



Reducing waste in the workplace

When it comes to conserving resources, preventing pollution and saving money, reducing waste trumps recycling. In this game, businesses and organizations of all sizes can truly do well by doing good.



What can I do?

Reduce your use of office paper

Copy paper, like the kind used in photocopiers, computer printers and plain-paper fax machines, is the most common type of office waste paper. According to the Minnesota Office of Environmental Assistance, the average office worker uses **10,000 sheets of copy paper each year**. The U.S. EPA estimates that paper and paperboard account for almost **40 percent** of our garbage. Here are some other statistics to keep in mind when looking for ways to reduce paper use and costs.

► Office paper is highly recyclable, but a lot gets wasted. Waste reduction is more cost-effective than recycling because it reduces the amount of material that needs to be collected, transported and processed. Waste reduction can save money for businesses and institutions of any size.

► Nearly 3.7 million tons of copy paper are used annually in the United States alone — over **700 trillion sheets**.



Benefits of using less

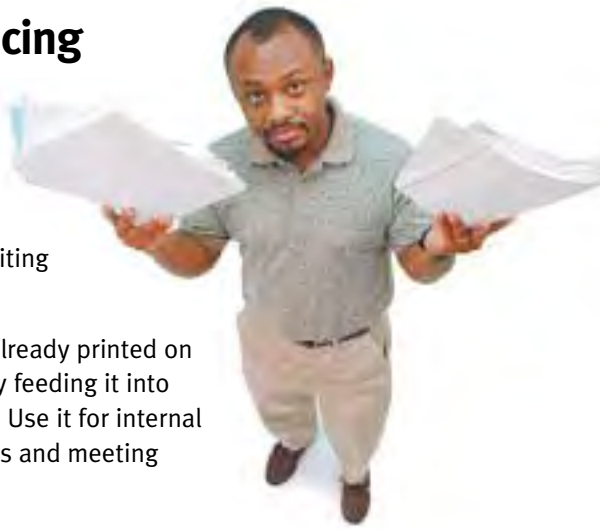
Storage and handling — Paper is bulky to store, in boxes or in file cabinets. By using fewer sheets, you can put storage space to more productive use. For example, Owens Corning recently made all of its offices worldwide “paperless.” Having had 14,000 file cabinets around the world, the company has already saved around \$30 million in lease costs.

Mailing costs — Fewer sheets mailed may mean reduced postage. A single-sided 10-page letter costs \$ 0.55 to mail; that same letter, copied onto both sides of the paper, uses only five sheets and requires only \$0.33 in postage.

Environmental benefits — By increasing double-sided copying (duplexing), U.S. offices could reduce annual paper use by 20 percent (Inform, Inc). By using and discarding less paper, you are conserving resources, reducing water and energy use, and preventing pollution.

Tips for reducing paper use

- ▶ Always try to use **both sides** of a sheet of paper for printing, copying, writing and drawing.
- ▶ **Reuse paper** that's already printed on one side by manually feeding it into copiers and printers. Use it for internal documents like drafts and meeting agendas.
- ▶ Once-used paper can also be reused in **plain paper fax machines** since they only need one clean side.
- ▶ **E-mail** can be used to share documents and ideas. Be sure to only print the e-mails you need to have a hard copy of. This advice goes for Internet documents as well. Instead of printing a Web page, bookmark it or save the page on your hard drive and pull it up when needed.
- ▶ Desktop fax, electronic references (CD-ROM databases), electronic data storage, electronic purchasing and direct deposit are all ways to use electronic media that reduce office paper waste.
- ▶ Help minimize misprints by posting a diagram on how to load special paper like letterhead so it will be printed correctly.
- ▶ Practice **efficient copying** — use the size reduction feature offered on many copiers. Two pages of a book or periodical can often be copied onto one standard sheet.
- ▶ Use **two-way** or **send-and-return** envelopes. Your outgoing envelope gets reused for its return trip.
- ▶ Use reusable **inter- and intra-office envelopes**.
- ▶ Reuse old paper for **notepads**. It can be cut to custom sizes and simply bound with a staple.
- ▶ Draft documents can be reviewed, edited and shared **on-screen**.



A Duplexing Situation

Approximately two-thirds of all copy machines are duplex capable (able to print on both sides of a sheet of paper). Yet the duplexing rate in the United States is only 15 percent. This leaves significant opportunities to reduce office paper waste simply by educating.

- ▶ For laser printers that are capable of printing 12 or more pages per minute, you can usually add a unit that allows for automatic duplexing.
- ▶ If you put a duplexing unit on your printer, it will add \$350 to \$500 to the base price of your printer. An office with 10 to 20 workers could recoup that extra cost in **one year or less**.
- ▶ If you lease your copier, specify a duplexing unit when the lease comes up for renewal.

DUPLEX=ON



Materials Exchange

The **Minnesota Materials Exchange** connects businesses who have unwanted materials with those who can use them. The exchange lists a wide range of items, from chemicals, to furniture to scrap fabric. The **Minnesota Materials Alliance On-line Catalog** is a service that helps businesses save, become more competitive, and conserve natural resources.



(www.mnexchange.org)

Buying green for your office

The National Recycling Coalition recently published *Purchasing Strategies to Prevent Waste and Save Money*. This publication contains many useful ideas on how to purchase products that create less waste.

Here are some purchasing ideas for offices to make the workplace more environmentally friendly.

- ▶ **Refurbish** and **buy refurbished** office equipment.
- ▶ **Reuse and refill** toner cartridges and ribbons.
- ▶ Purchase **non-toxic, biodegradable** cleaners that contain low- or non-volatile organic compounds.
- ▶ Buy **concentrates**.
- ▶ Buy in **bulk**.
- ▶ Buy products that are **reusable, returnable** or **refillable**.
- ▶ Buy office products that contain **post-consumer recycled material**.
- ▶ Use **flexible interior features**, such as movable walls, to reduce waste associated with renovation.
- ▶ Choose **durable** materials and furnishings to reduce the costs and waste associated with replacement.



Discover great printing

The **Minnesota Great Printers Project** encourages printers, designers and print buyers to incorporate good environmental practices into daily work to reduce the overall impact that printed materials have on the environment.

Great Printers commit to operating in compliance with environmental, health, and safety requirements. They also pledge to minimize wastes, reuse and recycle wastes, and maximize energy efficiencies through continuous environmental, health and safety improvements.

Strategies for printing greener:

- ▶ Print on **both sides of the paper**, and reduce the width of margins and font sizes. These options reduce waste and save both resources and money.
- ▶ Evaluate your mailing list and **keep it updated**. Delete duplicates, remove those who have requested to be off, and target your mailing to specific audiences. This can help save money on printing and mailing costs, provide you with a more effective mailing, and reduce waste throughout the printing process.
- ▶ Request paper with pulp that is brightened **without the use of chlorine**. Chlorine bleaching creates a toxic, bio-accumulative waste by-product called dioxin. By demanding alternatives to chlorine-bleached papers, you help create new markets and encourage paper mills to move away from polluting production practices.

- ▶ Use paper labeled **totally chlorine-free (TCF)** or **process chlorine-free (PCF)**. Both terms mean that the mill did not use chlorine compounds to brighten the paper. Talk to your paper vendor or printer about the price and availability of TCF and PCF papers. Both significantly reduce the persistent, bio-accumulative compounds in the mill wastewater that are associated with the traditional chlorine bleaching process.
- ▶ Request **inks with non-petroleum bases**, such as soy-based and linseed-based inks.
- ▶ Request inks that emit low amounts of **volatile organic compounds (VOCs)**. Usually, non-petroleum-based inks are lower in VOCs.
- ▶ Use pre-press technologies that eliminate or reduce hazardous materials, such as **direct-to-plate** printing.
- ▶ Buy **paper** that is produced by a company with a stated commitment to environmental stewardship, and to minimizing ecological impacts and ensuring long-term sustainable production.
- ▶ Purchase and specify **post-consumer recycled content papers**. This helps expand the recycling market and assure recycling programs stay viable and effective. It also closes the loop by diverting waste from landfills and incinerators. As an added benefit, purchasing papers made from recycled stock means using fewer trees to make the paper.

For more info on the Great Printers Project point your browser to **www.reduce.org**



Building management tips

How a building is managed can affect environmental quality and employee health. The World Health Organization estimates that nearly one-third of all commercial buildings have significant indoor air quality problems. There are several steps that building managers can take to reduce waste and protect employees' health within a building.

- ▶ Use reusable dishware in your company's cafeteria and kitchen instead of disposables.
- ▶ Use cloth towel roll dispensers in your bathrooms and cloth napkins and towels in your kitchens.
- ▶ Where available, have your building's compostable waste sent to a composting facility. This includes your facility's food wastes, garden and yard wastes, as well as soiled and unrecyclable paper products. At the Minnesota Office of Environmental Assistance in St. Paul, it is estimated that around two-thirds of what goes into the office's garbage cans is commercially compostable.
- ▶ Use paint and install carpeting that contains low levels of volatile organic compounds (VOCs). VOCs from paint, carpet, building materials and other office products can create unsafe indoor air quality in your work environment and cause Sick Building Syndrome.
- ▶ Work with janitorial service or staff to find ways to use less toxic, non-toxic and/or no-VOC cleaning products.

Reduce Waste — If not you, who?

TO LEARN MORE ABOUT WHAT YOU CAN DO:

www.reduce.org



Minnesota
Office of
Environmental
Assistance



Your county solid waste office is a great resource for waste reduction materials, including local waste and environmental information, education resources and speakers.