



Wastes - Resource Conservation - Common Wastes

[Wastes - Resource Conservation](#) |
 [Common Waste & Materials](#) |
 [Paper Recycling](#) |
 [Basic Information Details](#)

Basic Information Details

This page provides detailed basic information about paper recycling, including:

[Benefits of Paper Recycling](#)
[Source Reduction/Lightweighting](#)
[EPA's Waste Reduction Goals](#)
[Paper Industry's Recovery Goal](#)
[Use of Recovered Paper](#)
[Paper Making and Recycling](#)
[Best Practices](#)

Benefits of Paper Recycling

The environmental benefits of paper recycling are many. Paper recycling:

Reduces greenhouse gas emissions that can contribute to climate change by avoiding methane emissions and reducing energy required for a number of paper products. Extends the fiber supply and contributes to [carbon sequestration](#). Saves considerable landfill space. Reduces energy and water consumption. Decreases the need for disposal (i.e., landfill or incineration which decreases the amount of CO₂ produced).

Recycling one ton of paper would:

Save enough energy to power the average American home for six months.
 Save 7,000 gallons of water.
 Save 3.3 cubic yards of landfill space.
 Reduce greenhouse gas emissions by one metric ton of carbon equivalent (MTCE).

Sources:

Municipal Solid Waste in the United States: 2006 Facts and Figures
 Abitibi Paper Retriever [EXIT Disclaimer](#)
 Energy Information Administration Kid's Page
 US EPA Waste Reduction Model (WARM)

On the other hand, when trees are harvested for papermaking, carbon is released, generally in the form of carbon dioxide. When the rate of carbon absorption exceeds the rate of release, carbon is said to be "sequestered." This carbon sequestration reduces greenhouse gas concentrations by removing carbon dioxide from the atmosphere.

Source Reduction/Lightweighting

Source reduction is the process of reducing the volume or toxicity of waste generated.

One form of source reduction is "lightweighting." Lightweighting means reducing the weight and/or volume of a package or container, which saves energy and raw materials. As early as 1983, companies manufacturing food service disposables began reducing the weight of plates, bowls, containers, trays and other tableware. Manufacturers of paper food service disposables have been able to source reduce by decreasing the paper stock required to manufacture food service containers and coating the containers with a very thin layer of polyethylene or wax. The coating enables the container to maintain its strength and food-protection functions.

Paper packaging is also a good example of where lightweighting has been achieved. Product manufacturers work with their packaging suppliers to identify the best combination of effective protection for the product using the lightest weight package.

Another way to reduce the amount of paper used is to reduce the margins, whether it is in newspapers, books, or everyday printing. For example, reducing the margins in Microsoft Word from 1.25 inches to 0.75 inch could result in average paper savings of approximately 4.75 percent (1).

In addition to reducing page margins, learn how you can reduce your paper usage by using the [Green Print program](#) [EXIT Disclaimer](#) to automatically eliminate printing out unnecessary, wasteful pages.

Also related to source reduction are forest certification programs such as the Sustainable Forestry Initiative (SFI), a comprehensive system of principles, objectives and performance measures developed by professional foresters, conservationists and scientists that combines the perpetual growing and harvesting of trees with the long-term protection of wildlife, plants, soil, and water quality. Learn more about the [SFI](#) [EXIT Disclaimer](#).

(1) Source: ["Mueller Policy Paper #1: Reduce Standard Margin Settings", 2001 \(PDF\)](#). (1 pg, 108K, [about PDF](#)) [EXIT Disclaimer](#)

EPA's Waste Reduction Goals

Under the [Resource Conservation Challenge \(RCC\)](#), EPA has set goals to boost the nation's overall recycling rate to 35 percent by 2008 and 40 percent by 2011. We are making progress but there is still a ways to go.

For more information specifically about EPA's goals for waste reduction, visit:

[Municipal Solid Waste Recycling National Priority Area](#), which describes EPA programs and information for promoting reuse and recycling of municipal solid waste (MSW)

[2006-2011 EPA Strategic Plan](#), which serves as the Agency's road map and guides the Agency in establishing annual goals (information about the goal of recycling 40 percent of MSW by 2001 is found under Goal 3 – Land Preservation and Restoration on page 63)

For more paper recycling statistics, please visit:

[Frequent questions](#), which has paper recycling facts and figures
[Municipal Solid Waste Characterization Report](#)
[Paper Industry Association Council PIAC](#) [EXIT Disclaimer](#)
[American Forest & Paper Association \(AF&PA\)](#) [EXIT Disclaimer](#)

Paper Industry's Recovery Goal

The forest, paper, and wood products industry, represented nationally by the [American Forest & Paper Association \(AF&PA\)](#) [EXIT Disclaimer](#) trade association, has been a partner with EPA in its commitment to recycling. More paper is recovered in America for recycling (measured in terms of weight) than all other materials combined (except for steel). More than one third (37 percent) of the raw material fiber US papermakers use comes from recovered paper. In 1990, the US forest and paper products industry voluntarily established a goal of recovering 40 percent of the paper consumed in the US. That goal was achieved in 1996. The industry went on to establish a 50 percent recovery goal, which was achieved in 2003, and a 55 percent recovery goal by 2012. The recovery rate

reached 56 percent in 2007 — five years ahead of schedule — and the industry has set a new 60 percent recovery goal by 2012. Since 1994, significantly more paper has been recovered in America than landfilled.

Use of Recovered Paper

AF&PA reported that in 1988, about 25 percent of the raw materials used at US paper mills was recovered paper. In 1999, according to AF&PA, that figure rose to 36.3 percent and has remained around 36-37 percent through 2007. More than three quarters of America's paper mills use recovered fiber to make some or all of their products. Approximately 140 mills use recovered paper exclusively. As a result, virtually all types of paper products contain some recycled fiber. According to AF&PA, the brisk rise in paper recovery is attributable to strong demand overseas for US recovered paper and solid gains in domestic consumption.

See more information on the [uses of recovered paper](#) [EXIT Disclaimer](#) from AF&PA.