2003 Global Citizenship Report

hp invent

Table of contents

*References to the Global Reporting Initiative (GRI) indicators. See http://www.globalreporting.org/guidelines/2002.asp Some are fully reported, some partially. For a comprehensive list, see http://www.hp.com/go/report.

Key:
EC – economic indicator
EN – environmental
LA – labor practices
HR – human rights
SO – society
PR – product responsibility

About this report

Reporting helps define and improve our global citizenship program. For example, it:

- Brings together employees who work in different areas of global citizenship

- Encourages goal-setting and actions towards meeting those goals

- Helps us identify our strengths and weaknesses, and compare performance with other companies

- Improves internal and external accountability

- Raises key decision makers' awareness of global citizenship issues

- Promotes collecting and analyzing performance data

Scope
This report describes our global citizenship activities worldwide. It is the successor to our 2002 Social and Environmental Responsibility Report.

Currency and measurement
All $ references in this document are US dollars.

Throughout this report, 'tonnes' refers to metric tonnes. A metric tonne equals 1,000 kg, approximately 2,205 lbs.

Reporting year
- Financial data are for HP's fiscal year 2002 (ending October 31, 2002)

- Other data, except where stated, are for calendar year 2002

- Case studies and product examples are from calendar year 2002 and up to May 1, 2003

- Data are for HP and Compaq as a combined company, unless otherwise noted

Joint ventures
Joint venture company data are excluded from this report.

GRI guidelines
We used the Global Reporting Initiative (GRI) guidelines as a basis for reporting. The checklist on the Table of contents provides easy reference of GRI items included. See our website (http://www.hp.com/go/report) for a comprehensive list of reporting against all GRI indicators.

> "…at a time when technology itself can exclude or empower like never before, we have both an opportunity and an imperative to improve the choices, economic conditions, and sphere of opportunity for billions more people around the world."
>
> Carly Fiorina, Chairman and CEO

Letter from Carly Fiorina

HP has always been a company that is thoughtful about its role in the world. Our co-founder, Dave Packard, put it best when he wrote that "many assume, wrongly, that a company exists simply to make money…the real reason HP exists is to make a contribution." Today, the idea that HP exists to make both a profit and a contribution to society is still the foundation of everything we do.

As a company doing business in more than 160 countries, we recognize the importance of being extremely clear about our policies and deliberate in our actions, as we engage in responsible business around the world and live up to our reputation as a good global citizen. At a minimum, it means upholding the highest possible standards of integrity and transparency. It includes rigorously managing our performance in the areas of environmental sustainability, customer and employee privacy, and human rights. And it requires an insistence that we choose suppliers and vendors that maintain appropriate standards in these areas as well.

In today's world, good citizenship also means leveraging our assets to raise skill levels, extend hope, and extinguish despair. As a technology company at a time when technology itself can exclude or empower like never before, we have both an opportunity and an imperative to improve the choices, economic conditions, and sphere of opportunity for billions more people around the world. It's a greater mandate – one that our customers and shareowners increasingly demand of us, and one that is deserved by every country in which we do business.

One thing we have learned is that while financial capital alone is a great asset that companies like HP bring to the world today, perhaps more valuable is our contribution of human capital – our experience and knowledge, and our ability to convene and collaborate with a wide range of partners to make a difference. Rather than simply writing a check, we are committing some of our best talent to underdeveloped communities from East Palo Alto, CA to Kuppam, India; charging them with the responsibility of working with local citizens to set goals; and then working as a catalyst to bring together local governments, nongovernmental organizations, and other organizations to create technology based solutions that accelerate economic development.

Engaging in these markets is not just the right thing to do, it's the smart thing to do. As representatives of an industry whose goods are affordable for just 10 percent of the world's population, we have to acknowledge that growth will come from markets that are underserved today. In other words, it is entirely in our interests to apply technology to economic development because not only will this help empower millions of people to benefit from the digital age – it will also help create a new generation of ideas, employees and customers for HP.

The idea that building social value can also be good for business marks a profound change in the way society views the role of corporations today. At HP, we have been laboring in this vineyard for six decades. We will proudly continue to do our part, not just to make a profit, but also to make a difference.

Sincerely,

Carleton S. Fiorina
Chairman and Chief Executive Officer

HP profile

HP is a leading global provider of products, technology solutions, and services to consumers and businesses. Our offerings span information technology (IT) infrastructure, personal computing and access devices, global services, and imaging and printing products.

HP at a glance

Core products and services:
- Information technology (IT) infrastructure
- Personal computing
- Global IT services
- Imaging and printing

2002 revenues: [Million $US]
- Historical results: $56,588
- Combined company results[1]: $72,346

Corporate summary:

Chairman and CEO: Carly Fiorina
Employees: approximately 141,000
Countries of operation: 178
Headquarters: Palo Alto, California, US
Regional headquarters:
- Latin America: Miami, Florida, US
- Europe/Africa/Middle East: Geneva, Switzerland
- Asia/Pacific: Singapore

---

[1] The combined company results include the results of operations of HP and Compaq as if the acquisition had occurred as of the beginning of fiscal 2002. Due to different historical fiscal period ends for HP and Compaq, the results for the year ended October 31, 2002 combine the results of HP for the year ended October 31, 2002 and the historical quarterly results of Compaq for the six-month period ended March 31, 2002 and for the period May 3, 2002 (the acquisition date) to October 31, 2002.

Corporate objectives

Global citizenship is one of HP's seven corporate objectives, which guide the company in the conduct of its business. Following are the seven objectives.

Customer loyalty. To provide products, services and solutions of the highest quality and the greatest possible value to our customers, thereby gaining and holding their respect and loyalty.

Profit. To achieve sufficient profit to finance company growth, create value for our shareholders and provide the resources we need to achieve our other corporate objectives.

Market leadership. To grow by continually providing useful and significant products, services and solutions to markets we already serve and to expand into new areas that build on our technologies, competencies and customer interests.

Growth. To view change in the market as an opportunity to grow, and to use our profits and our ability to develop and produce innovative products, services and solutions that satisfy emerging customer needs.

Employee commitment. To help HP employees share in the company's success that they make possible, we provide people with employment opportunities based on performance. We create with them a safe, exciting and inclusive work environment that values diversity and recognizes individual contributions.

Leadership capability. To develop leaders at every level who are accountable for achieving business results and exemplifying our values.

Global citizenship. Good citizenship is good business. We live up to our responsibility to society by being an economic, intellectual and social asset to each country and community in which we do business.

Revenue by segment (as reported in the 2002 Annual Report)
[Million $US]

	Historical results, 2000-2002			Combined company results[2], 2001-2002	
	2000	**2001**	**2002**	**2001**	**2002**
■ Imaging and Printing Group	$20,346	$19,426	$20,324	$19,470	$20,326
■ Personal Systems Group	12,008	10,117	14,733	26,800	21,962
■ Enterprise Systems Group	9,628	8,395	11,400	20,486	16,449
■ HP Services	5,730	6,124	9,095	12,846	12,411
■ HP Financial Services	1,411	1,454	1,707	2,126	2,088
■ All other	423	245	-	245	-
Total segments	**$49,546**	**$45,761**	**$57,259**	**$81,973**	**$73,236**
■ Elimination of intersegment net revenue and other	(676)	(535)	(671)	(868)	(890)
▢ **Total HP consolidated**	**$48,870**	**$45,226**	**$56,588**	**$81,105**	**$72,346**

[2]The combined company segment results include the results of each of HP's segments in fiscal 2002 and fiscal 2001 as if the acquisition of Compaq had occurred at the beginning of fiscal 2001. Due to different historical fiscal period-ends for HP and Compaq, the segment results for the year ended October 31, 2002 combine the results of HP for the year ended October 31, 2002 and the historical quarterly results of Compaq for the six-month period ended March 31, 2002 and for the period May 3, 2002 (the acquisition date) to October 31, 2002. The segment results for the year ended October 31, 2001 combine the historical results of HP for the year ended October 31, 2001 and the historical quarterly results of Compaq for the twelve-month period ended September 30, 2001.

Operational structure

HP's business groups, corporate functions and research and development deliver our business objectives.

The following are HP's business groups.

Imaging and Printing Group (IPG). Provides printing and imaging solutions for businesses and consumers, including printer hardware, digital imaging devices such as cameras and scanners, and associated supplies and accessories.

Personal Systems Group (PSG). Provides personal-computing solutions and devices for home and business use, including desktop and notebook PCs, workstations, internet access tools and personal devices.

Enterprise Systems Group (ESG). Provides IT infrastructure for businesses, including storage, servers, management software and a variety of IT solutions.

HP Services (HPS). A global IT services team that offers guidance, know-how, support and a comprehensive portfolio of services enabling customers to realize business value from IT investments.

HP's corporate functions include Finance & Administration, Human Resources, Information Technology (IT), Legal, Marketing, Office of Corporate Strategy & Technology, Operations and Strategic Change & Global Excellence.

Research and innovation

HP is a technology company fueled by research and innovation. We hold more than 19,000 patents worldwide. In fiscal 2002, we submitted 7,000 new patent applications and spent $3.9 billion[3] on research and development compared with $4.1 billion[3] in fiscal 2001. We conduct research within our product groups and at HP Labs, a central research function for breakthrough technologies. Research areas include next-generation computing, printing and imaging, and innovation for emerging economies. Examples of innovation particularly related to global citizenship are profiled throughout this report.

[3]Amounts indicated are on a combined company basis. On a historical basis, HP spent approximately $3.3 billion and $2.7 billion on research and development during fiscal years 2002 and 2001, respectively.

Global citizenship

Letter from Debra Dunn
Senior Vice President of Corporate Affairs, leading HP's global citizenship efforts.

Transparency is an essential component of citizenship. This global citizenship report is part of our effort to promote greater transparency into the ways we think and operate. It provides a tool for stakeholders to understand HP's goals and monitor our progress against the high standards we have set for ourselves.

In this report, we describe some of our achievements and acknowledge our challenges. I am pleased about the significant progress we have made over the past year including establishing a new organization to lead our global citizenship efforts and creating new governance and program structures to drive consistency in the new company.

Among our successes are creating and strengthening policies and compliance processes in the areas of human rights and labor, supply chain and standards of business conduct.

We donated more than US$62 million in cash and equipment worldwide and extended our e-inclusion initiative to underserved communities in South Africa and India. At the same time, to help employees experience the new company culture and facilitate the integration of new teams, we implemented a company-wide Fast Start program. Finally, we continued to expand our recycling programs and to set an even higher bar for our industry in regards to eliminating e-waste.

While this progress is heartening, we are fully aware of the extent of the challenges that lie before us.

Suppliers are key to the manufacture of our products. It is in the supply chain that we have significant social and environmental impact, but only limited control. We have started to communicate our expectations to our supply chain, but fostering change in standards and practices across all levels of suppliers is a major undertaking and will take time.

Another significant challenge is achieving the technological innovations required to maximize product recyclability and developing the logistics required to implement global takeback of our products. All of this must be achieved through a viable business model.

Living by our values in the face of harsh commercial reality is a difficult test we face as we continue to strive to be a good global citizen. We know we can't achieve all our goals on our own. This is why I especially appreciate the enthusiasm with which outside experts responded to our invitations to contribute stakeholder perspectives for this report. We also have planned structured stakeholder feedback on this report, which will help us achieve greater transparency in the year ahead, and keep us firmly in touch with the issues we must address as we continue to pursue a leadership position in global citizenship.

As one of those stakeholders, please forward any of your thoughts and reactions regarding the report to us at hp.globalcitizenship@hp.com. We look forward to hearing from you.

Sincerely,

Debra Dunn
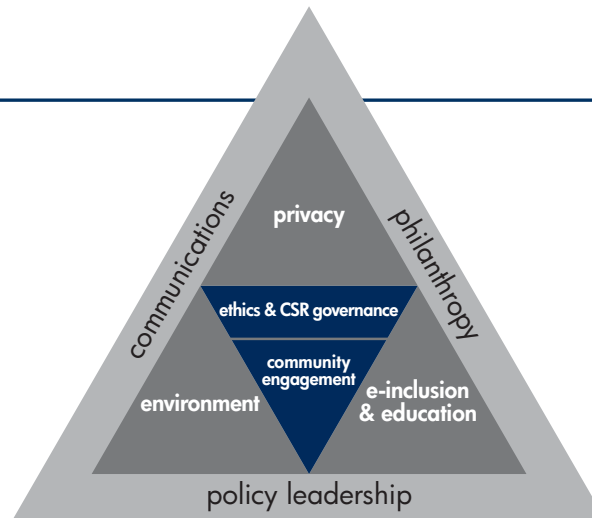
What global citizenship means to HP

Global citizenship is one of our corporate objectives (see page 2). We are committed to making a positive contribution to the global community, in addition to advancing our commercial role as a business.

Global citizenship involves seeing ourselves as a member of the global community. This means exhibiting strong values in whatever we do and applying ourselves to the environmental, social and economic challenges of globalization. In particular, we will:

- Maintain the highest standards of integrity, transparency and accountability

- Uphold and respect human rights and commit to fair labor practices

- Work in partnership with communities and stakeholders to promote social and environmental causes

- Work toward a world in which everyone has access to the opportunities of the digital age

- Develop new products and solutions to meet people's needs, in both developed and developing economies

- Provide products and services that are environmentally sound throughout their lifecycles, and conduct our operations in an environmentally responsible manner

This report describes the management systems, policies and practices we use to meet our global citizenship objectives and summarizes our performance during 2002.

Global citizenship framework

Our challenge is to connect our commitment to good global citizenship to the day-to-day running of the business. To make the connections more clear, we have developed a framework to guide our strategic planning and focus our priorities (see graphic).

Core. At the core of our approach is a focus on sound ethics, a governance structure and process that ensures accountability, and a commitment to engage with local communities and other stakeholders. These are the necessary foundations to any and all work we do that relates to global citizenship.

Strategic focus areas. e-inclusion and education, the environment, and privacy are the three global citizenship issues we have identified as most important to our business, and most tightly linked to the capabilities of HP. We have focused our formal programs and initiatives in these three areas.

Enablers. Through public policy leadership, communications and philanthropy, we support our strategic focus areas.

Our understanding of global citizenship constantly evolves based on ongoing exchanges with the global community regarding the role of corporations in society.

HP at the World Summit on Sustainable Development

HP played a prominent role and was the lead technology sponsor at the World Summit on Sustainable Development in Johannesburg, South Africa, in September 2002.

The summit's themes were People, Planet and Prosperity, and it focused on innovative public/private partnerships. These themes closely reflect our global citizenship objectives. The summit provided a valuable opportunity to learn about and contribute to the international sustainability agenda.

We showcased our e-inclusion projects and launched a new i-community in the town of Mogalakwena, Limpopo province, South Africa. Our i-communities use information technology to promote economic and social development (see page 66).

At the i-community launch, HP CEO Carly Fiorina said: "This week, we've learned that financial capital alone is not the greatest wealth multinationals can bring to the developing world – it's human capital. It's experience and knowledge and the ability to transmit that as capacity building."

"At a time when the challenges to sustainable development are so great and the urgency to achieve is so profound, we need to apply all of our best talents to solving those problems."

Working in partnership with the Johannesburg World Summit Company, we provided IT infrastructure, technology, support services and websites to integrate the summit's 39 venues. This included more than 2,300 computers, 128 servers, and numerous notebooks, printers and scanners. A group of HP engineers ensured the technology at the summit ran smoothly.

Stakeholder engagement

As a global citizen, HP interacts with a wide range of communities, or stakeholders, that affect, and are affected by, our products and operations. These include our customers, employees, investors and suppliers, as well as community groups, the media, non-governmental organizations and regulators. Stakeholder engagement is an important part of our global citizenship activity.

Regular dialogue is mutually beneficial. It enables stakeholders to influence corporate policy and helps us interpret social expectations, improve our reputation, better understand our markets and develop our overall global citizenship approach. Throughout this report, opinion leaders provide views on our global citizenship performance in 'Stakeholder perspective' boxes.

Membership in external organizations

We belong to several organizations that address global citizenship issues.

ASrIA. Not-for-profit membership association dedicated to promoting sustainable and responsible investment (SRI) in Asia.

Business for Social Responsibility (BSR). Global non-profit organization that helps member companies enhance business performance while respecting ethical values, people, communities and the environment.

Center for Corporate Citizenship at Boston College. Educational institution, think tank, consulting firm and information resource.

CSR Europe. Business membership network that promotes the business case for corporate social responsibility.

Ethics Officer Association. International professional association for ethics program managers.

Global Business Coalition on HIV/AIDS. Alliance of international businesses dedicated to combating the AIDS epidemic.

Global Environmental Management Initiative. Non-profit organization dedicated to environmental, health and safety excellence and corporate citizenship.

National Association for Environmental Management (NAEM). Non-profit educational association composed of professional, private and public sector environmental managers.

SustainAbility Engaging Stakeholders. Non-profit joint venture between SustainAbility and the United Nations Environment Programme (UNEP).

United Nations Information and Communication Technologies (UN ICT) Task Force. Global project to bridge the digital divide, coordinated by the UN.

United Nations Global Compact. Voluntary UN initiative relating to human rights, labor and the environment. HP became a participant in 2002.

World Business Council for Sustainable Development. Coalition of 165 international companies committed to sustainable development.

World Economic Forum. Independent international organization committed to improving the state of the world.

Our stakeholders
We communicate with stakeholders in a variety of ways.

Stakeholder group	How we engage	
Communities	• e-inclusion programs • Employee volunteerism • Local and regional Government and Public Affairs offices manage relationships with communities	• Philanthropy program and annual philanthropy report • Tours of facilities See pages 62-71 for more details.
Customers	• Customer satisfaction surveys, helplines, call centers and hp.com encourage feedback	• Employees ranging from sales staff to executives focus on specific accounts See pages 56-61 for more details.
Employees	• @hp employee portal is updated daily and allows for two-way communication • Annual employee satisfaction surveys give employees the opportunity to express views on a range of issues • Employee networking groups, for employees with common interests • Open Door Policy encourages employees to voice concerns	• Meetings and websites provide feedback opportunities • Regular employee meetings, from work-group to company-wide in scope • Regular Standards of Business Conduct discussions between employees and managers See pages 18-27 for more details.
Investors	• Our Annual Report, Global Citizenship Report, Annual General Meeting, quarterly and annual reports filed with the US Securities and Exchange Commission, and Investor Relations website provide information on policies and performance	• We engage with the socially responsible investment (SRI) community through meetings, questionnaires and conferences See pages 16-17 for more details.
Legislators/regulators	• Our Government and Public Affairs department meets regularly with government officials and regulators, and publishes position papers on key issues	• Membership in industry associations See pages 11-15 for more details.
Non-governmental organizations (NGOs)	• We work with various NGOs in meetings, conferences and other forums on issues of joint interest	See pages 13 and 25-26 for more details.
Suppliers	• We engage with suppliers through our Supplier Management Process, including implementation of our Supplier Code of Conduct	See pages 38-41 for more details.

What we stand for

A company cannot be a good global citizen without running its daily business responsibly. This involves a commitment to corporate governance and business ethics, and putting that commitment into practice. This section covers:

• Core values

• Corporate governance

• Business ethics

• Public policy

Core values

HP's core values have shaped our history and will continue to define our future. Following the merger with Compaq in 2002, we communicated these values throughout the new company. Our core values are:

• We are passionate about customers

• We have trust and respect for individuals

• We perform at a high level of achievement and contribution

• We achieve our results through teamwork

• We act with speed and agility

• We deliver meaningful innovation

• We conduct our business with uncompromising integrity

Corporate governance

Now more than ever, strong corporate governance is essential to business success. Our governance standards are set at the highest level, starting with the Board of Directors.

Board of Directors

The Board's role is to govern HP to benefit its shareowners and other stakeholders, including employees, customers, suppliers and the communities in which we work and live.

The Board is comprised of 11 members, 10 of whom are independent (the number of employee directors was reduced from two to one in 2002). As Chairman, Carly Fiorina also serves as CEO. Five board committees – all led by independent directors – are responsible for review and oversight of company strategy and practices (see Web links). These include:

• Audit Committee

• Finance and Investment Committee

• Human Resources and Compensation Committee

• Nominating and Governance Committee

• Technology Committee

Executive team

Our executive team consists of 20 company officers. They include Senior and Executive Vice Presidents from our business divisions and the heads of Corporate Affairs, Finance, Global Brand and Communications, HP Labs, Human Resources, Investor Relations, IT, Legal, Marketing, Operations, the Office of Strategy & Technology, and Strategic Change & Global Excellence.

Internal Audit

Internal Audit's primary role is to address risks throughout the company and to evaluate, monitor and improve the effectiveness of controls and governance processes in support of corporate objectives. Internal Audit performs financial and operational reviews across the company and, where appropriate, of third parties doing business with HP. Audits are conducted in all regions where HP operates. Internal Audit provides regular reports to the Audit Committee of the Board of Directors (see page 8).

Ethics Committee

The Ethics Committee was established in 2002. It consists of Senior and Executive Vice Presidents from Human Resources, Legal, Finance, and Corporate Affairs. It is charged with overseeing the development and enforcement of the company's ethical guidelines, known as the Standards of Business Conduct, and reviewing allegations of violations of the Standards of Business Conduct.

Web links

HP Board of Directors and Executive Team
http://www.hp.com/hpinfo/execteam/#hpBoard

HP Annual Report (with description of Board committees)
http://www.hp.com/hpinfo/investor

Business ethics

Our character is defined not only by what we do, but how we do it. Our business success depends on building trusted relationships with our partners, customers and employees. We earn this trust by conducting business with uncompromising integrity.

We are dedicated to the following ethical principles:

- Honesty in communicating within the company and with business partners, suppliers and customers, while protecting the company's confidential information and trade secrets

- Excellence in our products and services

- Responsibility for our words and actions

- Compassion in our relationships with our employees and communities affected by our business

- Citizenship in our observance of all laws wherever we do business, respect for the environment, and service to the community

- Fairness to and respect for fellow employees, shareowners, business partners, customers and suppliers

Standards of Business Conduct

HP's Standards of Business Conduct (key elements shown in box, page 10) guide us in our actions, behaviors and decisions. The Standards apply globally and are translated into more than 12 languages. They were enhanced in early 2003 to reflect changing perspectives on ethical behavior.

Additional policies and guidelines complement the Standards of Business Conduct, for example our Personnel Policies and Guidelines.

Standards of Business Conduct – key elements

Embodying HP standards. Every member of the HP community (including directors, executives, managers, employees and business partners) must adhere to the highest standards of business ethics and comply with all applicable laws.

Conducting HP business. While working for the best interests of HP, we must be ethical and lawful in our dealings with customers, partners, suppliers, competitors, and fellow employees.

Serving HP customers. We must deal fairly and truthfully with our customers.

Working with channel partners. We select and manage channel partners in accordance with the law and HP channel policies.

Relating to our competitors. Our interactions with HP competitors must be fair and respect the law.

Dealing with suppliers. When buying products and services, we interact with suppliers fairly and in compliance with applicable laws and HP policies.

Avoiding conflict of interest. Employees must avoid situations in which their interests conflict with HP's.

Handling sensitive information. HP safeguards its business and technical information, and that of others, and uses it exclusively for HP business purposes.

Safeguarding HP assets. We must use HP assets, tangible and intangible, only for legitimate business purposes and protect those assets from loss and unlawful, improper or unauthorized use. This includes behavior regarding expense recognition, political contributions, and use of assets for personal gain.

Respecting HP colleagues and the community. HP is committed to creating and maintaining a diverse and inclusive work environment based on respect for the individual and to being a leading corporate citizen everywhere we conduct business.

Issues reported to the Office of Business Practices, 2002
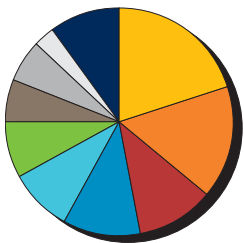
Outside activities, employment	20%
Employee relations	16%
Discrimination, harassment	11%
Misuse of company resources	11%
Contract compliance	9%
Customer/supplier relations	8%
Gifts & entertainment	6%
Handling sensitive information	6%
Antitrust	3%
Other	10%
Total number of issues	**174**

Implementing our standards

Training and resources

Regular ethics training is designed to ensure employees understand and comply with our Standards of Business Conduct. For example:

- All employees have access to interactive, web-based training

- All managers are required to take business ethics training classes

- Managers are expected to conduct regular discussions about the Standards of Business Conduct with their teams

- Vice Presidents are given ethical leadership training and materials to engage in dialogue with staff

We conduct focus groups with employees to determine their awareness of ethics resources. These activities, and analysis of alleged ethics infractions, help to shape future ethics programs.

Web links

HP Business Ethics
http://www.hp.com/hpinfo/globalcitizenship/csr/ethics.html

HP Standards of Business Conduct
http://www.hp.com/hpinfo/investor/sbc.html

Office of Business Practices

Employees and other stakeholders can anonymously report potential violations of law, company policy or the Standards of Business Conduct to the HP Office of Business Practices. The Office provides objective, confidential advice regarding these matters. In 2002, 174 separate issues were reported (see pie chart).

The Office can be contacted by:

- Telephone. A free and confidential 24-hour resource line, called The GuideLine, is available globally. In the US, contact 1-800-424-2965.

- E-mail. Corporate.compliance@hp.com

- Postal mail.
  HP Office of Business Practices
  PO Box 692015
  Houston, TX 77269-2015, United States

Monitoring

Internal Audit monitors adherence to HP's Standards of Business Conduct. Activities include risk assessment, business practice site audits, and the monitoring and evaluation of ethics training.

We have a disciplinary process for violations of the Standards of Business Conduct, which includes termination of employment and referral to law enforcement authorities if warranted.

Public policy

Companies play an important role in public life, frequently presenting views on legislation and policy to governments. This is an integral part of the democratic process, done transparently, free from financial inducements and other pressures.

HP has a Government and Public Affairs team that reviews legislative developments in our markets. The team engages globally with governmental and political representatives, trade associations, companies, non-governmental organizations (NGOs) and community leaders. It works to shape policies that directly affect our growth and competitiveness, open new markets, lower costs of our products, and create a more favorable business climate. It does this in compliance with relevant laws.

Political donations

In the US, political giving is one way we engage in politics. Most states allow corporate contributions to state and local candidates. HP makes limited political contributions to candidates and ballot measure campaigns, consistent with our public policy agenda. In 2002, we donated $503,150.

US law prohibits corporate donations to federal candidates. However, our eligible employees can make individual donations to the HP Political Action Committee (HP PAC), which contributes to the campaigns of congressional candidates who share our public policy views. Contributions to fund the HP PAC, a separate legal entity, are voluntary. In 2002, the HP PAC contributed $114,250.

HP's policy is not to make political contributions outside the US.

Policy initiatives

The Government and Public Affairs team works to shape a broad array of policies on the digital economy worldwide, including issues related to global citizenship such as:

• Accessibility

• e-commerce

• Education reform

• e-inclusion

• Employment nondiscrimination

• Homeland security

• Internet privacy

• Recycling electronic equipment

• Trade policy

These issues cut across many business activities. Following is a summary of our policy positions as they relate to global citizenship. More information is on our Government and Public Affairs website (see Web links).

Web links

HP Government and Public Affairs
http://www.hp.com/hpinfo/abouthp/government

Accessibility

We support government efforts to make mainstream technology accessible to people with disabilities.

In the European Union, some member states have adopted or are considering accessibility legislation. HP is a sponsor of the European Year of People with Disabilities (EYPD) 2003.

HP Japan is collaborating with the Japanese government to standardize accessible design criteria to be more consistent with global standards. Japan is expected to publish relevant standards in 2003.

In 1998, the US government strengthened Section 508 of the Rehabilitation Act. This requires US federal agencies to make electronic and information technology available to people with disabilities. It applies to the development, procurement, maintenance and use of these technologies. We are committed to helping government customers comply with Section 508.

For more on our accessibility work, see pages 59-61.

e-commerce

e-commerce holds much promise for consumers, business in general, and companies such as HP that benefit directly from its expansion.

Obstacles to the growth of e-commerce include inadequately defined consumer rights, concerns about internet security, copyright issues, and tax and international trade laws. HP works with consumer groups, business partners and legal authorities to address these issues. We chair the consumer committees at the Global Business Dialogue on Electronic Commerce (GBDe), a major industry organization, and the International Chamber of Commerce.

As chair of the GBDe's Consumer Confidence Committee we are helping develop Alternative Dispute Resolution guidelines, or ADRs. These will offer effective extra-judicial means to resolve online consumer disputes. In May 2003, GBDe reached an agreement with Consumers International (representing 160 consumer organizations worldwide) on ADR guidelines to be used by merchants and ADR providers. HP acted as secretariat for this effort, which has been strongly supported by governments in Japan, the EU, the US and elsewhere.

Education reform

We support government efforts internationally to:

- Raise educational standards

- Strengthen teacher training and student knowledge of science and mathematics

- Integrate technology into curricula

- Promote skills for success in the high-tech economy

For example, in the US, we have advocated for increased education funding in mathematics and science, and we have supported efforts to make permanent Section 127 of the US Tax Code, which will enable employers to promote continuing education among employees.

For information about HP's investments in education, see pages 70-71.

e-inclusion

HP is committed to increasing access to digital technology in underserved communities – we call this e-inclusion.

We support the removal of trade barriers and reduction or elimination of taxes that restrict access to or raise the cost of high-tech equipment and services. We endorse programs and policies that improve:

• Local access to technology and information

• The business climate for small to medium enterprises and entrepreneurs, including transparency in government procedures

We work in partnership with governments, NGOs and businesses to increase digital opportunities worldwide through public policies and initiatives. HP Chairman and CEO Carly Fiorina served on two international boards that address the digital divide – the UN Information and Communication Technology (ICT) Task Force and the G8 Digital Opportunity Task Force (DOT Force). The G8 are the eight major industrialized nations.

In the DOT Force, HP worked closely with other companies, G8 government representatives, NGOs and developing countries to create Enablis, a non-profit entity. Enablis is being piloted in South Africa and will provide venture-capital style funding and support to small and medium-sized enterprises.

Our work with the UNICT Task Force has focused primarily on small and medium-sized enterprises and micro-entrepreneurs, as well as policy recommendations that can most benefit our efforts in developing countries.

We are active in the World Economic Forum's Global Digital Divide Initiative, and the Global Business Dialogue on e-Commerce Digital Bridges Working Group.

Employment nondiscrimination

HP supports equal opportunities for all individuals regardless of ethnicity, gender and sexual orientation. We encourage public policies that increase employment opportunities for underserved communities and support family-friendly employment practices.

HP supports the pending US federal Employment Non-Discrimination Act (ENDA) that would prohibit employment discrimination based on sexual orientation. Current US federal law prohibits only employment discrimination based on race, religion, gender, national origin, age or disability. We believe that US federal policy should extend the same coverage as our corporate policy on discrimination, which includes sexual orientation.

Homeland security

Homeland security – protection against terrorist attacks – became a global priority after September 11, 2001. We worked with government agencies worldwide to draft legislation on cyberspace security (protection against computer-based attacks).

We helped the US White House Office of Cyber Security and federal legislators create and implement the National Strategy to Secure Cyberspace. It has three main objectives:

• Minimize damage and recovery time from cyber attacks

• Prevent cyber attacks against critical infrastructures

• Reduce vulnerability to cyber attacks

Our approach was to improve national security without stifling technological innovation.

We worked with US senators and representatives to draft and pass the Cyber-Security Research and Development Bill. This provides $900 million to recruit and support students in cyberspace security. The cyber-security bill introduced tougher penalties for hackers and measures to raise public awareness of the issue.

HP Labs is a member of the European Commission initiative to establish the European Network and Information Security Agency. This intends to advise on homeland security while respecting civil liberties.

Internet privacy

HP believes that consumers' right to privacy must be respected and enforced on the internet. Throughout the world, HP is a member of several working groups addressing international data protection.

In the US, we have taken a strong position in favor of uniform national privacy protection. We support proposed federal legislation that would require companies to clearly disclose privacy policies and offer customers choices regarding use of their personal data. We were the first Fortune 50 company to self-certify with Safe Harbor, an agreement on customer and employee privacy standards between the US and the European Commission. HP is implementing a privacy policy worldwide that is aligned with the Safe Harbor principles and therefore compatible with the European Union Data Protection Directive.

For information on our privacy standards and initiatives, see pages 26-27 and 56-59.

Recycling electronic equipment

Governments, the media and the public are paying increasing attention to the disposal of used computers and other electronic products. Governments are adopting and proposing legislation to address the issue.

Some proposed legislation holds manufacturers solely responsible for collection and recycling costs, while others impose a fee on new product sales. We believe these approaches can be inefficient and unfair, and are not the best way to promote recycling and resource conservation.

Instead, HP encourages recycling policies based on:

- Shared responsibility between manufacturers, municipal organizations and customers

- Flexible implementation to encourage increased efficiency and innovation

- Reform of existing laws or regulations that can discourage recycling
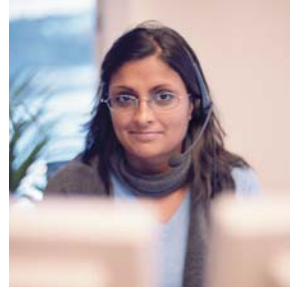
HP prefers harmonized regional or national recycling approaches, as opposed to varying provincial or state requirements that can result in inconsistent and inefficient recycling systems. In any jurisdiction that pursues legislative approaches to electronics recycling, HP advocates the following principles:

• Shared responsibility for collecting, transporting, and recycling products

• No prescriptive design mandates, such as material bans or special labeling requirements

• Flexible implementation and reasonable administration

• Sensible recycling standards to assure environmentally sound management of used products

We believe this approach will most efficiently and fairly reduce the environmental impacts caused by recycling used technology products.

For information about HP's product recycling programs, see pages 52-55.

Trade policy
HP supports global trade liberalization to reduce product costs and generate economic growth through increased IT penetration. We work with trade agreement negotiators on bilateral, regional and multilateral agreements, and specifically support:

• Agreements promoting transparency in procurement, provision of IT services, and the modernization of customs procedures

• Bilateral trade agreements including the US-Chile Free Trade Agreement (FTA), the US-Morocco FTA, the US-Singapore FTA and a US-Australia FTA currently under negotiation

• Free Trade Area of the Americas (FTAA) negotiations

• Continued protection of intellectual property rights

• The second round of Information Technology Agreement (ITA) negotiations at the World Trade Organization (WTO), that would extend the list of products covered by the agreement (the first round eliminated tariffs on more than 90% of world IT trade)

• WTO's multilateral trade negotiation, the Doha Round

Following China's accession to the WTO in 2001, HP worked with the Chinese government and other interested groups to ensure a successful transition and the timely implementation of its commitments. China is the world's second largest PC market. HP has 30 sales and service offices, two manufacturing facilities and more than 2,000 employees there. China's membership in the WTO will foster greater political and economic openness in China and we believe this will help promote human rights.

Economic value

Our commercial activity directly impacts society. It boosts economic activity and provides jobs and benefits, taxes and dividends.

Fiscal year 2002

Overall [Million $US, except per share amounts]	Historical results	Combined company results[4]
Net revenues	$56,588	$72,346
Net loss	$903	$928
Reinvested in HP		
Investment in property, plant and equipment	$1,710	N/A
Research and development	$3,312	$3,890
Shareholders		
Cash dividends paid per share	$0.32	N/A
Governments		
Benefit from taxes	$129	$136
Communities		
Philanthropy	$60.0	$62.2

[4] The combined company results include the results of operations of HP and Compaq as if the acquisition had occurred as of the beginning of fiscal 2002. Due to different historical fiscal period ends for HP and Compaq, the results for the year ended October 31, 2002 combine the results of HP for the year ended October 31, 2002 and the historical quarterly results of Compaq for the six-month period ended March 31, 2002 and for the period May 3, 2002 (the acquisition date) to October 31, 2002. Adjustments have been made to the combined results primarily to reflect amortization of purchased intangible assets as if the acquisition had occurred at the beginning of the periods presented.

Socially responsible investment

Socially responsible investors (SRI) are those who include social, environmental and ethical criteria in their investment decisions.

We meet with SRI groups privately and at major SRI forums in Asia, Europe and the US. We respond to information requests regarding our business and global citizenship policies and performance, and work with these groups to streamline the process. This interaction gives us a valuable independent assessment of our performance and improves our understanding of emerging issues.

We meet the criteria of many SRI funds, including Domini Social Investments, Henderson Global Investors Limited, ISIS Asset Management, LLC, Storebrand Investments and Trillium Asset Management. We were not included on the Dow Jones Sustainability Index or the FTSE4Good listing in 2002. Our goal is to be listed on both in 2003.

In 2002, we were ranked first in the oekom research rating of eight leading international computer manufacturers. The German sustainability rating agency used 200 criteria to evaluate social and environmental performance.

> "Today, the IT industry and consequently HP are facing several challenges. The overall problem of toxic materials contained in computers is far from being solved...HP will have to enhance a proper and environmentally sound strategy..."
> oekom research AG

oekom research AG

In 2002, HP produced the best performance in oekom research's Corporate Responsibility Analysis of the Computer Industry. The company is also one of the leaders regarding corporate responsibility in the IT industry worldwide. Throughout the past years, oekom research's ratings have revealed that HP has steadily striven for improvement regarding environmental issues. For example, our Corporate Responsibility Rating showed that HP has implemented several measures to reduce the energy consumption of equipment, and a large number of products now come with energy labels. But there are also several fields with potential to reduce the environmental impacts of HP's activities, (e.g., in the use of hazardous substances in the products.) Today, the IT industry and consequently HP are facing several challenges. The overall problem of toxic materials contained in computers is far from being solved. Therefore, HP will have to enhance a proper and environmentally sound strategy to deal with the handling of end-of-life equipment. As a future goal, HP should also assure that it and its suppliers comply with international human and labor right standards as well as adequate environmental practices.

Evelyn Bohle, Senior Analyst, oekom research AG

oekom research is an independent rating agency with ten years of experience in the sustainable investment field. The company is one of the world's leading providers of information on the social and environmental performance of companies, sectors and countries.

SAM Research (provides assessment for Dow Jones Sustainability Indexes)

HP is clearly positioned among the most sustainable companies in its industry as the company displays high levels of competence in addressing sustainability challenges. Through its open, transparent and integrated approach towards corporate responsibility, HP has managed to create value for the company and its stakeholders.

Among the most significant achievements of the company is an excellent management of the supply chain where, for example, HP requires and monitors environmental and social standards of suppliers. This is very important for an industry in which most of the production is outsourced.

Environmentally, HP has attained outstanding results in product stewardship. For example, the implementation of recycling schemes is among the best in the industry and HP was formally recognized by the US Environmental Protection Agency as leading in this regard.

HP's societal involvements have shown the great commitment of the company. Its efforts to reduce the digital divide are exemplary; providing a platform where citizens, governments, NGOs, and other corporations can together work on solutions for the local communities.

Edoardo Gai, Sustainability Analyst, SAM Research

SAM Research is part of SAM Sustainable Asset Management, a Swiss-based independent asset management company, with a focus on sustainable investment.

Trillium Asset Management

Trillium Asset Management is a 20-year old socially responsible investment firm that has held Hewlett-Packard for most of our history. We commend HP for its commitment to disclosure, and a number of its leadership initiatives, including working to figure out how its products can benefit some of the world's poorest communities and beginning to address environmental issues with its suppliers around the globe.

Over the past year we've engaged in dialogue with HP about sales to repressive regimes. We suggested that HP could benefit from developing a 'beyond compliance' policy to preclude sales of potential military value to heavily militarized, undemocratic regimes. We are still encouraging HP to address this challenge, and appreciate the company's willingness to take our concerns seriously and engage in discussions on the issue.

Steve Lippman, Senior Social Research Analyst, Trillium Asset Management

Trillium Asset Management is the oldest and largest independent investment management firm dedicated solely to socially responsible investing.
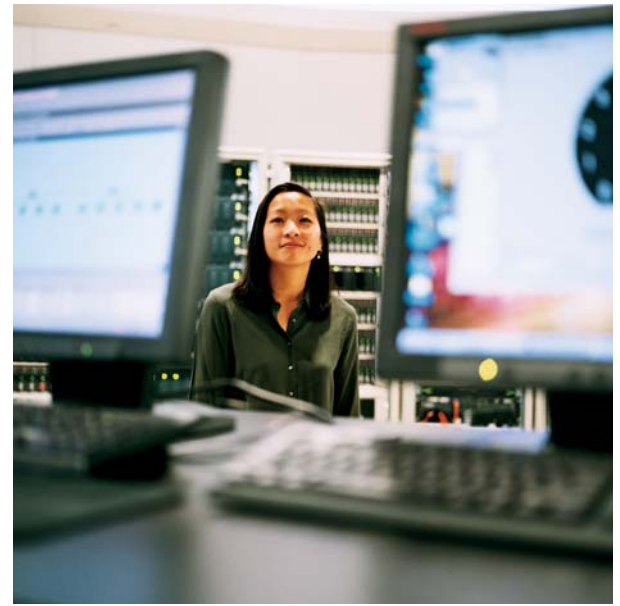
Employees

HP employs approximately 141,000 people in 178 countries. Working with them to fulfill their potential is one of our most important roles as a global citizen.

This section summarizes our approach and performance in:

• Labor practices

• Diversity

• Health and safety

• Human rights

• Employee privacy

Labor practices

Our people are among our most important business assets. To attract and retain the best talent, HP must offer opportunities for personal development and advancement, as well as competitive salaries and a good work-life balance.

To help HP employees share in the company's success that they make possible, we provide employment opportunities based on performance. We create with employees a safe, exciting and inclusive work environment that values diversity and recognizes individual contributions, and help employees gain a sense of satisfaction and accomplishment from their work.

We believe that:

• HP's performance depends on motivated employees, and their loyalty is essential

• When we trust our employees, they will do the right thing and make a difference

• All employees, regardless of title, level or tenure, make important contributions

• An exciting, stimulating work environment is critical to invention

• A diverse workforce gives us a competitive advantage

• Employees are responsible for lifelong learning

Our employee policies, such as those relating to equal opportunity and nondiscrimination, apply globally. When they differ from local law, HP abides by the more demanding standard.

Restructuring

As part of the integration of HP and Compaq, HP restructured its workforce and by the end of the first half of our 2003 fiscal year had eliminated 16,800 jobs. Programs to reduce jobs were started in 54 countries, in compliance with local labor laws.

Employees who lost their jobs were given severance benefits, time to look for another HP job (using an online search system) and career transition counseling. Voluntary enhanced early retirement packages were offered where legally permissible.

Our selection process for positions in the new HP was based on these principles:

- Support the integration, culture and success of the new HP – retaining top talent is a business necessity

- Respect, accountability, trust and cost-effectiveness

- Partnership between business leaders and Human Resources

- Provide leaders essential information to make informed decisions

- Diversity of talent

- A fair balance of HP and Compaq employees

We studied the corporate culture of the two companies to develop the cultural framework for the new HP. Although the cultures differed, the companies shared several characteristics, including an emphasis on teamwork.

Pay and performance evaluation

Total Rewards is our global performance management and awards program. It provides competitive compensation and benefits that enable us to attract and retain a talented and diverse workforce.

Our pay philosophy is to:

- Pay among the leaders

- Pay employees based on their sustained performance

- Pay fairly

- Be transparent about how pay is determined

We recognize differences in performance levels among employees doing the same or similar jobs. Pay rates, assessed by our annual Focal Point Reviews, reflect this. These reviews typically include:

- Performance evaluation and rating

- Review and recommendations on base pay and stock options

- Performance planning for the current fiscal year

- Development planning for the next fiscal year

Work-life navigation programs

Pressure to perform can lead to long work hours. The challenge for management is to devise working practices that help employees balance the time they spend at home and work.

The following programs address the issue.

Flexible work arrangements (FWAs). Flexibility on how, when and where employees work is central to our culture. FWAs include:

- Flexible work hours – in most countries, employees may start an eight-hour workday any time between 6am and 8.30am

- Part-time – employees may work part-time, with their salary and benefits adjusted accordingly

- Telework – employees may do all or part of their job away from their primary business location (see Telework, page 33)

FWAs are available to all employees worldwide, and are subject to management approval. FWAs must meet legal requirements and business needs.

LifeWorks. This phone and web service for employees in the US and Canada offers professional advice on parenting and child care, education, retirement planning, disabilities, caring for elderly dependents, and legal and financial matters. Lunchtime seminars have been introduced.

The LifeWorks advice website and confidential phone line offer consulting with trained professionals. In 2002, the website received 7,200 requests for help on parenting and childcare, and 3,000 requests for information on care for the elderly.

Maternity and paternity leave. Our programs comply with, and sometimes exceed, the law. In the US, we offer 12 weeks of unpaid time off to employees who become parents, either through childbirth or adoption, and the opportunity to extend this to one year.

Employee training programs

All employees are provided opportunities for training and career development. Regular performance reviews ensure that development plans are implemented.

Special development programs identify employees with high potential and assist them to expand their leadership skills. The Leadership Effectiveness and Development (LEAD) program, intended for individual contributors and first-line managers, and the Accelerated Development Program (ADP) for more experienced managers, identify high potential employees within HP and help them progress to leadership positions. In 2002, 384 employees took part in these programs – 156 were women and 91 were from ethnic minorities. Another program is Winning Edge, an 18-month long senior leadership development program.

Fast Start. As part of the integration of Compaq and HP, managers conducted one- to two-day team meetings to introduce employees to the new HP. The meetings covered the structure, brand, culture and expectations of the new company.

Employee Sustainability Network

The Sustainability Network, a worldwide employee volunteer group established in 1998, works to integrate sustainable practices into HP's business operations. Its 500 members represent all businesses, regions and levels in the company.

The network uses a web discussion forum, website and mailing lists, and publishes a bi-monthly newsletter called HP GreenScene. This newsletter discusses sustainability in the context of HP's operations, customer concerns, and how employees can integrate sustainable practices into everyday activities. The publication is sent to network members and 1,000 employees.

In 2002, the network started a series of monthly speeches by experts and coordinated Earth Day activities at a number of sites in the US. These included electric car rallies and educational fairs.
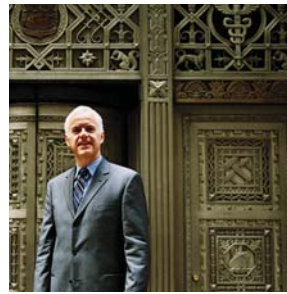
Employee communications

Our internal communications are designed to increase employee understanding of our corporate strategy and values, improve employee confidence in the company's leadership and energize the workforce. Our communications vehicles and forums include:

- A semi-annual broadcast from the CEO to all employees
- Employee Networks (see box above)
- Frequent email updates sent to all employees
- Quarterly business performance review video
- Regional 'coffee talks' (employees have the chance to question the CEO)

We have tracked employee satisfaction using surveys since the 1970s. The questionnaire was updated in April 2003 after the integration of HP and Compaq and is available online in 17 languages. We expect to publish the results in our next Global Citizenship Report.

Open Door Policy

Our 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. Blocking or threatening an employee for raising a concern can result in disciplinary action.

Awards and recognition

Australia. Department of Employment and Workplace Relations ranked HP Australia among the top 30 companies in 2002.

India. Dataquest-IDC included HP in its list of IT's Best Employers.

Singapore. Pre-merger HP Singapore won the Family Friendly Firm Award in July 2002 for innovative pro-family practices.

Singapore. JobStreet.com ranked HP 1st on its Best Employer: The People's Choice list.

US. Maryland Work-Life Alliance included HP in its 100 Best Companies for Working Mothers.

US. Working Mother Media included HP in its 100 Best Companies for Working Mothers.

Challenges

The reduction of 16,800 jobs was a necessary but regrettable outcome of the integration of HP and Compaq. It presented several human resources challenges, including:

- Dealing fairly with business rationalization and maintaining morale in the new organization
- Defining a new company culture and establishing initiatives that help create the best work environment for our employees

Creating opportunity for people with disabilities

HP's SEED Center in Japan provides training and paid work experience for people with disabilities. Since it was established in 2001, 11 people have completed the training and nine have gained full-time employment, mainly outside HP. Eight more will finish training in August 2003.

Trainees spend a year at the center. They receive IT and business skills training, work on outsourced HP projects, and receive career guidance.

Mina Nakajo joined the center in 2002. She developed web design skills, creating the home pages for SEED and the HP Invent Center. "This enhanced my technical skills and built my self-confidence," she says. Mina now works for HP Services, where she says the work is pressured but diverse: "The thing I enjoy most is that today is never like yesterday."

HP Japan is planning to restructure the layout of its office to make it barrier-free for disabled employees.

Diversity

Increasingly, companies recognize that to succeed they need employees who reflect the cultural and gender diversity of their markets.

HP believes a diverse workforce encourages creativity, innovation and invention. We want HP employees to reflect the diversity of the world in which we do business.

Our Diversity and Inclusion Leadership Committee (DILC) plays a critical role at helping HP integrate diversity and inclusion into the fabric of our company. Consisting of senior business leaders and Diversity Directors from around the world, it oversees company-wide diversity, inclusion and work-life programs. The committee sets diversity and inclusion priorities, decides on diversity initiatives and influences implementation of those initiatives.

Managers are responsible for creating and maintaining diversity through development programs, recruitment opportunities and training practices.

Diversity policies

Equal opportunities and nondiscrimination
Our Equal Opportunity Policy states we will not discriminate against any employee or applicant for employment because of race, creed, color, religion, gender, gender identity/expression, sexual orientation, national origin, disability, age or covered veteran status.

As a minimum, it is our policy to comply with all non-discrimination and equal-opportunity laws. These include Employment Equity in Canada, the New Economic Policy in Malaysia, the Social Charter in the European Community and Affirmative Action in Australia and the United States.

For information about HP's public policy positions regarding employment nondiscrimination, see page 13.
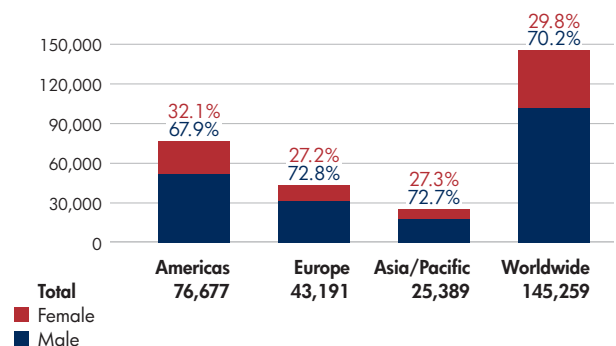
Harassment-free work environment
Harassment is a form of personal discrimination. It includes offensive verbal, physical or visual behavior directed toward an individual, based on his or her gender, color, race, ancestry, religion, national origin, age, physical or mental disability, sexual orientation, gender identity/expression or covered veteran status.

Our Harassment-Free Work Environment Policy represents a strong commitment to ensuring customers, employees, suppliers, business partners, visitors and shareowners are treated with dignity, respect and courtesy.

Complaints
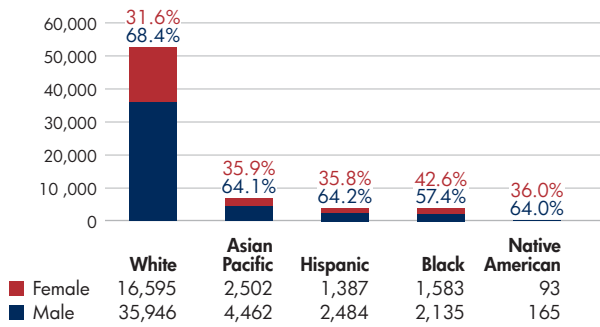We encourage our employees to report harassment and discrimination. All allegations are investigated and appropriate action is taken.

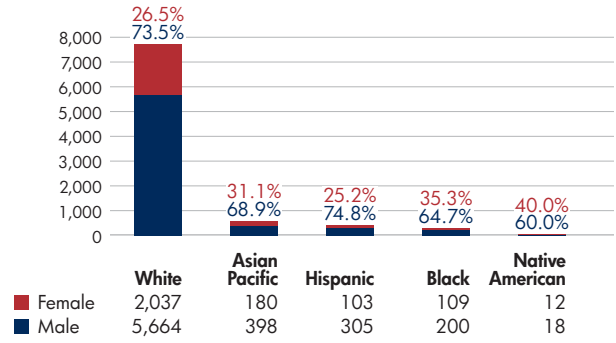**Gender diversity by region, 2002**
[Employees]

	Americas	Europe	Asia/Pacific	Worldwide
	32.1% / 67.9%	27.2% / 72.8%	27.3% / 72.7%	29.8% / 70.2%
Total	76,677	43,191	25,389	145,259

■ Female
■ Male

US workforce diversity, 2002 [Employees]

	White	Asian Pacific	Hispanic	Black	Native American
Female	16,595	2,502	1,387	1,583	93
Male	35,946	4,462	2,484	2,135	165

US management diversity, 2002 [Officers and managers]

	White	Asian Pacific	Hispanic	Black	Native American
Female	2,037	180	103	109	12
Male	5,664	398	305	200	18

Diversity programs

We have various programs to promote diversity.

Network groups. Employee network groups, consisting of employees with common interests, have existed informally at HP for the past 30 years and formally since 1993. Groups in Canada, Europe and the US represent many dimensions of diversity, such as gender or gender identity/expression, race or national origin, sexual orientation, age and disability. Activities include professional development workshops, speakers and panels for membership development and leadership training, and events to promote cultural awareness and celebration.

Diversity training. Our training courses on diversity combine internet and classroom learning. Topics include various dimensions of diversity as well as diversity policies and guidelines.

Benefits for same-sex domestic partners. Our employees' same-sex domestic partners are eligible for HP medical programs and other benefits, such as life insurance, relocation/travel assistance and adoption assistance. To qualify, they must register their partnership with a state or local government. If this is not possible, they need to meet specific criteria in our Affidavit of Domestic Partnerships.

Employment programs for people with disabilities

HP Accessibility Program. Coordinates efforts to make HP products, programs and services accessible to everyone (see Accessibility, pages 59-61). This includes a commitment to employ people with disabilities.

Asia-Pacific disability programs. In Asia Pacific, we have a program to employ people with disabilities. In Japan, our target is for people with disabilities to constitute 1.8% of our workforce, a level we plan to reach next year. In 2003, HP will sponsor disability mentoring days across the Asia Pacific region.

Business Leadership Network. HP is a member and major sponsor of this employer-led venture of the US Department of Labor that increases career opportunities for people with disabilities.

disabilities@hp. This website helps HP employees learn about disabilities and work with disabled colleagues.

Job accommodations. Catering to the needs of people with disabilities (such as providing adjusted workstations, longer breaks and assistive technology) helps those employees deliver their best work.

Diversity performance

We track ethnic diversity in our US workforce and gender diversity globally. The above charts illustrate ethnic group representation in the total US workforce and in management, and the chart on the opposite page illustrates gender diversity by region.

Awards and recognition[5]

US. The Advocate (a gay and lesbian news magazine) included HP in its list of the top gay-friendly employers in the US.

US. Fortune Magazine, 50 Most Powerful Women in Business.

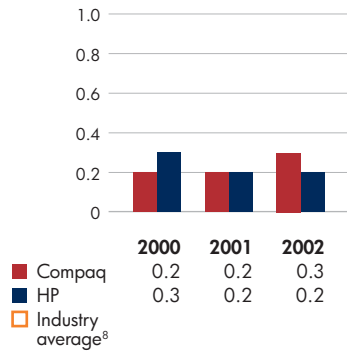**US**. Hispanic Magazine, Hispanic Corporate 100.

US. HRC (Human Rights Campaign) Corporate Equality Index (HP scored 86 out of 100 points).

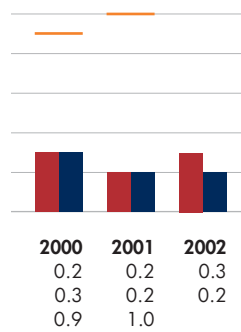**US**. JOBs (Just One Break), 'Corporate Champion' award.

US. National Association for Female Executives (NAFE), Top 30 Companies for Women Executives.

[5]Note: Because of the integration of HP and Compaq, many diversity awards did not include HP in the 2002 review.
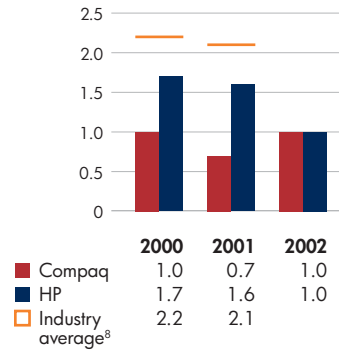
Lost workday case rate[6],
2000-2002
[Worldwide]

Lost workday case rate[6],
2000-2002
[US]

Recordable injury rate[7],
2000-2002
[US]

Lost workday case rate, 2000-2002 [Worldwide]

	2000	2001	2002
Compaq	0.2	0.2	0.3
HP	0.3	0.2	0.2
Industry average[8]			

Lost workday case rate, 2000-2002 [US]

	2000	2001	2002
Compaq	0.2	0.2	0.3
HP	0.3	0.2	0.2
Industry average[8]		0.9	1.0

Recordable injury rate, 2000-2002 [US]

	2000	2001	2002
Compaq	1.0	0.7	1.0
HP	1.7	1.6	1.0
Industry average[8]	2.2	2.1	

[6]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.

[7]US recordable injury rate is the total number of work-related accidents including minor injuries that do not require time away from work, per 100 employees working for a full year.

[8]US Bureau of Labor Statistics for SIC 357 (Computer and Office Equipment).

Health and safety goals

- Although our long-term goal is zero occupational injuries, we set annual goals to measure performance

Goals set in 2002

Goal
- Achieve a year-to-year reduction in lost workday and US record-able injury rates

Progress in 2002
- HP sites achieved this goal for US recordable injury rate in 2002

New goals set for 2003
(compared to 2002)

- Decrease lost workday case rate
- Decrease average number of lost workdays
- Increase percentage of HP staff completing the ergonomic assessment and training program

Health and safety

Workplace health and safety is a basic right protected by regulation in most countries. Injuries harm people, disrupt operations, damage worker confidence and cost companies money. It is in everyone's interest to make workplace health and safety a priority.

HP's long-term goal is to eliminate work-related injuries, based on a firm belief that almost every injury is preventable. We expect all business units to establish injury-reduction targets and the programs necessary to achieve them.

Our Environmental, Health and Safety Management System (EHS MS) provides the management structure, risk management, measurement and assurance required to prevent work-related injuries (see page 28). The EHS MS encompasses all HP business operations, including field sales and service employees working at customer locations.

Performance

We have historically tracked health and safety performance against various international reporting standards. For 2003, we are standardizing global injury reporting, using Lost Workday Case Rate and the average number of work-days lost by these cases. These measures allow us to track our progress in injury prevention and in reducing injury severity on a global basis. In addition, these measures are globally accepted as key indicators of health and safety program success. We compare our performance to our industry, as well as other leading global companies, to ensure that our health and safety programs demonstrate our commitment and leadership in injury reduction.

HP did not have any work-related fatalities in 2002.

HP's injury trends, globally and for the US, show gradual reduction. There was a minor increase in the former Compaq locations during 2002.

Although HP continues to be an industry leader in safety performance, we are committed to improvement.

Ergonomics

Musculoskeletal injuries continue to be the most common type of workplace employee injury. Effective ergonomics programs, including those in the office, help reduce the frequency and severity of these injuries.

HP uses a global web-based training and self-assessment program, available in nine languages, to help computer users reduce the ergonomic risks of their jobs. A survey showed that 91% of those who had used this program had changed the way they work and 95% would strongly recommend the program to a colleague. We will use the program participation rate as a health and safety performance measure, starting in 2003.

Health and wellness programs

HP's EHS MS addresses broader employee health and wellness issues. We want to be a leader in providing valued and cost-effective health and wellness programs designed to optimize employee health, quality of life and productivity.

Our global health and wellness strategy contains three key initiatives: health risk identification, health risk management/ reduction, and health education and self-care.

The strategy is implemented through local programs and designed to address local or regional health and wellness needs. The programs include immunization and screening, fitness centers, web-based health and wellness information, health risk assessments, stress management, smoking cessation, nutritional counseling and sports leagues.

Awards and recognition

Scotland. Gold Award for Occupational Health Excellence from the Health at Work (SHAW) Agency.

HP Human Rights and Labor Policy

HP supports and respects the protection of international human rights within the sphere of our influence, and ensures that we are not complicit in human rights abuses.

Freely-chosen employment. Ensure no forced, bonded or involuntary prison labor is used in the production of HP products or services. Ensure that the overall terms of employment are voluntary.

No child labor. Comply with local minimum age laws and requirements and do not employ child labor.

Minimum wages. Compensate our workers with wages and benefits that meet or exceed the legally required minimum.

Working hours. Do not require workers to work more than the maximum hours of daily labor set by local laws. Comply with overtime pay requirements.

No discrimination. Prohibit discrimination based on race, color, age, gender, sexual orientation, gender identity and expression, ethnicity, religion, disability, union membership or political affiliation.

No harsh or inhumane treatment. Prohibit physical abuse, harassment or the threat of either.

Freedom of association. Respect the rights of workers to organize in labor unions in accordance with local laws and established practice.

Human rights

Human rights are the standards of treatment to which all people are entitled. The most widely recognized definition is the Universal Declaration of Human Rights, adopted by the United Nations in 1948 (see Web links, page 26). Although human rights are principally the responsibility of national governments, this has become an increasingly important issue for business.

We are committed to respecting our employees' human rights. Managers are responsible for ensuring adherence to our global personnel policies and guidelines. We will abide by our policy or local law, whichever sets higher standards. Our Supplier Code of Conduct (page 38) requires the protection of human rights by our suppliers.

Our recently established Global Citizenship Policy states our commitment to the Universal Declaration of Human Rights and includes a specific policy on Human Rights and Labor (see above).

UN Global Compact

The United Nations Global Compact (see Web links, page 26), a voluntary initiative established in 2000, helps articulate business' role in protecting human rights. Participating companies agree to support nine principles in the areas of human rights, labor and the environment. Basic human and labor rights identified by the Compact include: safe and healthy working conditions; nondiscrimination at work; no forced or child labor; and freedom of association.

In 2002, HP became a participant of the UN Global Compact. We are working to ensure that our policies and practices reflect and support its basic principles.

Performance

We formally adopted our Human Rights and Labor Policy in 2003.

We have compared our internal policies with the nine Global Compact principles. This led us to focus on how to strengthen our commitment to human rights and labor issues. We will continue to review our policies and make adjustments as necessary to clearly communicate our support in these areas. Our Supplier Code of Conduct reflects this commitment. It specifically requires our suppliers to treat employees fairly and in accordance with national laws. Suppliers must not use forced, bonded, involuntary prison or child labor (see pages 38-39).

As part of our support for the Global Compact, we helped organize, in April 2003, the first Global Compact North American Learning Forum. It convened 25 companies from the region to discuss the Compact's benefits, challenges and opportunities. The forum identified ways to promote the nine principles in North America.

Challenges

• Applying our human rights policy in our supply chain, where we do not have direct control

• Maintaining consistent human rights standards in countries with inconsistent human rights records where we have significant outsourced manufacturing

• Meeting rising stakeholder expectations on human rights standards and performance

UN Global Compact

As a global corporate citizenship initiative, the UN Global Compact brings companies together with UN agencies, governments, labor and civil society to advance nine principles in the areas of human rights, labor and the environment. Through the power of collective action, the Global Compact seeks to create a more sustainable and inclusive global economy.

HP's commitment to corporate citizenship is perfectly aligned with the vision of the UN Global Compact. Nowhere was HP's commitment and leadership more visible than at the World Summit on Sustainable Development in Johannesburg. While many global companies shied away from the summit for fear of becoming the target of criticisms concerning the private sector, Carly Fiorina was one of a select group of leadership CEOs who actively participated in dialogues on how businesses can advance sustainable development by working with other social actors, including non-governmental organizations.

At the summit, Carly participated in a high-level roundtable convened by the Global Compact and chaired by Secretary-General Kofi Annan to launch an initiative to grow sustainable business in the world's least developed countries. A challenge for HP moving forward will be how, through a leadership approach, it can show the benefits of sustainable development and corporate citizenship to more companies around the world. And here, work has already begun: in April 2003, HP – in partnership with Pfizer – organized and hosted the launch of the Global Compact's North American Learning Forum, a platform to raise awareness of the Compact and share good corporate practices in implementing the nine principles.

Moving forward, a significant challenge for multinational companies – including HP – will be the application of principles throughout global supply chains. More and more companies are realizing that in today's world their responsibilities extend beyond the four walls of their own factories and operations. Ensuring that business partners, or potential business partners, respect fundamental values and principles is also of critical importance – from a moral standpoint, as well as from a strategic business perspective. Still, practically speaking, this can indeed be a challenging endeavor – often with no one-size-fits-all solution. Success will largely hinge on a sustained leadership commitment, based on continuous learning and improvement.

Georg Kell, Executive Head, UN Global Compact

Next steps

- Communicate HP's human rights policies and commitments to employees, suppliers and other external partners
- Educate HP's workforce on human rights and employee responsibilities regarding human rights
- Engage with third parties regarding human rights in countries where we do business

Awards and recognition

US. The Appeal of Conscience Foundation, 2002 Appeal of Conscience Award.

Web links

UN Global Compact
http://www.unglobalcompact.org

Universal Declaration of Human Rights
http://www.unhchr.ch/udhr

Employee privacy

Employee privacy is an important component of a trusted workplace. Companies hold a wide range of employees' personal information, some very sensitive. New technologies facilitate information transfer and monitoring of employee activities, communications, and resource use. This increases the challenge of protecting employees' rights to privacy.

Privacy is fundamental to HP's global citizenship goals. Our employee data privacy policy is applicable worldwide and covers the protection of personal information for employees, former employees and job applicants. This includes family data, performance data, medical information and background checks.

Our Global Master Privacy Policy (see Web links, page 59) is based on guidelines formulated by the Organization for Economic Cooperation and Development (OECD), the Global Business Dialogue on Electronic Commerce (GBDe), and the US Federal Trade Commission's Fair Information Practices. Our participation in the Safe Harbor ensures our policy is consistent with the European Union Data Protection Directive. Our employee data privacy policy can be found on our internal employee website.

Key elements of our employee privacy policy are:

- Notice – HP informs employees about available privacy protections

- Access – employees may review and correct personal information

- Security – we make every effort to encrypt sensitive data and use a range of business processes and technologies to protect the security of employees' personal data

- Onward transfer – HP requires third parties that hold employee data to sign confidential disclosure agreements and adhere to Safe Harbor or HP's employee data privacy policy to safeguard data from inappropriate use

Policy implementation

A dedicated privacy team ensures compliance with HP's employee data privacy policy. Steps taken include:

- An email address for employees to submit questions and concerns on data privacy

- Notification of data protection authorities in the EU about computer programs that contain employee personal data

- A tool to ensure that access to employee data complies with global and local privacy laws

- Compulsory training for all employees who have access to confidential and sensitive employee information

- Legal confidentiality agreements including confidential disclosure clauses that control the transfer of employee data across national borders and to third parties

Safe Harbor

We were the first Fortune 50 company to self-certify with Safe Harbor, an agreement between the US Department of Commerce and the European Commission. This agreement allows companies to self-certify to a set of privacy principles, based on European standards. Those principles include notice, choice, onward transfer, access, data integrity, security and enforcement. Safe Harbor principles are evolving into a global privacy standard. Our first self-certification for employee data took place in July 2001. We recommitted in 2002 and 2003.

Challenges

With approximately 141,000 employees worldwide, we need effective systems to ensure their privacy is respected. Particular challenges include:

- Educating HP managers and employees on privacy issues and their related responsibilities

- Managing the increasing quantity and complexity of privacy regulations globally

Next steps

We will continue to:

- Build employee data privacy awareness and training

- Develop compliance metrics

- Implement compliance tracking and monitoring processes and tools
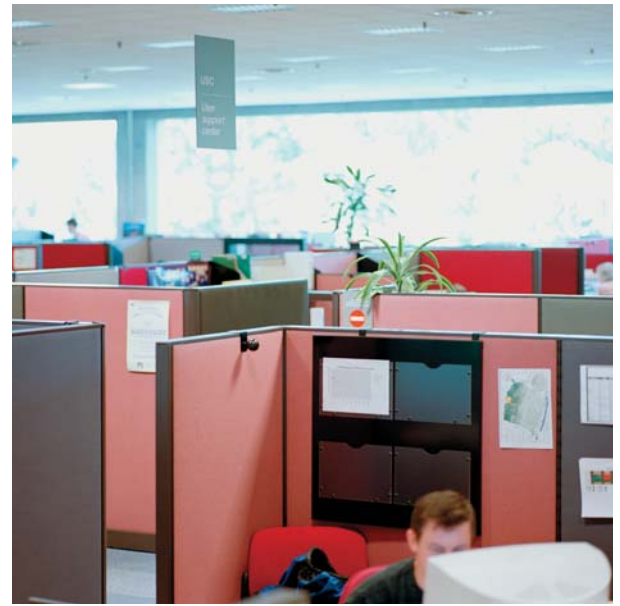
Operations

This section covers the environmental impacts and performance of our site operations. These are manufacturing facilities, warehouses and distribution centers, computer data centers and offices.

We describe our Environment, Health and Safety Management System, identify the environmental impacts of HP site operations and report on our environmental performance (see scope of data, page 30). For health and safety performance, see page 24.

Our environmental impacts vary according to the type of facility (see table).

We require that all HP operations worldwide meet legal requirements, pursue continual improvement and meet our company standards. We support this with our Environmental, Health and Safety Policy (see page 43), comprehensive organizational structure and management system.

Managing environmental impacts

Our global Environment, Health and Safety (EHS) organization identifies HP's significant environmental impacts, sets EHS standards, manages our audit and assurance programs and recommends improvement goals to management. The regional EHS organization provides sites with specialist support.

Environmental management system

HP's Environment, Health and Safety Management System (EHS MS) provides the framework for all of our sites to meet our legal obligations and company standards and to achieve continual improvement.

Our sites use the EHS MS to identify environmental, health and safety issues, ensure regulatory compliance, set goals and implement improvement plans. The system requires performance monitoring, regular audits, management reviews, and plans for corrective and preventive actions.

Activity	Potential impacts	Type of facility
Energy consumption	• Greenhouse gas emissions • Depletion of nonrenewable resources	• Manufacturing • Offices • Distribution
Chemical emissions	• Air and water pollution • Greenhouse gas emissions	• Manufacturing
Hazardous waste disposal	• Air and water pollution and soil contamination • Reduced landfill capacity	• Manufacturing • Distribution
Non-hazardous waste disposal	• Use of renewable and nonrenewable resources • Reduced landfill capacity	• Manufacturing • Offices • Distribution

ISO 14001

Formal environmental management systems are widely used tools for identifying and managing a company's environmental impacts. ISO 14001 is a voluntary international environmental management systems standard. It has become a widely accepted benchmark of environmental commitment, especially for larger corporations.

We were one of the first global businesses to obtain ISO 14001 certification for our worldwide manufacturing operations. In 2003, we renewed our worldwide ISO 14001 certification for another three years. Outside of manufacturing, our other locations implement our EHS MS, but do not certify to ISO 14001.

Audits and oversight

HP provides assurance that our EHS policies and standards are implemented worldwide through an audit of our EHS MS. The audit program is based on decades of audit success and covers our major operations in approximately 50 locations. Major sites are audited at least once every three years.

An internal team of qualified professionals conducts audits based on site complexity and performance, and reports the results to senior management. These audits complement annual self-assessments conducted by each site and third-party audits conducted by our ISO 14001 registrar. We address issues or potential improvements identified by the audits and self-assessments. This system provides a strong basis for continual improvement of our EHS programs.
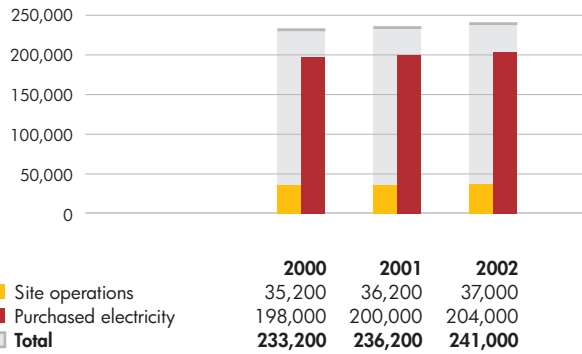
Standards and guidance

HP has developed comprehensive EHS performance standards that apply to every HP site. They are the basic requirements sites must follow. General standards include management responsibility, assessment and regulatory inspections. The environmental standards include control of air emissions, energy management, spill response and waste minimization. Health and safety standards include chemical handling, machine guarding, electrical safety and industrial hygiene.

Emergency response

We have risk-based emergency response programs to protect people, property, the environment and continuity of business operations. These programs cover planning, prevention, response and recovery. Plans are in place for chemical release, evacuation, fire, natural disasters, security threats and other emergencies. Response teams are trained and tested in first aid, cardiopulmonary resuscitation, spill response and facility control operations, as appropriate to the local working environment.
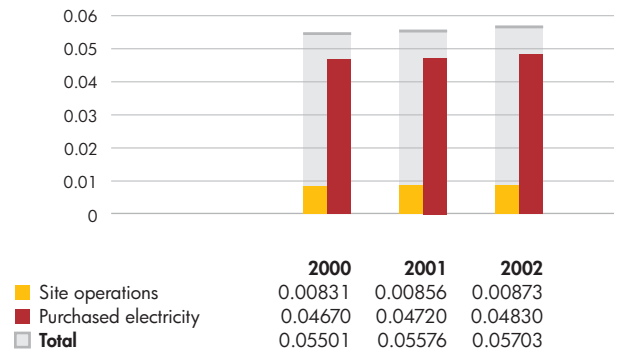
Greenhouse gas emissions, 2000-2002
[Metric tonnes carbon equivalent, MTCE]

	2000	2001	2002
■ Site operations	35,200	36,200	37,000
■ Purchased electricity	198,000	200,000	204,000
□ **Total**	**233,200**	**236,200**	**241,000**

Greenhouse gas emissions per unit of floorspace, 2000-2002
[MTCE per meter^2]

	2000	2001	2002
■ Site operations	0.00831	0.00856	0.00873
■ Purchased electricity	0.04670	0.04720	0.04830
□ **Total**	**0.05501**	**0.05576**	**0.05703**

The following eight pages cover performance data for:

• Climate change

• Energy

• Travel

• Ozone depleting substances

• Water

• Waste

• Compliance

• Remediation

Climate change

Scientific opinion is that society's greenhouse gas (GHG) emissions contribute to global warming, which causes climate change. Predictions suggest that unless action is taken soon, climatic effects may include an increase in droughts, storms and floods.

HP recognizes that climate change, greenhouse gas emissions, energy conservation and the impacts of the Kyoto Protocol are concerns shared by many of our stakeholders. We believe companies, countries, governments and people around the world need to cooperate to address these issues. We are working to reduce our GHG emissions from operations. In addition, we are striving to improve the energy efficiency of our products, which helps our customers reduce their GHG emissions (see Products, page 44).

How we measure our GHG emissions

We use the Greenhouse Gas Protocol published by the World Business Council on Sustainable Development and the World Resources Institute to calculate our GHG emissions from operations. This categorizes emissions from different sources under a number of 'scopes.'
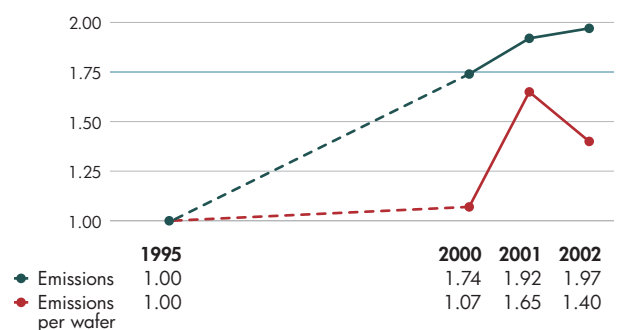
Scope 1. Direct emissions from site operations (including gas usage and halogenated chemical emissions).

Scope 2. Indirect emissions from electricity use.

Participation in climate change initiatives

We are a member of the US-based Pew Center on Global Climate Change and have recently joined the Climate RESOLVE Initiative, sponsored by the US Business Round-table to lead voluntary efforts on GHG emissions reduction.

Perfluorocarbons (PFCs)

PFCs are a family of solvents widely used in the semiconductor industry for cleaning and etching processes. The global warming potential of PFCs ranges from 6,500 to 23,900 times greater than that of CO_2.

In the US, HP participates in the PFC Reduction Climate Partnership. This is a voluntary initiative with the US Environmental Protection Agency (EPA) to reduce emissions of specified PFCs by 10% from 1995 levels by the end of 2010. We have a more challenging company-wide goal to achieve the 10% reduction by 2005.

PFC emissions, 1995-2002
[Index 1995 = 1.00]

	1995	2000	2001	2002
● Emissions	1.00	1.74	1.92	1.97
● Emissions per wafer	1.00	1.07	1.65	1.40

Electricity use, 2000-2002
[GWh]
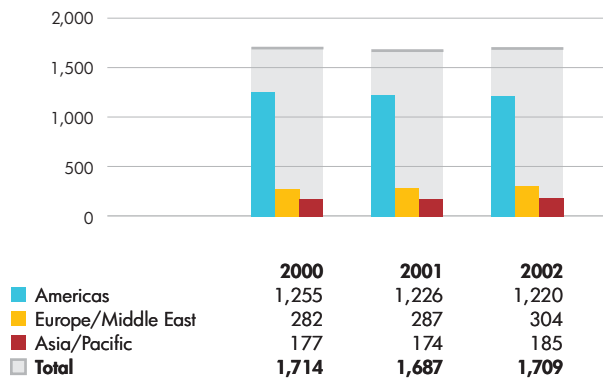
Electricity use per unit of floorspace, 2000-2002
[KWh per meter^2]

	2000	**2001**	**2002**
■ Americas	1,255	1,226	1,220
■ Europe/Middle East	282	287	304
■ Asia/Pacific	177	174	185
■ **Total**	**1,714**	**1,687**	**1,709**

	2000	**2001**	**2002**
■ Americas	415	406	404
■ Europe/Middle East	347	354	375
■ Asia/Pacific	439	430	459

PFC emissions have nearly doubled from the 1995 baseline, due to increased production levels and more complicated product specifications. From 1995 to 2001, we investigated PFC substitution, but alternative materials with no climate impact did not work in our processes. This is why in late 2002 we changed our approach to PFC emission reductions from materials substitution to process changes. In the last quarter of 2002, we reduced PFC emissions by more than 18%, and we anticipate that we will meet our 10% target reduction by 2005.

Our largest site has addressed the problem with a combination of emission controls and substitution of one PFC with another gas with lower global warming impact.

Energy

Energy use accounts for 76% of our climate change baseline. Our main energy sources are electricity and natural gas. Priority is given to energy initiatives that cut consumption and provide environmental and operational improvements. By managing energy use and tracking progress we can identify opportunities to reduce our environmental impact as well as our operational costs.

Energy management programs

We have achieved significant energy reductions through the integration of HP and Compaq by aggressively consolidating and eliminating underused and inefficient operations. Although this consolidation is not reflected in the data described in this section, we reduced our real estate portfolio by more than 474,000 square meters (5.1 million square feet) through the end of 2002. These activities saved approximately 191 GWh of electricity in 2002, a 7% reduction compared to the estimated combined electricity usage of HP and Compaq that year (including some sites not covered in this report; see Scope of data, page 30). We will continue to consolidate underutilized
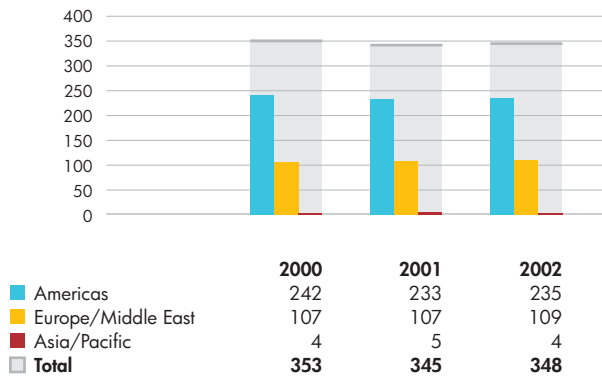
real estate through 2004 and anticipate decreasing overall electricity consumption an additional 25%, relative to the total real estate portfolio at the end of 2002. These changes reduce HP's overall 'footprint' and allow us to apply our environmental programs with a greater focus.

In addition to the energy savings associated with real estate consolidation, HP is expanding its energy management program in 2004 to reduce electricity consumption by another 50 GWh. Our program builds energy efficiency into our facilities and seeks to improve our use of lighting, heating, ventilation and cooling systems. We have established global temperature standards, lighting levels and operation schedules. We provide guidance on technology that sites can use to improve energy efficiency and share best practices.
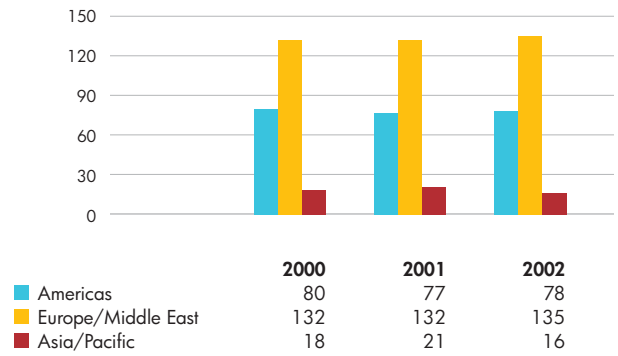
Most HP buildings have automated systems that balance energy use with occupant comfort. HP's energy management program minimizes the electricity and gas required without adversely affecting business operations. One example is the use of outside air for 'free cooling'. This is similar to controlling temperature by opening and closing windows. HP's controls are precisely adjusted to maximize the use of free cooling before mechanical refrigeration is needed. Further, HP's operations and construction standards call for systems and controls that prevent simultaneous heating and cooling. Older buildings are retrofitted to these standards as part of upgrade and energy efficiency projects. Finally, new lighting and variable speed drive technology is employed when it provides a reasonable return or improves building performance.

At a local level, our energy education program encourages employees to conserve energy by turning off their computers, printers and lights when not in use. We are integrating these initiatives into local and global energy communication programs for implementation in 2004. As a part of the integration of former Compaq sites and operations, we formalized and provided resources for our energy management program to coordinate global energy reduction and procurement efforts.

	2000	**2001**	**2002**
■ Americas	242	233	235
■ Europe/Middle East	107	107	109
■ Asia/Pacific	4	5	4
■ **Total**	**353**	**345**	**348**

	2000	**2001**	**2002**
■ Americas	80	77	78
■ Europe/Middle East	132	132	135
■ Asia/Pacific	18	21	16

Energy goals set in 2002

Goal

- Maintain the energy conservation achievements of the previous two years (2000 and 2001) and implement additional conservation measures where feasible
- Continue to improve mechanisms for tracking and reporting energy use in all major operations worldwide
- By Q4 fiscal year 2002, propose future global and regional energy conservation goals for HP operations

Progress

- Our energy conservation practices maintained the energy use of 2000
- We developed an energy tracking database for the US and are evaluating similar databases for other regions in 2004

Goals for 2004

- Reduce electricity consumption by 25% of 2002 total estimated usage through the consolidation of underutilized real estate, by the end of 2004
- Implement energy efficiency improvements that deliver a 50 GWh reduction in annualized electricity use, by the end of 2004

Electricity

Electricity is our most significant energy source. We currently report electricity use as an absolute value and per unit of floorspace (see charts, page 31). As we finalize the integration of Compaq and HP and understand the electricity consumption associated with higher building utilization and data center acquisitions, we will evaluate other performance measures. Excluding the 7% savings associated with real estate consolidation, electricity consumption was relatively flat during 2002, compared with the two previous years.

Case study:

Energy efficiency initiatives in the Americas

Energy efficiency initiatives throughout the Americas, including operational changes and the use of electricity from renewable sources, saved more than 18,000 MWh in 2002.

One specific example is the Corvallis, Oregon site in the US, which installed a state-of-the-art system that halved the electricity used to recirculate the air in its cleanroom (where microchips are manufactured). Cleanrooms have cleanliness, temperature, humidity and pressure control requirements exceeding those of a hospital surgical facility. These requirements result in the recirculation of the full air volume of the cleanroom every 15-20 seconds (see picture of interstitial space).

The site investigated other ways to minimize energy use with the Northwest Energy Efficiency Alliance. The projects will save approximately 7,400 MWh a year and have won several awards from the State of Oregon.

Our Ft. Collins, Colorado site in the US bought 204 MWh of electricity generated by wind in both 2001 and 2002, avoiding 49 MTCE of CO_2 emissions each year.

Gas

Total gas consumption was roughly flat during the three-year period, 2000-2002 (see charts). Gas use will be included in our focus on improved efficiency, especially in Europe where it represents a greater portion of our total energy use compared to other regions.

Building design and construction

In addition to energy efficiency initiatives, we continue to look for ways to improve the environmental performance of our buildings. Our real estate organization evaluates and implements sustainable building design and construction practices, including:

- Consideration of design capabilities in our architect and engineer selection process
- Creating design specifications to minimize potential environmental impacts (for example, ensuring provision is made to contain spills in oil and chemical storage areas)
- Developing designs to accommodate alternative transportation such as bicycle commuting
- Specification of drought-tolerant landscaping and efficient irrigation to reduce water consumption
- Evaluating the use of renewable products and materials (for example, recycled carpeting and bamboo flooring)
- Rigorous installation testing, continuous measurement and verification of mechanical, electrical, plumbing (MEP) systems and devices to ensure building systems run at peek performance
- Recycling demolition materials when possible

'BiReality' enables face-to-face meetings, from a distance

HP Labs Mobile and Media Systems has developed technology that has many of the benefits of visiting a distant location without traveling. This can increase access for those living in remote areas and reduce the environmental impacts associated with travel.

A device moves around the meeting location, streaming 360-degree audio and life-sized video over a wired or wireless network. The system essentially allows a person to be in two places at the same time: attend a meeting, make eye contact with remote participants, whisper an aside to someone, even stop by a colleague's office – all from a thousand miles away.

Although a commercial version of the system is some years away, patent applications have been filed.

Travel

Business travel

Business travel is our second largest source of greenhouse gas emissions, after operations energy use. The majority of our business travel is by commercial airline. During 2002, HP employees traveled 1.1 billion miles by commercial plane, equivalent to about 44,000 trips around the world at the equator. This represents 65,000 MTCE of GHG emissions.

We have a small aircraft fleet, and a fleet of company cars for sales employees. The aircraft fleet has relatively little environmental impact but that of the cars is significant. To reduce our impact, we consider factors including fuel efficiency, availability of alternative vehicles and the future of hybrid vehicles when selecting our auto fleet.

Employees are encouraged to use teleconferencing instead of travel whenever possible. More than 500 million minutes of conference calls were made using HP facilities in 2002. Web-based meetings are often the best solution for training and real-time information sharing. We provide several web-based systems for this, such as the HP Virtual Classroom.

Employee commuting

Employees spend considerable time and energy traveling between their homes and work. While the environmental impact of this travel is not directly within HP's control, we have programs that reduce these emissions.

Alternative Commute. Provides employees with information, resources and support to take public transport or participate in carpooling.
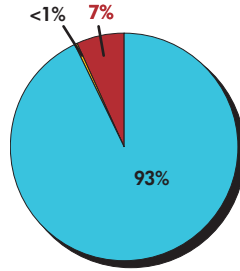
Mobile Office. Many employees have responsibilities that require them to work at a site only a few days a week. We provide these employees with the technology to work from almost anywhere by connecting to HP servers around the world, thus allowing them to avoid regular commuting. Because these employees are not at a site every day, HP can allocate a set of 'mobile cubicles' to them and reduce HP's overall space requirements.

Telework. Allows employees to establish their primary work location outside the normal office. As well as reducing employees' environmental impact, Telework can allow employees to manage time more effectively and improve productivity and work-life balance.

We estimate that in 2002 the Telework program alone saved about 2 million round-trip commutes, avoiding approximately 52 million miles of road travel and reducing CO_2 emissions by 6,000 MTCE.
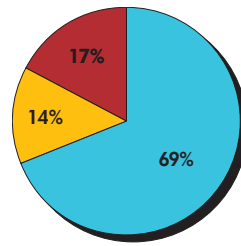
In 2002, HP received the US EPA Commuter Choice Award in recognition of innovative transportation programs offered to employees at its Silicon Valley and Roseville, CA sites.

**Ozone depletion potential of estimated emissions[9], 2002**
[kg of CFC11 equivalent]

Water use, 2002
[Million liters]

Hazardous waste, 2000-2002
[Tonnes]

[9]Draft guidance from the US EPA was used to estimate the probable level of emissions.

<1%   7%

93%

■ Americas	3,639
■ Europe/Middle East	15
■ Asia/Pacific	266
Total	**3,920**

17%

14%

69%

■ Americas	1,334
■ Europe/Middle East	267
■ Asia/Pacific	334
Total	**1,935**
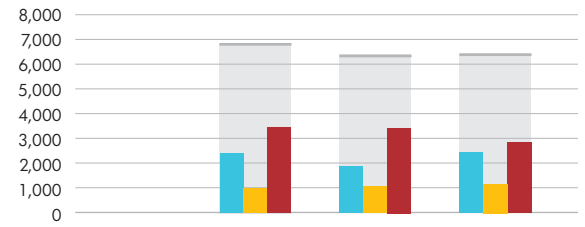
	2000	2001	2002
■ Americas	2,400	1,870	2,440
■ Europe/Middle East	1,000	1,090	1,170
■ Asia/Pacific	3,460	3,430	2,830
▢ Total	**6,860**	**6,390**	**6,440**

Ozone-depleting substances

Since the elimination of most ozone-depleting substances (ODS) from manufacturing in 1993, the only remaining use of these substances at HP facilities is in cooling/air conditioning systems and in data center fire suppression systems. These are sealed units, but faults and leaks during maintenance can lead to emissions.

HP has significantly reduced the ozone-depleting potential of its cooling and air conditioning systems by replacing CFCs with HFCs, which do not deplete ozone. In Europe, we have been switching to HFCs.

Water

HP is not a major user of water, but we recognize that water consumption is a growing concern, particularly in water-stressed regions. Our main uses of water are for cooling at most sites and for production at manufacturing sites. In 2002, we began measuring our water consumption and will continue to do so in the future.

HP sites in water-stressed areas recycle significant amounts of water. Our site in Singapore reuses or recycles more than 8.7 million liters of water each month (14% of its total use). In Puerto Rico, several initiatives enabled us to reduce consumption by 190,000 liters a day. These included using cooling towers more efficiently, recycling process water and recovering water from ink waste.
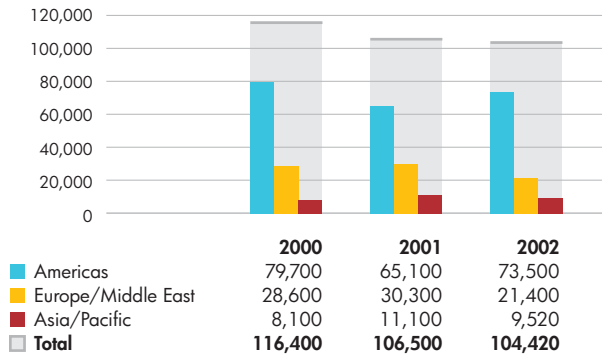
Waste

HP seeks to reduce the quantity of waste generated by its operations. We apply the hierarchy reduce, reuse, recycle, treat and dispose. Where possible, waste is eliminated at the source. Reuse and recycling are the preferred options and disposal a last resort when other options are not reasonably available. Waste contractors are carefully selected for the ability to conform fully to legal requirements.

Hazardous waste

Classification of hazardous waste differs around the world. Our data is based on the most rigorous regulatory definition and therefore includes materials that are not classified as hazardous in some countries.

Total hazardous waste decreased 6% between 2000 and 2002, even though production levels increased. We have several teams working on waste reduction initiatives in manufacturing since this is where most of our hazardous waste is generated. These teams are making progress. For example, one initiative implemented an evaporation system to reduce the waste volume and capture the evaporated water for use in on-site processes. This project reduced the waste requiring disposal by 96%.

Non-hazardous waste, 2000-2002
[Tonnes]

Non-hazardous waste diverted from landfill, 2000-2002
[%]

	2000	2001	2002
■ Americas	79,700	65,100	73,500
■ Europe/Middle East	28,600	30,300	21,400
■ Asia/Pacific	8,100	11,100	9,520
▨ **Total**	**116,400**	**106,500**	**104,420**

	2000	2001	2002
■ Americas	84.2	81.1	79.3
■ Europe/Middle East	74.9	79.3	71.2
■ Asia/Pacific	74.8	67.2	63.6
■ Global rate	81.3	79.1	76.2

Non-hazardous waste

Non-hazardous waste is generated in manufacturing, offices and warehouses. It includes paper, cardboard, metals, and cafeteria waste.

Non-hazardous waste volumes decreased by 10.3% between 2000 and 2002, largely due to outsourcing several manufacturing operations. Consequently, recycling rates have decreased. We have renewed our focus on our recycling program to capitalize on the operational and environmental benefits. We are establishing global and regional resources and standardizing the program.

Recycling programs
The following are examples of HP recycling programs around the world.

Australia. Our site in Melbourne launched a program called HOPE (Help Our Precious Environment). It collects materials such as bottles and cans, as well as CDs and floppy disks.

Germany. A recycling program in Herrenberg collects and recycles waste generated from three HP sites. Ninety percent of the waste received is recycled.

US. Our major distribution facilities are recycling 900 metric tonnes of packaging material a year by sending it to a company that uses this material to manufacture building products that are sold in home improvement stores.

Paper purchase and recycling

Paper and paper products make up the largest percentage of the solid waste streams from HP site operations. We take steps to reduce the impact:

- Our offices use recycled paper when possible to meet everyday office paper needs

- We require that office paper waste is recycled; many sites have separate bins for segregating high-grade white paper from mixed paper

For more information, see http://www.hp.com/hpinfo/globalcitizenship/environment/operations/usingrecycled.html

Emissions of TRI substances, 2000-2002
[Tonnes]

	2000	**2001**	**2002**
■ Disposal	250	20	17
■ Waste water	75	185	164
■ Air	2	1	1
■ Recycle/recovery	803	573	686
□ **Total**	**1,130**	**779**	**868**
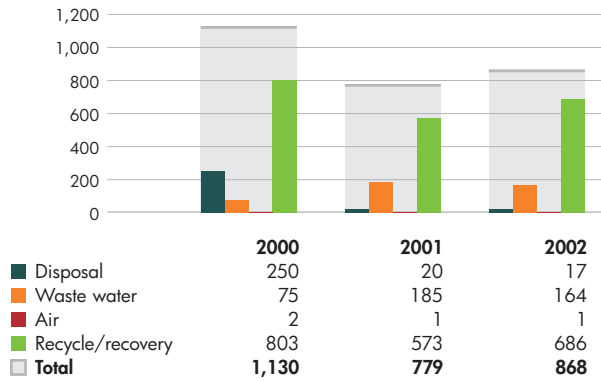
Toxics Release Inventory substances

The Toxics Release Inventory (TRI) is an annual report, required by the US EPA, on releases of specified chemicals. The inventory was established under the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA). We are in the process of applying TRI reporting criteria to all worldwide manufacturing sites. We currently have data for six manufacturing sites that account for more than 75% of HP's TRI emissions.

We continually strive to reduce TRI emissions and have achieved a 23% reduction between 2000 and 2002. One recent success is our program to reduce use of our largest production solvent, n-methyl pyrrolidone (NMP). We have reduced NMP use by 65% and decreased the amount sent for off-site disposal from 88 tonnes to 6.8 tonnes. Implementing closed-loop recycling processes at our manufacturing facilities achieved most of this reduction. The material that cannot be recycled on-site is sent to an off-site recycling facility and returned to HP.

TRI emissions to wastewater discharge increased by 127% between 2000 and 2002. This was primarily due to the manufacture of a new, more complex generation of microchip, requiring additional cleansing washes.

Compliance

Full legal compliance is the minimum requirement within our EHS Management System. All violations are investigated to determine their root causes and evaluated to prevent re-occurrence.

2000 and 2001 data do not include former Compaq operations. Our reporting system was integrated in 2002 to cover the entire company.

Violations resulting in fines

	2000	**2001**	**2002**
Fines [$US]	$6,374	$412,500	$15,000

In November 1999, in settlement of an administrative complaint filed in 1998 that alleged violations of the Toxic Substances Control Act ('TSCA'), HP entered into a consent agreement with the United States Environmental Protection Agency (the 'Agency') under which HP agreed to pay a civil penalty of $112,500, to have a ten-month post-enforcement audit of specified operations conducted by a third party and to pay civil penalties in stipulated amounts for any violations that may be discovered in that audit. As required by the terms of the settlement agreement, the final report of the audit was submitted to the Agency in April 2001. In May 2001, HP and Agilent Technologies, HP's former subsidiary, paid stipulated penalties in the aggregate amount of $600,000 to the Agency in full satisfaction of any claims under the agreement against either company.

A comprehensive audit and compliance program has been integrated into our management system to ensure future compliance with TSCA.

In 2002, our Andover, MA, operation discovered a back-up emergency generator that had been installed without a permit. This was disclosed to the Massachusetts Department of Environmental Protection and HP received a $15,000 fine.

Remediation

In the past, HP has had accidental releases of chemicals to soil and groundwater at some of our sites. Most of these releases occurred during the 1970s or early 1980s. While HP no longer owns many of these sites, HP continues to maintain responsibility for the chemical releases. In addition, some of our waste management contractors have had accidental chemical releases at their sites. For 2002, HP had 32 sites under management for soil and groundwater contamination.

HP is committed to addressing chemical releases resulting from historical site operations. We have conducted due diligence assessments of our facilities to identify soil and groundwater affected by chemicals, which has helped us to identify and address chemical releases requiring remediation. In addition, HP has implemented a waste vendor management program that includes auditing third-party recycling and disposal facilities to help ensure that we use reliable waste management contractors.

We evaluate new remediation technologies and adopt them when they offer advantages compared to traditional methods. We have used innovations such as insitu oxidation, biostimulation, iron filings, and high vacuum systems in addition to traditional remedial measures.

Examples of remediation projects

While no two sites are the same in terms of type of contaminants or scope of the problem, remediation cases often involve solvents in soil or groundwater. Here are two brief summaries describing how we addressed these issues at two particular sites.

In the late 1980s, chlorinated solvents were discovered in groundwater at a former printed circuit board manufacturing site in Puerto Rico. HP worked with local and federal regulators to develop a remedial management plan which includes a groundwater extraction and treatment system. HP continues to operate and monitor the remedial system at the site. In 2001, engineering studies verified that the remedial system operates as designed and groundwater contaminates remain contained on-site.

HP and other companies are designing an extraction system that uses air to strip chemicals from the soil and groundwater at a recycling site near Denver, Colorado. Chemical waste stored in drums and tanks had leaked into the soil. Construction and operation of the remediation system is due to begin in late 2003 or 2004.

Operations awards and recognition

Ireland. Highly commended - National Boiler Award.

Ireland. Repak Best Practice Award for excellence in packaging-related waste management.

US. Waste Reduction Awards Program (WRAP) Award (California, 11th straight year).

US. US EPA Commuter Choice Award (2001 and 2002).

Web links

HP Environmental, Health and Safety Policy
http://www.hp.com/hpinfo/globalcitizenship/
environment/envprogram/envpolicy.html

Supply chain

A global network of more than 10,000 suppliers provides HP with materials and components for its products. Thousands more support our operations. Many of our major suppliers are well-known companies with multiple sites and extensive supply chains of their own.

During the last decade, the IT industry has increasingly outsourced product manufacturing to contractors. While suppliers are key partners in the manufacturing of our products, we continue to manufacture some products, such as inkjet cartridges.

Our supplier relationships take into account global citizenship issues, specifically the environment, health, safety and labor. We want to ensure our standards and expectations are upheld throughout our supply chain and we use our influence as a customer to do this.

In 2002, we adopted a Supply Chain Social and Environmental Responsibility (SER) Policy (see page 39), benchmarked and developed a Supplier Code of Conduct, established a governance structure and launched an implementation program.

Supplier Code of Conduct

Our Supplier Code of Conduct (see Web links, page 41) covers employment, environmental, health, labor and safety practices. In selecting and retaining qualified suppliers, we show preference to those that comply with the code.

Key elements of the code include the following.

Environment
Suppliers must have environmental policies that cover:

• Energy efficiency

• Hazardous materials

• Information and labeling

• Manufacturing

• Packaging

• Product recycling and reuse

The code incorporates our General Specification for Environment (GSE) (see Web links, page 41), which specifies restrictions on materials that may be used in our products.

Health and safety
Suppliers must meet health and safety requirements including:

• Evaluating and controlling exposure to chemical, biological and physical risks

• Machine safeguards

• Occupational injury reporting

• Training

• Workplace ergonomics

HP Supply Chain Social and Environmental Responsibility (SER) Policy

HP's commitment to corporate social responsibility extends to our global supply base and we expect all HP suppliers to conduct worldwide operations in a socially and environmentally responsible manner. Our goal is to work collaboratively with our suppliers to ensure compliance with the following principles.

Legal and regulatory compliance
Suppliers will ensure their operations and the products supplied to HP comply with all national and other applicable laws and regulations.

Continual improvement
Suppliers will integrate environmental, occupational health and safety, and human rights and labor policies into their business processes, and maintain management systems to guarantee improvement.

Information access
Suppliers will provide clear, accurate and appropriate reporting to HP upon request.

Human rights and labor practices
Suppliers must treat employees fairly and in accordance with local laws. They must:

- Not use forced, bonded, involuntary prison or child labor

- Provide wages and benefits that meet or exceed legal requirements

- Respect the rights of workers to associate freely, in accordance with local laws

Governance structure

To ensure effective implementation, we have integrated the Supply Chain Social and Environmental Responsibility (SER) Program into our procurement management structure (see right).

The Supply Chain Council is responsible for overall implementation of the SER program and reports directly to HP's Executive Council. Each HP business is represented on the Council and has appointed delegates to manage the SER program.

The Procurement Council reports to the Supply Chain Council, and is redesigning our supplier management criteria to include SER performance. Facilities will be inspected, suppliers' SER performance will be measured and progress monitored. This will more closely tie our social and environmental expectations with our purchasing practices.

Supply Chain and Procurement Commodity Managers deal directly with our suppliers. They communicate our SER requirements, introduce SER clauses to contracts, complete supplier agreements and conduct assessments.

Procurement management structure

```
        HP Executive Council
                |
        Supply Chain Council
                |
        Procurement Council
                |
  Supply Chain & Procurement Commodity Managers
                |
         Supplier companies
```
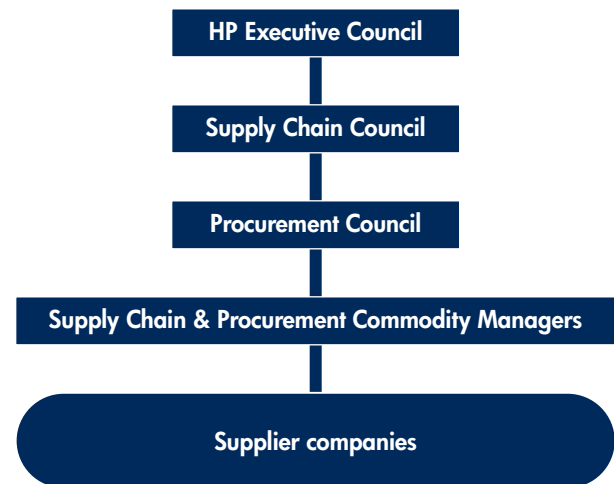
Implementation

It will take time for all our suppliers to embrace and institutionalize the code of conduct and complete the assessments. This is why we have a phased approach based on priority suppliers.

2003. Assess our 40 largest suppliers, who collectively account for more than 70% of the total we spend on product materials. These companies are large multinationals. We monitor performance at all sites where HP products and components are produced.

2004. Assess suppliers that pose a significant risk, for example through chemical or labor-intensive operations, or operations in developing countries.

Beyond 2004. Assessment of remaining suppliers is likely to take several years.

- Complete assessment and documentation with our largest suppliers
- Continue to benchmark our program with suppliers and other industry groups
- Improve our audit strategy (for example, identify and pre-qualify independent auditors)
- Introduce electronic management tools for supplier communication and performance data

Goals for 2004

- Assess responsiveness to the program
- Communicate SER information to 100 high-risk suppliers
- Engage with suppliers and stakeholders, including local non-profit organizations

Training

We trained 350 procurement professionals on the SER program before its launch. This covered how to communicate requirements to suppliers, and monitor and report their performance.

Monitoring

Once suppliers have signed up to the SER program they are required to provide annual compliance updates. We verify the responses and provide feedback. When we identify a breach of compliance we require corrective action. We currently conduct supplier audits and site visits and are evaluating the use of third-party auditors for independent verification.

We track and respond to emerging issues and individual cases of concern. When preliminary evidence suggests a risk of serious non-compliance by a supplier, we conduct an investigation even if the supplier is outside our priority categories.

More information is on our website, including compliance questionnaires (see Web links, page 41).

Performance

The supply chain SER program was launched in 2003. Our target is for our 40 top suppliers to sign the Code of Conduct and be assessed by the end of the 2003 fiscal year (October 31, 2003). So far, we have engaged 50 suppliers, representing 72% of the total we spend on product materials.

We have contacted an additional 100 suppliers in high-risk and other categories (target groups for 2004 and beyond).

Performance update – to end Q2, fiscal year 2003

Top supplier metrics	# of companies	% of product spend
Fiscal year 2003 goal		
Documentation completed	40	50%
Progress		
Engaged	50	72%
Documentation completed	21 [10]	34%
ISO 14001 certified	26 [11]	33%

[10]Reviewed more than 100 sites (some companies have multiple sites).
[11]The actual number may be higher; HP is still collecting this information.

Product transportation

Transporting millions of products around the world requires a large amount of energy. HP works with transport providers to reduce this impact in several ways.

Shift to ocean. During the last decade, HP has decreased reliance on air cargo while increasing use of ocean freight. This saves considerable amounts of energy, since air transport is many times more energy intensive than ocean transport.

Bulk packing. By packing products more densely on each pallet, HP can fit more products into a shipping container, reducing the total number of trips (see page 51).

Influencing transport providers. HP participates in the Business for Social Responsibility (BSR) Clean Cargo Group, which is working in collaboration with both shippers and ocean freight carriers to establish environmental performance criteria for the ocean freight industry.

Small, minority- and women-owned business procurement

HP has a policy and program to ensure we offer US-based small, minority- and women-owned businesses equal opportunities to become HP suppliers, partners and resellers. HP has maintained a Corporate Multicultural Procurement Program Office for more than 30 years.

Major accomplishments in 2002

US. Led the creation of Concordis Real Estate, the first national minority- and women-owned business group formed to serve the real estate industry.

Global. Expanded the program outside the US. Became a founding member of the Canadian Aboriginal and Minority Supplier Development Council, headquartered in Toronto, Canada, and the European Supplier Diversity Group, headquartered in Brussels, Belgium.

Awards and recognition

US. Minority Business Advocacy Award, Northern California Supplier Development Council.

US. Top 50 Corporations for Minority Business Opportunities, Diversity.com.

US. Certificate of Achievement for 'Outstanding' Small Business Program, Defense Contract Management Agency, US Department of Defense.

2003 Goals[12]

- Award $1,600 million of US purchases to US-based small businesses
- Award $400 million of US purchases to US-based small minority-owned businesses
- Award $140 million of US purchases to US-based small women-owned businesses

[12]For the year October 1, 2002 – September 30, 2003, data does not include former Compaq sites. Data for the combined company will be reported beginning in 2004.

[13]Data does not include purchases of former Compaq sites.

[14]2001 figures are for October 1, 2000 - September 30, 2001.

[15]2002 figures are for October 1, 2001 – September 30, 2002.

Purchasing results[13]

Category [Million $US]	2001[14] results	2002[15] goal	2002[15] results
Total US purchases from US-based small businesses	$1,832	$1,600	$1,672
US purchases from US-based small minority-owned businesses	$548	$400	$480
US purchases from US-based small women-owned businesses	$141	$140	$126
Total US purchasing from US-based minority-owned firms	$564	N/A	$544
Total US purchasing from US-based women-owned firms	$148	N/A	$161

Supply chain challenges

We have a multilevel, multinational supply chain involving thousands of interlinked companies. We are continuously seeking to verify supplier performance in a cost-efficient way. Ultimately our goal is to create meaningful and sustainable change in our extended supply chain without threatening our world-class cost structures. Particular challenges include:

- Inconsistent environmental and social laws and regulations throughout the world

- Suppliers can find expectations and requests from multiple customers and stakeholders overwhelming, confusing and costly

- Responses by suppliers may be incomplete for various reasons, including cultural and language diversity and confidentiality

- Ensuring consistent standards and communication across companies with multiple manufacturing sites

Web links

HP Supply Chain
http://www.hp.com/go/supplierE

HP Supply Chain Social and Environmental Responsibility Policy
http://www.hp.com/hpinfo/globalcitizenship/environment/pdf/suppolicy.pdf

HP Supplier Code of Conduct
http://www.hp.com/hpinfo/globalcitizenship/environment/pdf/supcode.pdf

HP General Specification for Environment (GSE)
http://www.hp.com/hpinfo/globalcitizenship/environment/pdf/gse.pdf

HP Supplier Self-assessment Questionnaires
http://www.hp.com/hpinfo/globalcitizenship/environment/supplychain/compliance.html

Products

Our biggest impact on the world is through our products. Our products can benefit society (see box) and we want to ensure that they become more accessible to a greater number of people (see pages 59-61). At the same time, we strive to minimize the environmental impacts of our products throughout their lifecycles.

This section covers:

• Design for Environment (DfE) – designing easily recycled products that use energy and materials efficiently

• Packaging – protecting products in transport while minimizing environmental impacts

• Recycling – programs to recycle computer hardware and supplies

Delivering social benefits

In addition to helping people to compute and communicate, HP products are used in applications that yield social benefits.

Advancing education. The HP Tablet PC provides students the freedom to learn anywhere, at any time. The lightweight, durable devices recognize handwriting, communicate by using built-in wireless standards and will one day allow students to access electronic textbooks.

Forecasting the weather. The HP Marvel GS1280 helps to predict extreme weather patterns, such as hurricanes. HP workstation-based supercomputers are used at the Ohio Supercomputer Center (OSC), where research includes global climate modeling.

Improving car safety. HP Superdome high-end servers perform crash simulations.

Mapping the human genome. HP AlphaServer systems were the main computers used in the mapping.

Researching cures for cancer. The German Cancer Research Institute is using HP Superdomes to research cancer cures.

Streamlining health care. HP AlphaServer systems help users of healthcare systems, for example, to access patient information during surgeries.

> The environmental performance of products is largely determined at the design stage. Through intelligent design we can reduce the environmental impact of our products and that of our customers.

Design for Environment (DfE)

Millions of HP products are used around the world everyday. The total environmental impact of these products – including the use of raw materials, energy consumption and disposal – may exceed that of our facilities and operations.

The environmental performance of products is largely determined at the design stage. Through intelligent design we can reduce the environmental impact of our products and that of our customers.

Our Environmental, Health & Safety Policy (see box) states that we will "seek to design our products to be safe to use, to minimize their use of energy and natural resources, and to enable their end-of-life recycling."

HP began its Design for Environment (DfE) program in 1992. It has three priorities:

- Energy efficiency – reduce the energy needed to manufacture and use our products

- Materials innovation – reduce the amount of materials used in our products, find alternatives for hazardous materials and develop materials that have less environmental impact and more value at end of life

- Design for recyclability – design equipment that is easier to upgrade and recycle

Product stewardship
Product stewards – design team members who contribute to making safe, environmentally sound products – are essential to our approach. They work with product designers and research and development (R&D) teams to identify, prioritize and recommend environmental innovations for products.

HP Environmental, Health & Safety Policy

Hewlett-Packard is committed to conducting its business in a manner that delivers leading Environmental, Health and Safety (EHS) performance. This is consistent with our commitment to corporate citizenship, social responsibility and sustainability.

Our goals are to provide products and services that are environmentally sound throughout their lifecycles, conduct our operations in an environmentally responsible manner, and create health and safety practices and work environments that enable HP employees to work injury-free.

In order to accomplish this, we will:

- Meet or exceed all applicable EHS regulatory requirements

- Strive to proactively reduce occupational injury and illness risks and promote employee health and well-being

- Aggressively pursue pollution prevention, energy conservation and waste reduction in our operations

- Seek to design our products to be safe to use, to minimize their use of energy and natural resources, and to enable their end-of-life recycling

We will achieve this high level of performance by integrating EHS into our business planning and decision-making, maintaining global EHS performance standards, and establishing EHS goals and objectives that achieve continual improvement. Each employee has an individual responsibility to follow EHS procedures and to actively participate in our EHS programs. We will evaluate our EHS performance by monitoring ongoing performance results and through management review and global assurance processes.

We believe business must work with suppliers, partners, customers, and governmental, nongovernmental and community organizations to help protect and enhance health, safety and the environment. We will foster open dialogue with our stakeholders to share relevant information and contribute to the development of sound public policy and business initiatives.
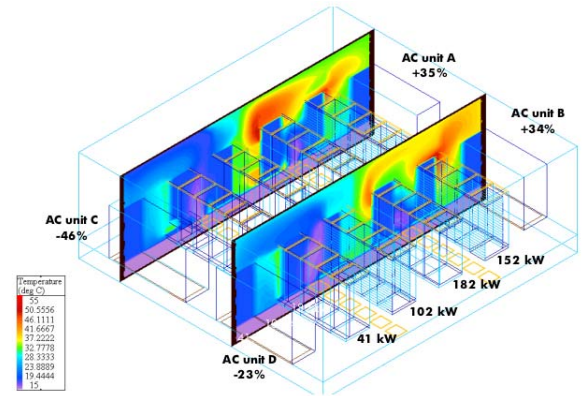
Keeping data centers cool

Data centers house thousands of servers. They consume large amounts of energy and generate a lot of heat. The cooling needed further increases energy consumption.

HP Labs' Thermo-mechanical Architecture Research Group, the hub of a cross-company grassroots group known as the 'Cool Team', is working to reduce energy used in cooling. The team has developed a system that uses computational fluid dynamics (the process used for airplane design).

The system creates a 3-dimensional (3D) data center temperature distribution model and plans the most efficient computer and air conditioning equipment layout (see image). This reduces energy consumption by 25%, saving about $1 million a year for a data center producing 10 MW of heat.

The Cool Team plans to develop 'dynamic smart cooling' that will automatically direct cooling to those parts of the center where it is most needed. This could double the savings.

Energy efficiency

Energy-efficient products save customers money and may reduce pollution and climate change impacts. We are designing products that consume less energy.

ENERGY STAR®

We participate in the ENERGY STAR® program, a voluntary energy efficiency program sponsored by the US Environmental Protection Agency. More than 400 HP products are ENERGY STAR® qualified, including the majority of our printing and imaging products (see Web links, page 49). All new business and consumer PCs and notebooks that run a Microsoft operating system are ENERGY STAR® compliant. We have energy efficiency improvement goals for products not yet covered by ENERGY STAR® standards, such as servers and storage devices.

The EVO N620C portable computer demonstrates gains in energy efficiency. Advanced microprocessor technology has reduced power use by a third, extending battery life by more than 1.5 times compared with previous models (N600c & N610c).

Server energy efficiency goal

- Achieve a 200% increase in transactions per minute per watt by the end of 2005 and a 500% increase by the end of 2007, relative to 2002

Servers and energy use

Servers are increasingly important as internet use grows. They are powerful computers with multiple microprocessors and run continuously. Advances in microprocessor speed have helped improve the energy efficiency (the number of transactions that can be processed with a given unit of power) of high-end HP servers by more than 150% since 1998 (see below).

Despite these energy efficiency gains, overall energy consumption is rising because the increase in the rate of transactions exceeds gains in energy efficiency. In addition to the increased energy use of servers, data center cooling systems use significant amounts of energy. HP Labs is working to reduce the energy used by cooling systems (see above).

Energy efficiency for high-end servers, 1998-2003

	1998	1999	2000	2001	2002	2003
Transactions per unit power, normalized to 1	1.0	1.1	0.9	2.1	1.9	2.6
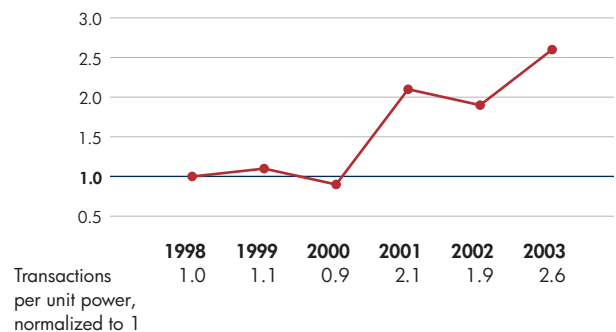
Reducing hazardous materials

HP prohibits or restricts the use of many materials in products through an environmental specification called the General Specification for Environment (GSE). The GSE establishes requirements for prohibiting or restricting certain chemical compounds used in products or the manufacture of products. The specification is integrated into our product development process and used by our designers and suppliers. Following are examples of materials prohibited or restricted by the GSE. The GSE in its entirety can be found at http://www.hp.com/hpinfo/globalcitizenship/environment/supplychain/index.html.

Prohibited
- Asbestos; chlorinated hydrocarbons; halogenated diphenyl methanes; mercuric oxide batteries; ozone depleting substances; polychlorinated biphenyl (PCB) and polychlorinated terphenyls (PCT)

Restricted use
- Cadmium and its compounds are subject to quantity limits if used in batteries. Cadmium must not be used as a stabilizer, coloring agent or as a surface coating treatment in parts, components, materials or products

- Chlorinated paraffins cannot be used in paints, coatings and sealants, oils, or flame retardants in rubber, plastic and textiles

- Heavy metals used in packaging materials are restricted (lead, mercury, cadmium, and hexavalent chromium)

- Lead acid batteries are subject to testing and special marking requirements

- Lead carbonates and sulfates cannot be used in any paint applied to parts, components, materials or products

- Lithium and Li-ion materials are subject to quantity limits and special testing requirements if used in batteries. Lithium-based batteries must be certified safe for transport

- Mercury cannot be contained in any subassembly or product, except for small amounts in certain flat panel displays, lamps and batteries

- Polybrominated biphenyls (PBBs) and polybrominated biphenyl ethers (PBBEs)/polybrominated biphenyl oxides (PBBOs) cannot be used in flame retardants for plastic parts heavier than 25 grams

- Polyvinyl chloride (PVC) use is restricted except for wires and cables, nozzle tape on inkjet cartridges, printheads, and limited retail packaging applications

---

Materials innovation goal

- Qualify recycled plastic for use in a hardware product application and introduce a hardware product with recycled plastic content in 2003

Materials innovation

Society uses a significant amount of raw materials and resources, and many experts believe such consumption levels are unsustainable. Materials innovation involves materials reduction (doing more with less) and reducing the use of hazardous materials.

Materials reduction

Materials reduction is fundamental to HP's product environmental strategy. Reducing the amount of materials used to make products can cut costs for our customers and HP, meet customer demand for smaller and more efficient products – such as handheld devices, laptops and digital cameras – and reduce recycling and disposal costs.

Some of our products and packaging contain recycled materials. We plan to increase the quantity of recycled material used where this does not compromise quality.

The amount of computing power drawn from each unit of material in our products (materials efficiency) has progressively improved. For example, HP NonStop servers have become approximately 82 times more efficient since 1989 (see chart). Similar trends apply to PCs, laptops, printers and other devices.

Researchers at HP Labs are inventing technologies that could further reduce materials use. Molecular electronics is one example (see page 72).

Materials efficiency for HP NonStop servers, 1989-2002

	1989	1993	1995	1997	2001	2002
Transactions per unit mass, normalized to 1	1	19	29	39	72	82
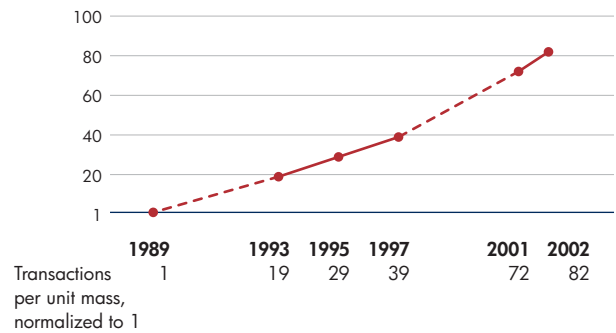
Lead-free program

The European Union has adopted a new directive, the Restriction of Hazardous Substances (RoHS), which will restrict the presence of certain substances, including lead (Pb), in electrical and electronic products. The directive applies to all electrical and electronic products, and their component parts, offered for sale into Europe after July 1, 2006. In addition to lead, the directive restricts the presence of mercury, cadmium, hexavalent chromium, and two halide-containing flame retardants, PBB (polybrominated biphenyls) and PBDE (polybrominated diphenyl ethers).

HP will comply with the RoHS Directive, and HP's General Specification for Environment (GSE) already prohibits the use of PBB and PBDE, as well as certain uses of lead, mercury, cadmium, and hexavalent chromium, in HP purchased parts, materials, and products. The GSE is available at: http://www.hp.com/hpinfo/globalcitizenship/environment/pdf/gse.pdf. HP's goal is to comply with the RoHS Directive worldwide.

Lead has been widely used for decades in electronics. When combined with tin, lead forms the solder used to attach electronic components to circuit boards. It is also found in cables, connectors, chassis components, distribution packaging, paints, labels, inks, bearings, and other parts.

HP's 'Lead-Free Team' manages our lead elimination efforts, and includes representatives from HP's product groups and functional areas as well as subject matter experts. Eliminating lead poses a significant industry-wide challenge, so we perform much of our lead-free transition work with suppliers and competitors through consortia and standards bodies. For example, HP co-chairs the Pb-Free (Lead-Free) Assembly and Rework Project of the National Electronics Manufacturing Initiative (NEMI) consortium. This project is working to establish reliable lead-free manufacturing processes. HP also led the Low Temperature Pb-Free Project in the High Density Packaging Users Group (HDPUG), another industry consortium.

HP participates in standards-setting activities, including the complex task of updating specifications to reflect new process and material requirements. We are involved with component, materials, and printed circuit assembly specifications, and provide input with other manufacturers to the EU RoHS Technical Adaptation Committee.

In addition to outside collaboration, HP's Lead-Free Team independently investigates lead alternatives. HP has published numerous research papers on this topic.

For more information regarding HP's lead-free program, please visit http://www.hp.com/hpinfo/globalcitizenship/environment/pdf/leadposition.pdf.

Product examples

The following products demonstrate materials innovation.

Scanjet 4500c and 5550c. In early 2003, HP began testing a scanner with a carriage cover made from recycled plastic, which is made of 25% post-industrial plastic from HP inkjet cartridges and 75% post-consumer plastic from polyethylene terephthalate (PET) bottles.

Non-mercury lamps. HP All-in-One products combine printers, scanners, copiers and sometimes fax machines in a single device. Almost half of All-in-One models have replaced mercury scanner lamps with a new contact imaging technology (CIS) lamp that does not contain mercury. As an added benefit, this makes the product easier to recycle.

HP Paper. We ensure that all of our virgin wood-based paper products are derived from sustainably-managed forests. HP Office Recycled brand paper contains 30% post-consumer recycled paper fiber. Our HP branded office paper is made to work effectively with our printers.

ProLiant BL10e blade servers. Servers are usually deployed in racks, holding up to 42 servers in a standard rack. Traditional servers have their own power supplies, fans and interconnects. By consolidating these resources into a single enclosure and using smaller components from mobile computers, HP has devised an ultra-dense line of power and space-efficient 'blade servers', the ProLiant BL10e.

The ProLiant BL10e weighs just 6.5 pounds, compared with 34.5 pounds for the previous model. The reduced size allows for 280 units in a standard server rack, a more than 600% gain in server density. As we introduce new generations of BL10e servers, customers will be able to reuse fans, power supplies and interconnects.

> "Product designers have to understand better how people use technology and help them become more efficient by providing the necessary systematic enhancements."

Justus von Geibler & Michael Kuhndt,

Wuppertal Institute

Making printer cases from bioplastics

Bioplastics use polymers created from plants, unlike traditional plastic made from petroleum. Biopolymers can be composted, breaking down to carbon dioxide (CO_2), water and organic matter.

An HP team based in Corvallis, Oregon has created a working prototype of an inkjet printer with a bioplastic case made from corn. The case is designed to last for the life of the product. After that, it can be dismantled at a recycling center to separate the shell from other components before being composted.

Although this product is a technology demonstration and may not be brought to market, this type of innovation is key in determining how we can minimize environmental impact.

Sample HP inkjet printer with corn-based biopolymer case.

Wuppertal Institute

Modern economies are increasingly dependent on IT products and services. As these "virtual" technologies are linked to physical environmental effects, the related businesses have the responsibility to consider these effects and need to find strategic options for the creation of added value with a less natural resource intensive base.

In 2002, Wuppertal Institute measured the resource intensity – including energy and raw materials – needed for HP's mobile computing devices[16] and identified improvement opportunities. The study was conducted for the Digital Europe project, a partnership researching the impacts of e-business on sustainable development.

Our study identified two stages of the lifecycle where most resources were used. The first was the manufacture of the components (such as the printed wiring boards, processors or memory chips), which uses large amounts of non-renewable materials. The second was the electricity consumed when using and charging the devices. HP should focus on these two areas to reduce the overall impact.

Although we determined options for improvements, such as the use of recycled materials, energy efficiency or lifetime extension by upgradability, efficiency gains per device could be wiped out as more people make greater use of IT products. To improve materials and energy efficiency by ten times, which is required to extend developed country living standards worldwide, product designers have to understand better how people use technology and help them become more efficient by providing the necessary systematic enhancements.

Such innovation demands creativity and courage. We think HP can meet this challenge.

Justus von Geibler and Michael Kuhndt, Wuppertal Institute, Eco-Efficiency and Sustainable Enterprise Group (http://www.wupperinst.org)

For more information on the Digital Europe project case study see http://www.digital-eu.org.

The **Wuppertal Institute** pursues the aim to communicate the concept of sustainable development as defined at the Earth Summit in Rio de Janeiro, Brazil in 1992. The Institute's working guideline is: more wealth, less natural resource use. In order to meet worldwide future demands the Wuppertal Institute calls for an increase of energy and material efficiency by a Factor 10 in the industrialized countries.

[16]The study was of two devices, the handheld Jornada 565 and the notebook Omnibook 5000.

• Extend inkjet printers recyclability model to all business units during 2003

Design for recyclability

Governments, the media and the public are paying increasing attention to the disposal of used computers and other electronic products. Many countries are introducing legislation to encourage electronics recycling.

For its part, HP is working to design products that are easier to upgrade and recycle. Many HP products have a modular design so that components can be removed, upgraded or replaced.

Features used to improve recyclability include:

• Eliminating glues and adhesives from product construction, when technically feasible (for example, using snap-in features instead of glue)

• Marking plastic parts weighing more than 25g according to ISO 11469 international standards, which speeds up materials identification during recycling

• Reducing the number and types of materials used in HP products

• Replacing fasteners with snap-in features

• Using single plastic polymers when possible

• Using molded-in colors and finishes instead of paint, coatings or plating, when possible

Case study, Canada:

EPS Canada

HP Canada joined forces with other electronics and IT organizations across Canada to create Electronics Product Stewardship Canada (EPS Canada). This non-profit organization works to design and implement environmentally sustainable solutions, such as promoting an understanding of cost and environmental implications of recycling and creating programs to better design products for recyclability. The goal of EPS Canada is to launch the first end-of-life management program in 2004.

Product examples

The following products demonstrate design for recyclability.

NonStop servers. These are designed for easy component upgrades, which extend product life and therefore reduce waste. Customers need only to upgrade the microprocessor and memory board and can extend use of the server for more than a decade.

Inkjet printers. We have developed a tool that allows us to better assess a product's end-of-life performance and make comparisons across products and product generations. After using this to evaluate our inkjet printers, we are currently adapting this model for use with HP scanners, digital cameras and other products.

Eco-labels and eco self-declaration

Eco-labels help consumers choose products that meet high environmental standards. Many HP products carry eco-labels (see Web links).

ENERGY STAR®. A voluntary energy efficiency program sponsored by the US Environmental Protection Agency. ENERGY STAR® has recently been adopted by Australia, the European Union, Japan and Korea.

Blue Angel. A German eco-label based on criteria in product design, energy consumption, chemical emissions, noise, recyclable design and take-back programs. More than 30 of HP's most popular printers qualify for this eco-label. We had the world's first Blue Angel certified inkjet printers, meeting rigorous requirements (such as consuming less than two watts of electricity in off-mode).

IT Eco Declaration (formerly NITO). A voluntary standard certifying that products meet legal and some customer requirements in Denmark, Norway and Sweden. HP has issued NITO declarations for more than 370 HP products.

GREENGUARD™ Environmental Institute. Certification for low-emission products. Several HP printers have been certified.

Taiwan Green Mark. A Taiwanese eco-label program launched in August 1992 to promote recycling, pollution reduction and resource conservation. In September 2002, HP became the first foreign IT company to receive the Green Mark certificate. We have since begun qualifying more than 100 imaging and personal system products for this label.

TCO. A Swedish eco-label for visual displays including criteria regarding electromagnetic fields, visual ergonomics, energy consumption, recyclable design and take-back programs. Several HP displays are certified against this eco-label.

DfE challenges

The overall effect of environmental improvements in specific products can be offset by the increased use of IT technologies. We have to continue to innovate if we are to further reduce impacts. Specific challenges include:

• Developing cost-effective environmental improvements

• Further reducing the energy use of our products

• Anticipating regulatory and market trends that impact design

• Establishing meaningful metrics to measure product environmental performance

• Adhering to emerging regulations without fully understanding product integrity and quality implications

Web links

HP Blue Angel qualified products
http://www.hp.com/hpinfo/globalcitizenship/environment/pdf/blueangelcert.pdf

HP ENERGY STAR® qualified products
http://www.hp.com/hpinfo/globalcitizenship/environment/productdesign/energyefficiency.html

HP Green Mark qualified products
http://www.hp.com/hpinfo/globalcitizenship/environment/productdesign/greenmark.pdf

HP lead position statement
http://www.hp.com/hpinfo/globalcitizenship/environment/pdf/leadposition.pdf

HP product environmental profiles
http://www.hp.com/go/msds

HP TCO qualified products
http://www.hp.com/hpinfo/globalcitizenship/environment/productdesign/tco.pdf

HP material safety data sheets
http://www.hp.com/go/msds

HP Nordic Information Technology Organization declarations
http://www.hp.se/miljo/index.asp?page=eco&lang=eng

Packaging

Our products are distributed worldwide by air, land and sea. Packaging protects them in transit. This helps to prevent potential product damage and ensure the products arrive in working order.

The challenge is to design packaging that offers adequate protection, while minimizing environmental impacts. Using less packaging or recycled and recyclable materials can reduce resource use and waste. Increasing pallet density can enhance transport efficiencies. Environmentally sound packaging can save costs, too.

Our Global Packaging Team coordinates packaging initiatives throughout HP and seeks to minimize packaging-related environmental impacts. We have packaging groups in each of our business units.

Our packaging engineers use the following guidelines – based on the waste hierarchy of reduce, reuse and recycle – to decrease environmental impact:

- Design returnable/reusable packaging

- Eliminate the use of heavy metals such as lead, chromium, mercury or cadmium

- Eliminate the use of ozone-depleting substances (ODS) in the production of packaging materials

- Make packaging materials easily separable (for example, avoid gluing foam to paperboard)

- Mark or identify material type following ISO 11469 (the international standard for identifying plastic types)

- Maximize the use of post-consumer recycled content materials

- Use readily recyclable materials such as paper and corrugated materials

Web links
HP Packaging
http://www.hp.com/hpinfo/globalcitizenship/environment/productdesign/packaging.html

Packaging examples

The following examples demonstrate packaging innovation.

Using recycled plastic in printer packaging. HP designed a clamshell printer package made with an average of 10% post-consumer recycled PET, a plastic used for soft drink bottles. The clamshell is not damaged on opening and is strong enough to reuse as a printer carrying case. It stacks easily, saving space in transit and storage. The design won an award from the Institute of Packaging Professionals in the US for its ecological efficiency, economy, product protection and effective marketing.

New paperboard sleeve for tri-color ink cartridges. By using a lighter paperboard stock for ink cartridge sleeves, we reduced the packaging weight of each unit by 34%. This will save more than 1,100 tonnes of paperboard during the next four years, and reduce costs by more than $700,000 a year. Paperboard used for HP inkjet print cartridge supplies in North America is made with 100% recycled content, a minimum of which is 50% post-consumer.

'Easy open' bag for toner cartridges. A new bag design eliminates the need for end-caps or a corrugated wrap around ink toner cartridge boxes, reducing box size by up to 30%. The smaller box will allow 40% more boxes per pallet, increasing shipping efficiencies and decreasing the use of materials and overall costs. External packaging for HP LaserJet cartridges includes up to 30% post-consumer recycled content.

Reusable transit packaging for inkjet cartridges. We use packing trays to transport inkjet printer cartridges from the factory to regional product completion centers. In 2002, we began re-using the trays for up to five round trips. This reduced corrugated waste by 2,400 tonnes in 2002, saving $1.5 million.
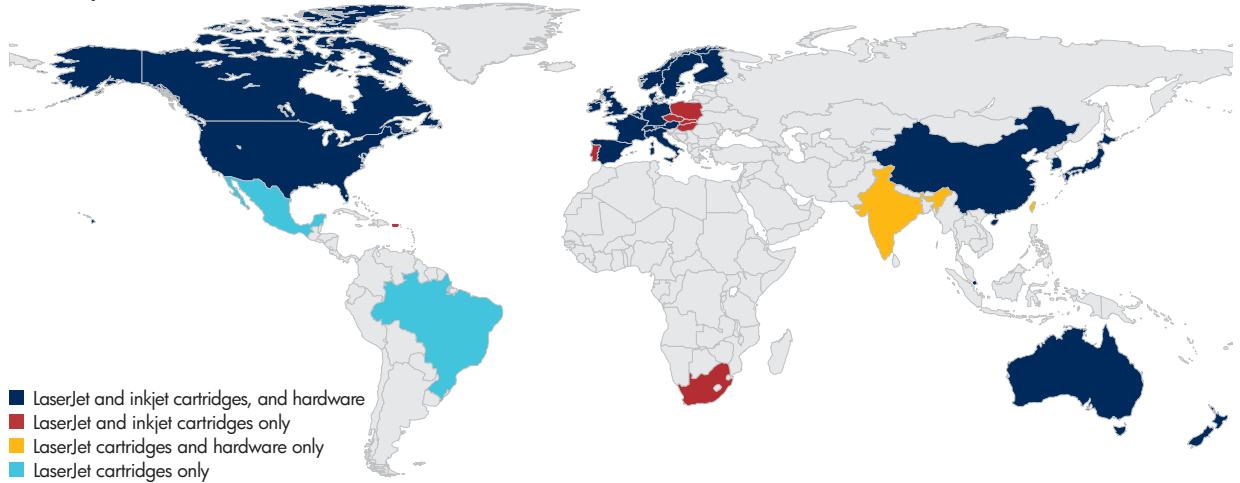
Recycled plastic protection for notebook computers. Through innovative design and collaboration with suppliers worldwide, we developed a 100% post-consumer recycled plastic for use in notebook computer packaging. The new design saved 140 tonnes of virgin plastic and reduced costs by $260,000 in 2002.

Recyclable board protects delicate components. LaserJet packaging engineers designed a fully recyclable corrugated paper container to protect delicate fax components. This replaces foam material, which is not recyclable in some countries. The new container requires less space, improving transport and storage efficiency. The new design saved $385,000 in 2002.

Bulk packaging for desktop computers. HP Personal Systems Group developed a bulk-pack for large orders of PCs. Instead of packing the PCs separately, several PCs are placed together in one container. This reduces packaging waste by 86%, about 900 tonnes a year. Initial savings were $1.1 million in 2002, and are expected to be $4 million in 2003.

Converting product manuals to CD. HP continues to convert many of the manuals that accompany products to CD format, dramatically reducing the pages HP prints and transports. In 2002, this saved more than 9,000 tonnes of paper in the Personal Systems Group (PSG) alone.

Availability of HP Planet Partners™

- ■ LaserJet and inkjet cartridges, and hardware
- ■ LaserJet and inkjet cartridges only
- ■ LaserJet cartridges and hardware only
- ■ LaserJet cartridges only

Recycling

Governments, customers and the public are paying increasing attention to the disposal of used computers and other electronics products at the end of their useful lives. Many countries are adopting or proposing legislation to address the issue.

Our objective is to offer customers a return and recycling service for as many HP products as possible. This is integral to our business strategy.

Planet Partners™, our return and recycling program, covers the return of computer hardware and HP print cartridges. The goal of the program is to reduce the environmental footprint of these products and to minimize the amount of waste going to landfill.

For information about HP's public policy positions regarding recycling electronic equipment, see page 14.

Computer hardware recycling

Our computer hardware recycling program operates in more than 20 countries. It works through specialist vendors that reclaim and recycle computer products made by HP and others. We use two recycling facilities in the US (see case study) and more than 10 different recycling vendors throughout Europe.

During 2002, we estimate 13,500 metric tonnes of hardware were recycled in Europe on our behalf. We recycled about 16,000 metric tonnes of hardware in the US.

Case study, US:

State-of-the art hardware recycling facilities

HP's two US hardware recycling facilities in Roseville, California and LaVergne, Tennessee recycle nearly 100% of the materials in the computer products received.

We work with a company that specializes in computer recycling. The relationship began in the mid-1990s, as part of our effort to establish an environmentally sound recycling service for our products. Acting as a team, HP and our vendor established the necessary facilities and our vendor set up the machinery and equipment.

Returned equipment is sorted. Products that still work are donated to charity and the rest are dismantled. Reusable parts are removed and either sold or donated. The remaining equipment is processed and sorted. Metals, such as gold, silver, platinum, palladium and copper are sent for refining and the remaining materials are recycled.

Teaming up with Starbucks and Best Buy for computer take-back days

In April 2003, HP held computer recycling drop-off events with Starbucks Coffee Company and Best Buy (an electronics retailer) in Seattle and New York City. The 'Team Up Clean Up' events enabled consumers to bring computer hardware and other consumer electronics to selected points in the cities, for recycling at our facilities in California and Tennessee.

The Seattle event was held at Starbucks' headquarters. More than 700 people brought approximately 55 metric tonnes of equipment for recycling.

Consortium of manufacturers (EMEA)

In January 2003, the Waste Electronic and Electrical Equipment (WEEE) Directive became European law. This directive places certain responsibilities for recycling end-of-life electronics products on producers (manufacturers, sellers, distributors).

In 2002, we co-initiated the European Recycling Platform (ERP), a consortium of manufacturers (including Electrolux, Gillette/Braun, and Sony), to investigate the most cost-effective ways to comply with the legislation. The ERP is researching recycling technologies, logistics and tendering methods for recycling services.

Asia-Pacific recycling program

In June 2003, HP expanded its hardware recycling program to Australia, China, Hong Kong, India, Japan, South Korea, New Zealand, Singapore and Taiwan. Customers register products for take-back online.

e-coupon

In early 2003, we launched a US e-coupon pilot program that gives consumers up to $50 towards the purchase of a new HP product when they recycle computer hardware from any manufacturer through HP Planet Partners™. This doubled US recycling orders. The program is currently scheduled to run through October 31, 2003.

Silicon Valley Toxics Coalition

I have visited several computer recycling programs and have found the HP-Noranda facility in Roseville, CA to be a step forward. It provides a valuable service for HP customers and it helps them to avoid some of the undesirable practices that are currently widespread in the US, such as shipping e-waste overseas to developing countries with lax health and environmental protections. It is important that HP pays its recycling workers a living wage and does not rely on tax-payer subsidized prison labor for recycling, as some other companies do.

Cleaner design is important, and HP's forward-looking model for effective recycling helps provide essential feedback to product designers. We'd like to see HP's programs go further, but appreciate efforts in their well-managed recycling program. In addition, we appreciate HP's willingness to engage in public policy discussions about the growing e-waste crisis.

Ted Smith, Executive Director, Silicon Valley Toxics Coalition (http://www.svtc.org, http://www.computertakeback.org)
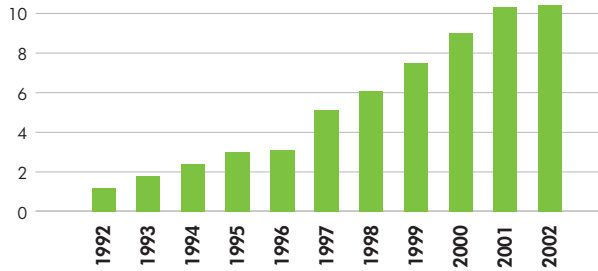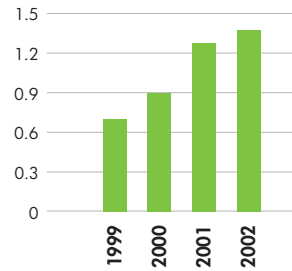
[17]Includes cartridges returned by customers and cartridges used internally by HP offices.

Print cartridge recycling

HP offers free recycling for HP LaserJet and inkjet cartridges. Customers can return used HP original print cartridges by following simple instructions on the packaging, our website or by phone. Returned cartridges are sent to recycling facilities located within the same region.

HP is expanding its cartridge recycling program into the Asia-Pacific region. We are growing our program in Australia, China, India, Hong Kong, Japan, South Korea, New Zealand, Singapore and Taiwan. We are installing cartridge collection bins at our largest customers' sites and in some public areas. The collected cartridges will be directed to regional recycling centers.

LaserJet cartridges
We launched our LaserJet cartridge return and recycling program in 1991. Today, we offer take-back programs for HP LaserJet cartridges in more than 30 countries, covering 86% of our global market for LaserJet supplies (see map, page 52).

As of 2002, HP recycles and recovers for energy up to 98% of returned HP LaserJet print cartridge materials, by weight, worldwide. Some of the recyclable plastics are turned into products such as trays and wire spools. In total, we have recycled nearly 60 million HP LaserJet cartridges (see above).

Inkjet cartridges
The HP inkjet cartridge recycling program began in 1997. It is expanding to more than 30 countries, including Asia-Pacific (see map, page 52). The cartridges are converted into materials such as ferrous metals, precious metals and plastic. Some unrecoverable parts are used as fuel for energy recovery (see pie chart).

Product take-back program return rates have increased each year since the program began in 1997. Milestones reached in 2002 include:

- Qualifying recycled polysulphone (RPSU) plastic for use in cartridges

- Qualifying recycled PET plastic for a printer part

- Establishing dedicated facilities with recycling process lines (unique process equipment for our inkjet cartridges) in Europe and in North America

HP inkjet cartridge recycling outcomes, 2002

Energy recovery	32%
Ink	20%
Landfill	1%
Metal	23%
Plastic	24%
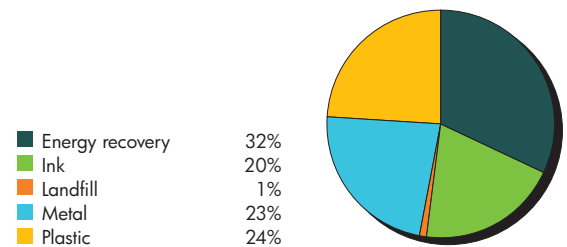
Recycling challenges

Among the challenges we face regarding recycling are:

- Closing the loop on end-of-life IT equipment so that materials are recovered and reused by efficiently integrating our environmental design, re-use and recycling efforts across all product lines

- Finding cost-effective ways to comply with emerging laws on recycling

Next steps

- Expand customer recycling programs to other countries

- Use appropriate strategies to increase the volume of hardware recycled

Web links

HP Product Recycling
http://www.hp.com/recycle

Calvert Group, Ltd.

We are pleased that HP has sought input and commentary from various stakeholders on its corporate social responsibility programs. Transparency, willingness to reach out and respond to stakeholders, the drive to cultivate the business case for sustainability, and reporting measurable results of sustainability programs are the foundations for leadership in the area of corporate social responsibility. Calvert applauds HP for its progress in all of these areas.

One issue of concern to Calvert is the problem of electronic waste. It is estimated that millions of computers and electronic equipment pieces will become obsolete in the coming years. As investors, we view the financial risks associated with this escalating problem as significant. HP's "Planet Partners" recycling program is a good start to addressing this problem, and should eventually reduce HP's financial and reputational risk exposure. In implementing this program, Calvert encourages HP to develop and adopt systemic e-waste solutions, including measurable targets for global product take-back, recycling, and the manufacturing of products that are designed for environment. In doing so, we believe HP will enhance shareholder value and deliver benefits to customers, workers, communities and the environment.
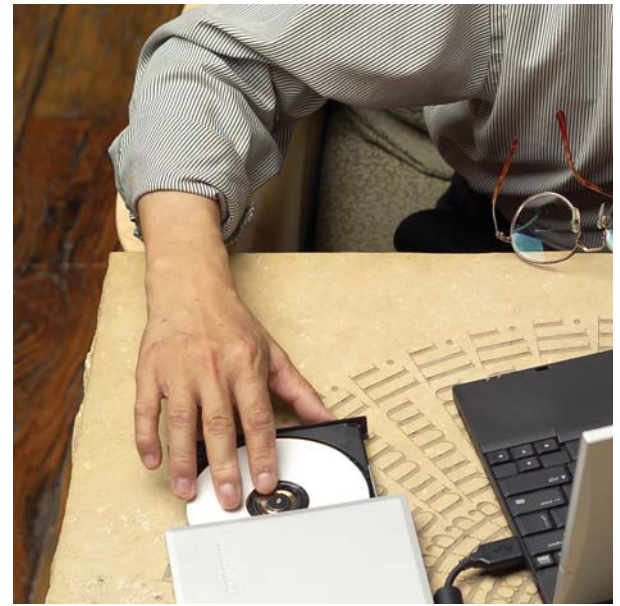
Customer engagement

Our business depends on meeting customer needs and expectations. Increasingly, customers want to know that companies maintain high environmental and social standards.

This section covers the following areas:

- Customer experience management – how we integrate global citizenship into customer experience

- Customer privacy – how we develop and maintain trusted relationships with customers

- Accessibility – how we help people with disabilities use our products

Customer experience management
One of our corporate objectives (see page 2) is customer loyalty. It commits us to provide products, services and solutions of the highest quality and the greatest possible value to our customers. Through the use of customer experience management tools and processes, we will ensure that HP's customer experience standards are reflected in all customer interactions.

We want our customers to see HP as environmentally and socially responsible. This is part of our Customer Experience Standard that will be introduced in late 2003. We want customers to describe HP as a company that:

- Bases its actions on the highest ethical standards

- Contributes to the communities in which it operates

- Conducts operations in an environmentally responsible way

- Sells products and services that are environmentally sound throughout the lifecycle

We strive to support our customers' global citizenship activities. This includes our efforts to ensure that people with disabilities can use our products (see pages 59-61) and to provide convenient ways to recycle HP products (see pages 52-55). In Europe, we have an Environmental Business Management Team dedicated to meeting customers' environmental requirements.

Customer privacy

Good privacy protection is fundamental to establishing trust between HP and our customers. e-commerce enables companies to collect and analyze information about customer behavior, lifestyles and shopping habits. Customers and internet users interact with a company in a variety of ways, and the provision of personal information is often part of the transaction. This raises concerns about how personal information will be used and shared.

Good privacy protection is fundamental to establishing trust between HP and our customers.

Privacy is a fundamental part of our global citizenship program. Our Global Master Privacy Policy (see Web links, page 59) is based on guidelines established by the Organization for Economic Cooperation and Development (OECD), the Global Business Dialogue on Electronic Commerce (GBDe) and the US Federal Trade Commission's Fair Information Practices. Our policy is consistent with the European Union Data Protection Directive (see Web links, page 59).

The policy covers customers and potential customers in all market segments, as well as employees (see pages 26-27). A link to our Online Privacy Statement can be found in the lower left corner of all www.hp.com web pages.

The following are key elements of our privacy policy that affect customers.

Accuracy and access. HP provides customers access to their data so they can review or correct personal information.

Choice. HP does not sell, rent or lease our customer data. We will not share personal information with an unrelated company without the customer's permission.

Notice. HP provides customers notice on our global web site about privacy protection and their rights.

Security. HP applies a range of business processes and technologies to protect the security of customers' personal data. Sensitive data, such as credit card numbers, are encrypted.

We have a dedicated customer privacy team that works to assure the highest standards in customer data protection.

Training
Privacy training is required for all employees that access or handle customers' personal information. Our customer privacy training program is a seven-module online course that provides self-paced training worldwide.

For more information regarding HP's public policy position on internet privacy, see page 14.

Global privacy organizations and standards

BBBOnLine Privacy Seal Program
HP was a founding sponsor of the Better Business Bureau OnLine's Privacy Seal Program, one of the most widely recognized privacy standards in the US (see Web links, page 59). We display the seal on our website, communicating our customer privacy commitment. The program was founded in 1999 and HP has renewed its privacy seal every year since. Compaq was a member prior to the merger, and in 2002 the combined company consolidated and renewed under a single seal.

We co-sponsor BBBOnLine's Education Forum (http://www.bbbonline.com/education), which provides privacy information and resources to businesses and consumers. We are developing the Global Trustmark Program in partnership with BBBOnLine to increase consumer confidence in global e-commerce.

BBBOnLine

At BBBOnLine, we believe HP is a leader, encouraging corporate citizenship and responsibility on a global stage.

As a BBBOnLine Privacy Seal holder, HP has demonstrated a serious commitment to implementing fair information practices. In the midst of the complexities of the HP/Compaq merger, the organization devoted substantial attention to the privacy concerns of customers of the two merging companies. HP has worked to achieve a careful balance – providing comprehensive privacy information while simultaneously producing notices that are customer friendly.

As a founding sponsor of the BBBOnLine Reliability program, HP has strongly supported our Code of Online Business Practices, actively encouraged the development of systems for the resolution of consumer disputes and – through its leadership role in the Global Business Dialogue on e-Commerce – encouraged the development of the Global Trustmark Alliance, a partnership among non-governmental organizations to promote trust and confidence in global electronic commerce.

We believe HP faces two interrelated challenges as it moves forward. First, HP's universal, global privacy policy requires that it constantly remain vigilant toward worldwide trends in privacy regulation, while taking note of specific laws that affect the company's operation in its strategic markets. Second, the organization must find ways to successfully grapple with its various legacy systems as it moves to implement its 'opt-in' strategy.

Charles I. Underhill, Senior Vice President and Chief Operating Officer, BBBOnLine, Inc.

BBBOnLine brings the Better Business Bureau system's 90 years of experience in consumer protection and business self-regulation to e-commerce. Guided by its mission to promote consumer trust on the Internet, BBBOnLine encourages sound and ethical online business practices. Three hundred national and global corporations and 300,000 businesses at the grass-roots level support the Better Business Bureau system, and over 14,000 businesses have qualified to display the BBBOnLine Seals.

Safe Harbor

HP was the first Fortune 50 company to self-certify with Safe Harbor, an agreement between the US Department of Commerce and the European Commission. Our first self-certification was in January 2001. We recommitted in 2002 and 2003. The agreement allows companies to self-certify to a set of privacy principles based on European standards, including notice, choice, onward transfer, access, data integrity, security and enforcement. Safe Harbor principles are evolving into a global privacy standard, which will benefit our customers everywhere.

Technology tools

We support the Platform for Privacy Preferences (P3P), which enables consumers to make better-informed decisions about the online collection and use of some types of personal information on the web.

Personal data transfer

As part of the integration of HP and Compaq, we notified more than 15.7 million customers that their personal data was being transferred to HP and offered them a chance to opt out (only 7% did). This was the largest corporate global personal data transfer notification project ever.

Compliance management

In 2002, we established a global tool to automatically audit all www.hp.com websites for compliance with HP privacy policy requirements, focusing on notice, data collection, customer choice and security. Several million pages are scanned every month to check compliance.

We have a global process to generate quick response to and resolution of customer privacy concerns. This includes a reporting framework that measures and tracks issues and trends.

Challenges

HP has millions of customers around the world and needs to maintain constant privacy protection standards for them all. Particular challenges include:

- Building a privacy compliance, remediation management and reporting infrastructure

- Educating HP managers and employees on rapidly evolving customer privacy issues

- Managing the increasing quantity and complexity of privacy regulations worldwide

CSUN Center on Disabilities

HP has taken one of the strongest positions of any large technology supplier in the world on accessibility. This is evident through its work with suppliers of assistive technology, involvement in discussions and planning regarding the future of technology and accessibility for everyone, and its commitment to build accessibility into all HP products. HP has clearly demonstrated its commitment to this issue through its collaborative efforts with researchers, developers and educators in the disability and assistive technology field. Clearly, HP and its talented and dedicated staff have raised the bar in terms of efforts to fully integrate issues of disability into a corporate wide mission.

HP will continue to experience challenges. Full accessibility by all people is a commendable goal, but one that is based on such a dynamic set of principles that compliance can be all but impossible. HP has accepted this challenge.

Dr. Bud Rizer, Director, Center on Disabilities, California State University, Northridge (CSUN)

Next steps

- Develop a privacy impact assessment tool, to help HP identify the effects new initiatives may have on privacy and examine how adverse effects may be overcome

- Improve privacy data management systems

- Train more employees on privacy and expand job-function specific training programs

Web links

HP Global Master Privacy Policy
http://www.hp.com/hpinfo/globalcitizenship/community/privacy/masterpolicy.html

HP Online Privacy Statement for Customers
on all pages of www.hp.com

BBBOnLine
http://www.bbbonline.org

European Union Data Protection Directive
http://europa.eu.int/comm/internal_market/privacy/index_en.htm

Global Business Dialogue on Electronic Commerce (GBDe)
http://consumerconfidence.gbde.org/protection.html

Safe Harbor
http://www.export.gov/safeharbor

US Federal Trade Commission's Fair Information Practices
http://www.ftc.gov/reports/privacy2000/privacy2000.pdf

Accessibility

People with disabilities can find it difficult to utilize information technology (IT). Access to IT can be improved through intelligent design. Many accessibility features benefit everyone, for example, larger backlit displays on printers and connecting ports located on the front of PCs rather than the back.

Approach

HP makes products and services that allow people with disabilities to fully utilize the technology and solutions our products provide.

Our Accessibility Policy commits us to:

- Develop and implement accessibility guidelines for products and services

- Raise awareness of accessibility issues within our company

- Document accessibility features and make information about our products and services publicly available in an accessible form

- Support and contribute to industry accessibility standards and guidelines

- Establish relationships with leading suppliers of 'assistive technology,' that is, products that help people with disabilities use IT

- Involve people with disabilities in developing accessibility requirements, and in designing and testing products and services

- Support assistive technology research

Global e-Text

Together with a local developer of adaptive learning software and hardware tools, HP Canada works to assist people with learning and physical disabilities or cultural differences by delivering relevant learning resources. HP Canada is the technology supplier for a number of different applications, including text-to-audio and enlarged print programs. HP Canada is a primary sponsor of Global e-Text, and seeks private and public sector partners to proliferate adaptive and accessibility technologies.

HP often partners with assistive technology vendors (ATVs) who make products for people with disabilities (for example, a screen reader that uses a synthesized voice to read information). We work with ATVs and software companies to ensure assistive technology products are compatible with new operating systems and HP products. Partner companies include Anthrotronix, Freedom Scientific, Madentec and VisuAide.

US law (Section 508 of the Rehabilitation Act, see Web links, page 61) requires all US federal agencies to purchase accessible IT products and make their websites accessible to people with disabilities. Many countries in Asia Pacific and the EU, as well as state and local governments in the US, are passing similar legislation. Our publicly available database describes how HP products conform to Section 508 (see Web links, page 61).

HP was the first company to provide detailed product accessibility feature assessments using the Voluntary Product Accessibility Template (VPAT), created by the US General Services Administration and the Information Technology Industry Council. HP played a significant role in the development of the VPAT.

EU member states are adopting accessibility legislation as part of the European Year of Disabilities 2003 and Japan is expected to publish relevant standards in 2003.

For information about HP's public policy positions regarding accessibility, see page 12.

Product accessibility

We document accessibility features for all computer and printing products we sell to the public sector. These include:

- Desktop PCs that support special keystrokes, color and contrast settings, assistive technology devices and Microsoft Windows Accessibility features

- Inkjet printers that have large, well-spaced buttons that can be identified by touch alone, and some models with concave buttons for easier use with mouth sticks

- LaserJet printers that have on/off switches at the front or side of the printer, within reach of wheelchair users

- Notebook computers that employ easy-to-use single-handed operation and support Microsoft Windows Accessibility features

In 2002, HP created an 'Accessibility Toolkit,' a web-based tool for HP designers to improve product accessibility features. The toolkit provides information on accessibility requirements, legislation and best practice.

See more examples on our Accessibility website (see Web links, page 61).

Assistive Technology Industry Association (ATIA)

HP has demonstrated its commitment to accessibility for people with disabilities. They have been staunch supporters of many activities, both within the advocacy community of people with disabilities and the Assistive Technology Industry. I applaud HP's efforts to improve making its broad portfolio of products more accessible.

There continue to be challenges in the world of accessibility; as products become smaller and often more complex, new accessibility issues arise. As the working population grows older and works longer, there will be greater numbers of individuals with disabilities who need accessible products. The strong relationships HP has developed with assistive technology companies should benefit HP, its customers, and the assistive technology community. HP is both a leader in the IT field and accessibility. It is my hope that HP will continue to shine in these efforts. People with disabilities need strong supporters and accessible technology is one of the best ways to create opportunities for them.

David Dikter, Executive Director, ATIA

Information accessibility

HP provides accessible information about the company and its products. The HP website complies with the guidelines of the Web Accessibility Initiative and US regulations (see Web links).

The US National Federation for the Blind certified HP as an e-business leader for web accessibility. For example, text and graphics are understandable when viewed in monochrome, and images and audio material are translated into text. Our user manuals are available on the internet with a screen reader for the visually impaired.

Highlights

Europe: European Year of People with Disabilities. HP is a sponsor of the European Year of People with Disabilities (EYPD) 2003. This European Union initiative is raising awareness about the rights of the estimated 37 million disabled people in Europe. The EYPD is promoting changes in hiring and employment law to reduce discrimination and improve the employment status of people with disabilities. We plan to hold an EYPD Awareness Day during 2003 in each European country where we operate.

Global: Events sponsorship. In 2003, we sponsored the Assistive Technology Industry Association conference and the Center on Disabilities (CSUN) International Conference on Technology and Persons with Disabilities.

Sweden: Public sector sales. In 2002, HP won a contract to supply up to 40% of the computer hardware to all Swedish public authorities and administrations, meeting the rigorous accessibility requirements set by the Swedish Agency for Public Management.

UK: Philanthropic support. Under its philanthropy program, HP UK provided a large system to the National Blind Children's Society for on-demand production of books and academic materials in special fonts and formats. These will benefit visually impaired children and enable them to be included in mainstream schools, rather than having to attend special institutions.

US: Library Technology Access. In 2002, together with the American Library Association, we launched the Library Technology Access (LTA) initiative. The LTA's objective is to improve access by increasing the number of accessible workstations in libraries throughout the US. HP donated two accessible workstations, peripherals and assistive technology hardware and software to six libraries.

US: National Disability Mentoring Day. HP sponsored and participated in National Disability Mentoring Day 2002. Students with disabilities spent part of a day with HP employees to learn about potential career paths.

Web links

HP Accessibility
http://www.hp.com/accessibility

HP database of product accessibility features
http://www23.compaq.com/508/index_hp.asp

European Year of People with Disabilities
http://www.eypd2003.org/eypd/about/hp.jsp

Section 508
http://www.section508.gov

Web Accessibility Initiative
http://www.w3.org/WAI

Social investment

Companies have an impact on communities where they operate, and are expected to make a positive contribution. The trend is to move beyond traditional philanthropy and strengthen the link with long-term business objectives. Leading companies are finding ways to use their products, services and skills to address social challenges such as poverty and inequality, while building shareholder value. Social investment is a term used to describe this broad activity.

Our objective is to be a leader in social investment, providing cash, products, services and time to schools, local communities and underserved groups. Our efforts extend beyond traditional philanthropy to develop and support initiatives that use technology to promote capacity building and opportunity.

Our social investment program focuses on three areas where we can maximize our impact:

• e-inclusion

• Local community engagement

• Education

These are described on pages 63-71. First we give an overview of our philanthropic activity in 2002.

Philanthropy overview

In 2002, we donated approximately US$62.2 million in cash and equipment worldwide[18]. Of this, $23.5 million was given to organizations and programs primarily supporting members of minority groups and women. The Chronicle of Philanthropy 2002, a US publication, listed HP as the second largest contributor among US computing companies. For more information, see our 2002 HP Philanthropy & Education Annual Report and our Philanthropy website (see Web links).

[18]Amounts indicated are on a combined company basis. On a historical basis, HP donated approximately $60.0 million during fiscal year 2002. This amount includes contributions of $1.3 million made by the HP Foundation.

Web links

2002 HP Philanthropy & Education Annual Report
http://grants.hp.com/us/reports/2002report

HP Philanthropy
http://grants.hp.com

Map of e-inclusion sites

Worldwide giving by category, 2002
[Million $US]

Education	$32.1
e-inclusion	$16.5
Community	$13.6
Total	**$62.2**

Worldwide giving by region, 2002
[Million $US]

US	$47.2
Europe/Middle East/ Africa	$9.6
Asia/Pacific	$3.4
Canada	$1.0
Latin America	$1.0
Total	**$62.2**

e-inclusion

Only 7% of the world's people have access to a personal computer and 4% to the internet, according to the World Bank. Most of the world does not benefit from the social and economic opportunities created by Information and Communications Technology (ICT).

The gap between those who have access to ICT and those who do not is often referred to as the digital divide. Bridging this gap is an enormous challenge for developing countries and underserved communities, but it is critically important to their progress.

Approach

Our corporate vision is a world where the benefits of ICT are available to everyone.

This has led us to develop our e-inclusion initiative. e-inclusion utilizes ICT to increase communities' access to social and economic opportunities, focusing on sustainability. Long-term commercial imperatives drive our e-inclusion initiatives, linking our core business activities with our commitment to social investment.
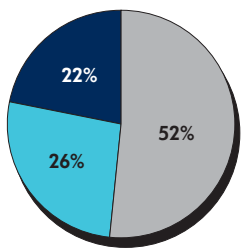
We focus on underserved markets in Africa, Asia, Central and Eastern Europe and parts of Latin America. The four billion people living in those regions represent about two-thirds of the global population. We also address underserved communities in developed countries.

Our e-inclusion initiative covers a wide variety of partnerships with schools and universities, communities, governments, non-governmental organizations (NGOs) and companies.

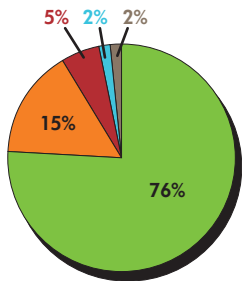The following principles drive our e-inclusion initiatives:

• Value creation for the community

• Shared ownership and accountability through public/private partnerships

• In-depth community involvement

• Relevant, scalable, innovative and replicable solutions

• Sustainable programs and solutions

e-government

HP works with national, state and local governments worldwide to use technology to manage their operations more efficiently and provide inclusive public services. This increases transparency and accessibility, and reduces long-term costs.

Implementing e-government solutions is complicated, however, especially for developing countries. Together with partners, HP designed an e-government framework to streamline solution delivery. Sharing best practices between countries helps simplify the implementation process.

Bella Bella settlement

The Heltsiuk Nation settlement, located on British Columbia's upper mainland coast, was growing more isolated relative to other Canadian communities. Accessible only by air or sea, Bella Bella had a connection to the internet, but service was intermittent, slow and expensive; it failed to create a meaningful or positive cultural, commercial, social or civic impact.

Together with partners, HP Canada worked with local inhabitants to define and develop 1NterLink, an internet-based community resource. Access to online educational, health and business development resources are broadcast to Bella Bella via satellite, cached on an HP server, and accessed by community groups and residents at a high bandwidth over existing phone lines and wireless networks.

1NterLink delivers information to the community that has cultural and social relevance to the local population and helps Bella Bella seek business opportunities on an online global stage.

We have a dedicated team and several programs within our e-inclusion initiative. Our programs make use of our products, services and skills to enhance the lives of those currently not able to take advantage of the benefits of the digital age.

These are our key e-inclusion programs:

- Solution innovation for emerging markets

- Digital Villages

- i-communities

- Microenterprise development

- Microfinance

- GlobalGiving (formerly known as DevelopmentSpace Network)

- Digital Freedom Initiative

Here is an overview of these programs and progress in 2002. For more information about HP and e-inclusion, visit our website (see Web links, page 68).

Solution innovation for emerging markets

Solution innovation for emerging markets is designed to generate profitable HP business growth by developing and delivering sustainable ICT solutions for underserved communities. HP Labs India (our research facility in Bangalore) and the Emerging Market Solutions organization work in partnership to understand the economic, social and cultural factors – such as low individual spending power and less reliable ICT infrastructure – that make emerging markets different from those in technically advanced economies. HP works with key constituents to co-develop products and services that meet end-user needs.

Digital Villages

HP Digital Villages are philanthropic initiatives in which we invest our ICT products and skills to increase economic and social development in underserved communities. The projects are founded on partnerships with local organizations to build community capacity and are managed by an HP project manager.

South Africa
In 2002, we opened a community center with three classrooms in the town of Dikhatole, equipped with the latest HP computer products. The center serves young people, local teachers, entrepreneurs, government officials and the general public. Nearly 200 unemployed youths received training at the center in 2002.

Ghana
In 2002, HP and its Kumasi Digital Village partners, the University of Pennsylvania and Kwame Nkrumah University of Science and Technology opened 11 technology centers in and around Kumasi, a city in south-central Ghana. These facilities have provided internet access and technology training to nearly 26,000 people. The program's goals are to improve education, support job creation and improve living standards in the communities.

France
In 2002, HP and the Villetaneuse University Institute of Technology in Paris opened multimedia centers equipped with HP PCs, servers and peripherals in four French towns. The program provides basic IT skills, job training and online access to schoolteachers and young people in a district where a third of those under 25 are unemployed.

HP launched digital community centers in 2002 in Dublin, Ireland and Miskolc, Hungary to provide online training and services.

United States

We have made a three-year commitment to help bridge the digital divide in the communities of East Palo Alto (launched in 2000), East Baltimore (2001) and the Southern California Tribal Community (2001).

Each community works with HP to develop and implement a Community Technology Partnership Plan. This identifies the community's needs – such as access to ICT, learning and employment opportunities, community building or economic development – and then develops a shared strategy to meet those needs.

HP's commitment covers products, consulting, services and cash for operating expenses. We focus on four areas:

• Assisting schools and universities

• Helping adults and children use the internet at neighborhood centers

• Providing home-based access to the internet

• Supporting small business development

Baltimore Digital Village (MD). East Baltimore is a waterfront district, north of Washington DC. It was once dominated by manufacturing and now increasingly focuses on the digital economy.

Since its launch in 2001, the program has concentrated on education, workforce training and economic development, community and housing development, infrastructure and government policy.

The Baltimore Digital Village's schools program focuses on enhancing teaching and positively impacting student performance. In 2002, the program provided notebook PCs and computer training to 140 teachers. HP is partnering with five schools to help meet and exceed state technology standards. These schools will serve as models for the rest of the Baltimore city school system.

East Palo Alto Digital Village (CA). East Palo Alto is a small, predominantly Hispanic, African-American and Pacific Islander community in California, where about 10% of the people live below the poverty line. Residents strive to take advantage of the opportunities of the technology industry in neighboring Silicon Valley.

The East Palo Alto Digital Village project has three flagship initiatives, the Community Network, Belle-Haven one-to-one e-learning project and the Small Business Development Initiative (SBDI):

• The Community Network consists of an online resource center with information about Palo Alto (EPA.net), three internet access points for local residents, and a community grants program that has provided ICT equipment to 30 small non-profit organizations

• The Belle-Haven one-to-one e-learning project provides laptop computers and training to local educators and students

• Managed by a local non-profit organization called Start Up, SBDI provides training, capital and technology to help establish and support local small businesses; in 2002, the program provided 3,000 hours of training, 500 hours of workshops courses, 300 hours of networking time and 200 hours of drop-in support assistance

Southern California Tribal Community. The rural tribal community of Southern California is made up of 18 Indian tribes dispersed over 150 square miles in San Diego County.

In 2000, the community began to develop its high-speed wireless network that will eventually provide internet access to residents and businesses from all the tribes. Ten tribes are already connected. The network is being used as the basis for delivering managed web services and managing a centralized community web site on HP infrastructure.

A website helps tribal members preserve, archive and share their language. Email and web cameras will promote distance learning between tribes and provide interactive tribal calendars and online mentoring.

i-communities

HP i-communities are three-year public-private partnerships where ICT is used to promote social and economic development. Examples include increasing literacy, creating jobs and improving access to government services, healthcare and education.

HP i-communities provide product development and testing grounds for solution innovation for emerging markets. Experience gained in i-communities is transferred to regions where access to ICT is limited.

We have three i-communities – in India, South Africa and the US.

India
HP launched the first i-community in 2002 in Kuppam, a community of 320,000 people in five rural mandals (clusters of villages) in the state of Andhra Pradesh. Our partner, the state government, has committed to establish basic ICT infrastructure in Kuppam. HP is working with the community to develop solutions to match its needs. The focus is on citizen empowerment.

Projects include: e-government services for land records, birth and death registration and bill payments; internet connections in local schools, colleges and hospitals; youth education and vocational training with direct and distance learning; and health and agricultural services.

The project has spawned a community portal that makes a number of services, such as government stipends, education information and traditional herbal remedies, available to the citizens of Kuppam. This portal is available in Community Information Centers run by local entrepreneurs, who are sponsored by an NGO that provides low-cost loans to the entrepreneurs and by HP, which provides the equipment. For a small fee, a resident can access not only this portal, but the internet as well. The level of community awareness about key services and resources has been greatly enhanced.

In March 2003, HP held a week-long conference in Kuppam to demonstrate ICT solution innovation for emerging markets. This included a solar-powered photoshop with a digital camera and photo-printer, new handwriting technologies and an adult literacy test (see page 67).

South Africa
During the World Summit on Sustainable Development in September 2002, HP launched an i-community program in Mogalakwena, Limpopo Province. We have signed a three-year agreement with the provincial and local governments to use ICT to improve standards of living. We are working with key stakeholders on projects that help create jobs. HP has already engaged in a number of partnerships with South African enterprises, NGOs and other government agencies to collaborate on the projects that will be launched as a result of visioning sessions held with key community members.

The project is currently in the 'Quick Start' phase. In this phase, HP is developing community access points in five cluster areas. Each of these areas has accessible venues for residents to access technology, such as post offices, schools and multi-purpose centers. HP is providing the technology and delivering education and training programs to residents, teachers, municipality staff and children.

Literacy testing

A fifth of the world's adult population is illiterate. Improving literacy is essential to the development of emerging economies – reading and writing are the path to knowledge, language, culture and above all, opportunities. Recognizing this and the business opportunities provided by literacy training, HP Labs India has created computerized adult literacy tests to increase literacy levels and help governments measure progress.

The tests rely heavily on audio, graphics, and touchscreen features to enable people with low literacy levels to use them. They do not require a mouse or keyboard.

The tests cover reading, writing and mathematics but can be adapted to test other subjects, for example health or work skills. In 2003, HP piloted the tests with 500 people in HP's i-community project in Kuppam, Andhra Pradesh (see page 66) – an example of using i-communities to test solution innovation for emerging markets.

The period 2003-2013 is the United Nation's Literacy Decade, intended to extend literacy education. Literacy tests are one way our technology can contribute to the UN initiative.

United States
In August 2002, we launched an i-community in Houston, Texas. We are working with a non-profit organization to use ICT to improve learning opportunities, teach job skills, and increase community involvement and communication.

Microenterprise development

In November 2002, HP launched a program to support non-profit microenterprise development agencies in low-income US communities. Microenterprises are very small businesses. The Microenterprise Development Program provides each partner agency with a grant worth between $150,000 and $300,000 in equipment, cash, services and support.

Of more than 500 grant applications, we selected nine agencies to receive the first grants, including the New York Association for New Americans (which provides microenterprise advice to immigrants in New York) and the Lakota Fund – Pine Ridge Reservation (which provides capital and technical assistance to Lakota tribe members in South Dakota).

Microfinance

Microfinance provides small loans, as low as $25, enabling poor people to invest in entrepreneurial activities (for example, by purchasing farm implements or buying livestock for resale). These people have traditionally not been served by commercial banks, but experience has shown that they pose no higher credit risk than other borrowers. Many microfinance institutions report higher than 95% loan repayment results.

Aid programs run by non-profit organizations or governments provide the loan capital. Up to 50 million people now have access to microfinance. According to the World Bank, this could reach 500 million if the microfinance industry overcomes barriers such as poor infrastructure and communications.

HP is investigating how to use ICT to increase microfinance accessibility and efficiency. In August 2002, we established the Microdevelopment Finance Team (MFT), a public-private consortium of microfinance, technology and business experts that has invested more than $1.2 million in researching microfinance programs. MFT members include Accion International, the Grameen Technology Center, PRIDE AFRICA and Freedom from Hunger. The World Resources Institute and McKinsey & Company have played an advisory role.

The MFT is seeking funding for its first project, a Remote Transaction System (RTS) to improve microfinance access in Uganda. The RTS will connect a network of third parties – such as agricultural retailers, traders and gas station managers – accredited to make financial services more accessible in rural and semi-urban areas. The RTS will keep records of clients and their transactions.

GlobalGiving

GlobalGiving, formerly named DevelopmentSpace Network, is a public-private partnership that works to increase donations from individuals, companies and multilateral aid agencies to social entrepreneurs and community projects in developing countries.

HP established the network in October 2002 with Many Futures Inc., the Center for Global Development, the State of the World Forum, and other organizations. Donors may invest directly in projects of their own choice, ranging from bilingual teachers for indigenous school children in Peru, to waste treatment facilities in Mali and ICT education in Nepal.

Donors invest through Many Futures' DevelopmentSpace website, selecting from entrepreneurs' projects posted on the site. The network plans a series of events where social entrepreneurs and sponsors meet.

In 2002, there were a total of 65 international projects available to contributors. HP employees pledged $21,575 and HP matched $20,575.

Digital Freedom Initiative

HP contributes planning assistance, business expertise and ICT strategy consulting to the Digital Freedom Initiative of the US Department of Commerce.

The initiative was launched in early 2003 to encourage technology-led economic growth in developing countries. It will use volunteer ICT training programs and services to help small businesses and entrepreneurs maximize the benefits of ICT.

Web links

HP e-inclusion
http://www.hp.com/e-inclusion

HP Labs India
http://www.hpl.hp.com/india

Local community engagement

It is imperative for companies to develop good relationships with local communities, of which their employees, customers, investors and other stakeholders may be a part.

HP is committed to being an intellectual, social and economic asset in the communities where we operate. HP has always addressed community needs, such as education, social services, transportation and affordable housing.

Employee involvement is an important part of this work. We encourage our employees to contribute time, talent and money.

Our regional and local Public Affairs offices co-ordinate our engagement with local communities, and identify opportunities and potential partners. We sponsor events and programs supporting our non-profit partners, for example the Digital Garage in Brazil (see case study, page 69).

Case study, Sacramento, US:

Black Employees' Forum initiatives

Our Black Employees' Forum, an employee network group, works closely with schools that have a large proportion of underprivileged black students in Sacramento, CA. The students each have an HP mentor with whom they spend 10 to 15 hours a month throughout the year.

During the 2001-2002 school year, 23 students completed a program of tutoring, field trips related to history, science or mathematics, and monthly visits to HP sites. Thirty HP employees were involved, including 23 as mentors.

Digital Garage builds young people's futures on music and technology

HP employees volunteer as tutors and mentors at the Digital Garage, our award-winning project in São Paulo, Brazil. The Digital Garage is a neighborhood center equipped with HP computers where underprivileged young people are creating a musical website. This site provides information on bands and event booking. Program participants are learning valuable job skills by integrating art, music and ICT. More than 120 people between the ages of 14 and 24 have participated in the project and 30 have found jobs as a result of it.

Daniela Ferreira, 19, says, "I have received so many gifts from this program: friends, learning, responsibility and satisfaction.

I work as a writer, which I really like. The Digital Garage helped me discover I want to be a journalist."

Five hundred HP employees have volunteered for the project, including team leaders who each spent eight hours a month at the Garage.

Three Brazilian social organizations are involved: the Children from Morumbi Association, a percussion and dance company for low-income youths; the Apprentice City School Association that focuses on art education; and the Abrinq Foundation, which promotes children's rights.

The Digital Garage won the '2002 Corporate Conscience Award' in the Innovative Partnership category, sponsored by Social Accountability International.

Community engagement goals for 2003

- Develop a structured approach to employee volunteering; measure employee volunteering hours and establish an effectiveness tracking system
- Increase community grant impact by boosting employee engagement (for example, encourage employees to help grant recipients set up and use equipment, or provide essential skills such as people and financial management)
- Establish a website that matches employees with local and world-wide volunteering opportunities

Employee giving

Our annual US-wide Charitable Giving Campaign matches employee giving with company funds, up to $1,000 per employee. We run similar initiatives in Canada and Singapore, and are looking for ways to extend the programs globally.

In 2002, the US campaign raised $9.2 million through employee and company contributions combined. The average gift per donor was $454, an increase of $100 from 2001. We have a leadership giving category for employees who each generate a combined gift of at least $1,000. The number of people in this group more than doubled to 1,459 in 2002, compared with 2001.

In 2002, employees could donate to community organizations through one of five federations. These include United Way, Community Health Charities, GlobalGiving (formerly DevelopmentSpace Network), America's Charities and Earth Share. A women's learning center in Afghanistan and mushroom farms supporting AIDS widows in Tanzania were among grant recipients from the GlobalGiving donations.

Employee volunteering

HP supports employees' volunteering activities in schools and communities for up to four hours per month of company time in the US. Volunteer programs operate throughout HP, although we do not formally collect data on the participation level. We plan to report the number of events and total volunteering hours in 2004.

In 2002, we launched a 'Days of Caring' program in the US, expanding upon our previous initiative. Days of Caring lasts three months and offers employees opportunities to volunteer during work time – 3,500 participated in 2002. This is in addition to the four hours per week described in the above paragraph.

Similar volunteering initiatives took place in Europe, Japan, Singapore, Taiwan and Latin America. For example, in Brazil, eighty percent of HP employees took part in volunteering activities in 2002 under a program called HP Citizen.

Web links

HP Community Engagement
http://www.hp.com/hpinfo/globalcitizenship/community

HP US Community Programs
http://grants.hp.com/us/local

Investing in education

Information and Communications Technology (ICT) has great potential to improve education, by increasing access to information and improving communication.

Good education is essential to the advancement of ICT, which requires people skilled in computer science and electrical engineering. In some regions of the world not enough people are being trained in these subjects to keep up with the pace of change. In other regions there is a lack of diversity in the high-tech field, which can restrict creativity and innovation. ICT companies can use resources and expertise to enhance education, which in turn helps secure a vital workforce.

Many of our educational grants are targeted at institutions serving low-income and ethnically diverse students in the US. We donate equipment, technical support and services to schools and universities worldwide.

For information about HP's public policy positions regarding education, see page 12.

Employee contributions to education

In 2002, HP donated more than $3 million (including equipment) to schools and universities in the US through our cash-matching and product-gift-matching programs. HP employees in the US can support schools and universities with cash or computing equipment. For each donation, HP matches the employee contribution, up to $10,000 for cash and $20,000 for list price value of products.

Highlights in 2002

Worldwide: Increased accessibility. Examples include library technology access and an on-demand production system for accessible educational materials (see page 61).

China: Expanded e-Learning model schools. These are extended equipment donations programs, launched in 2001, to support middle schools in eight provinces. The program is helping the government meet its goal to provide internet access to 90% of middle schools within 10 years.

Europe/Middle East/Africa: Continued primary schools initiative. For example, computers were provided to Coombe Dean School in Plymouth, UK, to help develop distance-learning programs for more than 1,000 students.

Europe/Middle East/Africa: Donating computing equipment to disadvantaged schools. Since 1999, HP has made more than 2,000 contributions to schools in these regions.

US: Supported 120 HP scholars. Engineering and computer science students were awarded scholarships worth nearly $45,000 each (including cash, internships at HP and technology equipment). This program targets African American, Native American and Hispanic young people.

US: Engaged nearly 500 community college pre-engineering students. We provided assistance to African American, Native American and Hispanic students pursuing computer engineering or science degrees at community and tribal colleges.

US: Delivered 50 wireless mobile classroom systems to schools, colleges and universities. Each package included 30 HP notebook PCs, a digital camera and an OfficeJet multifunction device.

US: Built learning communities of HP grant recipients. We convened several grant recipients to discuss their programs, share best practices and develop common goals.

Smart Systems @ School

HP's Smart Systems @ School is an information utility providing high-speed internet access to K-12 schools which lack the required network infrastructure to support a predictable online experience for multiple classroom computer labs. Through this utility, HP provides e-mail, student network folders, integrated backup and restore, remote monitoring (no local support required), web content filtering, 2,500 educational web sites, and thin client integrated desktops. Furthermore:

• Teachers First provides selected teachers with HP laptop computers, access to web-based classroom resources, and hands-on training for IT-assisted curriculum delivery

• One-to-One Learning provides students with a dedicated laptop computer providing them uninterrupted access to web-based learning content, as well as connecting to the resources of their school network; coupled with 'Teachers First', this enables an empowered classroom with increased intellectual stimulation and enhanced student learning

Awards and recognition

US. Business Ethics, 2nd on '100 Best Corporate Citizens' list.

US. The Chronicle of Philanthropy, 2nd largest giver among computing companies in the US.

US. The Chronicle of Philanthropy, 3rd in percentage of giving outside the US.

US. The Chronicle of Philanthropy, 5th in percentage of matching of employee gifts.

Worldwide. World Information Technology and Services Alliance, 'Global Excellence in Information Technology' award for HP's philanthropic investments in the Digital Village initiative.

Worldwide. Social Accountability International, winner of 'Innovative Partnership' category for the Digital Garage project – HP Brazil.

Helping to provide training and education for disadvantaged communities

HP has provided more than 1,000 computers to Mexico's Community Learning Centers (CLCs), which offer distance education and training for disadvantaged communities. Children, teenagers, teachers, parents and government officials use the centers.

CLCs are part of the National Strategy for Micro-Regions, launched in 2001 to overcome poverty and inequality in 263 areas of Mexico. There are currently 200 CLCs, which help more than 36,000 people each month. Of these, 46% are women and 80% are between 7 and 21 years old. The most popular courses are in computing.

Web links

HP Philanthropy
http://grants.hp.com

Moving forward

Global citizenship is a journey, not a destination. The world's social and environmental problems are so great that it is certain there will be challenges for the foreseeable future. Our philosophy is to continually increase the beneficial impact of our business through our citizenship work, to be flexible in responding to changing needs and to seek areas where our investment is most effective.

Here are our priorities:

We will continue to reduce the environmental impact of our **operations**, particularly in the areas of climate change, waste and solvent emissions.

We plan to reduce the lifecycle impact of our **products** by minimizing hazardous materials, improving energy efficiency and increasing recycling and reuse rates. We will extend our range of products that are accessible to people with disabilities.

Our **suppliers** are key to the manufacture of our products. We will progressively extend our new Supply Chain Social and Environmental Policy to more suppliers. Our multilevel, multinational supply chain, involving thousands of interlinked companies, creates a challenge for us as we implement our Supply Chain Policy and program. Our long-term goal is to meet these challenges in our extended supply chain while preserving our world-class cost structures.

Social inequality is an important area of our global citizenship program, but it is often difficult to measure the outcomes of our investments. Our short-term goal is therefore to evaluate the impact of existing programs so that lessons are learned and used to help target future investment. Our vision is a world with universal access to the opportunities provided by information technology.

We foresee many challenges, some of which we have recognized and new ones not yet apparent. We will continue to discuss these with our stakeholders and report on our strategy and performance.

Innovation case study:

Molecular electronics

Molecular electronics is electronics scaled to its ultimate limit – individual components consisting of single molecules. HP labs' Molecular Electronics Team is investigating this technology to break through the limitations of current silicon chip technology, potentially creating a new era of computing.

The goal is to develop integrated circuits that are a billion times more efficient than today's chips, but just a fraction of the size and cost. This could reduce the environmental impacts of computer manufacture and use, while dramatically increasing accessibility of digital products to many underserved communities.

"Computing efficiency has increased by a factor of about 100 million in the past 40 years, but there appear to be no physical reasons why it can't be improved by another factor of a billion," says Stan Williams, Director of the Quantum Science Research (QSR) group, who initiated and leads molecular electronics research at HP.

Eventually nanotechnology could provide computing devices so tiny that they would be part of the fabric of clothing and powerful enough to understand ordinary speech. The QSR team expects the first nanotech products to be available within five to 10 years.

Glossary

The following are definitions of terms as used in this report.

Accessibility – Provision of products and information for people with disabilities.

ADR – Alternative Dispute Resolution. A non-judicial process for resolving disputes.

AT – Assisted Technology. Computer equipment and software designed to be accessible for people with disabilities.

Bioplastics – Plastics made from plants instead of petroleum.

Climate change – A change of climate attributed directly or indirectly to human activity that alters the composition of the global atmosphere, beyond natural climate variability observed over comparable time periods.

Corporate Governance – Structures and standards designed to promote fairness and transparency in the conduct of corporate activities.

CFCs – Chlorofluorocarbons. Gases formed of chlorine, fluorine and carbon. A group of ozone-depleting gases (see Ozone depleting substances).

CO_2 – Carbon dioxide. A greenhouse gas, emitted when fossil fuels such as coal, oil and gas are burned.

Data center – A building that houses a collection of servers to host websites and process network information. Some data centers may have hundreds of individual servers.

DfE – Design for the Environment. Specific design features to address product environmental impact. Includes energy efficiency, materials innovations and design for recyclability.

Digital divide – Inequality in access to Information and Communication Technology (ICT).

Digital village – An HP initiative in which HP invests IT products and skills in selected underserved communities, to increase economic and social development.

Diversity – Management commitment to the representation within an organization of people of different backgrounds, including race, color, religion, gender, national origin, sexual orientation, gender identity/expression, age, disability, or covered veteran status.

Eco-label – A standardized symbol or logo used to indicate that the product on which it appears meets certain pre-defined environmental criteria.

e-commerce – Buying and selling products and services over the internet.

EHS – Environment, Health and Safety. HP has a global EHS organization that identifies significant environmental impacts, sets standards, manages audit and assurance programs and recommends targets to management.

EHS MS – Environment, Health and Safety Management System. The HP EHS MS provides the framework for all sites to meet legal obligations and company standards, and to achieve continual improvement.

e-inclusion – HP term for increasing access to IT in underserved communities.

Emerging markets – Relatively fast-growing economies, primarily among developing countries.

ENDA – Employment Non-Discrimination Act. A proposed US act that would prohibit employment discrimination based on sexual orientation.

EPA – The US Environmental Protection Agency.

Equal opportunity – Providing opportunity based on merit, without discriminating on grounds of race, color, religion, gender, national origin, sexual orientation, gender identity/expression, age, disability, or covered veteran status.

Ergonomics – The science of matching jobs and work demands to the capabilities of people.

ESG – Enterprise Systems Group. One of four HP business groups. ESG provides IT infrastructure for businesses.

FWA – Flexible Work Arrangement. Includes flexi-time, part-time and teleworking.

Global citizenship – Companies' efforts to make a positive contribution to the global community beyond their commercial role as a business.

Global warming – The gradual rise of the earth's surface temperature.

Greenhouse gas (GHG) – A gas that contributes to the natural greenhouse effect. Greenhouse gases that can be produced by human activities include: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride.

GSE – General Specification for Environment. Document detailing certain substances prohibited or restricted from HP products for environmental reasons.

GRI – Global Reporting Initiative. A multi-stakeholder process and institution that is developing guidelines for corporate reporting on economic, environmental and social issues.

GWP – Global Warming Potential. Measure of the reactive potency of greenhouse gases in the atmosphere relative to carbon dioxide.

Handwriting technology – Computer software that enables users to input information with handwriting rather than a keyboard.

HCFCs – Hydrochlorofluorocarbons. Gases formed of hydrogen, chlorine, fluorine and carbon. A group of ozone-depleting gases considered less damaging to the ozone layer than CFCs.

HFCs – Hydrofluorocarbons. Gases formed of hydrogen, fluorine and carbon. A group of gases used to replace ozone-depleting gases. They do not deplete the ozone layer.

HP Labs – HP research and innovation division.

HPS – HP Services. One of four HP business groups. HPS is our global IT services team.

Human rights – Basic human needs seen as essential in a variety of international declarations such as the Universal Declaration of Human Rights, adopted by the United Nations in 1948.

i-community – An HP initiative that uses ICT to promote economic and social development while providing a platform for testing solution innovation for emerging markets.

ICT – Information and Communication Technology.

IPG – Imaging and Printing Group. One of four HP business groups. IPG provides printing and imaging solutions for businesses and consumers.

IT – Information Technology.

ISO 14001 – The International Standards Organization's standard for environmental management systems.

Landfill diversion rate – A term used in this report to refer to the percentage of waste that does not go to landfill (for example, that is reused, recycled or incinerated).

Lost workday case rate – The number of work-related injuries or illnesses resulting in time away from work for every 100 employees working a full year.

Microenterprise – A very small business.

Microfinance – The provision of small loans (from $25) to low-income clients.

MTCE – Metric Tonnes of Carbon Equivalent. Measure used to quantify greenhouse gas emissions.

MWh – Megawatt hour. One million watt-hours, a measure of energy consumption.

NGO – Non-Governmental Organization.

Nonrenewable resources – Natural resources that are depleted with use, including fossil fuels such as coal, oil and gas.

Ozone layer – A layer of gases in the atmosphere that protects the earth from the sun's harmful ultraviolet radiation.

Ozone depleting substances – Man-made chemicals that deplete the ozone layer.

PFCs – Perfluorocarbons. A group of solvents used in the semiconductor industry for cleaning and etching.

Polybrominated Flame Retardants – Certain bromine-containing chemicals that have been used to reduce flammability in electronics products.

Product stewardship – Monitoring and minimizing product environmental impact throughout the lifecycle, from design to disposal.

PSG – Personal Systems Group. One of four HP business groups. PSG provides personal computing solutions and devices for home and business use.

Recordable injury rate – The number of work-related injuries or illnesses requiring more than first-aid help for every 100 employees working a full year.

Rehabilitation Act (Section 508) – US legislation requiring federal agencies to make electronic and information technology accessible to people with disabilities.

Remediation – Restoring contaminated land to a usable condition.

Renewable resources – Natural resources that are not depleted when used because they are naturally replenished. These include wind, solar and geothermal power and biomass.

RoHS Directive – Restriction of Hazardous Substances Directive. A European Union directive that will restrict the presence of certain substances in electrical and electronic products placed on the market in the European Union from July 2006.

Safe Harbor – As used in this report, an agreement between the US Department of Commerce and the European Commission that allows companies to self-certify to a set of privacy principles based on European standards.

Small, minority- and women-owned business procurement – Policies and practices to ensure small, minority- and women-owned businesses have equal opportunities to be suppliers and resellers.

Social Investment – A company's contribution to social goals, including philanthropy, community engagement and business models that combine profit making with social goals.

SRI – Socially Responsible Investment. SRI investors include social, environmental and ethical criteria in their investment decisions.

Stakeholders – Individuals or groups that affect or are affected by the activities of a company.

Sustainability – The ability to meet the needs of present generations without compromising the ability of future generations to meet their own needs.

Telework – The use of IT to work away from the traditional office environment.

TRI – Toxic Release Inventory. An annual report required by the US EPA on releases of specified chemicals.

WEEE Directive – Waste Electronic and Electrical Equipment Directive. A European Union directive that will place certain responsibilities for recycling end of life electronics products on producers (manufacturers, sellers, distributors).

Please send comments to hp.globalcitizenship@hp.com.
You can find this report online at http://www.hp.com/go/report.

hp
®
i n v e n t