

Pan-HP Environmental Announcement – Imaging and Printing Group (IPG) Content

News of the day

Q: What did IPG announce today?

A: IPG today announced the expansion of its HP Eco Solutions portfolio, unveiling several new and improved solutions aimed at helping customers reduce their environmental impact and save money. Today's announcement builds on the momentum, success and ongoing efforts IPG is making in environmental sustainability. Highlights include:

- HP Eco Solutions printing practice for large organizations is a portfolio of tools, software, hardware, services and expertise to help customers reduce their environmental impact and save money, and includes:
 - HP Web Jetadmin Eco Solutions Reports: Allow IT administrators to measure, evaluate and, as a result, make decisions that will help reduce the environmental impact of their organization's printing and ultimately, save money. The reports present more than 15 environmental performance metrics, including duplex vs. simplex printing, digital vs. paper-based information management, and energy management settings, and track performance over time.⁽¹⁾
 - Change Management kit: In response to overwhelming customer demand, HP is launching a toolkit to help customers successfully implement environmental-focused printing initiatives including best practices on how to communicate across their organizations – both financial and environmental value – to internal stakeholders and employees, which includes a poster and email templates.
 - Updated Carbon Footprint Calculator for printing: New updates make it even easier for customers to assess and find ways to reduce their environmental impact including more graphics and charts to make information easier to digest and analyze, the ability to save data and reference individual information at a later date, the addition of the DesignJet product portfolio, the ability to calculate the impact – paper savings – of using Smart Web Printing, and new search capabilities including an import feature allowing customers to pull data directly from HP Web Jetadmin.
 - HP Eco Printing Assessment service helps enterprise customers assess their energy consumption, paper usage and carbon emissions, and recommends ways to use less energy, recycle more and save money while reducing the impact of their

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• A new example of how HP's portfolio of products, solutions and tools can help companies reduce their impact and save money: The Cerritos Library reduced energy use an estimated 30 to 40 percent and cut ongoing costs nearly 50 percent due to HP reliability and lower consumables cost, to achieve return on investment in less than eight months.

As part of HP's ongoing strategy to help customers save money and lower their environmental impact, it is reporting progress on existing goals as well as announcing some new goals:

- In 2008, HP announced a goal to improve the overall efficiency of HP ink and laser printing products by 40 percent by 2011 (relative to 2005); currently, the company is at 32 percent tracking toward its 40 percent goal.
- New goals include:
 - By 2011, use a total of 100 million pounds, cumulatively from 2007, of recycled plastic in printing products
 - By 2011, reduce the average weight of printer packaging per product by 35 percent (relative to 2005)⁽²⁾
 - By 2011, utilize at least 35 percent recycled paper in cardboard packaging for printers
 - By 2011, reduce the amount of plastic used in printer packaging by 50 percent (relative to 2005)

Furthermore, HP continues to carve out its environmental leadership position, through industry-leading efforts and achievements:

- In 2008, HP shipped more than 25 million ENERGY STAR® qualified printing products, more than any other vendor.⁽³⁾ Additionally, all its new 2009 inkjet printer models are ENERGY STAR qualified and all 2009 LaserJet printer introductions will offer an ENERGY STAR bundle.⁽⁴⁾
- HP's "closed loop" inkjet recycling process is the industry's first and only such innovation.⁽⁵⁾ In fact, according to industry analyst InfoTrends' Cathy Martin: "HP's 'closed loop' inkjet recycling process is unique in the printing industry. No other printer manufacturer has inkjet 'closed loop,' using recycled materials from their own products to make new products sold by them. We expect that business and home users will only demand more of this kind of environmental responsibility from the companies which they purchase office equipment. HP is smart to be continually pushing in this regard."
 - HP has sold more than 400 million inkjet cartridges made with the "closed loop" inkjet recycling process, which uses recycled plastic from empty cartridges, returned through the Planet Partners program, and other sources such as everyday water bottles, in the manufacture of new, Original HP cartridges.
 - HP's goal was to use more than 10 million pounds of recycled content resin in its products and exceeded that goal in 2008, using 12 million pounds of recycled content resin in Original HP inkjet cartridges, compared to 5 million pounds in 2007.⁽⁷⁾
 - In 2008, HP announced goals to triple the amount of recycled content in its inkjet products and double the amount of recycled content used in inkjet cartridges. HP



exceeded these milestones and has set the bar higher with an ambitious new goal.

- HP's Imaging and Printing Group is driving the industry transition from analog to digital printing; to this end, it conducted a quantitative analysis to forecast the potential environmental improvements, as a result of digital printing:
 - HP estimates the world's printing carbon footprint to be up to 850 million tonnes, CO₂ equivalents
 - HP estimates the opportunity exists to reduce the impact of printing by up to 251 million tonnes, CO₂ equivalents, by the year 2020.
 - To provide perspective, this is the equivalent of the greenhouse gas emissions of 54 coal fired power plants operated at today's standards.⁽⁸⁾
 - HP published a technical paper in the proceedings of the recent IEEE International Symposium on Sustainable Systems and Technology held May 18-21, 2009.
 - HP's approach was inspired by the Climate Group's recent report, "SMART 2020: Enabling the low carbon economy in the information age."

Goals and milestones

Q: Last year IPG announced a lot of lofty environmental goals – how are you tracking toward accomplishing those goals?

A: We are very proud of the progress we've made toward our goals, and in some cases, accomplishing our goals ahead of schedule. A few examples include:

- In 2008, HP announced a goal to improve the overall efficiency of HP ink and laser printing products by 40 percent by 2011 (relative to 2005); currently, we are at 32 percent, ahead of schedule, tracking toward our 40 percent goal.
- HP's goal was to use more than 10 million pounds of recycled content resin in its products and exceeded that goal in 2008, using 12 million pounds of recycled content resin in Original HP inkjet cartridges, compared to five million lbs. in 2007.⁽⁷⁾
- In 2008, HP announced goals to triple the amount of recycled content in its inkjet products and double the amount of recycled content used in inkjet cartridges. HP exceeded these milestones and has set the bar higher, with an ambitious new goal. By 2011, HP will use a total of 100 million pounds, cumulatively from 2007, of recycled plastic in printing products.

Q: Are you setting any new goals for this year?

A: Yes. Today, we are announcing new goals around packaging reduction and the use of recycled content:

- **New** Recycled Content Goal:
 - By 2011, HP will use a total of 100 million pounds, cumulatively from 2007, of recycled plastic in printing products
- New Packaging Goals:
 - By 2011, HP will reduce the average weight of printer packaging per product by 35 percent (relative to 2005)⁽²⁾
 - By 2011, HP will utilize at least 35 percent recycled paper in cardboard



packaging for printers

 By 2011, HP will reduce the amount of plastic used in printer packaging by 50 percent (relative to 2005)

Products, solutions and tools for consumer and SMB customers

Q: You say you have the most "environmentally responsible printing portfolio for consumer and SMB customers." Can you give some examples?

A: HP considers the environment at every stage – in designing our products and in helping our customers print responsibly. We work hard to design products, solutions and services to help customers save money and reduce their environmental impact. Specifically, for our consumer and SMB customers, a couple of recent highlights include:

- In 2008, HP shipped more than 25 million ENERGY STAR® qualified printing products – more than any other vendor.⁽³⁾ Additionally, all its new 2009 inkjet printer models are ENERGY STAR qualified and all 2009 LaserJet printer introductions will offer an ENERGY STAR bundle.⁽⁴⁾
- The user-friendly Carbon Footprint Calculator for printing tool gives customers the ability to measure and evaluate the existing carbon footprint of their current printer or printer fleet (energy, paper use, carbon emissions) to understand how they can reduce their impact and save money through responsible printing.
- HP launched the HP Eco Highlights label to make it even easier for customers to identify a product's environmental attributes. Since its introduction in May 2008, HP has more than 150 products that feature the HP Eco Highlights label.
- The new HP Deskjet D2600 is made from 50 percent recycled plastic and requires 30 percent less energy than the previous model; it uses the HP 60 cartridges made from recycled plastic through HP's "closed loop" inkjet recycling process and its packaging is 100 percent recyclable.
- The new HP Officejet Pro 8500 Premier All-in-One offers 50 percent lower cost per page and 50 percent less energy consumption than its predecessor.

Products, solutions and tools for enterprise customers

Q: Tell me more about the HP Eco Solutions printing practice – what all does that entail? Is this new?

A: The HP Eco Solutions printing practice for large organizations is a portfolio of tools, software, hardware, services and expertise to help customers reduce their environmental impact and save money. For years we have offered customers a host of services and solutions to help them make smarter environmental choices, and the HP Eco Solutions printing practice makes all of HP's environmentally responsible solutions, services and tools more accessible for our customers. The HP Eco Solutions printing practice is a new way of organizing existing solutions and tools – and some new offerings like Web



Jetadmin Eco Solutions Reports and the Change Management kit – to make it easier for customers to take advantage of all the ways HP can help them save money and reduce their impact.

Q: What customers are taking advantage of the new Change Management kit? Can you share how it is being used and any feedback you are receiving?

A: HP launched its new Change Management kit as a result of customer demand. Our customers – primarily in the enterprise space – were saying that they needed help communicating within their organizations the need for environmentally focused initiatives and the resulting impact. Customers can use the poster and templates provided in the Change Management Kit to communicate their own goals and help drive change within their organizations to reduce the environmental impact of printing.

Q: Tell me more about the HP Web Jetadmin Eco Solutions Reports.

A: The HP Web Jetadmin Eco Solutions Reports complement and extend the benefits of the original HP Web Jetadmin printer software management tool.⁽¹⁾

HP Web Jetadmin is a remote printing and imaging peripheral management software tool that helps optimize device utilization, control color costs, secure devices, and streamline supplies management by enabling remote configuration, proactive monitoring, security, troubleshooting, and reporting of printing and imaging devices. In addition, HP Web Jetadmin helps IT managers automate default settings – such as duplex printing mode and pre-setting printers for specific sleep and wake modes – which translates into significant savings.

By utilizing data from HP Web Jetadmin and pulling that data into separate reports, HP Web Jetadmin Eco Solutions Reports allow IT administrators to measure, evaluate and, as a result, reduce the environmental impact of their organization's printing and ultimately, save money. The report presents more than 15 environmental performance metrics, including duplex vs. simplex printing, digital vs. paper-based information management, energy management settings and tracks performance over time.

Q: It seems like you have a lot of great solutions for enterprise customers – but are they actually seeing results?

A: Yes, they are seeing results – reducing their impact on the environment AND saving money. A couple examples of HP customers who have achieved significant results in terms of cost savings and reduction of carbon footprint:

Cerritos Library in California:

- Reduced energy use an estimated 30 to 40 percent
- Eliminated \$45,000 annual operating loss; achieved return on investment in less than eight months
- Capital costs 70 percent lower than competing solution
- Cut ongoing costs almost 50 percent due to HP reliability and lower consumables costs

<u>3M:</u>

• More than \$3 million in savings in first two years; per page costs reduced by 90 percent



- Reduced energy consumption by an estimated 79.9 percent, saving more than \$1.2 million in energy costs
- Estimated 353 million fewer pages printed
- Over a 12-month period, recycling efforts diverted more than 17,000 print cartridges away from landfill⁽⁵⁾

<u>Viacom:</u>

- Anticipated cost reduction of 20 to 25 percent for printing and copying
- 12.5 percent reduction in number of pages printed (projecting savings of more than 10 million sheets of paper
- Energy use for printing slashed by 62.5 percent and CO₂ emissions reduced by nearly 839,000 lbs.

Reuse and recycling

Q: Tell me more about HP's Planet Partners Program.

A: HP began electronics recycling in 1987 and officially launched the <u>HP Planet Partners</u> return and recycling program for print cartridges in 1991. Today, <u>HP Planet Partners</u> makes it easy for customers to recycle any brand of IT equipment as well as HP print cartridges to customers in more than 50 countries around the globe. In fact, HP just announced an expansion into three new countries – Bulgaria, United Arab Emirates and Saudi Arabia.

In 2007, we achieved our goal of recycling one billion pounds of IT equipment and print cartridges and set a two billion cumulative goal by 2010. Additionally, since its inception in 1991, HP has recycled more than 265 million inkjet and LaserJet print cartridges through the Planet Partners program.

Q: Tell me more about HP's "closed loop" inkjet recycling process for HP print cartridges. A: HP's innovative "closed loop" inkjet recycling process results in a recycled plastic formulation (RPET) that contains recycled plastics from used HP inkjet cartridges collected through HP Planet Partners and other sources such as water bottles. This RPET is then used to manufacture new HP print cartridges and other technology products. This "closes the loop" on the product life cycle, saving energy and keeping plastic out of landfills. HP combines recycled beverage bottle resin (RBR) and a suite of additives in the engineering process to meet HP's high performance standards, keeping plastic out of landfills. The amount of recycled content varies from product to product and ranges from approximately 30 to 75 percent of the total plastic weight. HP also uses recycled plastic to make new Original HP LaserJet cartridges. Recycled plastic can represent as much as 25 percent or more, by weight, of newly molded LaserJet cartridge housings on select models.

Q: Are other printing companies using "closed loop" inkjet recycling technology?

A: HP's "closed loop" inkjet cartridge recycling process is the first and only of its kind in the printing industry.⁽⁶⁾



But don't take our word for it. Here is what industry analyst InfoTrend's Cathy Martin has to say: "HP's 'closed loop' inkjet cartridge recycling process is unique in the printing industry. No other printer manufacturer has inkjet 'closed loop,' using recycled materials from their own products to make new products sold by them. We expect that business and home users will only demand more of this kind of environmental responsibility from the companies from which they purchase office equipment. HP is smart to be continually pushing in this regard."

Smart printing in 2020

Q: What is the SMART 2020 report, and why is HP talking about it?

A: In late 2008, The Climate Group released a report, "SMART 2020: Enabling the low carbon economy in the information age." The report quantified emissions from the Information and Communications Technology industry (ICT) based on expected growth by the year 2020 and examined where ICT could enable emission reductions in other sectors.

HP evaluated the SMART 2020 findings, and applied the same premise specifically to printing, realizing a significant opportunity for HP to reduce carbon emissions. Highlights from HP's evaluation include:

- HP estimates the world's printing carbon footprint to be up to 850 million tonnes, CO₂ equivalents.
- By driving the industry to transition from analog to digital printing, HP estimates the opportunity exists to reduce the impact of printing by 251 million tonnes, CO₂ equivalents, by the year 2020.
- To provide perspective, this is the equivalent of the greenhouse gas emissions of 54 coal fired power plants operated at today's standards.⁽⁸⁾

HP published these findings in the proceedings of the recent IEEE International Symposium on Sustainable Systems and Technology held May 18-21, 2009.

⁽¹⁾ Available summer 2009, as part of the Web Jetadmin Enterprise Edition or an individual download.

⁽²⁾ Excluding environmentally preferable material substitutions that have been made, but normalized for accurate comparisons.

⁽³⁾ Based on HP internal analysis of six key environmental factors, covering 29 environmental attributes, of HP's printing portfolio vs. competitors.

⁽⁴⁾Based on IDC CY2008 WW Printer Hardware Market Share Reports data, comparison of competitors' total ship volumes to HP ENERGY STAR ship volumes.

⁽⁵⁾ Based on 2007 WW average recycling process efficiency.

⁽⁶⁾ According to internal analysis of available external data, conducted by HP's Imaging and Printing Group's Research Alliance, 2009.

⁽⁷⁾ As referenced here, HP's recycled content resin is at least 50 percent recycled content, at least 95 percent post-consumer.

⁽⁸⁾U.S. EPA Greenhouse Gas Equivalencies Calculator, updated Feb. 17, 2009; www.epa.gov/cleanenergy/energy-resources/calculator.html



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