Print and Paper have been the preferred communication medium for more than 2,000 years, serving as a catalyst for learning, creativity and commercial enterprise. But as awareness and interest in environmental issues have increased over the last couple of decades, so have misconceptions about the sustainability of Print Media.

Two Sides is committed to setting the record straight: Print and Paper have a great environmental story to tell! Using a straightforward, balanced approach, we address relevant environmental issues head on with factual, authoritative information that exposes the myths, explains the true sustainability of the Graphic Communications Supply Chain and gives stakeholders a solid foundation for making well-informed decisions about the use of Print and Paper.

‘Paper has been an integral part of our cultural development and is essential for modern life. Paper helps to increase levels of literacy and democracy worldwide and plays an important role in protecting goods and foodstuffs during transit. Paper is made from renewable resources, and responsibly produced and used paper has many advantages over other, nonrenewable alternative materials.’

*World Wildlife Fund, Guide to Buying Paper*
What a great sustainable idea

For sheer flexibility, style and touch, Print and Paper can be the natural and recyclable choice for sustainable and powerful communications.
TWO SIDES PROMOTES RESPONSIBLE, SUSTAINABLE BUSINESS PRACTICES THROUGHOUT THE ENTIRE GRAPHIC COMMUNICATIONS SUPPLY CHAIN.

From the forests where trees are grown, through manufacturing, printing and fulfillment processes, we’re engaging our industry’s diverse mix of businesses to help tell our sustainability story. Our message is simple, but powerful.

Print and Paper are renewable by nature:
- Made from a renewable resource (trees)
- Recyclable
- Have a great carbon story

From the forest to the recycling bin, responsible practices make Print and Paper a sustainable communications choice.

Both paper and electronic communications have an environmental footprint; reducing the impact of each is the right environmental choice.

Become a Two Sides Member
Two Sides membership demonstrates your organization’s commitment to sustainable business practices and provides you with a wealth of resources to more effectively communicate your commitment to customers, employees and other stakeholders.

You’ll also be part of our unified and growing global effort to dispel myths and misleading claims about the sustainability of Print and Paper and to promote the true sustainability of the Graphic Communications Supply Chain.

To join, please visit www.twosides.us/general-subscription

Print and Paper have a great environmental story to tell

www.twosides.us
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THE MYTH: MAKING PAPER Destroys Forests.

THE FACT: Paper production supports sustainable forest management.
The U.S. paper industry promotes sustainable forestry and depends on sustainable forest growth to provide a reliable supply of wood fiber.

Paper manufacturers do this by encouraging forest sustainability through their purchase and use of certified wood fiber and by promoting sustainable forest management policies and practices at home and around the globe. By providing a dependable market for responsibly grown fiber, the paper industry encourages landowners to continue managing their forestland instead of selling it for development or other non-forest uses.

- In the United States, we grow more trees than we harvest. The amount of U.S. forestland has remained essentially the same for the last 100 years at about 750 million acres, even though the U.S. population tripled during the same period.¹
- The income landowners receive for trees grown on their land encourages them to maintain, renew and manage this valuable resource sustainably. This is an especially important consideration in places facing economic pressures to convert forestland to non-forest uses.²
- While total forestland area in the U.S. has been relatively stable over the last century, a net loss of 20 million acres (2.7%) is projected between 2000 and 2050. Most of that loss will be caused by development.³

‘Sustainable forest management is commonly viewed as one of the most important contributions that the forestry sector can make to sustainable development.’

United Nations Food and Agriculture Organization
THE MYTH: MAKING PAPER IS BAD FOR THE ENVIRONMENT.

THE FACT: PAPER IS ONE OF THE FEW TRULY SUSTAINABLE PRODUCTS.
These features, combined with the U.S. paper industry’s advocacy of responsible forestry practices and certification, use of renewable, carbon-neutral biofuels and advances in efficient papermaking technology, make paper one of the most sustainable products on earth.

- Because forest products (including paper) can require little or no fossil fuels for production and store carbon throughout their useful life, they can have inherent climate change advantages over all other materials with which they compete, provided they are produced in a sustainable manner.\(^4\)

- Forest management certification is evolving rapidly in the United States. Forest management certification arose as a non-regulatory alternative for fostering the improved stewardship of working forestlands. While there are many regulations governing forest management — particularly in the United States — certification provides a private incentive to encourage landowner commitment to sustainable forest management. It also offers a stamp of approval for forest management practices that meet standards considered to be environmentally appropriate, socially beneficial, and economically viable.\(^5\)

- Paper is made from renewable resources, and responsibly produced and used paper has many advantages over other, nonrenewable alternative materials.\(^6\)

‘Paper is recyclable and in the United States, paper is recycled more than any other commodity in the municipal solid waste stream, including plastics, glass and metals.’

U.S. Environmental Protection Agency

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Get the full Fact Sheet in the Myths and Facts section of the Two Sides website [www.twosides.us](http://www.twosides.us)
THE MYTH: MAKING PAPER CONSUMES A LOT OF ENERGY.

THE FACT: YES, BUT MOST OF IT IS RENEWABLE ENERGY.
NEARLY TWO-THIRDS OF THE ENERGY USED BY U.S. PULP AND PAPER MILLS IS SELF-GENERATED USING RENEWABLE CARBON-NEUTRAL BIOMASS.

The U.S. forest products industry far exceeds all other industries in the use of renewable biomass energy and is a leader in cogenerating electricity [Cogeneration recycles exhaust steam for use as manufacturing process heat or space heating]. In 2005, the forest products industry produced more than four-fifths of the total biomass energy generated by all U.S. industrial sectors.7

- The Print and Paper industry accounts for only 1.1% of global carbon dioxide emissions.8
- U.S. pulp and paper mills are largely energy self-sufficient, and some mills supply excess energy to the electric utility grid. Since 1990, total energy use per ton of production at U.S. pulp and paper mills has been reduced by 8.2%, and purchased energy and fossil fuel use per ton of production was reduced 26%.9

‘Burning fossil fuels releases [new] carbon dioxide that has been locked up for millions of years. By contrast, burning biomass simply returns to the atmosphere the carbon dioxide that was absorbed as the trees grew and there is no net release of carbon dioxide if the cycle of growth and harvest is sustained.’

International Energy Agency (IEA)
THE MYTH: PAPER HAS A HIGH CARBON FOOTPRINT.

THE FACT: IT’S NOT AS HIGH AS YOU THINK.
A look across this entire life cycle shows that paper’s carbon footprint can be divided into three basic elements: greenhouse gas emissions, carbon sequestration and avoided emissions. Each of these elements is influenced by important characteristics that make paper’s carbon footprint smaller than might be expected: it’s made from a renewable resource that stores carbon, it’s manufactured using mostly renewable energy and it’s recyclable.

- Because forest products can require little or no fossil fuels for production and store carbon throughout their useful life, they can have inherent climate change advantages over all other materials with which they compete, provided they are produced in a sustainable manner. Indeed, under sustainable practices, the forest products industry is one of the least carbon-intensive manufacturing sectors.¹¹

- The paper industry burns large quantities of biomass fuels, but the CO₂ released from biomass combustion is not included in greenhouse gas totals because it contains biogenic carbon [produced from living or recently living sources] that is part of a natural cycle. It is for this reason that biomass-derived CO₂ is called “carbon neutral.”¹⁰


Carbon footprint is defined as the amount of carbon dioxide (CO₂) and other greenhouse gases that a person, organization, event or product causes to be released to the atmosphere, either directly or indirectly, during its life.
THE MYTH: HARVESTING TREES TO MAKE PAPER IS BAD.

THE FACT: SUSTAINABLE FOREST MANAGEMENT BENEFITS PEOPLE AND THE PLANET.
The wood fibers in paper can be recycled only about five times before they get too weak and break down. That’s why we need fresh fiber harvested from responsibly managed forests, too. Using fresh fiber creates a sustainable cycle of high-quality recyclable material to continually replenish recycled fiber. And the paper industry’s perpetual use of trees discourages the selloff of land for development, encourages sustainable forestry practices and supports hundreds of thousands of U.S. jobs.

- Without fresh wood, the production of paper ceases within six to 18 months depending on the paper grade. \(^{12}\)
- Where profitable, timber management and the revenues it generates can serve as a hedge against the conversion of forest land to other uses such as real estate development, although the extent to which it can actually do so in the face of rapid increases in land values close to urban areas will vary. \(^{13}\)
- The U.S. mailing industry provides 8.7 million jobs and $1.1 trillion in sales revenue. The production, distribution and handling of mail (including paper and printing) accounts for over 2 million jobs and over $260 billion in sales revenues. \(^{14}\)

‘To make the global fiber cycle work, a continual input of 35% to 65% of fresh wood fiber is needed depending on the grade of paper manufactured.’

Metafore (now GreenBlue)
THE MYTH:
PRINT AND PAPER IS A WASTEFUL PRODUCT.

THE FACT:
PAPER IS ONE OF THE MOST RECYCLED PRODUCTS IN THE WORLD.
In 2010, nearly 51 million tons or 63.5 percent of the paper used in the U.S. was recovered for recycling, an 89 percent increase in the recovery rate since 1990. That's about 334 pounds for every adult and child in the country.\(^\text{15}\)

- Each percentage point of paper recovery represents roughly 800,000 tons of fiber, enough to fill more than 7,500 railroad cars.\(^\text{16}\)

- In the United States, more paper products are recovered for recycling than any other material, including plastics (7.1%), glass (25.5%) and metals (7.1%).\(^\text{17}\)

Get the full Fact Sheet in the Myths and Facts section of the Two Sides website www.twosides.us
THE MYTH: ELECTRONIC COMMUNICATION IS MORE ENVIRONMENTALLY FRIENDLY THAN PRINT AND PAPER.

THE FACT: NOT NECESSARILY. E-MEDIA ALSO HAS ENVIRONMENTAL IMPACTS.
“GO PAPERLESS”, “GO GREEN” AND “SAVE TREES” ARE COMMON THEMES THESE DAYS AS MANY CORPORATIONS AND GOVERNMENTS ENCOURAGE THEIR CUSTOMERS AND EMPLOYEES TO SWITCH TO ELECTRONIC TRANSACTIONS OR COMMUNICATIONS.

But are appeals to help the environment by eliminating paper based on sound science or on marketing strategies aimed at cost cutting?

- Organizations that truly want to make responsible environmental choices should do so based on factual, verifiable information that takes into account every stage in the life of a product, not just a single characteristic. Rather than asking which is better, paper or electronic communication, we should use this life cycle thinking to figure out which combination of the two has the least impact on the environment while best meeting social and economic needs.

- The direct impact of ICT [electronic] products and services replacing paper is far from negligible, and the trade-off between the two “technologies” depends on conditions such as use frequency, source of energy, end-of-life management of the products, etc.18

- With a reading time of 30 minutes per day the environmental impact of a web based newspaper is, in general, in the same range as a printed newspaper’s environmental impact.19

- When billers consider the investment necessary to achieve their e-bill penetration potential and returns, they have primarily focused on cost savings. Across industries, billers can expect to save money by digitizing paper billing processes and formats, which include the cost of paper, postage, labor and equipment.20

Get the full Fact Sheet in the Myths and Facts section of the Two Sides website www.twosides.us

‘To adequately substantiate environmental marketing claims, marketers will need competent and reliable scientific evidence.’

U.S. Federal Trade Commission
Two Sides Principles

- We seek to minimize and reduce the environmental impact of our business activities and contribute to sustainable development.
- We conduct our businesses in an environmentally and socially responsible manner.
- We support and encourage forest certification schemes as well as the practical use of recycled fiber in suitable products.
- We employ procedures aimed at ensuring the purchase of raw materials from sustainably managed sources.
- We measure and manage our environmental footprint to eliminate or minimize negative environmental impacts.
- We support the implementation of effective recycling schemes and the minimization – and eventual elimination – of print and paper waste in landfills.
- We strive to improve the sustainability of our business operations by measuring and minimizing our waste and our use of water and energy.

‘Forestry, paper and packaging are among the most sustainable industries in existence.’

CEO Perspectives 2008, PricewaterhouseCoopers
Visit the Two Sides website at [www.twosides.us](http://www.twosides.us) for complete citations with links to sources and additional facts.

Two Sides members strongly support:
- Responsible Production
- Responsible Print and Design
- Responsible Consumption
- Recycling and responsible disposal

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**SOURCES**
(to access these reports and studies go to [www.twosides.us](http://www.twosides.us))

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