



SimplyGreen

Straight talk on sustainability.

Paper Recycling and Recycled Content Products

Verso Paper Corp.'s Position

Verso Paper Corp. supports the use of recycled paper because we believe that recovered fiber is a valuable resource that can supplement virgin fiber. We make recycled content products available in most of the paper grades we manufacture because they help support our customers' environmental goals. However, using increasingly higher percentages of recovered fiber to produce recycled-content paper is not always the best environmental alternative. A complete lifecycle analysis is needed to make a truly valid comparison of the environmental benefits of recycled versus virgin paper.

Background

Some 56 percent of all paper manufactured in the United States is recovered for recycling according to the most recent statistics released by the American Forest & Paper Association, and all of that paper is re-used. It is estimated that an additional 40 percent of post-consumer fiber (paper products where the end-user is a consumer) in the United States is food-contact, tissue or sanitary products that cannot be recycled or it is in rural, low-density population areas that makes recovery too costly or energy-demanding. The latter is the reason that paper recycling rates are higher in Europe than in the United States. Europe's dense population centers are much closer to each other, making paper recovery much more energy-efficient and less expensive. In the United States, the issues associated with food contact, tissue and sanitary products are unlikely to be resolved, but the paper industry continues to look for new and innovative ways to recover more paper from rural areas in cost-effective, energy efficient ways. Currently, nearly 37 percent of paper recovered in the United States is bought by manufacturers and shipped offshore to countries such as China. Rather than being faced with a surplus of recovered fiber, U.S. manufacturers are faced with a market where sources of quality fiber for recycling are limited.

Environmental Benefits of Recycling

Contrary to popular belief, the key environmental benefit of recycling is not saving trees, which are among the few truly renewable resources on earth, but in diverting as much usable paper from landfills as possible. By diverting usable fiber from landfills, we not only extend the useful life of a valuable raw material, but also reduce greenhouse gas emissions (methane) that result when landfilled paper products degrade over time.

The ultimate goal of paper recycling should be to increase fiber recovery to the maximum possible in the United States, and then to re-use all fiber that is recovered. Many believe the best way to accomplish this goal is to mandate increasingly higher levels of post-consumer content across all grades of paper. The assumption is that if a certain amount of recycled content is good, then a higher percentage of recycled content must always be better. A number of environmental "paper calculators" have been developed to compare the environmental benefits of recycled content papers with those of paper made with virgin fiber, and these can be valuable tools. However, they do not adequately reflect the fact that as increasingly higher percentages of recycled content are used, the resulting environmental benefits diminish significantly, especially for whiter, more highly processed paper grades such as coated magazine and catalog

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papers. To make a valid comparison, a thorough lifecycle analysis must consider the differences, especially in greenhouse gas emissions and solid waste that result from collecting, transporting, cleaning and processing post-consumer fiber versus virgin fiber.

Greenhouse Gas Emissions

- The vehicles used to collect widely-dispersed post-consumer waste and deliver it to recycling mills travel far greater distances, burn much more fossil fuel and emit more greenhouse gases than equipment used to harvest and deliver trees from working forests that are in much closer proximity to virgin paper mills.
- In a tight market where over 36 percent of recovered paper is shipped offshore, it becomes increasingly difficult for a coated paper mill to find the very clean, high-quality recovered fiber required to manufacture products such as magazines and catalogs. In today's market, a coated paper mill that uses increasingly higher percentages of post-consumer fiber must go greater distances to find high quality recovered paper, resulting in even more fossil fuel use/greenhouse gas emissions to ship recovered fiber longer distances back to the mill.
- Even though manufacturing virgin paper requires more energy than recycled-content paper, it relies heavily on greenhouse gas-neutral biofuels while most of the energy used to produce recycled content papers comes from fossil fuels that result in higher greenhouse gas emissions.

Solid Waste

- The recycling process generates far more solid waste (from inks, fillers, degraded fiber and contaminants) than the virgin process, which uses most tree mass and recycles more than 95 percent of its pulping chemicals.
- Yield loss is much greater per ton of recycled paper. In a typical white paper recycling plant, as much as half of a given ton of recovered fiber may be lost in screening, cleaning, de-inking and re-pulping, and that lost fiber becomes solid waste. In the virgin process, little of the tree goes unused or becomes solid waste.
- In today's market, as a coated paper mill uses increasingly higher percentages of recovered post-consumer fiber, that mill will certainly have to use larger quantities of lower-quality fiber containing elevated levels of contaminants. The higher the level of contamination, the more chemical and solid waste is generated to process this fiber back in to usable pulp.

Using recycled content in magazines and catalogs diverts valuable recovered fiber from uses in other paper products -- such as corrugated boxes and brown paper bags -- where solid waste and energy consumption for cleaning and processing the fiber are less.

Encouraging Fiber Recovery and Recycling

Verso encourages post-consumer fiber recovery and recycling through a variety of partnerships with interested stakeholders.

ReMix – Recycling Magazines is Excellent!

Through our partnership with Time Inc. and the National Recycling Coalition, Verso helped establish *ReMix – Recycling Magazines is Excellent!* – a public education campaign to raise awareness that magazines and catalogs can be recycled with other paper products in residential recycling programs. The program exemplifies Verso's commitment to work with customers and other important stakeholders to promote environmental sustainability.



According to the U.S. Environmental Protection Agency, about 2 million tons of magazines are produced each year in the United States, but only about 32 percent are recycled. Research shows that Americans support recycling but are often uncertain

about what can be recycled. *ReMix* is designed to let them know that magazines and catalogs can be recycled right along with their newspapers.

ReMix has already been launched and shown positive results in five municipalities: New York City; Boston; Milwaukee, Portland, Ore.; and Prince George's County, Md. The *ReMix* partners plan to launch the program nationally in 2009.

Industry-sponsored Programs

In addition to leading the charge for magazine and catalog recycling through *ReMix*, Verso supports the efforts of the Direct Marketing Association (DMA) and Magazine Publishers of America (MPA) to promote recycling. The DMA's *Recycle Please* initiative encourages consumers to recycle catalogs and mixed paper. In the summer of 2007, DMA member companies, which represent many of the country's leading brands, began adding *Recycle Please* logos to their catalogs and direct mail pieces. The logo directs consumers to the association's Web site, www.recycleplease.org, where they can find information, helpful tips and resources on recycling.



The MPA's *Please Recycle This Magazine* public education campaign lets readers know that magazines can and should be recycled. The centerpiece of the campaign is a pair of *Please Recycle* logos that MPA will be working with its members to prominently display in every issue of their magazines. The key objective of both the DMA and MPA campaigns is to increase public awareness that magazines, catalogs and direct mail can be recycled in the vast majority of communities in the United States and, thereby, increase the percentage of used magazines that are recycled.



For more information on recycling and recycled products or other sustainability issues, please call Verso's Office of Sustainability at 901-369-4154.

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