

DOWN TO EARTH

A practical look at environmental issues and trends



In this issue:

HOW BIG IS **YOUR** CARBON FOOTPRINT?

CLIMATE CHANGE IS ON EVERYBODY'S MIND THESE DAYS. GREENHOUSE GASES, ESPECIALLY CARBON DIOXIDE (CO₂), ARE THOUGHT TO BE A SIGNIFICANT CAUSE. FORTUNATELY, RESPONSIBLE INDIVIDUALS AND COMPANIES ARE WORKING TO REDUCE EMISSIONS AND THEIR CARBON FOOTPRINT. **HOW ABOUT YOU?**



Carbon is contained in CO₂, a greenhouse gas. Your carbon footprint, put simply, is the amount of CO₂ your activities generate.

You may wonder how your use of paper and wood products affects your overall carbon footprint. This *Down to Earth* edition looks at how you can help reduce CO₂ in our atmosphere by making informed product choices, knowing how the earth's carbon cycle works, and understanding how forest products fit into the natural cycle.

The Carbon Cycle

There is a fixed amount of carbon on earth. But it is constantly moving in a variety of forms in a series of exchanges. For example, when a tree conducts photosynthesis, it absorbs CO₂ from the air. When a tree dies and decays, carbon is transferred from the forest to the soil and eventually to the air as CO₂. When a factory uses energy to make goods, it emits carbon into the atmosphere. There are many such exchanges between the earth and the atmosphere, between the atmosphere and the ocean, and so on.

How do humans affect the carbon cycle? Our activities redistribute carbon and, in the case of greenhouse gases, can affect nature's balance. Fortunately, we can reduce our impact on the natural carbon cycle by making smart choices.

Steps to Reducing Our Footprint

To reduce our carbon footprint globally, we must **reduce emissions**, both direct and indirect, **promote carbon storage or sequestration**, and when possible, **avoid emissions** altogether.

REDUCE EMISSIONS

For you as an individual, direct emissions can come from sources like your car or your lawnmower. Indirect emissions can come from the power plant that produces the electricity you use in your home or from the methane produced by uncontrolled landfills that contain the products you discard.

Similarly, companies produce both direct and indirect emissions. A company's manufacturing processes create direct emissions. The power it buys from the utility company creates indirect emissions, as do the transportation services of the trucking company it hires.

Like any other industry, the forest products industry creates both direct and indirect emissions. However, companies are finding ways to be more efficient and create less waste. For example, they are using combined heat and power (CHP) technology that reduces CO₂ emissions by generating heat and power from a single fuel source.

Even better, 70% of the energy used by IP's U.S. mills is derived from waste materials from trees. This is called biomass energy. Emissions generated are not counted as sources of greenhouse gas emissions because they come from renewable energy sources and are carbon-neutral. **This means that the carbon removed from the atmosphere by tree growth is equal to the carbon released during energy production.**

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When you buy products from companies that are actively reducing their carbon footprint through use of carbon-neutral fuels, recycling, and energy conservation, you are reducing your own impact.

SEQUESTER MORE CARBON

Carbon is stored everywhere. Forests are a store of carbon. Our houses and items we use every day contain carbon. Since the amount of carbon in the world is a constant, when there is more carbon sequestered in long-term sinks such as these, there is less carbon going into our atmosphere.

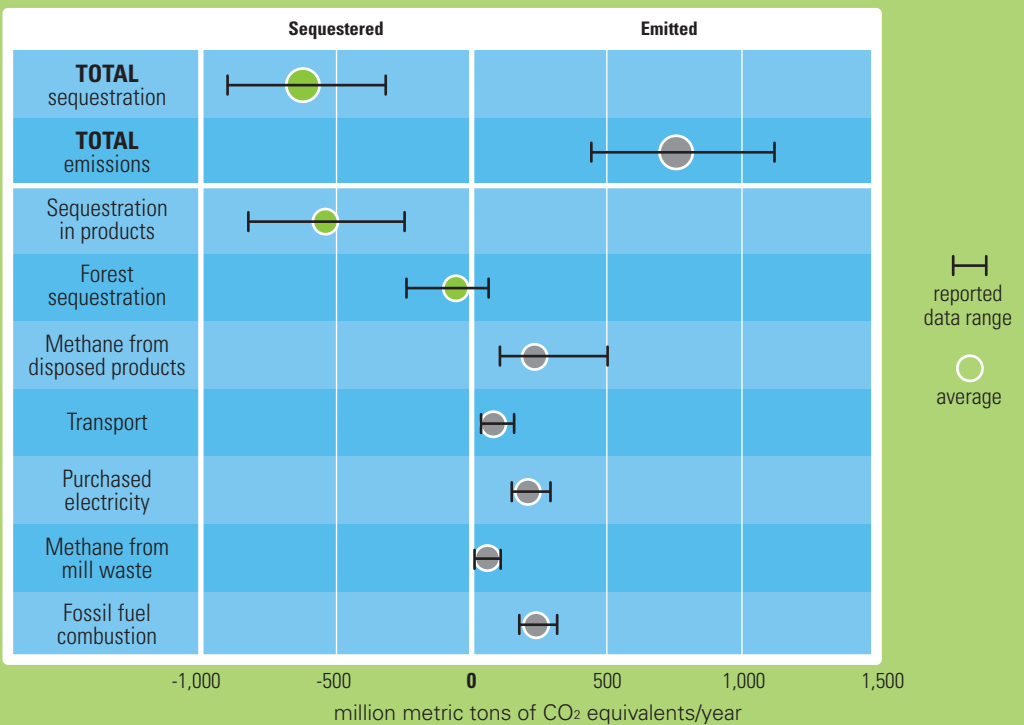
Forests

Forests provide both the materials and most of the energy needed to create paper and other forest products. Well-managed forests are a renewable resource that provides balance to the carbon cycle by capturing CO₂ from the air and sequestering the carbon. **In fact, an acre of young, healthy trees will produce 4,280 lbs. of oxygen and capture 5,880 lbs. of carbon dioxide** from the atmosphere each year.

EMISSIONS AND SEQUESTRATION

The forest industry's value chain emissions are mostly offset by sequestration in forests and forest products.

Source: Reid Miner, NCASI, "Using the Paper and Print Life Cycle to Understand Your Carbon Footprint."



Forest Products

The products created from forests, such as housing lumber and furniture, continue to store carbon during their useful lives. The total amount of sequestered carbon increases as we create more products for a growing population and meet rising standards of living worldwide.

DOWN TO EARTH INSIGHT

Sequestering carbon in well-managed forests and in the forest products you buy helps to offset emissions. This is essential in maintaining a balanced carbon cycle.

AVOID EMISSIONS ALTOGETHER

Last but not least, reducing our carbon footprint requires avoiding emissions whenever possible. **Here are some steps you can take:**

- Do business with companies like International Paper that use carbon-neutral fuels, create self-generated electricity, and utilize CHP technology.
- Substitute products that sequester carbon for those that do not.
- **Use paper and forest products to help keep land forested that might otherwise be subject to development or other non-sustainable uses.**
- Recycle paper, metal, plastic, and glass to reduce landfill methane emissions.

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We have real choices in our everyday lives that empower us to reduce our carbon footprint, from carpooling to reducing daily energy consumption at home. Together we can make a big difference.



WALKING IN EACH OTHER'S FOOTSTEPS

Your company depends on the products and services of other companies. The emissions they create then become a part of your company's overall carbon footprint. So it makes sense to seek out products and services from companies that are actively reducing their own footprints. Paper, because of the industry's stewardship of global forests, is in many ways a naturally "green" product. To make it more so, paper companies are working to reduce energy use, recover fiber for recycling, reduce waste, and decrease emissions across the board.

FIND OUT MORE

For more information about environmental responsibility, visit these websites:

ippaper.com/sustainability
sfiprogram.org
fsc.org
abundantforests.org

metafore.org
ncasi.org
epa.gov/climatechange/emissions

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Sources:

- NCASI, "Using the Paper and Print Life Cycle to Understand Your Carbon Footprint."
- "The Sustainable Forest Products Industry, Carbon and Climate Change."
- "The Greenhouse Gas and Carbon Profile of the Global Forest Products Industry."

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