



Celebrating Nature's Energy Source

Map of the United States showing the locations of 45 study sites. The sites are marked with red dots and labeled with their names and states. The locations are distributed across all 48 contiguous states, with a higher density in the Northeast and Midwest. The map includes state boundaries and major water bodies. A legend in the bottom left corner indicates that the red dots represent study sites and that the map covers the United States and parts of Canada (Ontario).

State	Study Sites
Washington	Seattle, WA; Everett, WA; Redmond, WA; Cle Elum, WA
Oregon	Portland, OR; Lyons, OR
Idaho	Moscow, ID
Montana	Missoula, MT
North Dakota	Bismarck, ND
Minnesota	Walker, MN; Duluth, MN
Michigan	McBain, MI
Wisconsin	
Illinois	
Indiana	
Ohio	South Charleston, OH; Chillicothe, OH
Kentucky	Louisville, KY; Murray, KY
Tennessee	Oak Ridge, TN; Knoxville, TN
Alabama	Tuscaloosa, AL
Georgia	Gainesville, FL
Florida	
South Carolina	Columbia, SC
North Carolina	Lenoir, NC; Raleigh, NC; Kenansville, NC; Wallace, NC
Virginia	
West Virginia	
Pennsylvania	Meadville, PA
New York	Schuyler, NY & Morrisville, NY; Potsdam, NY; Fort Drum, NY; Syracuse, NY; Rensselaer, NY; Burdett, NY; Ithaca, NY; Albany, NY
Vermont	Waitsfield, VT; Montpelier, VT
New Hampshire	Campton, NH; Gifford, NH; Bedford, NH
Maine	Ashland, ME
Connecticut	Woodstock, CT
Massachusetts	
Rhode Island	
Delaware	
Maryland	
District of Columbia	
Virginia	
West Virginia	
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What is bioenergy?

"Bioenergy" is use of any organic material, such as forest thinnings, residues, agricultural waste or urban wood waste, to generate heating, cooling and/or electricity. Many independent power producers across the United States and Canada produce electricity for the grid using bioenergy. Hospitals, college campuses, school districts and government buildings also use bioenergy for heat and electricity. Thousands of American homes and businesses have installed stoves and other appliances powered by wood pellets, reducing their heating costs. Working farms and other businesses with organic waste products recycle their "leftovers" to power or heat their facilities.

In addition to serving as a domestic energy source, bioenergy is responsible for sustaining tens of thousands of jobs, many of them in rural communities where they are most needed. Bioenergy's many stakeholders work closely together to keep American forests healthy and put organic byproducts like forest trimmings, industry byproducts and agricultural residuals to good use.

In addition to these essential forms of bioenergy, many farms and industrial operations use bioenergy to power their facilities. In these cases, the fuel for bioenergy is often composed of waste materials from production itself. For instance, Anheuser-Busch's Bio-Energy Recovery System (BERS) provides about 10 percent of the company's power for U.S. facilities, using wastewater from brewing production.

Why is bioenergy important?

Woody biomass is a sustainable substitute for fossil fuel-intensive products – and can play a key role in maintaining forest health. Our Nation's forests are a sustainable and strategic natural resource that can help America achieve and enhance U.S. energy security, economic opportunity, environmental quality, and global competitiveness.

Bioenergy produces about 2.5% of the nation's total energy, and supplies full-time jobs for tens of thousands of Americans. It is clean, renewable energy made from materials that are of low value or would often otherwise be discarded. Bioenergy creates new markets for low value wood fiber, which incents sustainable forest management, while supporting vibrant rural economies.

How else does bioenergy help the environment?

Bioenergy is renewable and offers a sustainable, dependable supply that results in very low levels of fossil carbon emissions. It can also be significantly less expensive than some fossil fuels, creating cost savings for users. Institutional buildings including hospitals and schools have successfully converted to wood energy projects and found it beneficial. It is also regionally accessible, providing local energy security and often enhancing economic development by creating jobs in rural areas. "Building stronger markets for innovative wood products supports sustainable forestry, reduces wildfire risk, and helps us treat more land and reduces air pollution," said U.S. Forest Service Chief Tom Tidwell.

Since bioenergy uses the byproducts of forest restoration treatments such as small-diameter trees, among other organic sources, it can be an effective way to reduce the risk of wildfires. (Please see the video on the homepage of www.bioenergyday.org to learn more about the role of bioenergy in forest restoration treatments.) Public-private partnerships across the country maintain federal forestlands while fueling clean energy projects. In 2013, the U.S. Department of Agriculture Secretary Tom Vilsack announced a plan to promote the growth of bioenergy for this purpose, and recently reiterated his support, saying, "USDA's support for bio-based technologies is good for the climate, and enhances rural economic development while it decreases our dependence on foreign sources of oil."

Similarly, markets for bioenergy provide private forest owners with the opportunity to invest in forest improvement and thinning that make forests healthier and more productive while improving biodiversity. These markets contribute to forest owners' decisions to keep forests as forests.

How does the use of bioenergy contribute to the Nation's energy supply and forest health?

Wood is an abundant, sustainable, and local resource that can contribute to reducing our dependence on petroleum. The National Climate Assessment released in May 2014 indicated that 30 percent of U.S. petroleum consumption could be offset by biomass sources. Bioenergy can help create a more stable energy future, improve environmental quality, and increase economic opportunities. Our Nation's forests are a sustainable and strategic natural resource that can help America achieve and enhance U.S. energy security, economic opportunity, environmental quality, and global competitiveness. Woody biomass is a sustainable substitute for fossil fuel-intensive products.

Most Americans are familiar with other forms of renewable energy, like wind and solar. However, of the energy consumed by the nation, bioenergy from wood and wood-derived sources contributes about 2.5%. In 2013, approximately 23% of all renewable energy consumed was from wood (EIA, 2013) – that's more than wind and solar combined and second only to hydroelectric energy. In addition, bioenergy complements wind and solar by providing a baseload renewable energy source that is available when the wind doesn't blow or the sun doesn't shine.

An additional benefit of bioenergy is that it is most often produced on a local or regional-scale, which means it helps to sustain the communities it benefits. Because it is often produced on a local or small-scale level in a rural setting, it often doesn't get the national recognition that other renewables receive. With National Bioenergy Day, we are hoping that more Americans become aware of the benefits of bioenergy.

**FOR MORE INFORMATION, PLEASE VISIT
WWW.BIOENERGYDAY.ORG.**

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