

Everything You Need to Know About Paper Recycling

Source: earth911.com

Published: July 1, 2016



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In 2011, [66.8 percent](#) of paper consumed in the United States was recycled. Every ton of paper recycled saves more than 3.3 cubic yards of landfill space, and if you measure by weight, more paper is recovered for recycling than plastic, aluminum and glass combined. Paper is a material that we're used to recycling, since [87 percent](#) of us have access to curbside or drop-off recycling for paper.

Additionally, [76 percent](#) of paper mills used some recovered paper in 2011, so the paper you throw into the bin is finding its way into plenty of new products. The process of recycling old paper into new paper might sound like it would be complex, but in reality, it's pretty straightforward. If you're feeling ambitious, you could even try to [recreate this process yourself](#) using everything from old wrapping paper to junk mail.



Photo: John Lambert Pearson

On an industrial scale, though, paper recycling allows us to save both energy and resources. By recycling one ton of paper we save 17 trees, 7,000 gallons of water and 463 gallons of oil, according to the [EPA](#). Keep reading to find out how the process works and how you can make sure you recycle paper correctly.

How is Paper Recycled?

- Step 1: After you put paper in your recycling bin, it's taken to a recycling center where contaminants such as plastic, glass or trash are removed.
- Step 2: Next, the paper is sorted into different grades.
- Step 3: Once paper is sorted, it will be stored in bales until a mill needs it, and then it will be transferred to the mill for processing.
- Step 4: Once at the mill large machines (pulpers) [shred](#) the paper into small pieces. This mixture of paper, water, and chemicals is heated and the pieces of paper break down into fibers.
- Step 5: The mixture is pressed through a screen to remove adhesives and other remaining contaminants.
- Step 6: Next, the paper will be [spun](#) in a cone-shaped cylinder to clean it, and sometimes ink will also be [removed](#). At this point, the pulp is sent through a machine that sprays it onto a conveyor belt. Water will drip through the belt's screen, and the paper fibers will start [bonding](#) together.
- Step 7: Heated metal rollers will [dry](#) the paper, and the paper will be put onto large rolls, which can be made into new paper products.

Grades of Paper

Newspaper is a lower grade paper because it has already been recycled numerous times, while printer paper is higher grade paper. The grade of paper is determined by fiber length, which shortens after each trip through the recycling process.

After being recycled five to seven times, the fibers become too short to make new paper and will need to be mixed with virgin fibers, according to the [EPA](#). Ever heard that paper has “seven generations”? That phrase refers to how many times paper can be recycled before its fibers become too short.



At a recycling center, paper is sorted and stored in bales. Photo: [chris bentley](#)

How to Recycle Paper Properly

Now that you understand how paper gets made into new paper, you need to know how you as a consumer can recycle properly. For example, you might occasionally find yourself with a type of paper you're unsure what to do with. In those situations, understanding some basic paper terms – for different kinds of paper and different kinds of recycling – can help you put the right materials in the right bin.

Paper Grades – There are five basic paper grade categories, according to the [EPA](#). While these terms may be most useful to paper mills looking to process certain kinds of paper, you may hear these terms once in a while, and it's possible you'll need to be able to distinguish between them.

- Old Corrugated Containers – You might know this as “corrugated cardboard.” It's most often found in boxes and product packaging.
- Mixed Paper – This is a broad category of paper that includes things like mail, catalogs, phone books and magazines.

- **Old Newspapers** – This one is pretty self-explanatory. Mills use newspapers, a lower grade paper, to make more newsprint, tissue and other products.
- **High Grade Deinked Paper** – This quality paper consists of things like envelopes, copy paper and letterhead that has gone through the printing process and had the ink removed.
- **Pulp Substitutes** – This paper is usually discarded scraps from mills, and you probably won't have to worry about running into it, though it may find its way into products you buy.

Collection – As a consumer, you will need to know whether paper can go in your curbside recycling bin, and if so, whether it needs to be separated.

- **Single-Stream** – This type of collection allows you to put all recyclables like glass, plastic and paper in one container. Single-stream collection makes the process easy for those who wish to recycle and it requires fewer trucks for collection.
- **Sorted-Stream** – This type of collection requires residents to separate certain kinds of recyclables. You may be asked to put all mixed paper in one container or to separate paper waste more specifically. If you have sorted-stream recycling, check local regulations before throwing paper in the recycling bin.

Paper Recycling Challenges

Once you know what kind of paper recycling is available to you and which types of paper are recyclable, you might still have some questions about paper recycling. Here are a few common items that cause confusion:

Shredded Paper – Ever wondered whether shredded paper can be recycled? The answer is [yes](#), though you may encounter some restrictions regarding the [size](#) of the shredded pieces and the way the paper is contained. Check with your local recycling program for specific information.

Staples & Paper Clips – Believe it or not, equipment at paper mills that recycle recovered paper is designed to [remove](#) things like staples and paper clips, so you don't need to remove them before recycling. It is probably in your best interest to remove paper clips, though, so they can be reused.

Sticky Notes – If your local recycling program accepts mixed paper, it will most likely [accept sticky notes](#). Paper mills that process mixed paper are able to remove adhesives. To be on the safe side, check with your local program to make sure sticky notes aren't a problem.



You do not need to remove paper clips and staples before recycling paper. Photo: [kimberly](#)

The amount of paper recovered for recycling in 2011 averaged 338 pounds for each man, woman and child in the U.S., according to the [American Forest & Paper Association](#) (AF&PA). By understanding how the process works and what you can do to ensure recyclable paper doesn't end up in a landfill, you can help keep this number high.

For more information about recycling your own paper at home, check out: [Simple Steps to Recycle Your Own Paper](#).

Learn More

- For more information about recycling your own paper at home, check out: [Simple Steps to Recycle Your Own Paper](#).
- To learn about how to start paper recycling programs at work, school or in your community, read: [3 Places You Should Always Recycle Paper](#).

Editor's Note: This article was originally published on March 19, 2013. It was updated on July 1, 2016 with new information and updated links.
