to \$2,200 in energy savings per enclosure over three years.<sup>9</sup>



**5 TAP INTO THE CLOUD**  
To quickly scale to meet computing demand, consider a cloud computing solution. HP Adaptive Infrastructure as a Service allows enterprises to host applications in HP data centers. This can help reduce reliance on less energy-efficient legacy technology, and avoid the expense and environmental impact of purchasing, installing and powering new infrastructure.

**1 DEVELOP A PLAN**  
Developing a comprehensive plan is essential. Solutions range from improving facility-wide power distribution and cooling efficiency to boosting server and storage performance. HP Data Center Transformation Services help with facility design and management, HP Energy Efficiency Services provide solutions for power and cooling, and HP Thermal Logic technology optimizes power management from the server to the entire data center.



**2 BE SMART ABOUT COOLING**  
You may be overcooling your data center just to prevent a few hot spots. HP's Thermal Zone Mapping reveals cooling regions in 3D, helping you fine-tune cooling settings and optimize the location of air conditioning units and density of server racks. HP also offers the HP Performance-Optimized Data Center, which delivers additional data center space, combining impressive energy savings with support for intense power densities.

**3 RECLAIM UNUSED CAPACITY**  
Expanding a data center can cost up to \$25 million per redundant megawatt of added electrical capacity. One solution is HP Insight Control Environment with Dynamic Power Capping for select HP ProLiant servers, software that sets an optimum threshold based on actual power usage. As a result, you can add servers without overloading power distribution systems, increasing effective capacity by up to 200% and delaying capital-intensive upgrades.

**6 BUILD, CONSOLIDATE OR RETROFIT**  
Whether you consolidate or build a new data center, virtually every choice can affect its environmental footprint. HP Critical Facilities Services can optimize your data center's infrastructure—including mechanical, electrical and plumbing systems that meet LEED requirements—in alignment with scalable, energy-efficient data center solutions, driving down capital and operating costs over a typical data center by up to 25%.<sup>10</sup> In 2008, HP completed consolidation of 85 HP internal IT data centers into just six locations in three U.S. cities.

"HP's thermal modeling exercise has given us a better and more efficient data center with the capacity to grow and be more adaptive and flexible to the changing environment of our business."

—MAURICE PERROS,  
EMEA DATA CENTER DIRECTOR,  
ALCATEL-LUCENT



# BEST PRACTICES FOR IT ASSET RECOVERY

Putting old PCs or servers in storage can be a security threat and erodes their residual value. Disposal involves meeting increasingly strict data protection and environmental regulations. These challenges are prompting new solutions for IT asset management that emphasize reclaiming value and limiting risk.

## SECURE SENSITIVE DATA

To protect your organization from a security breach, it is essential to have a rigorous process for wiping sensitive data from electronic equipment as you decommission it. HP deletes customer identification tags and other information from old IT using industry standard software and processes, making data virtually irretrievable.

## REUSE TO MAXIMIZE VALUE

Reusing IT saves money and limits e-waste. If your organization can no longer use old assets, HP will remove them—manufactured by HP or not—and may pay for their remaining resale value. HP collected about 3.5 million hardware units for reuse in 2008.

## MONITOR AND MEET REGULATIONS

Regulations, such as Sarbanes-Oxley and HIPAA in the United States and the Waste Electrical and Electronic Equipment (WEEE) Directive in Europe govern the disposal of IT assets to protect privacy and the environment. Customers that rely on HP asset recovery services do not have the resource-intensive task of monitoring and ensuring compliance with such regulations. HP manages disposal of old IT in accordance with all applicable laws and regulations.

## RECYCLE AT END OF LIFE

At some point, all IT equipment must be retired. Recycling keeps potentially hazardous substances out of landfills and recovers plastics and metals that can be reused in new products, reducing demand for raw materials. HP has been a leader in offering recycling services since 1991.

## SCRUTINIZE EVERY LINK

When engaging a disposition partner, it is important to verify it does not export waste to avoid environmental regulations. HP requires vendors to meet its Global Reuse and Recycling Standards, which specify guidelines for storing, handling and processing equipment. Last year, HP conducted and reported results for over 40 audits of reuse and recycling vendors in 22 countries.

**34,000** TONNES

Volume of electronics hardware HP recovered for reuse in 2008, up 16% compared with 2007

**120,000** TONNES

Volume of electronic products and supplies HP recycled in 2008, up 6% compared with 2007

## HP TESTS ITS OWN RECOVERY PROGRAM

As part of a three-year internal IT transformation initiative completed in 2008, HP consolidated 85 internal IT data centers worldwide to six next-generation data centers. In the process, it reduced its number of servers by 40%, prompting a large-scale asset recovery program spanning 29 countries. Of the more than 44,500 units of equipment collected, nearly 70% were refurbished and resold, with the remaining recycled. By reclaiming such a large percentage of assets for reuse, HP saved more than \$1.75 million.

# CITY 2.0: HP'S VISION FOR A SUSTAINABLE FUTURE

Responding to population, resource and climate issues presents unprecedented challenges and opportunities for governments and businesses. As urban infrastructure is replaced or built anew, HP believes information technology will be key to sustainability, fueling growth while decreasing environmental impact.

Worldwide, cities are expanding by 60 million people annually—the equivalent of adding another Paris, Beijing or Cairo every other month—putting increasing pressure on natural resources.<sup>11</sup> Forecasted population relocations from areas afflicted by natural disasters and resource shortages caused by climate change will further compound the problem.

## Reinventing cities for scalability and sustainability

As a result, according to Chandrakant Patel, HP fellow and director of HP's Sustainable IT Ecosystem Laboratory, "We must create a sustainable model for cities that takes full advantage of the technologies of the Information Age." HP refers to this model as City 2.0.

Every aspect of City 2.0—from energy, water and waste to buildings and transportation systems—will be designed with the life cycle in mind. HP applies this "cradle-to-cradle" concept in developing products and services, and envisions scaling this concept to entire cities.

Another key will be integrating IT into the fabric of cities to better match supply with demand. Patel describes deploying systems of resource micro-grids, a widespread, interconnected IT network made up of sensors, handheld devices and data centers, to deliver resources according to the ebb and flow of urban needs. "These intelligent technologies would ensure precise availability where and when resources are needed, reducing unused surplus and waste," Patel says.

## Opportunities for the public sector and enterprises

HP foresees helping governments design and adopt City 2.0 infrastructure that would support and stimulate business. Running a city-wide

grid of integrated data centers as a utility, for instance, could create large economies of scale. "Low-cost energy and IT services would be great catalysts for business," Patel says.

According to Prith Banerjee, senior vice president, research and director of HP Labs, public and commercial sectors will be under pressure to streamline operations and minimize costs. "Organizations will need to deliver more resources and products with the least energy and carbon footprint," he says. "In meeting this challenge, City 2.0 will create tremendous opportunities for responsible innovation and growth."

## Putting HP's vision to the test

HP Labs is using its data center facilities in Bangalore, India, and Palo Alto, California, as a test bed for core aspects of City 2.0. Thousands of sensors in each of these data centers monitor the demand and flow of resources in real-time. HP Labs is exploring opportunities to deliver these solutions on an unprecedented scale.

"HP has the breadth and depth to provide all aspects of the City 2.0 IT ecosystem, including the billions of service-oriented client devices, thousands of data centers and print factories needed to implement the vision." Patel says. "And we have a legacy in measurement, communication, and computation. Now we need to leverage the past to create the future, one where we meet society's needs by 'right-provisioning' resources so future generations can have the same quality of life we enjoy today."

Learn more about City 2.0 and the HP Sustainable IT Ecosystem Lab by visiting [hpl.hp.com](http://hpl.hp.com)

## HP AND WWF

HP and World Wildlife Fund (WWF) are collaborating to combat climate change, and are jointly focused on reducing greenhouse gas emissions, improving energy use, using technology in conservation, and educating and inspiring others to take action.

"World Wildlife Fund envisions a future in which business makes a positive contribution to the well-being of society and the planet. To achieve this, WWF engages in challenging and innovative partnerships with companies to drive change. WWF has a long-standing relationship with HP. In 2008, HP and WWF completed a joint research initiative to identify potential IT applications that can help save more than a billion tonnes of carbon dioxide emissions."

—DENNIS PAMLIN, GLOBAL POLICY ADVISOR, WWF

Download HP's Climate Strategy Whitepaper at [hp.com/go/customer/URLs](http://hp.com/go/customer/URLs)

# THE IMPERATIVE TO PROTECT PRIVACY

Until recently, how and where information was collected, analyzed, stored and shared was limited by technological, economic and geographic boundaries. But with advances in technology, data now moves virtually anywhere and between anyone—raising complex privacy issues.

HP was among the first IT companies to respond to this emerging challenge. It has taken pioneering measures to strengthen privacy in its operations, products and services, and supply chain. HP's overriding objective is to ensure the privacy of its customers and employees, and to help enterprises protect the privacy of their customers and employees.

## Finding the right balance

The challenge is in balancing access to crucial data with responsibly collecting and using information, regardless of its origin, route or destination. According to Marty Abrams, executive director of the Centre for Information Policy Leadership, current models fail to address both sides of this equation.

"Privacy is a local issue, reflecting cultural conditions and governed by country jurisdictions," Abrams notes. "But the global movement of data blurs those borders." For example, when a U.S. citizen makes a purchase from a website hosted in Brazil, the information collected might be processed in India and stored in Canada. As a result, it may be subject to conflicting privacy regulations.

One approach is to identify applicable laws in each case and comply with the most restrictive. This can be complex and costly, hindering a company from responding to customer expectations and market requirements.

Abrams believes there is a better way. "The obligation to protect data is universal. But that obligation should not impede business," he says.

"The solution is developing shared principles across economies that respect local differences. And businesses will need to be accountable for their actions."

## Applying a new model of accountability

HP collaborated with the Centre for Information Policy Leadership to develop a groundbreaking Privacy Accountability Model. It reflects HP's goal to safeguard privacy and drive greater accountability in its decision-making processes, a higher objective than simply complying with the law, observing industry norms and mitigating liability.

"We apply the same privacy principles everywhere HP operates," says Scott Taylor, chief privacy officer at HP. "We review decisions to ensure that they not only meet laws and our obligations, but that they also reflect HP values and customer expectations, and take into account risks to our business and customers."

HP believes its model is an important step forward, but sees greater opportunity industry-wide. It advocates for greater cooperation among companies and governments, and is working to educate stakeholders about privacy-related implications of technological advances.

"We are collaborating with regulators and non-governmental organizations to help develop new frameworks and more consistent privacy standards," says Taylor, citing HP's work with the Asia Pacific Economic Cooperative (APEC) and the European Commission and the French Data Protection Authority.

## DESIGNING FOR PRIVACY

HP expanded its **Design for Privacy** program in 2008, which yielded **HP's Secure Advantage** portfolio. It includes servers, storage, software and services with technologies that help enterprise customers securely share information, improve identity management and compliance controls, ensure business continuity and defend against network attacks. Other examples of HP security technologies include:

- **HP Drive Encryption** makes a hard drive unreadable to unauthorized users.
- **HP Disk Sanitizer** allows a user to destroy hard drive data to government standards.
- **HP Privacy Manager** protects against identity theft by encrypting electronic communications.

## TAKE THE TEST—HOW WELL ARE YOU PROTECTING DATA?

The online **HP Storage Security Self-Assessment** tool can help you identify privacy vulnerabilities and develop measures to manage risk, safeguard data and comply with privacy regulations.

Visit [hp.com/go/customer/URLs](http://hp.com/go/customer/URLs)



# THE POWER OF TECHNOLOGY TO TRANSFORM TEACHING AND LEARNING

Last year, HP invested \$25.7 million to advance creative uses of technology to help teachers redesign the learning experience and more deeply engage students, and to promote the success of entrepreneurs and microenterprises. To foster the next generation of high-tech innovators, HP focuses on science, technology, engineering and math in secondary schools and higher-learning institutions. In total, HP contributed \$46.2 million in cash and products to advance education, promote entrepreneurship and assist communities in 2008.



**ORGANIZATION:** Brookfield High School  
**LOCATION:** Ontario, Canada  
**TECHNOLOGY:** HP mobile technologies  
**FOCUS:** Enriching learning

## RE-IMAGINING THE LEARNING EXPERIENCE

Brookfield High School in Ontario, Canada, continues to illustrate how mobile technologies can enrich learning. Biology students there use HP Tablet PCs to capture field data, and physics classes employ them to model experiments. These hands-on experiences are the result of an HP Technology for Teaching grant that has unleashed creativity and collaboration among the school's teachers while increasing student engagement.

With HP Tablet PCs connected to a wireless network, teachers have powerful tools to deliver interactive, personalized lessons with real-time feedback. This

enables students to deepen connections with the material and work together closely. "Students are more engaged in exploring and learning," says Beverly Wilkinson, a teacher at Brookfield. "It's a whole new classroom dynamic."

The HP Technology for Teaching grant program has provided more than \$60 million to over 1,000 schools in 41 countries since 2004. Watch brief videos to see how the program is making a difference at Brookfield and other schools by visiting [hp.com/go/customer/URLs](http://hp.com/go/customer/URLs)

## WORKING TO REVERSE "BRAIN DRAIN" IN AFRICA

In many developing countries, the exodus of skilled professionals, scientists and academics is an acute problem. This so-called brain drain chokes economic and social development by depriving a country of its talent and experience. As the world's largest IT company, HP is in a unique position to help. Since 2003, it has partnered with the United Nations Educational, Scientific and Cultural Organization (UNESCO) to counter brain drain, first in Southeast Europe and now in Africa.

HP is providing grid computing technology, which focuses dispersed computing

power and storage on a single task or problem, as well as financial support and training. The pilot program in Africa, launched in 2008 in Algeria, Ghana, Nigeria, Senegal and Zimbabwe, connects local researchers with colleagues, research networks and funding organizations worldwide to open up opportunities not previously available in their native countries. For example, the Centre for the Development of Renewable Energies is using HP grid computing technology to connect Algerian researchers from around the world to bring innovative solar energy solutions, greater capital investment and more jobs to their native country.

**ORGANIZATION:** UNESCO  
**LOCATION:** Africa  
**TECHNOLOGY:** HP grid computing technology  
**FOCUS:** Connecting researchers



## SANKYA PLUS EDUCATION PROGRAM

In 2008, HP India and Rotary International partnered to connect more than 500 schools to an online knowledge center. Known as SANKYA Plus, the initiative is being funded by a \$150,000 HP grant. The program makes virtual classroom sessions, simulated laboratory packages and other tools available to students who may otherwise have limited access to educational resources. SANKYA Plus is an extension of SANKYA, HP India's PC reuse program that has provided over 3,500 refurbished HP computers to more than 750 schools.



ORGANIZATION: Rotary International  
 LOCATION: India  
 TECHNOLOGY: Recovered HP computers  
 FOCUS: Providing access

ORGANIZATIONS: MEA-I and UNIDO  
 LOCATION: Europe, the Middle East and Africa  
 HP CONTRIBUTION: Training and technical support  
 FOCUS: Building skills, promoting entrepreneurship



## BUILDING BUSINESS AND IT SKILLS AMONG YOUNG PEOPLE

High unemployment, low income and limited access to jobs are chronic challenges for young people in underserved communities. The Graduate Entrepreneurship Training through IT (GET-IT) program is combating these issues in Europe, the Middle East and Africa (EMEA) by helping students and recent graduates develop business and IT skills to enter the workforce and launch small businesses.

HP launched GET-IT in 2007 in collaboration with the Micro-Enterprise Acceleration Institute (MEA-I) in EMEA, and formed a partnership with the

United Nations Industrial Development Organization (UNIDO) to further strengthen the program in the Middle East and Africa. In 2008, the program doubled the number of its training centers to 70 in 25 countries. GET-IT training emphasizes building practical IT skills to solve daily business challenges. To spread the reach of GET-IT beyond the classroom, HP has created a web portal—[www.get-it-city.net](http://www.get-it-city.net)—where young entrepreneurs can go for training and advice. HP and its partners plan to expand GET-IT to reach over 500,000 students by 2010.

“HP’s Technology for Teaching grant has allowed us to take our Mobile Mapping project to a whole new level. Now our students are deeply engaged with learning, and getting essential, hands-on experience with technology that will benefit them in their post-graduate careers.”

—MEG STEWART, ACADEMIC COMPUTING CONSULTANT FOR GIS, VASSAR COLLEGE

# GLOBAL CITIZENSHIP IN ACTION

The impact of HP's global citizenship initiatives is visible in businesses and communities around the world.



1

1 In Costa Rica, 430 HP employees planted 1,800 trees as part of **HP Forest**, a three-year program to plant 6,000 trees that will capture more than 360 tonnes of CO<sub>2</sub> over the next 25 years.

2 Northern Arizona University in the United States used an **HP Technology for Teaching** grant to integrate mobile technologies into its curriculum, broadening learning opportunities outside the classroom. Since 2004, HP has contributed nearly \$60 million in grants to over 1,000 schools in 41 countries.

3 UPS uses the new **HP Handheld sp400 All-in-One** to print labels directly on packages, eliminating paper labels. The device is forecast to save UPS more than \$30 million in labor, capital and supplies over the next five years.

2



6

6 Following the earthquake in Sichuan, China, HP employees restored classrooms at three schools, equipping students with 80 HP desktop PCs. It was part of a broader **HP emergency relief effort** helping rebuild local communities. HP, its employees and the HP Company Foundation contributed over \$3 million to Sichuan earthquake relief efforts.



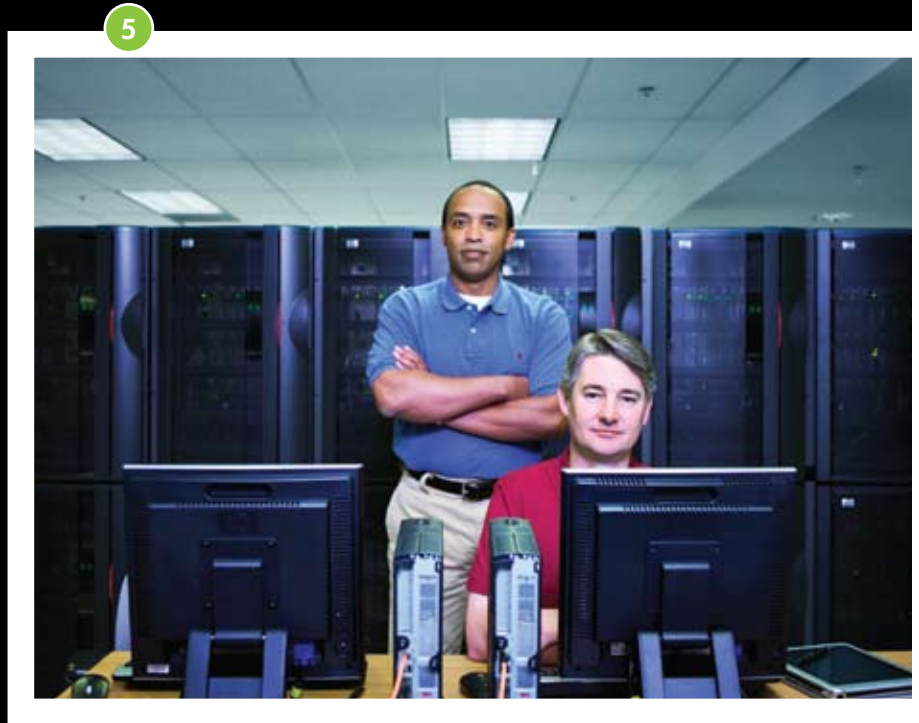




4

4 HP participates in the **SmartWay<sup>SM</sup>** program, a partnership between the U.S. EPA and the U.S. freight industry targeting reductions in fuel consumption and related GHG and other air emissions. In 2008, HP became the first company to qualify to display the SmartWay logo on its personal computer products.

5 **HP Labs** is researching solutions to the most urgent challenges and promising opportunities facing businesses and society. One of its focus areas is developing a comprehensive approach to security and privacy as IT devices, applications and data become more open and widely shared.



5



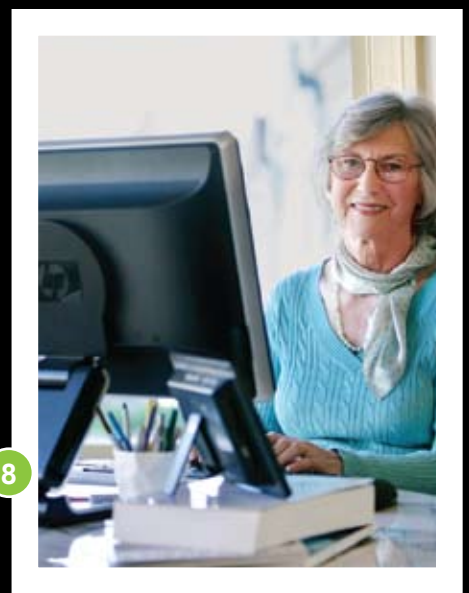
3



7

7 In 2008, HP held sessions in Shenzhen and Kunshan, China, to train management teams from nearly 50 supplier sites on social and environmental standards and practices. HP's approach emphasizes **building supplier capabilities** to promote sustainable improvements throughout the global IT supply chain.

8 HP product design teams integrate **assistive technologies and features** to improve accessibility, productivity and user comfort. Examples include buttons identifiable by touch, ports and switches positioned within easy reach, and large adjustable displays.



8

# PERFORMANCE

This is a summary of performance data from the comprehensive HP Global Citizenship Report 2008 online, which includes additional metrics and data. All data are for HP's fiscal year (ending October 31 of the year indicated), unless otherwise noted.

	2005	2006	2007	2008
<b>HP PROFILE</b>				
Net revenue [million \$U.S.]	note <sup>12</sup>	\$91,658	\$104,286	\$118,364
<b>HUMAN RIGHTS AND LABOR PRACTICES</b>				
<b>Supply chain responsibility</b>				
Suppliers engaged [total, cumulative]	480	565	615	635
Audits conducted [total including re-audits, cumulative] (detailed audit results online)	85	207	351	480
<b>HP employees</b>				
Worldwide workforce demographics [women as a % of total employees] (detailed U.S. ethnicity data online)	29.9%	29.9%	30.0%	30.1%
Lost workday case rate [global rate] <sup>13</sup>	0.11	0.13	0.10	0.07
Value of cash and products donated by employees, including HP-matched funds [million \$U.S.]	\$16.9	\$12.6	\$13.4	\$12.8
<b>ENVIRONMENTAL SUSTAINABILITY</b>				
<b>Climate and energy</b>				
Electricity use in operations [million kWh] <sup>14</sup>	2,801	2,759	2,704	2,729
Renewable energy purchasing in operations [million kWh energy and renewable energy credits]	NA	11.4	61.4	101.9
GHG emissions from operations [tonnes CO <sub>2</sub> e]	1,551,300	1,598,500	1,516,300	1,448,500
GHG emissions from HP employee business commercial air travel [tonnes CO <sub>2</sub> e]	279,000	289,000	289,000	265,000
<b>HP operations—other</b>				
Nonhazardous waste [tonnes]	102,567	106,492	89,275	91,832
Nonhazardous waste landfill diversion rate [% of total produced]	87.8%	88.2%	88.4%	91.3%
Water consumption [million liters]	8,136	8,358	7,359	7,225
<b>Product reuse and recycling<sup>15</sup></b>				
Total annual recycling—computer hardware and supplies combined [tonnes]	64,000	75,000	113,000	120,000
Total annual reuse of equipment [tonnes, approximate]	23,000	22,000	29,000	34,000
<b>SOCIAL INVESTMENT</b>				
Worldwide giving, total [million \$U.S.] <sup>16</sup>	\$45.3	\$45.6	\$47.1	\$46.2

# GOALS

This is a partial list of HP's global citizenship goals. See additional goals in several categories, as well as progress toward goals for 2008, in the comprehensive HP Global Citizenship Report 2008 online. Goals are for year noted.

## HUMAN RIGHTS AND LABOR PRACTICES

### Supply chain responsibility

2009: Expand supply chain social and environmental responsibility (SER) program beyond materials, components, and manufacturing and distribution suppliers to engage and assess 50 high-priority goods and services suppliers

2012: Develop supply chain SER programs that HP suppliers representing 75% of materials, components, and manufacturing and distribution spend will use with their suppliers

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## ENVIRONMENTAL SUSTAINABILITY

### Climate and energy (operations and products)

2010: HP will reduce the combined energy consumption and associated GHG emissions of HP operations and products to 25% below 2005 levels by achieving the following:

- Operations: HP will reduce energy consumption and the resulting GHG emissions from HP-owned and HP-leased facilities worldwide to 16% below 2005 levels
- Products: HP will reduce the energy consumption of HP products<sup>17</sup> and associated GHG emissions through specific goals for representative product categories, including the following goals for HP's high-volume printer, server, and desktop and notebook PC families:
  - By 2011, HP will improve the overall energy efficiency of HP ink and laser printing products by 40%, relative to 2005<sup>18</sup>
  - By 2010, improve energy efficiency for high-volume HP server families by 50%, relative to 2005<sup>19</sup>
  - By 2010, reduce the energy consumption of high-volume HP desktop and notebook PC families by 25%, relative to 2005<sup>20</sup>

2012: Double HP purchases of renewable energy from 4% in 2008 to 8%

### Sustainable design

2009: 100% of HP's consumer photo paper will derive from sustainable-forest-certified suppliers

2010: Remove all mercury from HP's entire notebook line by the end of 2010

2010: Triple the amount of recycled materials used in our inkjet printers, relative to 2007

### HP operations

2009: Continue to divert at least 87% of solid (nonhazardous) waste from landfill globally through the end of 2009

2010: Reduce water consumption by 5%, compared with 2007

### Product reuse and recycling<sup>21</sup>

2010: Recycle 2 billion pounds (900,000 tonnes) of electronic products and supplies by the end of 2010 (since 1987)

2010: Reuse 450 million pounds (200,000 tonnes) of electronic products by the end of 2010 (since 2003)

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## SOCIAL INVESTMENT

2009: Initiate more than 130 HP Innovations in Education grant-supported projects worldwide that showcase the future of learning

“Our customers are increasingly looking to HP to help them manage and transform their technology environments. We work with them to provide environmentally sustainable solutions that lower cost, help them grow and manage risk.”

—ANN LIVERMORE, EXECUTIVE VICE PRESIDENT, TECHNOLOGY SOLUTIONS GROUP

# TO LEARN MORE, VISIT HP.COM/GO/REPORT

## About this report

This report covers all HP operations but does not include joint ventures.

This report does not include information from EDS sites, because HP's acquisition of EDS closed late in the 2008 fiscal year. That data will be integrated into HP's Global Citizenship Report 2009.

Unless otherwise noted, all references to 2008 refer to the fiscal year, which ended October 31, 2008.

All references to dollars are to U.S. dollars (\$).

"Tonnes" refers to metric tonnes. (One metric tonne is equivalent to 2,205 pounds.)

Throughout this report, "greenhouse gas" or "GHG" refers to all greenhouse gases emitted by human activities, and "CO<sub>2</sub>e" refers to "carbon dioxide equivalent," the unit used to measure greenhouse gases. CO<sub>2</sub> is the main, but not the only, manmade greenhouse gas.

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.

For an index of websites and online resources cited in this report, visit [hp.com/go/customer/URLs](http://hp.com/go/customer/URLs)

## Report endnotes

<sup>1</sup> As of October 31, 2008.

<sup>2</sup> Aggregated CO<sub>2</sub>e emissions represent the sum of HP-allocated suppliers' emissions and are calculated by factoring the total supplier emissions by the percentage of HP dollar volume to the suppliers' total revenue.

<sup>3</sup> See: [energystar.gov/index.cfm?c=power\\_mgt.pr\\_power\\_management](http://energystar.gov/index.cfm?c=power_mgt.pr_power_management)

<sup>4</sup> Internal testing; customer results will vary. Variables include customer-determined percentage of sleep state, idle state, productivity state and peak usage state. Also, manufacturing variability will affect the savings a customer may see. HP advises customers to test a system with an 80% efficient power supply in their environment to determine potential savings.

<sup>5</sup> Percent reduction based on comparison with an HP Pavilion a6000 PC and HP w2207 monitor bundle.

<sup>6</sup> See: [eere.energy.gov/buildings/commercial/printable\\_versions/appliances.html](http://eere.energy.gov/buildings/commercial/printable_versions/appliances.html)

<sup>7</sup> Assumes \$2,000 per person per round trip between New York and London.

<sup>8</sup> U.S. Department of Energy, 2007 and U.S. EPA Report to Congress on Server and Data Center Efficiency, August 2, 2007.

<sup>9</sup> Source: HP internal testing; customer results will vary. Assumes rate of \$0.08 per kWh and cooling multiplier of 1.5.

<sup>10</sup> Based on internal analysis. Assumes 210,000 square-foot data center with 80,000 square-foot raised floor, 8,000 kW critical load, 2N electrical system, water-cooled central plant and 24x7 operation, 100% constant load.

<sup>11</sup> See: [wri.org/publication/content/8121](http://wri.org/publication/content/8121)

<sup>12</sup> Only three years of data reported for consistency with HP's 2008 10-k.

<sup>13</sup> 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.

<sup>14</sup> Operations include HP's office, manufacturing, distribution and data center facilities and the volumes of electricity, natural gas, water and waste from activities at these locations.

<sup>15</sup> 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.

<sup>16</sup> Includes cash, products and services. 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.

<sup>17</sup> Average energy efficiency per unit shipped using IDC-reported figures for 2005, across identified high-volume product families, using industry-standard measurement benchmarks. Identified product families include notebook and desktop computers, inkjet and LaserJet printers, and industry-standard servers.

<sup>18</sup> Efficiency is defined in terms of kWh (using the Total Electricity Consumption Method/pages per minute). These families represent more than 32% of inkjet printers and more than 45% of LaserJet printers shipped in 2005. HP updated this goal from the goal included in the FY07 Global Citizenship Report, which targeted a 30% improvement in energy efficiency by 2010 relative to 2005.

<sup>19</sup> Efficiency is defined in terms of kWh/transactions per minute (using SPEC or another benchmark appropriate to the server class). Goal applies to HP industry-standard servers, referenced in footnote 17.

<sup>20</sup> Energy consumption is defined as watts consumed in idle mode (using the U.S. ENERGY STAR<sup>®</sup> test protocol). Idle mode represents over 75% of total energy consumption. The improvement will be calculated by averaging the energy consumption of HP desktop and notebook platforms across shipped volume.

<sup>21</sup> These goals were updated this year to distinguish reuse from recycling and increase the overall amount of the target.

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