



Biomass Thermal Utilization (BTU) Act of 2013

Sponsors: Senator Angus King (I-ME), Senator Susan Collins (R-ME)

What is thermal biomass?

A thermal biomass system is a stove, furnace or boiler that runs on biomass fuels such as wood pellets and chips, solid wood or agricultural residues. The system produces thermal energy for heating residential, commercial and industrial buildings, as well as process heat for industrial applications.

Wood pellets, chips and solid wood are the most common fuels for biomass heating systems, although agricultural wastes will see growth in the future.

Wood pellets are generally made from wood waste, condensed under heat and pressure, with no additives. They have high energy density, low moisture content, and are as easy to transport and use as traditional fossil fuels. Wood chips offer a slightly less refined form of biomass fuel, but also allow for easy transport and storage.

Advanced combustion technologies allow the use of biomass fuels with very high efficiencies and low emissions. Leading technologies have been developed in Europe, but are now entering the U.S. market. Domestic U.S. manufacturers are also developing advanced technologies.



A biomass thermal system can provide hot air, water, and process heat

What are the economic and environmental benefits of renewable thermal biomass?

These technologies utilize fuels and feedstocks that support forest- and agricultural-based economic development in rural regions. Many rural regions are dependent on imported fossil heating fuels such as oil and propane, and do not have access to natural gas. Locally produced biomass fuels can displace dependence on these expensive imported fuels, thereby keeping fuel dollars local and greatly reducing heating costs.

Wood pellet and chip manufacturing, as well as dedicated production of agricultural feedstocks for thermal applications can help revitalize economies in regions that have been impacted by decline in forest industry or agriculture. Biomass thermal creates and helps retain JOBS.

Biomass fuels are low carbon and result in net reduction of greenhouse gas emissions when displacing high carbon intensity fuels such as heating oil. In addition, the use of wood fuels reduces sulfur emissions that contribute to acid rain.

The use of biomass fuels produced in America helps strengthen American energy independence and security.



Biomass fuels can be conveniently delivered in bulk

Why is the BTU Act important?

The BTU Act adds high efficiency biomass thermal technologies to the list of renewable energy technologies that current benefit from investment tax credits under section 25D (residential) and Section 48 (commercial/industrial) of the tax code. This investment credit currently applies to solar thermal and geothermal technologies, but not to biomass thermal. The BTU Act corrects this oversight. The BTU Act only qualifies the most efficient and advanced technologies for the credit.

Investment credits are needed for advanced biomass thermal technologies because of their comparatively high up front capital cost. This "capital hurdle" must be overcome to build the market and gain economies of scale that will bring system costs down. Similar policy has been very effective in reducing the cost of solar (PV and thermal) and geothermal technologies.

Who supports the BTU Act?

Alliance for Green Heat
American Boiler Manufacturers Association
American Forest Foundation
Aroostook Partnership for Progress
Biomass Energy Resource Center
Biomass Thermal Energy Council
Hardwood Federation
Heating the Midwest with Renewable Biomass
International District Energy Association
Maine Pellet Fuels Association
Mt. Adams Resource Stewards

National Association of Forest Service Retirees
National Network of Forest Practitioners
New York Biomass Energy Alliance
North Country Resource Conservation and Development Council
Northeast Biomass Thermal Working Group
Northern Forest Center
Pellet Fuels Institute
Pennsylvania Biomass Energy Association
Sustainable Northwest
Vermont Energy Investment Corporation
Watershed Research & Training Center