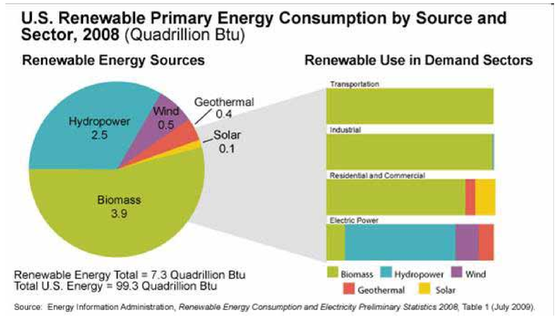
America's Energy Portfolio: Biomass

Hearth, Patio & Barbecue Expo

HPBA Hearth, Patio & Barbecue Association

What is Biomass?

Biomass is a renewable energy source, having all of its biological material being derived from living, or recently living, organisms

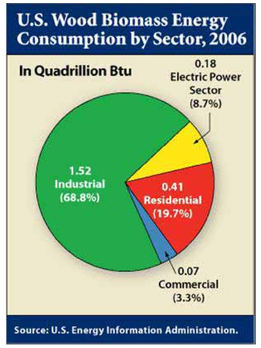


Thermal Conversion

- Biomass fuel is at the forefront of green alternatives for energy. In fact, the direct thermal conversion of biomass eliminates roughly 75% of carbon emissions associated with fossil fuels, and displaces twice as much imported oil as ethanol." – Dan Henry, HPBA Government Affairs Chairman
- Biomass accounts for approximately 50% of the renewable energy produced in the USA, higher than that derived from wind and other renewable sources.
- The direct thermal conversion of biomass is tremendously clean.

Did you know?

Biomass recently surpassed hydropower as the largest domestic source of renewable energy and currently provides over 3 percent of the total energy consumption in the United States. And, forestlands in the contiguous United States can produce 368 million dry tons of biomass annually. ("Biomass as Feedstock for a Bioenergy and Bioproducts Industry: the Technical Feasibility of a Billion-Ton Annual Supply" U.S. Department of Energy and U.S. Department of Agriculture - April 2005)



Wood -- the Original Renewable Energy

- Biomass is commonly plant matter grown to generate electricity to produce heat.
- Wood biomass includes wood chips from forestry operations, residues from lumber, pulp/paper and fuel wood for space heating.
- The largest single source of wood energy is "black liquor," a residue of pulp, paper and paperboard production. It supplies over 50% of these industries' energy requirements. (DOE)
- Wood biomass is a renewable energy source because we can always grow more trees and crops
- Burning wood is carbon neutral. As trees grow they absorb carbon dioxide from the atmosphere, when they die and are left to decompose in the forest or burn in forest fires, the carbon stored in the trees is released back into the atmosphere as carbon dioxide. Burning firewood produces the same amount of carbon dioxide as it has absorbed during its life cycle.
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