



The Sustainable Forestry Initiative® (SFI®) Forest Biomass and Energy



Louisiana Sustainable Forestry Initiative

www.laforestry.com

As the demand for renewable energy sources continues to grow, forest owners should consider the benefits and costs of biomass utilization from their forestland. Work closely with your resource professional to ensure that harvesting biomass is right for your property and that the activities follow state BMPs.

Additional resource information on this topic is available at:

<http://www.fs.fed.us/woodybiomass/index.shtml/index.shtml>

<http://learn.forestbioenergy.net>

What is Biomass?

Biomass has become a commonly used term in forestry. It probably is most often referred to in forestry as a fuel source for heat or power either in Combined Heat and Power (CHP) plants or in stand-alone power stations or heating facilities. Biomass in this context is a bioenergy feedstock, defined by SFI as:

“Bioenergy feedstock: Biomass used for the production of renewable energy. Biomass includes any organic products and byproducts derived from trees, plants and other biological organic matter, including limbs, bark and other cellulosic material, organic byproducts from wood pulping, and other biologically derived materials.”

For Louisiana forest owners, most of the usual tree species in the forest are suitable for biomass production (excluding endangered or protected species, of course). Trees are versatile in this way – they may suit more than one end use. Check specifics with a resource professional.

Why consider it?

The biomass market for timber comes into its own as it is often able to use wood that is undersized for other markets, or not straight enough for other markets. This means that a greater proportion of the growing crop can be sold. Even if the value of the biomass is low, the extra volume sold may lower the cost per unit for the harvesting operation – for instance set up costs would be spread over more tons.

The operation may also remove from the site material that would make restocking more difficult or general access across the site more difficult. Of course, it is sensible to leave sufficient material (especially leaves, needles and small branches) to recycle nutrients on the site. A resource professional will be able to advise on this.

Benefits of biomass utilization to landowners may include:

- Additional income from forest products
- Decreased site prep cost as harvested sites are left cleaner
- Opportunities for low to no-cost timber stand improvement
- Increased forest health by reducing threats and/or restoration cost from fire, disease/pest infestations, invasive species and storm damage



An in-woods chipping operation can add income from forest biomass.



These pellets were made from woody biomass that is formed into an easily transported fuel for utilities or even special home heating stoves.