



# WOOD<sup>to</sup> ENERGY

## Fact Sheet

### Federal Policies and Incentives

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The increasing costs and environmental concerns of producing energy from fossil fuels have drawn greater attention to the use of renewable sources of energy. Woody biomass is a potential source of energy that can be used to produce electricity or heat, and can provide both economic and environmental benefits. The federal government has actively encouraged the use of woody biomass (Figure 1). For example, President George W. Bush's recently announced goal to obtain 30 percent of the energy needs for the U.S. from renewable resources by the year 2030 has prompted new interagency cooperation. This fact sheet is intended to assist local community leaders in understanding some of the federal policies and incentives that may directly or indirectly affect energy production from woody biomass.

#### Background

Efforts to encourage the electric utility industry to use resources other than coal and natural gas began with the Public Utility Regulatory Policies Act of 1978 (PURPA). This act was designed to restructure the industry by increasing competition, since utilities were required to buy power from independent producers. The legislation succeeded in increasing electricity generated from biomass in the early 1980s.

There have been more recent policy efforts to encourage development of biomass energy such as (U.S. DOE 2007):

- The National Energy Policy Act of 1992 contained several provisions to encourage the use of renewable energy sources.
- Executive Order 13134, issued by Executive Memorandum in August 1999, encourages the development and promotion of bio-based products and bioenergy.
- The Biomass Research and Development Act of 2000 described the need for biomass research, created the Biomass Research and Development Board, encouraged coordination between the Department of Energy (U.S. DOE) and Department of Agriculture (USDA), and set the scope of the joint U.S. DOE-USDA Biomass Initiative.
- The Farm Bill of 2002, Title IX, supported biomass through federal procurement procedures, renewable fuels development programs, cooperative extension and research programs, and the Bio-based Products and Bioenergy Coordination Council.



Figure 1. Several national policies and programs encourage research and development of biomass energy projects. PHOTO COURTESY OF WOOD RESOURCE RECOVERY.

- The Healthy Forest Restoration Act of 2003 recommended thinning programs to reduce accumulation of woody fuel to lower the risk of catastrophic wildfire. The collection and removal of small-diameter trees and understory shrubs has spawned local biomass utilization efforts.
- The Energy Policy Act of 2005 provides for a federal tax credit for energy production using renewable fuels; grants for forest biomass utilization; and grants for small enterprises, training, and outreach (see the following section, “Incentives,” for more information).

In 2003, the federal Departments of Agriculture, Interior, and Energy issued a joint Memorandum of Understanding (MOU) pledging cooperation among the agencies to support the use of woody biomass from forests, woodlands, and rangelands where economically and ecologically appropriate. In addition to informing agency employees and partners about the possibilities of using wood waste for energy production, the MOU helped to raise awareness among communities, other resource professionals, and potential users of energy and initiated joint programs for assistance and grant funding. Furthermore, the MOU outlined several policy principles to guide the processes by which agencies work with communities to promote woody biomass utilization (NACD 2005):

- Collaborate with local communities to create woody biomass utilization strategies.
- Increase public understanding of the amount and value of woody biomass, and that it can be an effective element of restoration and wildfire risk reduction activities.
- Develop and apply the best scientific knowledge to manage forests for woody biomass production.
- Encourage the use of contracts and other agreements with growers, suppliers, and haulers to reduce wildland fuels and provide reliable, long-term supplies of woody biomass.
- Develop woody biomass systems to create jobs and new economic opportunities.

## Incentives

Federal agencies use various incentive programs to encourage the use of woody biomass. The following programs help provide funding for research and development of new technologies and investment in and use of renewable forms of energy. Tax credits are available for those who produce energy from renewable sources. The Energy Policy Act of 2005 (U.S. DOE 2007) has several

incentive provisions that apply to woody biomass, which are briefly described here.

### **Federal Renewable Energy Production Tax Credit.**

The production tax credit is an inflation-adjusted tax credit for electricity produced from qualifying renewable energy sources or technologies. EPACT 2005 expanded the types of qualifying sources and systems (U.S. DOE 2007). Three different rates of tax credits are available for producers of energy from biomass. A credit of 1.5 cents per kilowatt hour (kWh) is available for facilities that use wood from trees planted for energy use (closed-loop biomass). If the wood is mixed with coal in a co-firing facility, the 1.5 cents credit is reduced to match the ratio of wood fuel used. Using waste wood from any source enables facilities to earn a 0.75 cent per kWh tax credit. For the year 2005, the credit was adjusted for inflation to make the credit 1.9 cents per kWh for wind energy, closed-loop biomass, geothermal and solar, and 0.9 cents per kWh for open-loop biomass (NRBP 2005).

**Grants for Forest Biomass Utilization.** Sections 209, 210, and 944 of EPACT 2005 enable grant programs for rural or remote communities that improve the commercial value of woody biomass for increased efficiency or use, and for small business bioproduct marketing and certification (Ashworth 2006). USDA is authorized to issue grants to improve the commercial value of forest biomass for such uses as electric power and heat. Eligible communities can get up to \$500,000 total or up to \$20 per ton of green forest biomass for utilization. U.S. DOE may issue grants for rural and remote community electrification, with grants up to \$20 million per year available for increased efficiency or use of renewable energy sources including woody biomass. USDA may issue grants for small business bioproduct marketing and certification and may match grants up to \$100,000 for a total of \$1 million per year.

### **Grants for small enterprises, training, and outreach.**

Millions of dollars in grants have been awarded to small enterprises, universities, and research institutions to develop new uses for woody biomass, to explore policy issues, and to develop training and outreach programs.

## Summary

As renewable and local sources of energy become more valuable, a variety of policies and incentive programs may make it easier for communities, industries, and forest landowners to develop woody biomass systems. More

information is available from the fact sheets *Financing Woody Biomass Facilities* and *State and Local Policies and Incentives*. All of our materials can be found at <http://www.interfacesouth.org/woodybiomass>.

## References

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- U.S. Department of Energy (U.S. DOE). 2007. Federal Biomass Policy, Biomass Program, Energy Efficiency and Renewable Energy. [http://www1.eere.energy.gov/biomass/federal\\_biomass.html](http://www1.eere.energy.gov/biomass/federal_biomass.html) (accessed March 21, 2007).

For more information about using wood to produce energy, visit <http://www.interfacesouth.org/woodybiomass> and read other fact sheets, community economic profiles, and case studies from this program, or <http://www.forestbioenergy.net/> to access a number of other resources.

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