

REDUCING YOUR ENVIRONMENTAL FOOTPRINT: Tips 1 – 13

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Whether pushed by customer demand, industry regulation or motivated by personal conviction, printing "green" is an accelerating trend. The World Commission on Environment and Development defined the term *sustainable development* as "meeting the needs of the present without compromising the ability of future generations to meet their own needs."

In today's age, we are led to think about how we can continue to live, work and eat without harming our environment, while keeping it healthy for future generations. As a corporation, Adobe takes its role as sustainability steward seriously, defining corporate responsibility as the ability to achieve commercial success while honoring ethical values, respecting people, communities, and the environment.

Below are a few simple tips from Adobe on how you can turn your print-related activities into eco-friendly "sustainable" choices.

ADOBE'S TIPS FOR REDUCING YOUR ENVIRONMENTAL FOOTPRINT

1) Conserve a tree, institute a PDF workflow: It goes without saying that Adobe's Portable Document Format (PDF) and Adobe Acrobat have solved numerous problems for the print and publishing industries. Essentially, the software has allowed for a paperless office by giving people the ability to create and send electronic documents back and forth via e-mail, rather than printing hard copies and mailing. With Acrobat, printers can also create forms, view and publish review comments online, collaborate with their creative clients and agencies, implement a soft-proofing review cycle, and attach information electronically about how a file should be printed and finished through the Job Definition Format (JDF) – much more than simply creating a PDF file. With everything that Acrobat and PDF can now do, this leads to a reduced demand for paper and energy used to operate printers and copiers, which means reduced emissions and lower costs for you.



2) Recycle, reduce, reuse: Adobe recommends using high post-consumer non-chlorine bleached recycled paper and recycling used paper around the office. Studies reveal that recycled paper is equivalent to virgin paper in performance and many are competitively priced, yet recycled paper accounts for less than 10 percent of the paper market. Only products deemed acceptable by the Chlorine Free Products Association are granted Processed Chlorine Free (PCF) and Totally Chlorine Free (TCF) emblems. Look for the symbols when purchasing recycled paper.



Leading this effort is one of the nation's largest printers, Quad/Graphics, who is on the cutting edge of technology and running a 100 percent digital workflow for all prepress processes. For more than 35 years, Quad/Graphics has been a pioneer in green-printing practices, from reducing ink and paper waste to making sure print-shop air quality far surpasses legal guidelines. The company recycles more than 98 percent of its waste and has won numerous awards for environmental leadership.

3) Create a Web portal for your customers to submit print jobs online: It's easy to create a branded Web-to-print solution for your customers through your company's Web site, which allows customers to order collateral, request an estimate and submit jobs online. With online job submission, you can simplify and streamline the process of purchasing, producing, and

reordering print jobs. Not only does this speed the production process and avoid unnecessary errors, it reduces the amount of paper consumed – currently estimated at 10,000 sheets per office worker per year.



For example, when Consolidated Graphics Group established an online job submission system based on Adobe PDF templates and the Job Definition Format, it saved them 15 minutes per job by eliminating preflighting, which enabled them to accept more jobs. They greatly increased their efficiency while decreasing their dependency on paper.

4) Optimize production techniques through JDF to eliminate scrap, error and waste: Other industry standard formats have enabled information exchange

– but whereas Adobe PostScript was used to describe *pages* and Adobe PDF describes *documents*, Job Definition Format (JDF) describes *jobs*. JDF content sent from the designer’s desktop may contain the total number of pages in the job, the paper stock to be used, the run length, client contact information, and delivery details. Further downstream at the print production site, the JDF would be used to gather manufacturing details as the job goes through the workflow – an incredible time-saver when jobs are ganged, as is more and more the case for this market segment. Essentially, JDF automates the process -- speeds throughput, reduces errors, conserves paper and energy and lowers your production costs.



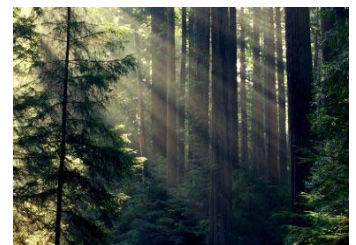
5) Forego paper proofs for online proofing and approvals: Traditional methods of securing proof approvals involve printing the job numerous times, deciphering customer comments, tracking and archiving detailed records, overnight mailing and couriers, audit trails, faxing and time spent shuffling the job back and forth. All of this can be overcome through online proofing, where a reviewer can receive a proof as an e-mail attachment, download a proof from a branded online job submission or FTP site instantaneously, or create a proof seamlessly using the print profile of their print service provider. Online proofing is an interactive process combined with an element of communication that enables you to not only view a document or image onscreen, but to make comments and mark-ups, and return an approval status.

By integrating Adobe PDF JobReady with its full commercial print service, the New Haven Print & Copy company rewards its customers with quality,



convenience and efficiency. Since incoming print jobs often lack all the necessary fonts and correct printing specifications, or contain graphics in the wrong color space and resolution, Adobe PDF

JobReady software makes online proofing easy for creative professionals.



To meet client needs, New Haven Print allows its customers to create print-ready PDF files on the fly, proof those files, and submit them for production directly to New Haven Print and Copy. New Haven Print and Copy’s clientele proof everything from copies of manuals and booklets to polished dealer training material --- eliminating the need for hardcopy proofs. Currently, more than 30% of New Haven’s print jobs are submitted online.

“With Adobe technologies, our customers can easily generate print-ready Adobe PDF files on our website. It’s convenient for them and it saves us time in print production,” says Craig Dellinger, president and general manager of New Haven Print & Copy.

6) Cut down on junk mail with variable data publishing for more targeted marketing: It takes about 68 million trees per year to produce the piles of no-name mail that Americans receive annually. Nearly half of this mailbox clutter is thrown out unopened. Variable data publishing (VDP) is a value-added service that will offer customers a more effective way to convey their

messages with greater certainty, clarity, and impact. VDP has emerged as a key enabling technology that makes personalized communications a reality, producing a customized message for each recipient. By giving print and email customers a personality, VDP will cut down on anonymous junk mail and help save a tree or two.

TREKK CROSS-MEDIA

Ahead of the pack in VDP services is Trekk Cross Media, where personalization extends beyond names, addresses and local promotions.

“Think predictive modeling,” says M.J. Anderson, Trekk’s vice president for creative services. “We use consumer’s history and demographics to match them with products they might be predisposed to buying, and then use Adobe Creative Suite design tools to customize the piece with images and copy related to those products.” VDP currently represents 30% of Trekk’s business.

To learn more about Adobe’s VDP partner solutions, which are based on the foundation of Adobe Creative Suite, Adobe PDF and Adobe PostScript-and PDF-based RIPs and output devices, visit the Adobe VDP resource center at www.adobe.com/vdp.

7) When leaving the office, be sure to power down your equipment: Make sure to use energy-saving features built into systems, setting printers and copiers to “standby” mode after 20 minutes of non-use. Simply activating the power-save features on desktops can save 50 or 60 percent of the energy wasted when computers are left on, and idle, for 24 hours a day. Dimming the monitor, spinning down the hard disks and putting the drive to sleep are all simple steps that help reduce air pollution.

Leading the charge in energy conservation is Monroe Litho, a premier graphic communications company located in Rochester, NY. Monroe is unique in that 100 percent of its electricity comes from clean, renewable, wind-generated sources. Monroe Litho’s annual wind power purchase will offset approximately 2.5 million pounds of carbon dioxide (CO₂) that would have been released into the atmosphere through conventional power generation. This is the equivalent of planting 134,000 trees, and eliminating 1.7 million miles of automobile driving or taking 140 cars off the highway every year. They are also the seventh graphic communications company in the country to be certified by the Forest Stewardship Council (FSC).



8) Ask yourself, can this be printed with low-polluting inks? Petroleum-based inks leach volatile organic compounds (VOCs)—which cause cancer and birth defects—into the soil when printed papers end up in landfills. These toxins can also be released into the air as fresh inks dry. In most jobs, soy- or vegetable-based inks work just fine and are naturally low in VOCs. In fact, 90 percent of daily newspapers use them routinely for color printing. Avoid inks containing heavy metals like lead, cadmium, and mercury, which are commonly used to produce some bright colors. Printers should be willing to swear off heavy-metal inks, toxic chemicals, solvents and suggest alternatives.



9) Select lower-impact packaging and distribution systems: Americans receive over 65 billion pieces of unsolicited mail each year, equal to 230 appeals, catalogs and advertisements for every person in the country. Discarded packaging represents over 30 percent of the solid waste buried in U.S. landfills each year. Also, bindings, adhesives, foils, and plastic bags used in printing or packaging printed material can render paper unrecyclable. Consider using glueless packaging made from biodegradable paper.

Organizations like the Sustainable Packaging Coalition (SPC) are focused on raising awareness of the sustainability issues related to packaging, as well as fostering the development of tools and



resources, partnerships and strategies to address them. The SPC is committed to eco-friendly packaging production and encourages other companies to be more environmentally active. Curtis Packaging, Kraft Foods, Unilever and Procter & Gamble are all members of the Sustainable Packaging Coalition.

10) There's no need to fly to meetings if you can join online: Business travel is a major expense and source of greenhouse gas emissions. Why fly when printers can collaborate with colleagues and clients in real-time, thereby avoiding costly flights by hosting meetings with Web conferencing technology? By joining meetings online, a small group collaborating between New York and San Francisco will realize a 98 percent travel cost savings and eliminate more than 44,500 pounds of CO2 emissions that would have resulted, had this meeting took place in person. Take steps to reduce carbon emissions through the use of virtual meetings using technology like Adobe Acrobat Connect.



11. Print Only What You Need: Eliminate unused and wasted publications by printing on demand. Did you know that 50% of the contents in landfills is comprised of paper and packaging? Print on Demand (POD) is a highly developed digital technology that allows you to print content as you need it. Printing on demand produces more timely and targeted information, and reduces printing, storage, and shipping costs, as well as pollution and waste.



Leading the cause is Adobe customer and InDesign User Group leader Copy General. They have made it possible for businesses to post their marketing and training materials in an online digital storefront, replacing inventories of outdated documents with current, high-quality, materials. Copy General also prints short-run books for a variety of self publishers, an option that would not have been cost effective with conventional printing.



12. Spare the Ozone; Proof Your Print Projects Online: Reduce your carbon footprint by marking-up your projects online with Adobe Acrobat 8 Professional. Reviewing work online can reduce the need for transportation costs and printing hardcopy documents that need to be circulated for review. This is especially important in the wintertime. As cooler temperatures and reduced sunlight diminish ozone problems, particulate matter (PM), becomes the pollutant with the greatest impact on air quality. One major source of PM is heavy trucks and motor vehicles.

Helping fight PM pollutants is Adobe print customer, Montage Graphics. They use Adobe Acrobat 8 Professional to send proofs to clients online, and comment directly on the project with the built-in annotation tools. This not only shortens the turn-around time on jobs, but also eliminates the need to print proofs and mail them overnight to clients.



13. Choosing Eco-Friendly Inks: By using ink settings that are low in Volatile Organic Compounds (VOCs), you can greatly minimize potential health risks to yourself and others. The National Association of Printing Ink Manufacturers says that the replacement of petroleum oils with soy and other vegetable oils in inks will reduce our environmental impact.



Heading the effort in using eco-friendly inks is Adobe customer, Hemlock Printers. Their inks, most of which are vegetable based, contain limited ozone-damaging petroleum distillates and minimal (VOCs). "Green" inks also help maintain color integrity, which is critical to good color management.

Metallic inks have the greatest impact on the environment, so to the degree that they can be avoided, or substituted, is a plus.

Hemlock became the first printing company in the Pacific Northwest to receive the Forest Stewardship Council chain-of-custody certification. This FSC certification promises print customers that the path taken from forest to consumer - including all stages of processing, transformation, manufacturing and distribution - is environmentally safe.



® We're practicing what we preach. Adobe diverts up to 95 percent of its waste (computers, batteries, printer toner, fluorescent lamps, etc...) from landfill projects, placing the company in the top percentile nationally. In June 2006, Adobe became the first company to receive three platinum awards from the nonprofit U.S. Green Building Council under its current Leadership in Energy and Environmental Design Standards. That makes Adobe's San Jose headquarters the greenest corporate building on record in the United States.

Just for fun, take a look back with us at the way office workers used to do business, before Acrobat was introduced to the world in 1993: <http://www.youtube.com/watch?v=qRpyY8KPWE>