



## HP Environmental History

Read about HP's environmental milestones:

- Celebrating over 20 years of recycling
- Leading the industry in environmental practices
- Designing cutting edge products and more...



### 2008

- HP qualifies for the U.S. Environmental Protection Agency's (EPA) SmartWay logo labeling program to reduce fuel consumption, greenhouse gas and other air emissions of surface transportation carriers. HP is also the first company of the EPA's approximately 950 SmartWay Transport Partners to qualify to have the SmartWay logo placed on its product packaging. To earn this designation, HP certifies its surface transportation carrier network for consumer accessories and desktop and monitor products is composed entirely of SmartWay-compliant carriers.
- HP is the first IT company to release the greenhouse gas emissions associated with its products manufacturing by publishing the emissions attributed to its first tier suppliers. The reporting is part of HP's effort to offer greater transparency and encourage other companies to do more to promote supply chain responsibility.
- HP introduces the HP Deskjet D2545 Printer, the company's first printer made almost entirely from recycled plastic material. Eighty-three percent of the printer's total plastic weight is made from recycled plastics, and it uses HP 60 ink cartridges, which are molded from recycled plastic resins. Additionally, the overall packaging for this printer is 100 percent recyclable. The printer is ENERGY STAR® qualified and features HP Smart Web Printing, which lets users easily combine portions of numerous web pages onto one page to save paper.
- HP wins Walmart's environmental design challenge by replacing a PC's conventional cardboard and plastic packaging with a reusable bag made from 100 percent recycled materials. The design reduces product packaging by 97%, conserves fuel and reduces CO2 emissions by removing the equivalent of one out of every four trucks previously needed to deliver the notebooks to Walmart stores and Sam's Club locations around the country.
- HP reduces the greenhouse gas emissions associated with its energy use by 4 percent compared to 2007 in absolute terms and 13 percent normalized to revenue.(1)
- HP additionally announces it has recovered for reuse 3.5 million hardware units weighing 75 million pounds (34,000 metric tonnes (2)) and increased its recycling volume to 265 million pounds (120,000 metric tonnes) globally in 2008.
- With a total of 1.71 billion pounds (775,510 metric tonnes) of electronic product and supplies recovered to date – almost the total weight of the Golden Gate Bridge(3) – HP is on track to meet its goal to recycle 2 billion pounds (900,000 metric tonnes) of products by the end of 2010 (since 1987) and to reuse 450 million pounds (200,000 metric tonnes) of products by the end of 2010 (since 2003).
- HP's progress includes recycling 1,435 million pounds (650,000 metric tonnes) to date, and more than 275 million pounds (125,000 metric tonnes) have been reused.(4)



- HP expands its audit program for reuse and recycling vendors and posts the results of 2008 on-site audits, disclosing the summary results of the assessments of 13 reuse and 30 recycling vendors in 22 countries.
- In the United States, HP is one of the first companies awarded the Green Recycling and Asset Disposal for the Enterprise (GRADE) certification by the research organization IDC in 2008.
- Through the new HP Consumer Buyback and Planet Partners Recycling Program, consumers receive cash back for their unwanted PCs, monitors, printers, digital cameras, PDAs and smartphones of any brand. If there is no value, consumers can responsibly recycle their HP and Compaq-branded products free of charge.
- In November 2008, HP expands the HP Planet Partners print cartridge return and recycling program to include HP authorized retail recycling locations for HP ink cartridge and LaserJet toner cartridge collection, in addition to other recycling options.
- HP announces an industry-first engineering breakthrough that uses recycled content – from cartridges returned through the HP Planet Partners return and recycling program as well as materials such as plastic water bottles – in the manufacture of new Original HP inkjet cartridges. Since 2005, HP has used more than 32 million pounds (14,500 metric tonnes) of recycled plastic resin(5) in more than 565 million inkjet print cartridges.(6) HP pledge to triple the use of recycled material in its inkjet products by 2010.

## 2007

- HP exceeds its 2007 goal to recycle 1 billion pounds of electronic products and supplies and ups the challenge to recover an additional 1 billion pounds for reuse and recycling by the end of 2010. (2007 HP Global Citizenship Report)
- HP continues its HP Workplace Transformation initiative, designed to reduce energy consumption

and resulting greenhouse gas emissions of HP facilities worldwide. The initiative consolidates 85 of HP's data centers into six locations in three U.S. cities.(2007 HP Global Citizenship Report)

- HP increases its annual recycling volume by more than 50 percent over 2006 to 250 million pounds. (2007 HP Global Citizenship Report)
- Reaching its goal of reducing the energy consumption and associated greenhouse gas emissions of HP operations and products sold each year to 20 percent below 2005 levels by 2010; HP increases its target to 25 percent. (2007 HP Global Citizenship Report)
- HP offers over a thousand printers, PCs, notebooks, and monitors that meet key eco-label programs. These include U.S. Environmental Protection Agency's (EPA), Electronic Products Environmental Assessment Tool (EPEAT) , Energy Star, Canada Environmental Choice, Germany's Blue Angel, TCO (Sweden), China's Energy Conservation Program , Japan's Green Mark, and Korea's Ecolabel. (Environmental Responsibility at HP, talking points, 6/19/2007)
- HP donates \$2 million to the World Wild life Fund to advance the science and education of climate change. The philanthropic component of this partnership — known as the "Advanced Climate Change Science and Solutions Initiative," is valued at over \$2 million in contributions of cash and equipment. Comprised of three separate projects managed from North America, Asia and Europe, it tackles both the causes and consequences of global climate change. (HP News release, 5/23/2007)
- HP sets a goal to reduce its global energy use by 20 percent by 2010. To accomplish this reduction below 2005 levels, HP will deliver energy-efficient products and services to customers and institute energy-efficient operating practices in its facilities worldwide. (HP news release, 3/28/2007)



- HP's Halo Collaboration Studio simulates face-to-face meetings, enabling global interactive collaboration while avoiding CO2 emissions related to travel (Ibid)
- HP announces that its Dynamic Smart Cooling solution can save up to 45 percent of datacenter cooling costs and up to 18,000 metric tons of CO2 per year. (Ibid)
- The CO2 emission reduction for every 12 HP desktop PC's with power management features enabled is equivalent to removing a car from the road each year. (Subject Files, Environment, General Environmental Responsibility at HP, talking points, 6/19/2007)
- HP marks its 20th anniversary of the companywide inception of HP recycling programs. (HP News release, 7/13/2007)

## 2006

- HP expands its product take back programs throughout Asia Pacific and Japan, where the company has aligned its trade-in, refurbishing and recycling operations to offer full asset-recovery services to commercial customers in the region. (HP News release, 6/27/2006)
- More than 30 HP business computing and display products are included in an independent online registry that helps institutional buyers select computer products based on their environmental attributes. Twenty-six of HP's 32 registered products have received "silver" recognition, the highest level bestowed to any manufacturer's product thus far. (HP News release, 7/21/2006)
- HP reduces on-site greenhouse gas emissions in 2006 by 31% from 2005 levels, surpassing its goal to reduce on-site greenhouse gas emissions by 18% from 2005 levels. (HP Environmental Citizenship Milestones, Backgrounder)

- HP and World Wild life Fund-US (WWF-US) announce a joint initiative to reduce HP's greenhouse gas emissions from its operating facilities worldwide, educate and inspire others to adopt best practices, and use HP technology in conservation efforts around the world. (HP News release, 11/8/2006) 2
- HP launches the Focused Improvement Supplier Initiative in China and the Central European Supplier Responsibility project, two capability building projects to help suppliers build management skills and share best practices. (HP News release, June 1, 2006)
- HP collects more than 2.5 million units of hardware globally — weighing more than 50 million pounds — to be refurbished for resale or donated. (HP News release, January 23, 2007)
- HP recycles more than 164 million pounds of hardware and HP print cartridges globally, an increase of 16 percent over the previous year and the equivalent weight of more than 600 jumbo jet airliners. (HP News release, January 23, 2007)

## 2005

- HP begins a free hardware recycling service for commercial and enterprise customers in European Union countries who purchase replacement HP products, in advance of the implementation of the EU Waste Electrical and Electronic Equipment Directive (HP Press Release, 11/21/2005)
- HP establishes the Environmental Strategies (CES) Council to develop and recommend environmental strategies, policies and positions to the Executive Council and to help HP achieve its environmental mission. (Corporate Affairs website)



## 2004

- To date, HP has recycled more than 750 million pounds of hardware and HP print cartridges globally and is well on the way to meeting its goal to recycle 1 billion cumulative pounds by the end of 2007. (Ibid)
- The Recyclability Assessment Tool (RAT) is created to help HP product stewards evaluate product compliance with international product take-back initiatives such as WEEE, the EU's Waste Electrical and Electronic Equipment directive which will take effect in 2005. (WEEE implementation resource center )
- HP co-develops the Electronic Industry Code of Conduct to promote industry standards for socially responsible business practices across global supply chains. (HP Environmental Citizenship Milestones, Backgrounder, HP Canada)
- HP announces that it is ranked No. 8 overall in the Accountability Rating, the first global index that evaluates how well the world 's 100 largest companies account for their impacts on society and the environment. HP is the only U.S. company ranked in the top ten. (HP News release, June 25, 2004)

## 2003

- HP announces a "smart" cooling solution for the design of data centers that could dramatically reduce energy use and save enterprise users millions of dollars annually. (HP News release, 3/4/2003)
- HP creates its Supplier Code of Conduct to ensure that the companies it does business with meets its standards for facility management; labor, health and safety practices; environmental policies and materials restrictions; and ethics. HP's suppliers must also ensure that their own suppliers meet these standards. (Corporate Affairs website)
- State of the art inkjet recycling facility in Germany begins operation.

- HP recycled plastic is included in first HP hardware product replacing virgin plastic with material obtained from end-of- life HP products. ( Ibid )
- In the 12 years of Planet Partners operations, more than 176 million lbs, of HP LaserJet and Inkjet print cartridge materials have been returned and recycled worldwide. (Ibid)
- HP expands HP Planet Partners return and recycling program by including postage-paid recycling envelopes. (HP news release, 11/12/2003)
- HP Financial Services moves more than 1 million pieces of used computer equipment through its Technology Renewal Centers in the U.S. and Europe in 2003. (HP news release, 4/22/2003)

## 2002

- HP announces that it is working on a suite of technologies to address the growing problem of heat generation and energy use in increasingly powerful microprocessors and data centers.(HP press release, 8/6/2002)
- HP releases its Supply Chain Code of Conduct which extends the company's ability to manage the most complex supply chain in the IT industry and to implement systems for achieving long-lasting conformance to environmental standards. (Corporate Affairs website)
- HP publishes its first combined Social and Environmental Responsibility Report (for the year 2001). (Global Citizenship at HP)

## 2001

- Award-winning thermoformed clamshell DeskJet printer package enters the market. It is economical, lightweight, space efficient, made of postconsumer recyclable material and is often recyclable. (HP Inkjet Printers and the Environment, 6/24/2004)



- HP opens a second U.S. facility to offer state-of-the-art recycling facilities (similar to the Roseville, Calif. site) in Nashville, Tennessee. This facility can process approximately 1.5 million lbs of e-waste per month. Similar take-back services are offered in major European countries and Canada. (HP press release, 7/23/2002)

## 2000

- HP is one of the first global businesses to achieve companywide certification of its worldwide manufacturing operations to ISO 14001 — a voluntary international standard that defines the elements of an environmental management system (EMS) needed for an organization to effectively manage its impact on the environment. (HPNow, Newsgram 6/21/2000)

## 1999

- DeskJet 970 bundle offers first inkjet duplexer producing true two-sided copy capability and the opportunity to dramatically reduce paper consumption. (HP Inkjet Printers and the Environment, 6/24/2004)
- HP Inkjet printer is the first on the market to achieve German eco-label Blue Angel certification 3 years earlier than any competitor. (HP Inkjet Printers and the Environment, 6/24/2004)

## 1998

- A small group of HP employees come together with sponsorship from HP Labs, to hold a two-day, low-budget conference on the topic of “New Business Opportunities for HP in Sustainable Development.” The 100+ HP employees founded the HP Sustainability Network.

## 1997

- HP opens its first recycling facility in Roseville, Calif., becoming the only major computer

manufacturer to operate its own end-to-end recycling facility. (HP Press Release, 7/7/2004)

- Planet Partners program expands to include the recycling of HP Inkjet print cartridges. (HP Inkjet Printers and the Environment; 6/24/2004)

## 1996

- The 10 millionth LaserJet cartridge is recycled through Planet Partners. (Taking the LaserJet from Good to Better, 4/27/2004)
- HP signs a voluntary agreement with the EPA to reduce air emissions of per fluorocarbons, which are used in semiconductor manufacturing and are believed to contribute to global warming. (Ibid)

## 1995

- Product Life Cycle Integration begins ensuring that the lifecycle of a product encompasses everything from design and manufacture through packaging, customer use and recycling or disposal. (Taking the LaserJet from Good to Better, 4/24/2007)

## 1994

- First multi-function printer/fax/copier ships. Product uses less power and represents a 30 percent reduction in materials used due to consolidation of three products in to one further reducing the company’s environmental footprint. (Inkjet Printers and the Environment; 6/24/2004)
- HP becomes one of the first companies worldwide to encourage telecommuting by formalizing its telecommuting policy. (Backgrounder; HP Environmental Citizenship Milestones, HP Canada)
- HP’s first packaging management system is created and includes environmental guidelines. The aim of the systems is to decrease the environmental impact of HP’s product packaging. (Subject Files, Environment, General, HP Co. Fact Sheet-Packaging)
- HP Publishes its first annual “Commitment to the Environment” report. (Subject Files, Environment, General)

## 1993

- HP stops the use of ozone-depleting chemicals in its manufacturing operations worldwide, two years ahead of an international ban on production of the chemicals. (Subject Files, Environment, General, Corporate facts, environment)
- HP replaces wood pallets with slip sheets made of 100% recycled and recyclable polyethylene for shipments between manufacturing sites and distribution centers. (HP’s Inkjet Printers and the Environment, 6/24/2004)

## 1992

- HP launches a Design for Environment (DfE) program addressing environmental performance at the design stage of product development. DfE’s three priorities are: energy efficiency; design for

recyclability; and materials innovation. (Taking the LaserJet from Good to Better, 4/27/2004)

- HP is one of the first computer manufacturers to sign partnership agreements with the EPA to introduce PCs that can “power down” when not in use. It earns HP the right to use the Energy Star Label. (Subject Files, Environment, General, Newsgram June 17, 1992)

## 1991

- HP bulk packaging doubles products per pallet and thus halves the number of trucks and planes required for transport. (Inkjet Printers and the Environment; Timeline, 6/24/2004)
- HP initiates a program called Planet Partners for HP LaserJet print cartridge return and recycling. It becomes a highly successful long-term undertaking expanding to other product lines in time. (Inkjet Printers and the Environment, 6/24/2004)
- The Boise, Idaho site invests thousands of man hours and more than \$3 million to find and implement alternatives to using chemicals containing CFCs in its manufacturing processes. The new alternative process reduces CFC usage by 85 percent in 18 months. (Insite- Boise Site newsletter, August 16, 1991)
- The decision is made for a company-wide replacement of chlorine bleached white boxes with natural, more environmentally friendly Kraft/brown boxes. Paper mills that use chlorine to bleach paper release toxic dioxins in to water downstream. (Subject Files, Environment, General, HP Co. Press Release 11/25/91)

## 1990

- HP adopts an expanded Environmental Health and Safety Policy which adds “minimizing energy and materials consumption in our products and processes.” (Subject Files, Environment, Energy Efficiency)

## 1989

- Dave Packard receives the Chevron Conservation Award.
- John Young, HP’s CEO is named to serve as a member of the Board of Directors for Earth Day 1990. (New York Times 11/12/89)
- Polyvinyl chloride (PVC) a widely used material that came to be associated with health and environmental issues is removed from HP’s DeskJet packaging. (HP’s Inkjet Printers and the Environment, 6/24/2004)
- A consolidated corporate policy for Hazardous Waste Minimization is announced. The policy states that while HP understands the economic advantages of waste minimization, it also recognizes its obligation to its employees and communities. (Subject Files, Environment, General)



## 1988

- HP Hazardous Waste Minimization Council formed. The Council’s initiatives include the development of a corporate-wide strategy for Site Pollution Prevention and Pollution Prevention Guidelines. (Subject Files, Environment, General)

## 1987

- HP establishes its own hardware recycling program. (HP’s Inkjet Printers and the Environment, 6/24/2004)

## 1986

- City of Palo Alto awards “Friends of Recycling” to HP for developing a comprehensive recycling program and “clearly leading the way among companies in Palo Alto in conserving resources.” (Letter from City of Palo Alto dated 6/26/86, Subject Files, Environment)

## 1985-87

- Dave Packard serves as a director of the National Fish and Wild life Foundation.

## 1985

- Each HP division has a basic wall- to-wall responsibility for its own environmental, health and safety. EHS programs and a staff of EHS professionals in turn oversee program execution and effectiveness. (Measure, September-October 1985)
- HP Corporate Environmental Lab in Palo Alto monitors the discharge water from up to 40 site manufacturing locations by testing and reporting on environmental and industrial hygiene each month. (Measure Magazine, September-October 1985)

## 1983-90

- Dave Packard serves as Vice Chairman of the California Nature Conservancy.

## 1983

- Dave Packard receives the Environmental Leadership Award from the Natural Resources Defense Council.

## 1978

- Twenty-one vans are in service or on order for employee van pooling to bay area sites. All vans run on propane fuel. (Peninsulan, August 1978)

## 1977-87

- Dave Packard serves as director of the Alliance to Save Energy, an organization dedicated to promoting energy efficiency worldwide to achieve a healthier economy, a cleaner environment and greater energy security.

## 1977

- There are 73 carpool locators organized to assist employees at the Stanford Plant (Peninsulan, May 1977)

## 1976

- HP purchases vans for employee van pools and encourages their use for fuel conservation. Five vans are in service commuting to the Palo Alto site from around the region and four more are on order. (Peninsulan, 1976)

## 1975

- An HP team designs and installs a solar heating system at the Sunnyvale site that reduces electrical consumption and saves about \$1000 per month in heating costs. (1975 Hewlett-Packard Annual Report)
- Hewlett-Packard's newly constructed wastewater treatment system in Palo Alto is recognized as exemplary of good business citizenship by the California Water Pollution Control Association. (Subject Files, environmental , Proposition 65)

## 1972

- Four years before Congress passes the first legislation governing toxic substances and later, clean air and water, HP adopts a basic manufacturing policy for protecting the environment, including control of all types of known pollution at company facilities. (Subject Files, Environment, General, PR Newsgram, Prop 65, 2/19/88)

## 1971

- Bay Area Electronic Data Processing estimates 140 tons of computer print-out paper and punched cards will be recycled through the HP recycling program in the coming year (Measure, July 1971)
- The environmental regulatory field is heating heat up and HP manufacturing manager Ed Truitt is named to head the company's major push into the environmental instrument business. The appointment formalizes a long-held interest in this field by HP's analytical products division (Measure, June 1971)

- HP employees turn out in large numbers to rescue and clean up hundreds of birds affected by an oil spill that spread between Santa Cruz and Half Moon Bay on the California coastline. (Watt's Current, February 1971)
- Bill Hewlett speaks about the practicality of addressing environmental issues and HP's potential contributions. He references the work going on at Avondale (Delaware) as well as in the Scientific Instruments division and states that it is clear both divisions are going to be important in pollution research, environmental control and the solution of (other) social problems. (Measure, January 1971)
- HP initiates the recycling of computer print-outs in its Palo Alto data processing center. Between January and June, 5 ½ tons of printout and 7 ½ tons of punched cards are recycled. (Watt's Current, June 1971)
- Nine categories of HP instruments and systems having environmental applications are in wide use. They include: Gas Chromatographs, Multichannel Pulse Height Analyzers, Microwave Spectrometers, Mass Spectrometers, Loudness Analyzers, Aircraft Noise Monitoring Systems, GC Mass Spectrometers, Ultrasonic Translator Detectors, Oscilloscopes, Recorders, Counters, Digital Voltmeters and others. (Subject files, General, 1971 list of instruments and applications.)

## 1970

- Glen Affleck is named to the newly created post of environment control coordinator for HP. His charter is to help focus company efforts regarding measurement and control of pollution in areas of HP operations. (Watt's Current; September 1970) This is also the first time the new term "environmental" is referenced.

## 1969

- HP encourages the city and county health departments to make a basic study of the Colorado Springs air shed in a proactive step toward staving off air pollution problems in the area as a result of projected population growth. (Measure, August 1969)
- HP Corporate Objectives are updated. Citizenship is the final objective and details the obligation of HP and its people to help solve instead of contributing to the problems of traffic and pollution. (Subject files, Corporate Objectives , 1969)

## 1967

- Measure Magazine announces the F&M gas chromatograph and declares, "HP Instruments Fight Pollution" (Measure, February 1967)

## 1966

- Employee Walt Moy initiates a recycling program for HP punched cards in Palo Alto (Watt's Current, June 1971)

## 1963-1964

- HP enters important new markets by which environmental pollution is detected and measured when it acquires Mechrolab, which manufactures equipment for chemical analysis; Dymec, whose equipment is used for digital data acquisition using temperature sensors and recorders; Delcon, specializing in ultrasonic devices for leak detection and F&M Scientific, manufacturer of gas chromatographs used for the scientific analysis of compounds such as pollutants in ground water. (Compiled from Measure Magazine 3/63-12/64)

## 1957

- HP's first set of corporate objectives, written by Bill and Dave, are introduced and adopted by HP senior managers. Objective number five is Citizenship — defined as "meeting the obligations of good citizenship by making contributions to the community and to the institutions in our society which generate the environment in which we operate."

## 1939

- Hewlett-Packard Company is formed.

## 1934

- Following graduation from Stanford, Dave and Bill cement their friendship on a two-week pack trip in the mountains of Colorado.

## 1913

- Bill Hewlett is born in San Francisco, California and spends many boyhood summers roaming the Sierra Nevada Mountains where his parents belong to the North Fork Association, an outdoor club dedicated to wilderness appreciation.

## 1912

- Dave Packard is born on the edge of the prairie in Pueblo, Colorado, and as a boy finds solitude and adventure in hunting, fishing and horseback riding.

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## Footnotes

- (1) See Climate and Energy – Operations  
<http://63.193.243.238/hpinfo/globalcitizenship/gcreport/energy/operations.html>.
- (2) One metric tonne is equivalent to 2,205 pounds.
- (3) Total weight of the Golden Gate Bridge, anchorages and approaches as of 1986: 1,773,979,658 pounds (804,525 metric tonnes).  
Source: <http://goldengatebridge.org/research/factsGGBDesign.php>.
- (4) These goals were updated this year to distinguish reuse from recycling and increase the overall amount of the target.
- (5) Through the end of fiscal year 2008; at least 50 percent recycled plastic by weight, minimum 95 percent post-consumer
- (6) This is a large increase over the cumulative total HP announced in early 2008 (200 million inkjet print cartridges). HP has been working with suppliers to accurately account for the recycled content it uses. In 2008, HP reconciled recycled plastic usage from one of its large resin suppliers; that usage is now included in HP's totals.

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