

Truth in Paper

MYTHS VS. FACTS

For the past 2000 years, paper has established itself as an incredibly effective and versatile means of communication. Despite computers, cell phones, the internet and other electronic devices, paper has demonstrated its value time and time again. Paper is portable, secure, consistent and permanent. But perhaps most of all – paper is extremely effective.

Recently, however, paper has been the target of negative and often misinformed environmental criticism, and therefore its benefits are sometimes overshadowed by misleading environmental claims — those of deforestation, excessive energy consumption, and crowded landfill sites.

Today's paper is renewable, recyclable and even responsible. Domtar has a good story to tell about environmental responsibility in the industry.

MYTH: MAKING PAPER DESTROYS FORESTS.

FACT: NO, IN FACT THE OPPOSITE IS TRUE.

Paper is made from cellulose fiber, which generally comes from trees, but this doesn't automatically equate to the destruction of forests. Companies like Domtar source their primary raw material from the forest, therefore it is in their best interest to ensure sustainability for the company's long-term survival.

The concept of managed forests means that for every tree harvested, several more are planted in their place. In fact, according to *The State of America's Forests*, a report released by the Society of American Foresters, four million trees are planted every day. Of this amount, the wood and paper products industry plants 1.7 million.¹ Increasing demand for forest products has provided powerful incentive for private landowners to reforest their harvest.

This study also found that replanting and reforestation efforts have helped keep forestland stable. There are nearly 750 million acres of forests in the U.S. —about the same as 100 years ago. Annual net growth of U.S. forests is 36 percent higher than the volume of annual tree removals.

“When people use more paper, suppliers plant more trees. If we want bigger commercial forests, then we should use more paper not less. Our policies should directly protect important wildlife habitats, not try to reduce our demand for paper.”

Edward L. Glaeser,
Professor of Economics at Harvard University
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¹ Sustainable Forestry Initiative® Program

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MYTHS VS. FACTS

MYTH: PAPER IS BAD FOR THE ENVIRONMENT.

FACT: NO, PAPER IS ONE OF THE FEW TRULY SUSTAINABLE PRODUCTS.

For every tree that is harvested in a managed forest, several more are replanted. And as young trees grow, they absorb CO₂ from the atmosphere. Furthermore, as a wood-based product, paper also continues to store carbon throughout its lifetime.

There are a number of credible and independent certification systems ensuring that paper certified under them comes from a responsibly managed forest source. All Domtar forests and facilities are certified under either the Forest Stewardship Council (FSC), Sustainable Forestry Initiative® (SFI) or the Canadian Standards Association (CSA).

Certification of sustainable forest management continues to increase every year. The three major U.S. certification systems (SFI, FSC and American Tree Farm System) together certify more than 107 million acres, representing 14 percent of total U.S. forests. Some 25 percent of private US forestland is now certified.

Sustainable forest management is contributing to carbon sequestration and storage. In the United States, the total carbon sequestered by forests and the creation of wood products during the 1990s reached almost 200 megatons per year – around 10 percent of U.S. emissions of carbon dioxide from burning fuels.

Planting new trees can significantly help to combat global warming. According to the Society of American Foresters, for every ton of wood a forest produces, it removes 1.47 tons of CO₂ from the air and replaces it with 1.07 tons of oxygen.

MYTH: MAKING PAPER CONSUMES A LOT OF ENERGY AND FOSSIL FUELS.

FACT: NOT REALLY.

Making paper the first time around does require a lot of energy, as is the case with other transformation industries, such as making aluminum from bauxite, or steel from iron ore. However, over the past several decades, the pulp and paper industry has made an impressive commitment to fuel efficiency and independence. Companies have invested significantly in their infrastructures in order to increase their efficiency and replace fossil fuels with alternative energy sources, such as spent cooking liquor from its pulping processes and biomass (bark and other wood wastes). This effort has helped to conserve non-renewable resources while reducing harmful emissions.

In fact, the forest products industry leads all other manufacturing sectors in onsite electricity generation, meeting more than half of its own energy needs. At many mills, self-generated electricity goes beyond serving onsite production needs by providing supplemental electricity to the surrounding electric power grid.²

In 2008, Domtar's used an average of 77% renewable energy at its mill operations. By making paper using more renewable energy, and less energy overall, Domtar's mills will also use less water in their processes and less fossil fuels, while better utilizing precious wood fiber.

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MYTHS VS. FACTS

MYTH: PAPER HAS A HIGH CARBON FOOTPRINT.

FACT: IT'S NOT AS HIGH AS YOU THINK!

Definition - A Carbon Footprint is a measure of the impact that human activities have on the environment in terms of the amount of CO₂ and other greenhouse gases released into the atmosphere, that have arisen through the manufacture and distribution of a product or service.

Burning fossil fuels, such as natural gas, oil and coal, is a major source of greenhouse gas (GHG) emissions. The pulp and paper industry largely utilizes renewable energy sources that are considered carbon neutral to generate steam. This means that the CO₂ emitted from their combustion is organic in origin, and as such, is viewed as neutral in terms of climate change contribution.

Sustainably managed forests are approximately carbon neutral. They form a mosaic across the landscape in which the growth of trees over a large area will compensate for the carbon lost through annual logging of a much smaller area.³

MYTH: RECYCLED PAPER IS ALWAYS BETTER FOR THE ENVIRONMENT THAN VIRGIN PAPER.

FACT: NOT NECESSARILY.

Virgin fiber harvested using recognized third-party certified sustainable forestry practices is as environmentally sound as the use of recycled fiber.

While recycled paper does reduce waste paper going to landfill, paper's full life cycle must be considered – not just the fiber source. Domtar favors the use of Life Cycle Management concepts to determine where and when it is appropriate to use recycled fiber in the papermaking process.

Recent peer-reviewed Life Cycle Management studies have demonstrated that the environmental benefits of recycled fiber in the production of business papers can vary greatly depending on the source of the paper being recycled, its prior destination (landfill or another use), and the facility where it is being recycled into new paper (trucking distances and the facilities' impact on climate change).

There are intrinsic limitations to the use of recycled fiber that make the need for virgin fiber inevitable. These include the loss of yield and strength during the repulping and deinking processes, as well as increased yield loss as the fiber is recycled again and again. Generally, fiber can be recycled no more than five to seven times.

Both recycled and virgin fiber have their purpose and justification. The paper industry can use all of the recycled fiber available. But the recycled paper industry also depends on virgin fiber. We're all part of the same cycle.

³ World Resources Institute www.sustainableforestprods.org

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MYTHS VS. FACTS

MYTH: PAPER CONTRIBUTES SIGNIFICANTLY TO LANDFILL.

FACT: PAPER IS THE MOST RECYCLED PRODUCT, COMPARED TO METAL, GLASS AND PLASTIC, AND IS ALSO BIODEGRADABLE.

Thanks to industry leadership and the tireless efforts of the millions of Americans who recycle paper at home, work, and school every day, paper recovery has reached record levels. In 2007, 56 percent of the paper consumed in the U.S. was recovered for recycling. This impressive figure equals nearly 360 pounds for each man, woman, and child in America. Since 1990, when the paper industry established its first recovery goal to advance recycling in the United States, paper recovery has grown by more than 85 percent.⁴ Comparatively, the recovery rate for metal is 36 percent; glass is 22 percent; and plastic is only 7 percent.⁵

The paper industry has set an aggressive new goal to recover 60 percent of the paper consumed in the U.S. by 2012. This represents a tremendous increase in recovery, as each percentage point represents nearly one million additional tons of recovered paper - enough to fill more than 14,000 railroad cars.



The NAPM (National Association of Paper Merchants) has launched an industry-wide initiative in the United Kingdom known as “Two-Sides” to dispel common environmental misconceptions surrounding print and paper while encouraging its responsible use.

From Europe to North America, these issues are relevant to all of us that use paper daily to communicate with one another, transact business, express ourselves and confirm information.

These paper myths and facts have been adapted from their materials. For more information about the initiative, please visit www.twosides.info