

HIT PRINT
INTELLIGENTLY



HP PLANET PARTNERS PROGRAM

Partnering with HP for a better environment.
Recycling Original HP print cartridges.





INVENTING for a more sustainable FUTURE

At HP, we realise that the development of innovative solutions designed with the environment in mind is not an option, it's an imperative. That's why HP is committed to programmes that help reduce our ecological footprint, and help our customers and partners reduce theirs. By developing high quality products, services, and solutions designed with the environment in mind, HP is helping to lead global businesses toward a sustainable future.

HP is both highly successful and ruthlessly uncompromising in making print cartridges that deliver excellent results while striving to meet your expectations for, and our own commitment to products designed with the environment in mind. A key part of HP's product innovation involves developing and delivering print cartridges that help reduce environmental impact and are manufactured and recycled responsibly—promoting good corporate citizenship. Designed for your HP printer, Original HP print cartridges provide outstanding performance and results, and the reassurance of a wise choice.

Customer Experience: Friends Life

When studies revealed that remanufactured and non-HP cartridges were responsible for the highest incidence of printing down-time, Friends Life, a leading UK financial services group, needed to improve the reliability, efficiency and quality of its printing output in a way that would best help in achieving their environmental objectives.

Friends Life enrolled in the HP Planet Partners Programme and has since stipulated that stationery suppliers to only use HP Original Supplies. This change vastly improved print quality, while it made their printing set-up more reliable, efficient, easy on the environment and far more manageable.

"Our move to using only HP Original Supplies is an important step in our supplies programme which aims to reinforce our corporate commitment to the environment. Compared to remanufactured toner cartridges, the HP products are more reliable, last longer and cause far fewer problems." - Dawn Dew, contracts manager, Friends Life

By embracing an industry-leading lifecycle approach, HP is committed to reducing the environmental impact at every stage of a product's development. This comprehensive, integrated approach focuses on conserving resources during product development, manufacturing and subsequent use, while creating more opportunities for recycling. From the outset, HP's Design for Environment (DfE) programme ensures HP print cartridges are designed with the environment in mind.

This commitment continues through to manufacture and packaging. Thanks to exacting standards of performance and reliability, HP has been able to reduce the waste its products generate during their working life. And when products eventually reach the end of their lives, the HP Planet Partners Programme makes sure customers can return them, free of charge, for recycling.¹ HP's comprehensive environmental management covers the entire lifecycle of its supplies, giving you complete peace of mind.

HP provides industry-leading environmental stewardship at every stage of the product lifecycle:

Design for Environment (DfE)

Original HP print cartridges are designed with the environment in mind.

Manufacture and packaging (MfG)

Every aspect of product manufacture and packaging is designed to minimise environmental impact.

Use

The performance and reliability of HP products helps to reduce waste.

Return

The HP Planet Partners Programme makes it easy and free to return your used HP print cartridges.

Recycling

Customers returned 320 million Original HP ink cartridges since 1991 through the industry's first "closed loop" inkjet cartridge recycling process.

HP PLANET PARTNERS PROGRAM

“CLOSED LOOP” recycling PROCESS

HP’s unique process combines recycled materials from Original HP Ink Cartridges and water bottles to make new Original HP Ink Cartridges



The HP Planet Partners Programme provides customers with a free, convenient and responsible way of returning and recycling empty Original HP print cartridges.

Developed over 20 years ago, HP Planet Partners Programme pioneered a simple and free-of-charge system for customers to return and recycle their used Original LaserJet print cartridges through state-of-the-art ISO 14001 certified facilities. This programme has since expanded to include Original HP ink cartridges and it's now available in more than 50 countries and territories around the world. Through our Planet Partners Programme, HP guarantees that it will never refill or resell print cartridges, or send them to a landfill. By the end of 2010 HP had cumulatively recycled 2 billion pounds (907 million metric tonnes) of IT equipment and print cartridges, a milestone that reflects our industry leadership in helping customers recycle responsibly.

HP Planet Partners Programme offers customers a free, easy and responsible way to return their empty Original HP print cartridges for recycling. This is in contrast to the processes used by some remanufacturers and refillers, which may delay some cartridges from entering the waste stream, but can also entail significant environmental impacts.¹² Consider the many print cartridges that remanufacturers cannot use—how do remanufacturers get these unusable cartridges off their hands? Or the used and worn parts—where do they end up? InfoTrends¹³ found that the many remanufacturers discard a certain percentage of cartridges as unfit for re-use.

A good proportion of these are likely to end up in landfills, lost to the recycling process.

Get involved

It's free, easy and convenient for businesses and individuals alike to participate in the HP Planet Partners Programme. We offer customers several free online return options at www.hp.com/recycle, including printable postage-paid return labels, envelopes and bulk collection boxes.

Once received, used Original HP LaserJet and Inkjet print cartridges are recycled at ISO 14001 certified facilities in France and Germany. All returned HP print cartridges go through a multiphase recycling process. Patented and proprietary technology is used to sort and shred materials, separating them into plastics, metals and residuals of ink, foam or toner. They are then reduced further into raw materials that can be used to make new products, including new HP print cartridges. Remaining materials and residual ink or toner are used in energy recovery, offsetting fossil fuel consumption, or disposed off in a responsible manner. Returned packaging is separated and recycled independently.



HP Design for ENVIRONMENT PROGRAMME (DfE)

HP has been leading the way in responsible environmental stewardship for well over a decade.

By introducing comprehensive and continual improvements in development and manufacturing processes, the HP Design for Environment (DfE) programme, established in 1992, formalised our already longstanding policy guidelines to focus on creating printing supplies designed with the environment in mind. In addition to meeting or exceeding environmental safety and regulatory requirements, our objective is to design products that offer high quality, performance and reliability, use fewer and less hazardous materials, are more energy efficient, and are easier to recycle, while increasing overall value for our customers. By choosing HP, you can rest assured that you'll be getting the highest quality print and supplies - as well as doing your bit for the environment.

Customer Experience: VŠZP

With a printing environment that consists of as many as 800 HP multifunction and desktop printers across 32 large offices and 74 smaller centers across the country and a huge requirement of 7,000 ink and toner cartridges every year, Všeobecná zdravotná poisťovňa (VšZP), the largest general health insurer in Slovakia was looking for solutions that were more viable in terms of efficiency, cost reduction and recycling.

According to Pavel Hajdin, head of IT, VšZP **"Tests showed us that it would be a mistake to move to non-HP print cartridges. They clogged the print heads which increased maintenance and management costs, disrupted workflow and, along with the poor toner performance, did not produce the quality of print we require. HP Original Supplies are the clear choice for our business."**

VšZP realised it was in their best business interest to continue to only use HP Original printer cartridges across their entire printer fleet. What's more, VšZP benefits from this fact – HP cartridges are recycled free under the HP Planet Partners Programme, allowing VšZP the opportunity to play their part in conserving the environment.

HP's Design for Environment programme boasts a worldwide network of product stewards, who work with product designers, research and development teams, manufacturing engineers and customers to identify, prioritise, recommend and implement environmental design innovations and improvements.

Original HP printing supplies are manufactured in a way that reduces the impact on the environment. HP requires suppliers to certify that all HP printing supplies and their packaging comply with the HP General Specifications for Environment (GSE)—a set of guidelines that prohibits the use of specific substances that are potentially harmful to the environment.

These guidelines ensure that:

- Manufacturing processes for printing supplies and their packaging do not use ozone-depleting substances.
- External HP LaserJet packaging is manufactured using elemental chlorine-free processes.

Conserving resources

Materials reduction—or doing more with less—is a fundamental aspect of working to reduce the environmental footprint of Original HP printing supplies. Through its DfE programme, HP strives to use materials efficiently during the manufacture and packaging of printing supplies, lowering material costs and consumption, while maintaining the quality and reliability you expect.

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HP strives to reduce the environmental impact of our products in a number of ways:

- HP has engineered LaserJet and Inkjet print cartridges that can utilise a percentage of recycled plastic and still meet HP's demanding standards for quality and reliability.
- To date, HP has recycled 1.71 billion cumulative pounds (776 million metric tonnes) of electronics and HP print cartridges around the world—almost the weight of the Golden Gate Bridge.⁴
- Through design innovation, HP has cut the average number of component parts used in monochrome LaserJet print cartridges by a third, and the average number of plastic resins used by more than half, which makes them easier to recycle.
- All HP print cartridges returned to HP through Planet Partners are recycled to recover raw materials or energy. HP never refills, resells or sends Original HP print cartridges to a landfill.
- HP's industry-leading Planet Partners Programme, established in 1991, allows free and convenient return and recycling of toner and ink cartridges. More than 106 million HP LaserJet print cartridges have been returned and recycled since 1991.
- By the end of 2011 HP will use a total of 100 million pounds (45,000 metric tonnes) of cumulative recycled plastic in its printing products.
- By the end of 2011 HP will improve the overall energy efficiency of HP ink and laser printing products by 40%.
- To date, HP has produced 1 billion Original HP ink cartridges containing post-consumer recycled material from plastic bottles and ink cartridges.⁵



Designed for the environment

Ongoing improvements in design and recycling are integral to HP's environmental stewardship over the entire product lifecycle. For this reason, the recyclability of Original HP print cartridges remains a top priority during the design process.

What's more, HP continuously investigates the use of raw materials obtained from the recycling of our print cartridges in the manufacture of new products and packaging. Key achievements include:

- Plastic from recycled HP print cartridges is being used in the manufacture of new HP print cartridges, of the same high quality which our customers expect.
- All uncoated office paper, greeting cards and glossy paper are recyclable.
- Packaging has been designed to be fully recyclable in areas where collection and recycling services exist.
- Plastic parts weighing more than 25 grams have been marked with internationally recognised ISO symbols to aid material identification.
- Collection boxes, postage-paid mailing labels and envelopes for returning used Original HP print cartridges are available online, at www.hp.com/recycle



THE MYTH of REMANUFACTURING

On the face of it, refilled or remanufactured cartridges sound like good environmental sense, but a 2008 study from research group InfoTrends³ suggests that the remanufacturing industry may not be as green as it first appears.



If you think remanufacturing or refilling cartridges prevents them from ending up in landfill by enabling them to be re-used many times, think again. The InfoTrends study found that most cartridges are remanufactured only once—and most remanufacturers don't want to get back the cartridges they've produced. They prefer to collect original equipment manufacturer (OEM) cartridges that have not previously been remanufactured. To collect these so-called "virgin empties"—some remanufacturers collect only OEM empties, or charge for the return of previously remanufactured cartridges. It's for that reason that 80% of remanufactured toner cartridges and 86% of remanufactured Inkjet cartridges are thrown away in the US and Europe.

When tested against non-HP remanufactured or cloned cartridges⁶, it was found that Original HP toner cartridges exhibited no failures compared to an average of 41.7% of 216 non-HP cartridges. Further more, 87 cartridges of the 216 non-HP toner cartridges had 50% or more pages that were unacceptable for any business purpose or were only fit for internal use. During testing, Original HP LaserJet print cartridges demonstrated solid toner adhesion; while pages printed using non-HP toner cartridges had issues with bonding to the paper.

Simply put, it means that the use of non-HP remanufactured or cloned cartridges give rise to escalated costs of printing, supplies and maintenance – in addition to the operational down time and easily

avoidable waste of resources like power, paper and other raw material, which together negatively impact the environment. It reinforces the belief that using HP Original printer cartridges ensures consistently high print quality and trouble-free performance that is environmentally sustainable as well.

Going to waste

And where do all those unusable waste cartridges go? InfoTrends³ suspects that many smaller remanufacturers in Europe are actually sending a lot of used cartridges to landfill. InfoTrends estimates that only 25 percent of waste produced by the remanufacturing of laser cartridges in Europe and the US is recycled. The figure for waste produced by Inkjet cartridge remanufacturing is even lower, standing at 12 percent.

In contrast to the transparency of HP's Planet Partners Programme, it's also difficult to measure the environmental performance of remanufacturers: not one of the remanufacturers surveyed by InfoTrends provided any public reporting of their recycling activities. Remanufacturers were also unaware of what happened to waste after they'd passed it on. They seem to collect and remanufacture the cartridges they can and throw away what remains after the cartridge remanufacturing process is complete.

HP does not offer remanufactured print cartridges because they do not meet our quality and reliability standards. Instead, the HP Planet partners Programme recycles collected HP print cartridges to recover raw materials or energy. All print cartridges returned to HP through Planet Partners go through a multi-phase recycling process, where they are reduced to raw materials that can then be used to make new metal and plastic products. These include new HP print cartridges, auto parts, roof tiles, microchip processing trays and parts of some other HP products, or recovered for energy. Additionally, the packaging for HP LaserJet print cartridges, HP Inkjet print cartridges, HP Photo Value packs and HP Inkjet multi-packs is made of recycled content paperboard, instead of PVC plastic.

If you buy an Original HP print cartridge you can rest assured that HP will never send cartridges returned through the Planet Partners Programme to a landfill. HP provides further assurance through leading environmental reporting. HP's Global Citizenship report, published at www.hp.com/go/report was recognised as Winner of Best Sustainability Report Award for Global Citizenship report in 2005 and 2006 by the independent environmental organisation CERES.

HP PLANET PARTNERS PROGRAM

RECOGNISED for environmental LEADERSHIP

Awards and qualifications

HP has received numerous awards in recognition of its environmental efforts, and many HP products also meet voluntary eco-label specifications that cover environmental criteria such as energy efficiency, reduced hazardous substance use and recyclability.

COMPUTERWORLD

HP ranked second on the 2009
"Top Green-IT Vendors" list



HP named to 2009 Global
Green100 list for Energy Efficiency
in Data Centers



HP Scotland received
certification for reducing its
environmental impact



HP ranked fourth on 2009
Corporate Sustainability Index
Benchmark Report



HP honoured by the 2009
California Waste Reduction
Awards Program (WRAP)



HP ClearView recognised by the
Industrial Designers Society of
America's IDEA program for reducing
product packaging materials



HP ranked #1 in Climate
Counts Company Scorecard in
electronics sector



HP ranked first among 100
Best Corporate Citizens

¹¹ HP Planet Partners—HP LaserJet and inkjet print cartridge return & recycling programme is only available for end-users who have used HP original cartridges in the manner for which they are intended. Please do not use the HP Return and Recycling Programme for defective supplies. Defective supplies which are still under warranty as described in the specific HP supplies warranty statement should be exchanged with an authorised dealer or service centre. Used supplies which are inadvertently sent to the HP Return and Recycling Programme cannot be returned. Visit: www.hp.com/recycle

¹² The 2009 Life Cycle Assessment study states Original HP print cartridges have an 8 percent lower impact in terms of global warming potential and a 44 percent lower impact in total waste produced, compared with remanufactured cartridges tested. The study can be found here

¹³ Remanufacturer information from InfoTrends Strategic Assessment, "US and European Cartridge Collections and Recycling 2007: Laser and Inkjet Cartridges for Use in HP", Cathy Martin and John Shane, March 2008. Commissioned by HP.

¹⁴ 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>.

¹⁵ Many HP ink cartridges with recycled content include at least 50 percent recycled plastic by weight. Exact percentage of recycled plastic varies by model and over time, based on the availability of material.

¹⁶ A QualityLogic 2010 study commissioned by HP comparing Original HP LaserJet Monochrome print cartridges with brands of non-HP toner cartridges available in Europe, Middle East and Africa.

Visit: www.hp.com/recycle for your Original HP cartridge recycling

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