



Biomass Carbon Neutrality

Position

As EPA continues to consider how to regulate biogenic CO₂ emissions, International Paper (IP) urges policymakers and the EPA to recognize our biomass use as carbon neutral. The efficient use of biomass residuals for energy produced and used by IP enables us to manufacture paper-based products people use every day while yielding significant carbon benefit.

Policy Request

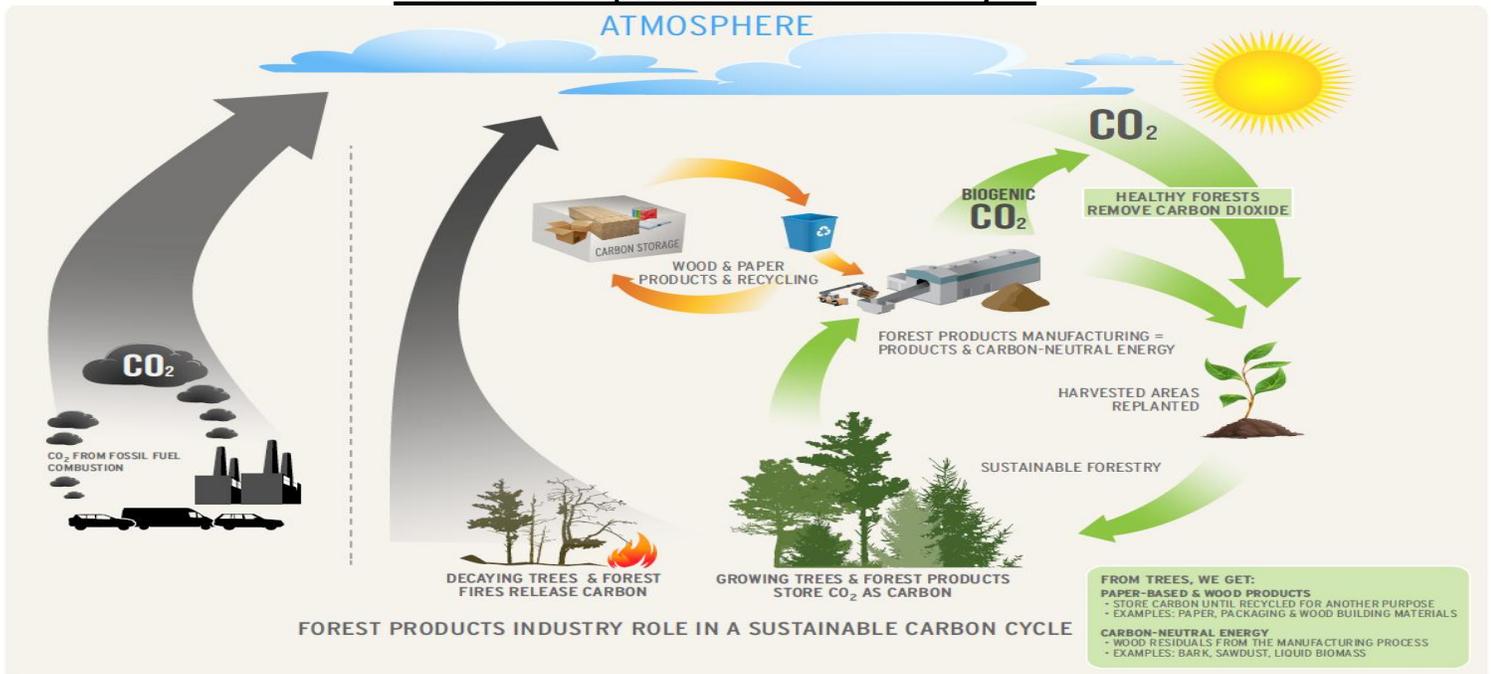
International Paper encourages the Senate and the House to support a potential biomass carbon amendment to the Interior Appropriations bill and potential year-end omnibus package

IP's Efficient Use of Carbon Neutral Biomass

Forest and manufacturing residuals are integral to manufacturing IP's products and our primary energy source. A study by the National Council for Air and Stream Improvement (NCASI) shows substantial benefits in using manufacturing residuals for energy by the forest products industry. The industry's use of biomass avoids the emissions of 218 million metric tons of CO₂ annually - equivalent to removing over 40 million cars from the road. By procuring wood from suppliers who certify their forest sustainability, IP voluntarily contributes to a successful market-based system of biomass use in the U.S. that perpetuates positive carbon benefits and co-benefits including:

- Efficient use of forest and manufacturing residuals through combined heat-and-power (CHP)
- Reduction of fossil fuel and related GHG emissions at IP – down 16% since 2010
- Limiting emissions of other GHGs, like methane, that could occur from residue disposal
- Robust recycling of paper fiber to reuse valuable biomass resources
- Employment of 32,000 people throughout the United States

International Paper's Role in the Carbon Cycle





How Does the EPA View Biomass Carbon Neutrality?

The carbon neutrality of biomass that is harvested from sustainably managed forests has been recognized repeatedly by numerous studies, agencies, institutions, legislation and rules around the world. As trees grow CO₂ is removed from the atmosphere via photosynthesis, converted into organic carbon and stored in biomass. To complete the carbon cycle, trees release the stored carbon when they die, decay or are combusted for energy. Carbon in biomass returns to the atmosphere whether it is burned for energy, allowed to biodegrade or consumed by forest fire.

The EPA has been examining how to regulate biogenic carbon for years. In 2011, EPA under the Clean Air Act's New Source Review program proposed regulating biogenic emissions by 2014. EPA proposed an Accounting Framework for Biogenic CO₂ Emissions and submitted it to its Science Advisory Board (SAB) for peer review. EPA considered the SAB recommendations, District Court mandates, NCASI life cycle assessments and public input before releasing an updated Framework and policy memorandum on biogenic emissions in November 2014. The Framework and memo contained positive language on the carbon neutrality of industrial byproducts and waste-derived feedstocks.

However, later EPA language on biomass related to the Clean Power Plan has led to uncertainty. Recently, EPA has engaged a broader spectrum of biomass stakeholders at a workshop which showed there are pathways to pragmatic solutions. Additional clarity on how EPA intends to handle biomass carbon would provide needed certainty for those who use biomass for energy.

Biomass Carbon Neutrality and the Impact to IP

International Paper currently generates about 70% of the energy at our mills from renewable carbon neutral biomass. While manufacturing needed paper-based products, IP alone produces 160 trillion BTUs of thermal energy annually and generates 7.1 million MW-hours of electricity in the US from biomass. That's enough thermal energy to heat a Midwestern city of more than 1.4 million for a year and about enough electricity from biomass to power Rhode Island for a year.

In the short term, an adverse regulatory decision could produce an unwieldy and costly forest carbon accounting process which would significantly complicate the wood fiber supply chain and/or discourage the longstanding practices of producing energy from biomass residuals in the forest products industry. A complex permitting process could also impede biomass-related energy projects at our mills.

Additionally, if a carbon tax is eventually implemented in the U.S. without recognizing carbon neutrality for our use of biomass, it would undermine the global competitiveness of U.S. forest products companies like IP. For instance, without a distinction between fossil and biogenic carbon emissions, a \$10/ton carbon price as instituted under the California cap and trade program could increase IP cost by \$400 million annually; a \$50/ton carbon price could increase IP cost by \$2 billion annually. An adverse EPA policy could lead to leakage - by creating a competitive advantage for overseas competitors where biomass has a more favorable carbon treatment, leaving U.S. forest products manufacturers at a significant disadvantage.