WOOD to ENERGY

Fact Sheet

State and Local Policies and Incentives

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Many communities are beginning to consider using renewable energy sources to generate energy. State and local governments usually follow the regulatory policies set by federal governments; however, in some cases they have also adopted their own policies and incentives to further promote the use of renewable resources for energy production. Due to local availability of wood resources and increasing demand for energy, the southern region of the United States is a prime location for considering the use of woody biomass as a renewable fuel source. This fact sheet explains the types of regulatory policies and incentives administered by various state and local governments concerning the use of woody biomass for energy generation. For more information on federal regulations and incentives, see the fact sheet *Federal Policies and Incentives*. All of our materials are available at http://www.interfacesouth.org/woodybiomass.

State and Local Regulations and Policies

Several policies related to renewable energy, including woody biomass, have been established in the southern United States, including generation disclosure rules, renewable portfolio standards, interconnection, construction and design standards, and green power purchase (Table 1). These regulations can be implemented at the

Table 1. *Summary of Regulations and Policies for the Use of Renewable Energy Resources in the Southern United States*
North Carolina State University 2007

State	Disclosure	Renewable Portfolio Standards	Inter-connection	Construction & Design Standards	Green Power Purchase
Alabama					
Arkansas			S		
Florida	S	U	S	S	
Georgia			S		
Kentucky					
Louisiana			S		
Mississippi					
North Carolina			S	L	
Oklahoma					
South Carolina					L
Tennessee					
Texas	S	S, L	S	S	
Virginia	S		S		
Total States	**3**	**3**	**7**	**3**	**1**

S=State/Territory L=Local U= Utility

state or local level or by regional utilities. The following further explains these types of rules, regulations, and policies.

Generation Disclosure Rules. Generation disclosure rules require utility companies to provide information regarding the energy they supply to their customers. This type of information, which may include fuel mix percentages and emission statistics, is often included on a customer's monthly bill. Related to disclosure, certification is an industry practice that guarantees customers that the utility company uses the types and amounts of renewable energy it claims to. The Green e-stamp is one example of a certification. By providing consumers with detailed information about local energy systems, practices like disclosure and certification can help raise consumers' awareness about their energy supply (North Carolina State University 2007).

Renewable Portfolio Standards/Set Aside. These standards require that utility companies generate a certain amount of their energy from renewable resources. For example, a certain percentage of the utility's electric power sales, measured in megawatt-hours (MWh), must be generated from renewable resources such as wood, wind, and solar by a determined year. The term "set aside" refers to similar regulations that require new utility installations to have a certain amount of generating capacity from renewable resources (North Carolina State University 2007). Twenty-three states and the District of Columbia have set renewable portfolio standards (Figure 1). Standard levels and definitions of renewable energy vary from state to state (Pew Center for Global Climate Change 2006). Some states have specific mandates concerning power generation from renewable energy. However, in the South, only Texas has currently adopted such standards at the state level.

Interconnection or Line Extension Analysis. Many states have policies regarding interconnection or line extension analysis. When power lines are extended to customers outside of the existing power grid, distance-based fees are charged. In some of these cases it may be more economical for customers to generate their own energy on-site using renewable energy systems. In some states, utility companies are required to provide information on renewable energy options when customers request a line extension (North Carolina State University 2007).

Construction and Design Standards. Several types of building construction and design policies are included in this category. State construction policies require an evaluation of the costs and benefits of using renewable energy technologies for new state construction projects, such as schools, office buildings, and other new facilities. In addition, green building guidelines are being developed in many cities to either encourage or require design and construction projects to consider renewable energy technologies. Local energy codes are another type of standard that can be implemented to increase energy efficiency by requiring building construction or renovation to exceed the state requirements for resource conservation. Builders or renovators can meet this requirement by incorporating renewable energy technologies (North Carolina State University 2007).

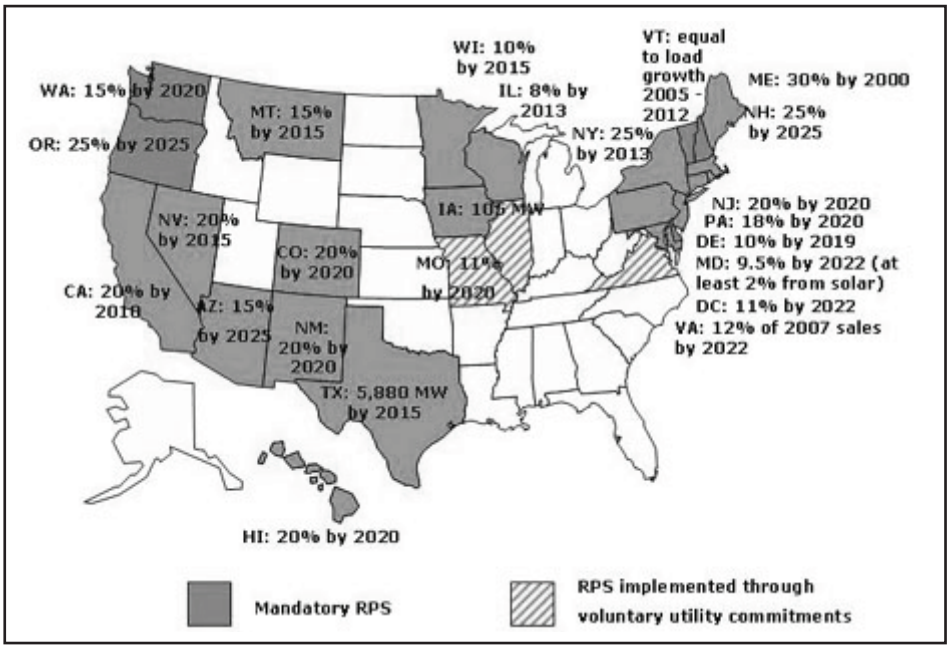

Figure 1. *Several states have implemented Renewable Portfolio Standards.* Pew Center on Global Climate Change 2006.

Green Power Purchasing/ Aggregation Policies. State and local governments, businesses, and other nonresidential customers can serve as role models to the rest of the community by purchasing electricity from renewable resources, a practice commonly called *green power purchasing*. Some states require that state government buildings use a certain amount of renewable energy. Green power purchasing can supply energy for various reasons, such as

local governmental facilities, street-lights, or water pumping stations.

The process by which local governments combine electric loads from the whole community, or in cooperation with other communities, to form a green power purchasing block is called "community aggregation" or sometimes "community choice." Utility green pricing programs, green power marketers, special contracts, or community aggregation are different ways to achieve green power purchasing (North Carolina State University 2007).

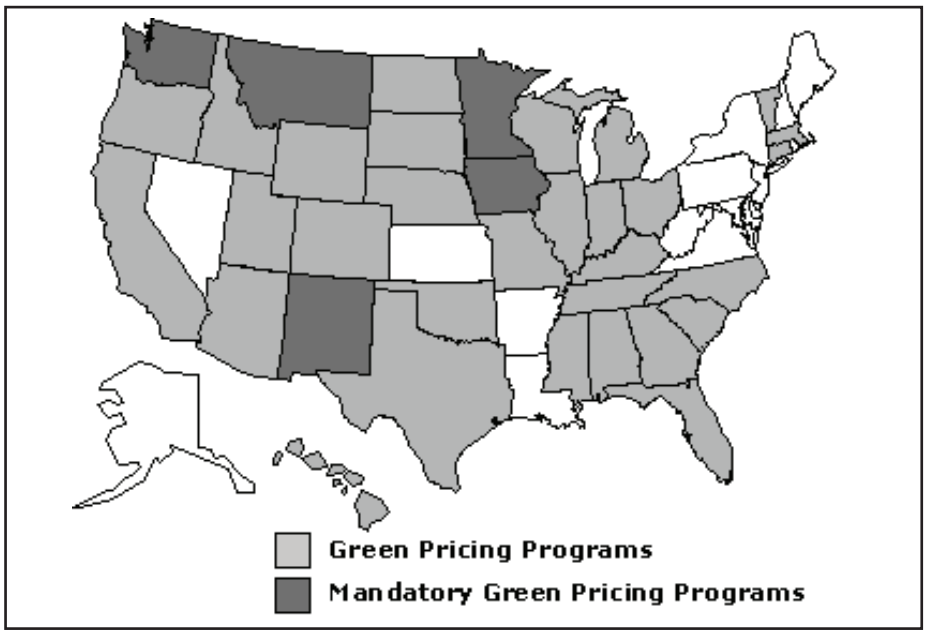

Figure 2. *The majority of states offer green pricing programs.*
Pew Center on Global Climate Change 2006.

State and local regulations and policies may also include green pricing programs, required utility green power option programs, statewide net metering, and public benefits funds, as described in the next section. While these regulations and policies are in effect in many states, they are not yet widespread in the southern states.

Green Pricing Programs. Green pricing programs offer customers the option to pay an additional fee beyond their regular electric bills to support the utility's effort to provide power from renewable sources. Customers who participate in these types of programs do not receive "green energy" directly, but rather help enhance the utility's ability to generate or purchase more of its power from renewable sources (Pew Center for Global Climate Change 2006). There are more than 500 electric utilities in 34 states now offering green power to their customers (Figure 2), including many in the southern U.S. (Energy Information Administration 2004). Some states have mandatory green pricing programs, where utilities are required to offer customers the option to purchase power from renewable energy sources, while in other states it is voluntary for utilities. Utilities may fulfill this requirement by generating power from their own renewable resources, through contracts, or through purchasing credits from a certified renewable energy provider (North Carolina State University 2007).

Net Metering. Thirty-five states and the District of Columbia had statewide net metering statutes in 2004 (Figure 3). Net metering is a system for customers who have their own electricity generating units. When customers generate more electricity than their demand, the excess electricity is provided to the local power grid. The customers' electric meter keeps track of the excess electricity as credit toward future power purchases (North Carolina State University 2007). Recent federal legislation requires all electric utilities to offer their customers net metering service upon request by 2008 (Energy Information Administration 2004).

Public Benefit Funds. Some states have funds, called Public Benefit Funds (PBF), which are used to support efforts such as energy efficiency, renewable energy projects, and programs for low-income households. The money for these support funds is commonly acquired by charging customers an added fee based on their electricity consumption. For example, the customer may be charged 0.2 cents for each kilowatt hour used. These funds can be used for rebates on renewable energy systems, funding for renewable energy research and development (R&D), and development of renewable energy education programs (North Carolina State University 2007). The Clean Energy States Alliance consists of twelve states that work together to direct investments in renewable energy that are supported with public benefit funds (North Carolina State University 2007). Currently, no southern states have public benefit funds.

State and Local Incentives

Various state and local incentives also exist for generating energy from renewable resources, including woody biomass. Incentives are usually expressed in state and local policies in the form of tax credits, rebates, grant and loan programs, or industrial and production incentives (Werner 2004). For example, in Florida, a comprehensive four-year plan, the Florida Renewable Energy, Technology & Energy Efficiency Act of 2006, provides rebates, grants, and tax incentives in order to increase the state's investments in renewable energy resources such as solar, hydrogen, and biofuels (Florida Energy Office 2006). Table 2 shows financial incentives for renewable energy production in the southern United States by incentive type. Five states offer property tax incentives, four states have rebates, and six states have loan programs. The tax incentives, grants, and loans are typically at the state level, while rebates and production incentives may be provided by local governments, utilities, or even private companies. While bond programs are also available, no southern states currently offer this type of incentive. Note that Table 2 does not include incentives for renewable fuels and vehicles.

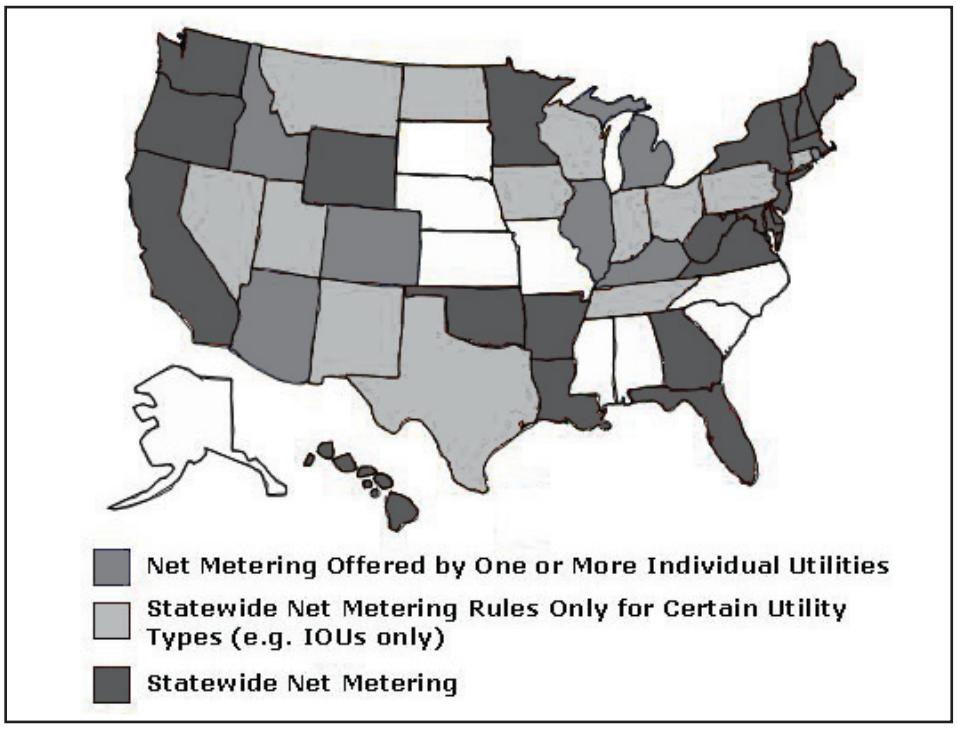

Figure 3. *Over 30 states had statewide net metering statutes in 2004.* Pew Center on Global Climate Change 2006.

In summary, state and local governments have many policies, regulations, and incentives to encourage the use of woody biomass and other renewable fuels for energy generation. These are constantly changing. Communities and individuals should learn more about current regulations and incentives provided in their city and state when considering using wood for energy. For more information on incentives, see the fact sheet, *Financing Woody Biomass Facilities*.

References

Energy Information Administration. 2004. Renewable Energy Sources: A Consumer's Guide. Energy Information Brochures, Official Energy Statistics from the U.S. Government, Renewable Energy Trends. http://tonto.eia.doe.gov/reports/reportsD.asp?type=Renewable (accessed April 3, 2007).

Florida Energy Office. 2006. Florida's Energy Act.

North Carolina State University. 2007. Database of State Incentives for Renewable Energy. North Carolina Solar Center and Interstate Renewable Energy Council. http://www.dsireusa.org/index.cfm (accessed March 30, 2007).

Pew Center for Global Climate Change. 2006. Energy Sector State Action Maps. http://www.pewclimate.org/what_s_being_done/in_the_states/state_action_maps.cfm (accessed March 15, 2007).

Werner, Carol. 2004. Bioenegy: Technologies, Federal and State Incentives. Environment & Energy Study Institute, Washington, DC.

Table 2. *Incentives for the Use of Renewable Energy Sources in the Southern United States* North Carolina State University 2007

State	Personal Tax	Corporate Tax	Sales Tax	Property Tax	Rebates	Grants	Loans	Industry Recruitment	Production Incentive
Alabama	S					S	S		
Arkansas									
Florida			S		U				
Georgia									U
Kentucky					P		P		
Louisiana				S			S		
Mississippi							S		U
North Carolina	S	S		S			S		U, P
Oklahoma		S						S	
South Carolina					S				
Tennessee				S			S		U
Texas		S		S	U			S	
Virginia				S		S		S	
Total States	**2**	**3**	**1**	**5**	**4**	**2**	**6**	**3**	**4**

S=State L=Local U= Utility or Energy Service Co.

For more information about using wood to produce energy, visit http://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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