

Unlikely Coalition Moves Forest Management into Carbon Spotlight

This February, the Forest-Climate Working Group (FCWG) called for Congress to recognize the value of private, well-managed forests in efforts to address climate change.

The Wilderness Society, Defenders of Wildlife, American Forest and Paper Association, California Forestry Association, and others sent a strong and unified message that while our forests sequester millions of tons of carbon today, they have the potential to do much more.

Forests Central to Federal Policy

A group this diverse has never agreed on an issue so critical to our nation's forestlands. The FCWG asked Congress to include private working forests as a central part of federal climate change policy, noting that forests and forest products can provide an immediate and cost-effective way to reduce carbon emissions.

The consensus call to provide incentives for forestland owners to sequester more carbon represents a dramatic leap forward. "It was too important not to agree on core principles," said Drue DeBerry, senior vice president of conservation for the American Forest Foundation.

"There was unanimous agreement on the urgency of stepping up forests' capacity to remove carbon emissions from the air."

Key Points of Discussions

Sustainable forest management on private forestlands provides at least five levels of climate benefit. Each could be leveraged to a greater extent, though doing so may not be economically feasible.

First, forest management creates ideal growing conditions and accelerates the rate at which trees sequester carbon. As they grow, trees absorb carbon dioxide from the atmosphere and, through photosynthesis, store carbon in wood fibers while releasing oxygen to the air. The faster trees grow, the better they clean the air, and the more carbon they store.

Second, when trees are harvested on private forestland, the carbon stored in their trunks becomes stored in wood products like lumber for homes. In carbon-market terms, the carbon is transferred from the "forest pool" to the "product pool" and is kept out of the atmosphere for decades or centuries. Harvesting also reduces fuel loads, which reduces wildfire severity and emissions from wildfire.

Third, clean energy. During harvest operations, small trees and branches can be chipped to be burned in power plants to produce clean renewable energy. Every kilowatt of power we can generate from forest biofuels reduces the need to burn fossil fuels and lowers our carbon footprint.

Fourth, replanting harvested lands continues forestry's carbon sequestration cycle. Young, fast-growing forests are perhaps the most efficient scrubbers of greenhouse gas on the planet.

These four aspects dominate most forest management-climate change discussions. Yet wood products provide a fifth, often overlooked benefit. Much like substituting clean energy for fossil fuel-based energy reduces emissions, substituting wood products for fossil fuel-intensive building materials like steel or concrete also reduces emissions.



Wood Versus Steel & Cement

Life Cycle Assessment (LCA), the most rigorous scientific methodology applied to the selection of building materials or assemblies, has shown that using wood rather than steel or concrete saves energy and reduces carbon emissions.

A study by the Consortium for Research on Renewable Industrial Materials (CORRIM) found that building with concrete takes up to 38 percent more energy and generates 80 percent more greenhouse gas emissions than building with wood. Using steel uses 18 percent more energy and generates up to 33 percent more global warming emissions.

Under scientific scrutiny, wood outperforms concrete and steel in every major environmental category, including air and water quality. And let's not forget wood is renewable.

So why is wood not embraced as quintessentially green? Why do some leading green rating systems favor steel and concrete over wood?

Perhaps it is because those rating systems choose to ignore LCA. Most well-known green building programs determine environmentally preferable products based on intuition more than data. The green building movement would benefit from rating systems that incorporate LCA and reflect a structure's true environmental impact.

Working Forests

The "working" aspect of working forests is critical to increasing carbon sequestration on private forestlands. The FCWG asserts that climate solutions must be economically viable for landowners and have environmental integrity to be successful. That means finding new revenue sources.

Carbon markets may become one such source. The protocols developed to support those markets, however, must recognize and provide credit for the carbon benefits of wood throughout wood's entire life. Early protocols have not provided sufficient incentive to convince forestland owners to sequester more carbon than they already do and trade offsets in cap-and-trade carbon markets.

Treating forest biofuels on par with other renewable energy sources also could create climate-enhancing opportunities. Forest biofuels are more efficient and reliable than solar or wind, but biofuels receive just half of the tax incentives. That should change.

The vigor with which the FCWG expressed its conviction and support for private working forestlands underscores the value of investing in forest management to restore forests, address climate change, and revitalize rural communities.

Bob Mion is communications director for the California Forestry Association. For more information on the FCWG policy platform, visit www.forestfoundation.org or www.tpl.org.