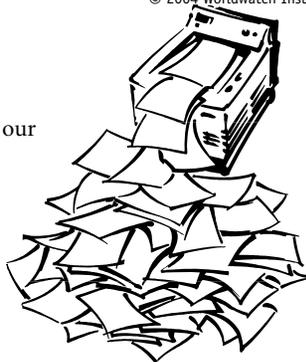


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## Painless Paper Cuts

For most of its history, paper existed as a precious and rare commodity. Today, it covers the planet. From the contents of our in-boxes to the currency in our wallets to the containers for our frozen dinners, paper is never far from reach. Global paper use increased more than six-fold over the latter half of the 20th century, and has doubled since the mid-1970s.

About 93 percent of today's paper comes from trees, and paper production is responsible for about a fifth of the total wood harvest worldwide. A sheet of writing paper might contain fibers from hundreds of different trees that have collectively traveled thousands of kilometers from forest to consumer. Though invented as a tool to communicate, about half the paper in today's consumer society serves another purpose—packaging. This and other rapidly discarded paper now represents a big chunk of the modern waste stream, accounting for roughly 40 percent of the municipal solid waste burden in many industrial countries.



### DID YOU KNOW...?

- \* The United States produces and uses a third of the world's paper. Forests in the southeastern U.S. now supply a quarter of the global total.
- \* The average U.S. citizen uses more than 300 kilograms of paper annually, and the average Japanese uses 250 kilograms. People in developing countries, in contrast, use only 18 kilograms of paper a year on average—in India, the figure is 4 kilos, while in 20 countries in Africa, it's less than 1 kilo. (The United Nations estimates that 30–40 kilos is the minimum needed to meet basic literacy and communication needs.)
- \* Producing one ton of paper requires 2-3 times its weight in trees. Newly cut trees account for 55 percent of the global paper supply, while 38 percent is from recycled wood-based paper, and the remaining 7 percent comes from non-tree sources.
- \* The pulp and paper industry is the world's fifth largest industrial consumer of energy and uses more water to produce a ton of product than any other industry.
- \* Making paper from recycled content rather than virgin fiber creates 74 percent less air pollution and 35 percent less water pollution. Yet the share of total paper fiber coming from recycled material has grown only modestly from 20 percent in 1921 to 38 percent today.
- \* The group Environmental Defense estimates that if the entire U.S. catalog industry switched its publications to just 10-percent recycled content paper, the savings in wood alone would be enough to stretch a 1.8-meter-high fence across the United States seven times.
- \* The Gutenberg Bible, the first and second drafts of the U.S. Declaration of Independence, and the original works of Mark Twain were all printed on hemp-based papers.

### CHALLENGE YOURSELF AND OTHERS:

See if you can go a week without printing out any new e-mails. Try instead to archive your e-mails and other information electronically, using a computer-based filing system.

## SUCCESS STORIES

- ❖ In 1991, Germany passed a law requiring packaging producers and distributors to take back certain packaging materials for reuse or recycling—including paper. Within three years, wastepaper recycling shot up to 54 percent, after stagnating at 45 percent for nearly 20 years.
- ❖ The European Union Parliament recently adopted a law requiring member governments to set waste paper recycling goals of 60 percent by 2008.
- ❖ A pulp and paper mill on the Androscoggin River in Maine dramatically reduced its hazardous waste generation from 6 million pounds in 1990 to 300,000 pounds in 1998, and slashed the amount of solid waste going to landfills by 91 percent, largely through pollution prevention measures.
- ❖ In November 2002, more than 50 environmental groups across North America agreed on a set of common environmental criteria for environmentally preferable paper, and released detailed guidance to advise paper buyers about their choices.
- ❖ On a limited scale, paper is returning to its nonwood roots. Alternative fibers now on

the market include hemp, kenaf (a leafy member of the hibiscus family), agricultural residues (cereal straws, cotton linters, banana peels, coconut shells), and even denim scraps.



## SIMPLE THINGS YOU CAN DO:

- ✓ Buy paper with at least 30 percent post-consumer recycled content, and encourage your school or workplace to do the same.
- ✓ Seek out nonwood paper alternatives made from kenaf, cotton, or other fibers. Many "agrifibers" yield more pulp-per-acre than forests or tree farms, and they require fewer pesticides and herbicides.
- ✓ Recycle your junk mail, and tell vendors to stop sending it. For an overview of how to get off junk mail (as well as e-mail and telephone) lists in the U.S., go to [www.newdream.org/junkmail](http://www.newdream.org/junkmail)
- ✓ Encourage your local or national government officials to introduce legislation requiring manufacturers to take back the packaging waste from their products.

## FOR MORE INFORMATION

- 👉 **Conservatree** ([www.conservatree.org](http://www.conservatree.org)), an organization dedicated to building markets for environmentally sound papers, offers useful tips on buying recycled, tree-free, and chlorine-free papers.
- 👉 The U.S. government's **Web-Based Paper Calculator** ([www.ofee.gov/gp/papercal.html](http://www.ofee.gov/gp/papercal.html)) allows users to compare the environmental impacts of papers made with different levels of recycled content, from virgin paper to 100% recycled.
- 👉 **Rethink Paper** ([www.rethinkpaper.org](http://www.rethinkpaper.org)) is an organization dedicated to rethinking and replacing current paper consumption and production practices with environmentally preferable alternatives, including nonwood papers.
- 👉 **ForestEthics' Paper Campaign** ([www.forestethics.org/paper/](http://www.forestethics.org/paper/)) is a U.S. campaign that aims for systemic change in the paper industry by targeting the largest retail paper sellers via pressure, protests, and other grassroots efforts.