

WHY PRINT IS green

Mother Nature clearly celebrates the cycles of life — the Earth twirls every 24 hours, for example, and travels once around the sun every year. For years now, we in the printing industry have been working with her, considering life cycles in everything we do, from what we print on to how we deliver it.

Many of her best materials arise organically, and so do ours — the chief ingredient in paper grows on trees (well, they are trees) and more so every day, we're basing our inks and toners on fruits and vegetables.

Likewise, she doesn't so much discard as reuse, and so do we: Most of the material from trees that doesn't become paper becomes power, and we both generate and use more renewable power than just about everyone. And more of our products are recycled than just about anything.

We take these steps not because they make us look good, though we hope they do, and not just because they make economic sense, although they clearly do. We take them because we know nothing exists apart from nature.

We are the printing industry — printers, designers, and makers of paper and printing equipment, inks and toners — and we love this earth. Here are 10 of the best ways we show it.

For additional information, please visit The Print Council website at www.theprintcouncil.org or write to:

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The Print Council ... is a business development alliance of the graphic arts industry whose goal is to promote the greater use of print media through education, awareness, market development, advocacy and research. The council works closely with industry associations, initiatives, and user groups with common goals.

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TEN REASONS WHY PRINT IS

green

1 We consider the source

We're careful to ensure that the paper and printing products we use originated responsibly.

For instance, we rely on forest-certification programs such as the Forest Stewardship Council (FSC) and the Sustainable Forestry Initiative® (SFI), which dominate in North America, and the Euro-centric Programme for the Endorsement of Forest Certifications.

All three promote forests' long-term health by minimizing damage during harvesting, preserving habitat and biodiversity, preventing overcutting, and other efforts. Safeguards include chain-of custody certifications, verified by third parties that document the origin of materials at every stage of the manufacturing process.

Meanwhile, inks and tonersⁱ increasingly are based on fruit or vegetable oils, removing the volatile organic compounds of their former base, petroleum, while making them far more renewable.

2 We're mad for recycling

And why not? Every reused paper fiber is a double bonus for the planet: Using recycled fiber contributes less to air pollution than virgin fiber, and fibers kept from landfills don't release methane, one of the most damaging greenhouse gases. Plus the processing of recycled fibers into paper consumes fewer chemicals and less water.

Of the fiber that went into paper in 2007, more than a third came from recycling,ⁱⁱ even though demand for newsprint, a key destination for reused fiber, has slowed considerably. In 2008, more than 57 percent of paper consumed in the U.S. was recovered for recycling,ⁱⁱⁱ more than any material.

The paper industry is aiming to reach 60 percent recycling by 2012;^{iv} every additional percentage point means that a million tons of paper are recovered.^v According to the EPA, paper is recycled at significantly higher rates than any other material. (Glass: 24 percent. Plastic: 7 percent)^{vi}

We have promoted recycling practically since its beginning. The Direct Marketing Association and the Magazine Publishers of America both lead "Recycle Please" campaigns, and the American Forest and Paper Association promotes a number of others.

Among them are AF&PA's Paper Recycles effort, which awards outstanding school, business, and community recycling programs; and Recyclemania, a higher-education recycling competition that involved more than 500 schools from every state in 2009.^{vii} The association has been working with the Environmental Protection Agency and the Keep America Beautiful campaign since 2003.

For us, recycling goes well beyond paper, too. Most parts of the tree are used, as renewable energy if not to make paper. Manufacturers and printers recycle printing plates, ink and toner canisters, shrink wrap, cardboard, the cores of large paper rolls, even shipping pallets.

3 We work well with others

There's reusing, and then there's never using, a notion we continue to capitalize on with our business partners, as well among ourselves. We've wrung barrels of petroleum from our processes by shipping proofs electronically instead of by overnight express, for example. With "distribute and print," finished jobs can be printed locally instead of delivered as freight, and "print on demand" means customers can order and print only as needed — reducing print overruns, waste, and unneeded warehousing.

Using postal-address verification and managing lists, we're also collaborating with customers to ensure that more of our work reaches just the people who want it. DMAchoice,^{viii} a service of the Direct Marketing Association, lets consumers choose the types of mail and e-mail they want to receive.

Meanwhile, tools like Metafore's Environmental Paper Assessment Tool^{ix} help both buyers and sellers of paper assess environmental attributes and trade-offs. Such tools consider sources, transportation, manufacturing methods, and other factors for broader sustainability assessment.

4 We're green by design

Design plays a crucial role in determining print's environmental effects. Responsible designers incorporate life-cycle considerations into every design choice, and use their creativity to capitalize on environmentally friendly options such as specifying elemental chlorine-free paper, low-VOC inks, and recycled materials.

Designers can also choose inks that are free of heavy metals or lighter in tone or intensity when a project is likely to be recycled, and forgo surface coatings for projects envisioned for shorter life spans.

In fact, responsible designers partner with printers that have robust sustainability portfolios, consult with them on best practices, collaborate with them for the most cost effective and efficient layouts for reducing waste, and assess results to guide future projects.

5 We care about the climate and forests

In its efforts to breathe and be cool, the planet has no greater friend than trees, and trees have no greater friend than print. Sure, we harvest trees, but we plant them too — on average, 5 million trees are planted every day in the U.S.^x

In the U.S. during the first half of this decade, 400,000 acres were added annually to cultivation, much of it managed for sustainability. That growth has sequestered an additional 53 million tons of CO₂ during that time.^{xi} Worldwide, 12 million more acres are forested today than 20 years ago.^{xii}

6 We clean up after ourselves

We have worked hard to reduce our impact on the environment. Consulting with the Department of Energy, American Forest and Paper Association members have achieved a double-digit reduction in greenhouse gas intensity; since 1980, they've reduced emissions of nitrogen oxides by 43 percent and sulfur dioxide by 72 percent.^{xiii}

Print providers have also made great strides in eliminating volatile organic compounds (VOCs), which contribute to harmful ozone formation in the atmosphere.

7 We're picky about our power

Less than 10 percent of U.S. power comes from renewable sources, but in the pulp and paper industry, that figure is greater than 60 percent.^{xiv}

We're also leading users of cogeneration, which produces both electricity and heat from the same unit of energy. In 2005, virtually all pulp-mill energy came via this method, and about two thirds of its fuel was renewable biomass — the parts of the tree not suited for papermaking.^{xv} Both the EPA and the UN's Intergovernmental Panel on Climate Change consider this energy to be carbon neutral.^{xvi} This summer, the largest U.S. cogeneration project in a decade will come on line — for a Washington mill.^{xvii}

In addition, some printers are frequent buyers of renewable-energy certificates. These certificates — which represent power generated by wind, hydro, solar, or biomass — support growth of renewable energy producers.

8 We're community oriented

More than 300,000 American small businesses — mom and pop shops, your neighborhood florist, the coffee shop on the corner — rely on advertising mail to reach their neighbors. More than 3.5 million Americans jobs are directly or indirectly supported by print advertising mail.^{xviii}

The U.S. Forest Service says that two-thirds of wood harvested for pulp and paper each year comes from relatively small, family-owned wood lots. The vast majority of these family forests are less than 50 acres in size.^{xix} Many of the jobs connected to the harvesting are often in rural areas where employment options are scarce.

9 We compare well to others

Every type of media has an environmental impact, and ours compares favorably with anyone's.

According to the Department of Energy, U.S. paper manufacturers used more than 75 billion kilowatt-hours of electricity in 2006, which is a lot, but a substantial portion of our energy is renewable. Compare that with the 60 billion kilowatt-hours that data centers and servers used that year, primarily from burned fossil fuels — and that doesn't even include the energy that PCs use.^{xx}

The average person's paper use for a year — 440 pounds — is produced by 500 kilowatt-hours of electricity, the amount to power one computer continuously for 5 months.^{xxi}

Daily news followers who read the print paper use 20 percent less CO₂ than those who read news on the Web for a half hour.^{xxii}

Meanwhile, consider the environmental footprint of spam: A study commissioned by the Internet security software company MacAfee estimated it wastes 33 billion kilowatt-hours annually, with the same greenhouse gas emissions as 3.1 million passenger cars using 2 billion gallons of gasoline.^{xxiii}

And while we grow trees to get our raw materials, electronics manufacturers need heavy metals. Recycling electronics has toxic implications whether it happens here or is shipped overseas.

Producers of all media — internet, digital media, and print on paper — can work together to decrease the environmental impact of communication.

10 We help preserve natural resources

From high school, everyone knows that trees clean carbon dioxide from the air. However, forests also protect water by filtering pollutants, regulating flow, and by other natural processes. Forests also impede erosion, protect coastlines, provide habitat for wildlife, and promote the biological diversity on which all life depends.^{xxiv}

In the mid-1990s, paper manufacturers needed 65 percent less water to make a ton of paper than we did about two decades earlier. The water that is still needed ends up 70 percent cleaner than it did in 1974, even though paper production more than doubled during that time.^{xxv}

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