

Green behind the scenes

An insider's look at HP's environmental momentum,
milestones and leadership

Moderated by Jeff Erikson, SustainAbility
HP IPG Annual Leadership Meeting
October 6–9, 2008



HP agenda

- The big picture: the environmental movement
- Environmental legacy
- Priorities for the environment
- Where HP is making progress:
 - Energy efficiency
 - Resource conservation
 - Digitally green alternatives
 - Recycling, reuse and end of life
- Q&A



The big picture

Jeff Erikson
SustainAbility



HP's legacy

“The deepening concern for preservation of the environment involves the whole basic question of man on this earth: How may the earth's resources be preserved?”

—Bill Hewlett, Co-founder of Hewlett-Packard, 1971



HP's social and environmental record

Start 1930's



HP's deep-rooted legacy focused on corporate and social responsibility

- 1930's Commitment to the community
- 1950's Global Citizenship objective
- 1970 First environment control coordinator at HP
- 1971 Recycling computer print-outs and punch cards
- 1973 Environmental policy to reduce pollution
- 1975 Energy Conservation Guidelines
- 1976 Van pools in Bay Area

1980's–1990's



Incorporated environmental sustainability to drive change, action, leadership

- 1987 First IT company HW recycling
- 1987 Computer product recycling
- 1988 Hazardous Waste Minimization Council
- 1989 PVC removed from DeskJet package
- 1991 Planet Partners Program
- 1992 Design For Environment Program; EPA Energy Star Partner
- 1993 Instant-On Technology

2000's–Today



Advancements to expand environmental responsibility in a rapidly changing digital world

- 2001 Bio plastics corn printer shell
- 2002 Supply Chain code of conduct
- 2006 Dynamic Smart Cooling
- 2006 International climate change initiative World Wildlife Fund
- 2007 Recycled 1 billions pounds—Planet Partners
- 2008 RPET from PP used in HP cartridges

What are our customers saying?

“We’re not experts at this!
Tell us how to assess the
impact of printing; reduce
overall CO₂ emissions &
report improvements”



“We’re open to ‘green’ ideas and
products but it needs to be easy!”

Gen-Y: “We want ‘green’ and
we’re willing to make some
sacrifices”

“The environment is
important but commercial
pressures make it difficult
to be green”

“We’re slowly adopting
sustainable print practices
because customers are
asking for it”

HP environmental leadership framework



Imaging and Printing Group's commitment

- Improve energy efficiency of HP LaserJet and Inkjet printers 40% by 2011⁽¹⁾
- By 2010, HP will triple the use of recycled material in inkjet products⁽²⁾
- Ensure that 100% of HP's consumer photo paper will derive from sustainable forest certified suppliers in 2009; Adding to existing portfolio of 100% certified HP everyday papers



(1) Reached previous goal of 30%; baseline for goal is 2005

(2) Relative to 2007

Examples of our momentum...

OPTIMIZE YOUR PRINTING ENVIRONMENT TO REDUCE ENERGY, CARBON, PAPER AND COSTS

Reducing your environmental impact and operational costs is easier than you think. The HP Carbon Footprint Calculator for Printing can help you estimate printer energy, paper usage, consolidation of devices, applying energy saving technologies, the carbon impact of usage and the estimated monetary costs. So you get a solution that's good for business and good for the planet.

» Learn More

EVALUATE PRINTER FLEET
» SHRINK YOUR FOOTPRINT

COMPARE INDIVIDUAL PRODUCTS
» LOWER YOUR COSTS

The advertisement features a green background with a fern leaf on the left. At the bottom, there are two yellow callout boxes. The left box shows three printers and the right box shows a single printer.

Carbon Footprint Calculator for printing

ecoHIGHLIGHTS

HP Photosmart C6380 All-in-One

ECO INFORMATION

- Reduce energy use up to 40% with an HP All-in-One
- Supports 100% recycled paper
- Print only the web content you need with HP Smart Web Printing

 ENERGY STAR® Qualified

www.hp.com/go/ecosolutions

Please recycle your computer hardware and printing supplies. Find out how at our website.



HP Eco Highlights label

Energy efficiency

Dave Lobato

LaserJet Environmental Program Manager



Energy savings through innovation

Featuring HP's industry-first Auto-on/Auto-off technology

	Department class Large	Business class Medium	Consumer class Small
Sleep	26 watts	13 watts	3 watts
Auto-On/Auto-Off	1 watts	1 watts	1 watts
Off	.4 watts	.3 watts	.3 watts



Carbon footprint calculator for printing

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» ADVANCED PATH » QUICK PATH Product Savings » Reset

PRODUCT COMPARISON CHART

Based on paper and electricity costs and CO2 emissions, here's how your selected devices compare

T YEARLY ELECTRICITY COSTS » ANNUAL CARBON FOOTPRINT

\$ 136

HP Color LaserJet 4730x MFP

kWh	1,436
CO2-e (lb)	1,957
Electricity cost	136
Mono PPM	31

Pages/Year
Move the slider to see how your costs and emissions are affected by the pages you print per year.

100 ————— 100,000
50,900

\$ 660

Xerox Workcentre 245

kWh	6,947
CO2-e (lb)	9,469
Electricity cost	660
Mono PPM	45

Comparison Time Period
Adjust the slider to see how your savings changes based on the amount of time you use a device.

1 ————— 10
5 years

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» CONVERT YOUR GHG
» SEE HOW HP REDUCES ITS FOOTPRINT
« BACK

Carbon Footprint Calculator for printing

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EVALUATE PRINTER FLEET

» SEE HOW HP REDUCES ITS FOOTPRINT



COMPARE INDIVIDUAL PRODUCTS

» COMPARE YOUR COSTS

[Calculate Printer Fleet Savings](#) | [» Compare Individual Product Savings](#) | [» Home](#)
[» ADVANCED PATH](#) | [QUICK PATH](#) | [» Reset](#)

ADJUST YOUR FUTURE FLEET AND SEE THE ANNUALIZED RESULTS

	CURRENT	FUTURE	SAVED	% REDUCTION
Energy (kWh)	177,344	70,769	106,575	60%
Energy and Paper (CO ₂) Emissions (lb)	1,891,748	1,210,227	681,521	36%
Paper (lb)	1,100,018	742,512	357,506	33%
Energy and Paper Costs (USD)	616,848	411,723	205,125	33%

How HP business solutions affect your carbon footprint?

Change Energy and Paper Saving Practices

» Change Location

Change number of employees in each category

Add or Remove Printers

Turn off printers at the end of the day |
 Web JetAdmin |
 None

UPD/Duplex printing |
 Pull printing

Small Desktop: |
 Medium Workgroup: |
 Large Workgroup:

Small Desktop: |
 Medium Workgroup: |
 Large Workgroup:

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PRODUCT COMPARISON CHART

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» CONVERT YOUR COSTS | » ANNUAL CARBON FOOTPRINT

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1 ————— 10
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3M: green IT case study:

Optimize infrastructure, manage environment

OBJECTIVE: Optimize office printing infrastructure at 3M worldwide and reduce total cost and environmental footprint

RESULTS (over a 3-year period):

- Reduced energy consumption by an estimated 79.9%, saving \$1,256,605 in energy costs
- 8,240 metric tonnes reduction of CO2 emission from energy and paper reductions, equivalent to taking 978 cars off the road for one year; estimated 353 million fewer pages printed
- Over a 12-month period recycling efforts diverted over 17,000 print cartridges away from landfill ⁽¹⁾

⁽¹⁾ Based on 2007 WW average recycling process efficiency

The 3M logo is displayed in a large, bold, red font against a black background.

“I am certain that the carbon footprint of what we're doing today is less than what we had before.”

—Peter, IT Print Services at 3M

Resource conservation

Scott Canonico

WW Supplies Environmental Program Manager



IPG and resource conservation



Paper



Packaging



Device optimization



Materials



Supplies



Green print tools and services

Providing digitally green alternatives

Michelle Price

IPG WW Environmental Marketing Manager



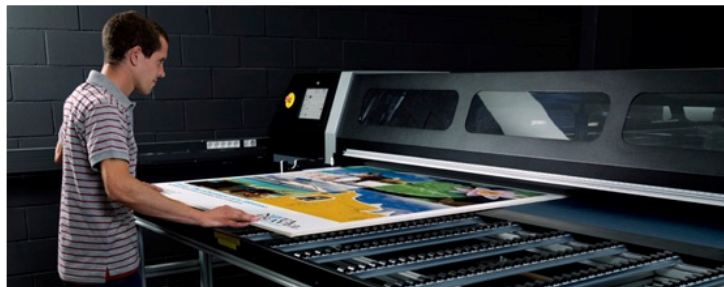
The impact of digitally green alternatives



Innovative Chemistry



Telepresence



Analog to Digital Printing



Optimize Workflow

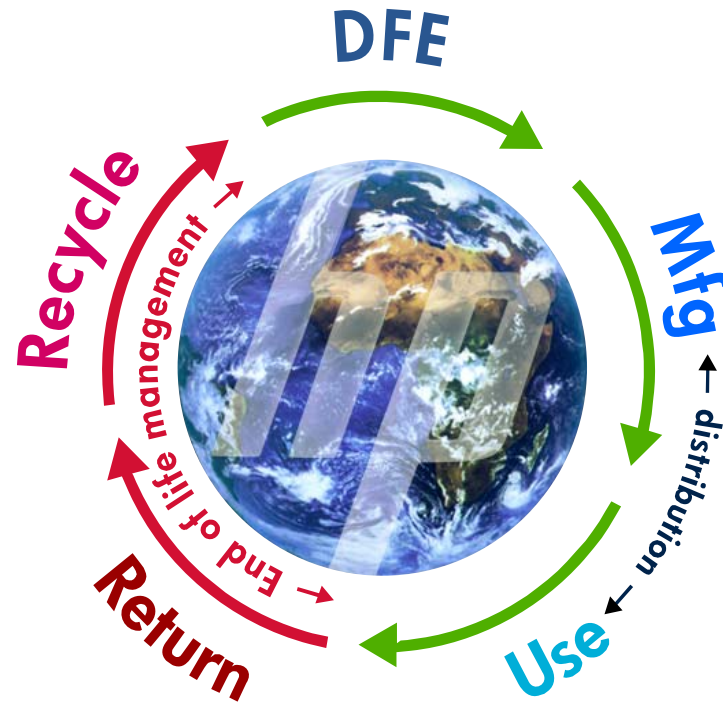
Recycling, reuse and end of life

Jean Claude Vanderstraeten

Environment Director, Asia-Pacific and Japan



Reducing product environmental impacts



Production Lifestyle

What is the solution?

HP asset recovery services

HP total
lifecycle
management

HP planet
partners
recycling

HP trade-in

HP buy-back

HP pack &
ship

- Single point of contact for complete portfolio
- Multi-vendor products / categories
- Instant online calculator
- Packing & logistics
- Pick-up & freight
- Data erasure
- Physical destruction of hard disk drive
- Removal of customer asset identification
- Off-site & on-site audit / asset report
- Cash payment
- Equipment warehousing
- Fair market value recovery
- Redeployment pool
- Recycling

What are the benefits for the customer?

- End-to-end service
- Recover value from your unwanted equipment
- Testing and reporting of received goods
- Secure data removal
- Environmentally responsible disposal



IPG's environmental leadership

Strategies



Our house:

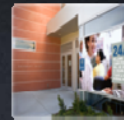
- Improve energy efficiency of printers 40% by '11
- 100% HP consumer photo paper from sustainable forest certified suppliers in '09
- From '07-'10, HP will have a 3x increase in use of recycled material in inkjets
- HP has recycled more than 250 million printer cartridges by Fall '08

Products



83 percent recycled content

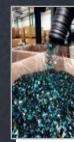
Digital publishing & latex inks



Supplies

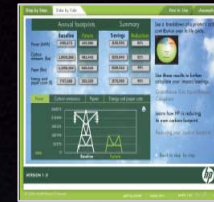


Made with Recycled Plastics



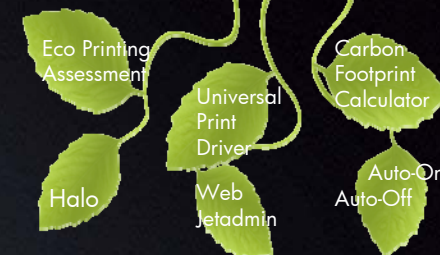
Cartridge Take Back Program

Solutions



HP Carbon Footprint Calculator

HP Eco Solutions for Enterprise/SMB



Halo – Digitally Green Alternatives



Q & A

