

# State Woody Biomass Utilization Policies in the Southern States

## Overview

This document attempts to catalogue the major state policies in the Southern states that are meant to promote woody biomass utilization for energy production. This list is derived directly from the *State Woody Biomass Utilization Policies*<sup>1</sup> document developed by the University of Minnesota. This list may not be exhaustive and policies developed since December 2008 are not included. The document addresses the major financial, educational and regulatory incentives and policies across the region.

Policies are classified into the following categories:

### Tax Incentives:

- Sales tax incentives
- Corporate/Production tax incentives
- Personal tax incentives
- Property tax incentives

### Cost-Share Programs and Grants

- Cost-share programs
- Grant programs
- Rebate programs

### Rules and Regulations:

- Renewable energy goals and standards
- Interconnection standards e.g net-metering
- Consumer green power programs
- Public renewable energy funds
- Bioenergy equipment certification

### Education and Consultation

- Service provisions that establish local or state programs to coordinate research on biomass utilization, disseminate technical information, and assist with business planning and grant writing.
- Training programs may include education courses or certificates offered to businesses, employees, agency personnel and others involved in biomass harvesting and utilization in which development of technical expertise is the objective.

### Financing and Contracting

- Business recruitment to promote economic development and job creation.
- State government bonds to finance construction of energy facilities.
- Loans
- Procurement and contracting that require certain types of products be purchased from qualifying sources or that certain types of contractors be used in biomass processing and delivery.

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<sup>1</sup> Adapted from Becker D.R. and Lee C., *State Woody Biomass Utilization Policies*, Staff Paper Series No. 199, Department of Forest Resources, College of Food, Agricultural and Natural Resource Sciences, University of Minnesota, December 2008  
<http://www.forestry.umn.edu/publications/staffpapers/index.html>

## Alabama

**Wood Burning Heating System Deduction** (Code of Ala. § 40-18-15 (16) - This statute allows individual taxpayers a deduction for the installation of a wood-burning heating system. The deduction is equal to the total cost of installation for the conversion from gas or electricity to wood when the system is used as the primary energy source for heating a home. The deduction must be taken for the taxable year during which the conversion was completed. Note that this incentive is for the conversion of an existing system and not for the first-time installation of a wood-burning system (Tax incentive; State income tax deduction; Target audience: Residential). Enacted in 1999.

Source: <http://www.legislature.state.al.us/codeofAlabama/1975/40-18-15.htm>

**Biomass Energy Program** (Alabama Department of Economic and Community Affairs) - The Biomass Energy Program assists businesses in installing biomass energy systems. Program participants receive up to \$75,000 in interest subsidy payments to help defray the interest expense on loans to install approved biomass projects. Technical assistance is also available through the program. (Subsidies and Grants; Interest subsidy payments; Target audience: commercial, industrial, schools, local government, school government, agriculture). Enacted in 1986.

Source: <http://www.adeca.state.al.us/C16/Biomass%20Energy%20Program/default.aspx>

**Electric Power and Renewable Energy** (U.S. Department of Energy's State Energy Program) - The Renewable Energy Demonstrations Activity promoted the adoption of renewable energy through demonstration projects that showcased commercially available renewable energy technologies for biofuels, biomass energy, biogas, and solar energy applications. (Education and Consultation; Public Education and Outreach; Target audience: All). Enacted in 2006.

Source: [http://www.eere.energy.gov/state\\_energy\\_program/grants\\_by\\_state.cfm/state=AL](http://www.eere.energy.gov/state_energy_program/grants_by_state.cfm/state=AL)

**Renewable Fuels Program** (U.S. Department of Energy's State Energy Program) - The Renewable Fuels Program promoted the use of renewable fuels by industry and institutions and provided information on available biomass fuels and on incentives for converting to biomass fuels. (Education and Consultation; Public Education and Outreach; Target audience: Industry, Institution). Enacted in 2005.

Source: [http://www.eere.energy.gov/state\\_energy\\_program/grants\\_by\\_state.cfm/year=2005/state=AL](http://www.eere.energy.gov/state_energy_program/grants_by_state.cfm/year=2005/state=AL)

**Biomass Program** (U.S. Department of Energy's State Energy Program) - Science, Technology & Energy (STE) promoted industrial use of renewable fuels and provided information on available biomass fuels and on incentives for converting from fossil fuels to alternative fuels. It developed brochures and other promotional materials and coordinated with federal agricultural organizations to promote energy efficiency in agriculture. (Education and Consultation; Public Education and Outreach; Target audience: Agriculture). Enacted in 2003

Source: [http://www.eere.energy.gov/state\\_energy\\_program/grants\\_by\\_state.cfm/year=2003/state=AL](http://www.eere.energy.gov/state_energy_program/grants_by_state.cfm/year=2003/state=AL)

## Arkansas

**Energy and Value-Added Products from Biomass** (Southeastern Regional Biomass Energy Program) - The purpose of this project is to briefly describe energy and value-added products from biomass workshop, which will be developed specifically for the people of the State of Arkansas as it relates to biomass utilization in the state and region. The workshop will unite biomass experts with Arkansas legislators and key decision makers on this important issue. The twofold objective of this workshop will be to educate legislators, entrepreneurs, the business and manufacturing community, community leaders and interested citizens on the potential for biomass, and especially Arkansas biomass, in the production of energy and value-added products. Secondly, the information from the workshop will serve as a basis for

legislators and decision makers to begin discussing and developing biomass policies in preparation for the 2007 legislative session. Amount: SERBP \$48,000; cost share \$13,362. (Service provision; Education; Target audience: Legislators, entrepreneurs, business, manufacturing) Enacted in 2005.  
Source: <http://www.serbep.org>

**Arkansas Net Metering** (Arkansas Code § 23-18-603 et seq.) - Residential renewable-energy systems up to 25 kilowatts (kW) in capacity and nonresidential systems up to 300 kW in capacity are eligible for net metering. Eligible technologies include solar, wind, hydroelectric, geothermal and biomass systems, as well as fuel cells and micro-turbines using renewable fuels. There is no limit on the aggregate capacity of all net-metered systems. The 2007 amendments allow net-metered customers to carry over any NEG to their following monthly bill at the utility's retail rate. Any NEG remaining at the end of an annual billing cycle is granted to the utility. (Renewable Energy Standards; Net Metering; Target audience: Utility) Enacted in 2007.  
Source: [http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive\\_Code=AR03R&state=AR&CurrentPageID=1&RE=1&EE=1](http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive_Code=AR03R&state=AR&CurrentPageID=1&RE=1&EE=1)

**Green Building Standards for State Facilities** (AR Code § 22-3-1801 et seq.) - The act includes Arkansas-specific provisions for LEED and Green Globes certification. Under these provisions, those pursuing LEED certification receive additional credit for the use of composite wood and agri-fiber products, post-consumer recycled content, renewable bio-based materials, carbon-sequestering bio-based materials, and bio-based materials from other certified sources. Those using the Green Globes rating system receive additional credit for carbon-sequestering, bio-based materials and bio-based materials from certified sources. (Regulation; Standard; Target audience: State government, commercial, industrial, residential, general public/consumer, nonprofit, schools, local government, state government, federal government, agricultural, institutional) Enacted in 2005.  
Source: <http://www.1800arkansas.com/energy>

**Interconnection Standards** (Arkansas Code § 23-18-603 et seq.) - Facilities producing electricity using solar, wind, hydro, geothermal and biomass resources are eligible to interconnect and net meter. Currently, net metering is available to residential systems up to 25 kilowatts (kW) in capacity and nonresidential systems up to 300 kW. (Regulation; Standard; Target audience: Commercial, industrial, residential, general public/consumer, nonprofit, schools, local government, state government, federal government, agricultural, institutional) Enacted in 2007.  
Source: [http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive\\_Code=AR06R&state=AR&CurrentPageID=1&RE=1&EE=1](http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive_Code=AR06R&state=AR&CurrentPageID=1&RE=1&EE=1)

## Florida

**Development of an Integrated Biomass Resource Plan and Network for Florida** (Southeastern Regional Biomass Energy Program) – The goal of this project is to offset petroleum imports by building a Florida bio-based economy. The objectives center around policy formulation and support. Two major tasks are planned. The first task involves creating a portfolio of biomass resource maps and identifying installed and potential biomass energy production capacity (to include biofuel refineries). The second task seeks to create a Florida Biomass Network that will assist the Florida Energy Office (FEO) with strategic planning for its biomass program and advise the FEO on specific biomass projects.  
Amount: SERBP \$48,000; cost share \$12,000. (Education and Consultation; Education) Enacted in 2005.  
Source: <http://www.serbep.org>

**Bioenergy Development Program** (U.S. Department of Energy's State Energy Program) - The Bioenergy Development Program fostered the development of biomass technology and increased the use of biomass energy. It provided for the education and promotion to the public of biomass energy as a reliable, market-ready alternative energy source that is available to all segments of society. Activities included hosting a statewide biomass network to facilitate information sharing, and conducted continuing research and demonstration of biomass and biogas technologies and practices. Projects linked biomass gasification technologies with production of alternative energy fuels such as hydrogen and ethanol. (Education and Consultation; Education) Enacted in 2006.

Source: [http://apps1.eere.energy.gov/state\\_energy\\_program/grants\\_by\\_state.cfm/state=FL](http://apps1.eere.energy.gov/state_energy_program/grants_by_state.cfm/state=FL)

**Florida Farm to Fuel Grants Program** (Fla. Stat. § 570.957)- In 2007, the Florida Legislature established the Farm to Fuel Grants Program to provide matching grants for demonstration, commercialization, research and development projects relating to bioenergy. As part of this program, the Legislature appropriated \$25 million in matching grants. The Program intends to stimulate investment in energy projects that produce bioenergy from Florida-grown crops or biomass. (Subsidies and Grants; Grant; Intended audience: Commercial, nonprofit, schools, local government, utility) Enacted in 2007.

Source: <http://www.floridafarmtofuel.com/grant.htm>

**Renewable Energy Technologies Grant Program** (Fla. Stat. § 377.804) - The Renewable Energy Technologies Grants Program was established in June 2006 (SB 888) to provide renewable energy matching grants for demonstration, commercialization, research, and development projects relating to renewable energy technologies. (Subsidies and Grants; Grant; Intended audience: Commercial, nonprofit, schools, local government, utility) Enacted in 2006.

Source: <http://www.dep.state.fl.us/energy/energyact/grants.htm>

**Biomass Project** (U.S. Department of Energy's State Energy Program) - The Biomass Project fostered development of biomass technology and increased the use of biomass energy. It provided for the education and promotion to the public of biomass energy as a reliable, market-ready alternative energy source that is available to all segments of society. It created resource maps of biomass and biofuels potential in Florida, developed a statewide biomass network to facilitate information sharing, and conducted continuing research and demonstration of biomass and biofuels technologies and practices. (Service Provision; Initiative) Enacted in 2006.

Source: [http://apps1.eere.energy.gov/state\\_energy\\_program/grants\\_by\\_state.cfm/state=FL](http://apps1.eere.energy.gov/state_energy_program/grants_by_state.cfm/state=FL)

**Florida Net Metering** (HB 7135) - In March 2008, the Florida Public Service Commission (PSC) adopted rules for net metering and interconnection for renewable-energy systems up to two megawatts (MW) in capacity. The PSC rules apply only to the state's investor-owned utilities; the rules do not apply to electric cooperatives or municipal utilities. (Renewable Energy Standards; Net Metering; Intended audiences: all) Enacted in 2008.

Source: [http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive\\_Code=FL19R&state=FL&CurrentPageID=1&RE=1&EE=1](http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive_Code=FL19R&state=FL&CurrentPageID=1&RE=1&EE=1)

**Renewable Energy Production Tax Credit** (HB 7134) - Annual corporate tax credit is equal to \$0.01/kWh of electricity produced and sold by the taxpayer to an unrelated party during a given tax year. (Tax incentive; Tax credit; Intended audiences: Commercial) Enacted in 2006.

Source: <http://www.dep.state.fl.us/energy/energyact/incentives.htm>

**Renewable Energy Property Tax Exemption** (Fla. Stat. § 196.175 & HB 7135) - Improved real property upon which a renewable energy source device is installed and operated is entitled to an exemption in the amount of the original cost of the device, including the installation cost.

The exemption does not include the cost of replacing, removing or improving existing property in the course of the installation. (Tax incentive; Tax credit; Intended audience: Commercial, industrial, residential) Enacted in 2008.

Source: [http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive\\_Code=FL66F&state=FL&CurrentPageID=1&RE=1&EE=1](http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive_Code=FL66F&state=FL&CurrentPageID=1&RE=1&EE=1)

**Alternative Fuels Production Incentive** (House Bill 7135, 2008, and Florida Statutes 377.804) - The Innovation Incentive Program is created within the Office of Tourism, Trade, and Economic Development to provide resources for business projects that allow the state to effectively compete for high-value research and development, including alternative and renewable energy projects. To qualify, an alternative and renewable energy project must involve collaboration with an institution of higher education; provide the state a minimum full return on investment within a 20-year period; include matching funds provided by the applicant or other available sources; and be located in the state of Florida. Additional criteria may apply. For the purposes of this incentive, alternative and renewable energy means electrical, mechanical, or thermal energy produced from a method that uses one or more of the following energy sources: ethanol, cellulosic ethanol, biobutanol, biodiesel, biomass, biogas, hydrogen fuel cells, ocean energy, hydrogen, solar, hydro, wind, or geothermal. (Subsidies and Grants; Grants; Intended audiences: Businesses, Higher Education) Enacted in 2008.

Source: [http://www.afdc.energy.gov/afdc/progs/view\\_ind.php/FL/6419](http://www.afdc.energy.gov/afdc/progs/view_ind.php/FL/6419)

**Renewable Energy Grants** (Florida Statutes 377.804) - The Renewable Energy Technologies Grants Program provides matching grants for demonstration, commercialization, research, and development projects relating to renewable energy technologies, including those generating or utilizing hydrogen or biomass resources. (Subsidies and Grants; Grants; Intended audiences: Researchers) Enacted in 2008.

Source: [http://www.afdc.energy.gov/afdc/progs/view\\_ind.php/FL/6072](http://www.afdc.energy.gov/afdc/progs/view_ind.php/FL/6072)

## Georgia

**Georgia Biomass Task Force** (Southeastern Regional Biomass Energy Program) - The Georgia Biomass Task Force was formed to allow members to share information on biomass research and project development. The Task Force will be in a unique position to organize such information into a strategic “roadmap” for future biomass development in the state. The Task Force will provide resource and clearinghouse for biomass research, development and commercialization activities within the state. (Service Provision; Initiative) Enacted in 2005.

Source: <http://www.serbep.org/projects.htm>

**Biomass Sales and Use Tax Exemption** (H.B. 1018) - To qualify for the exemption, biomass material must be utilized in the production of energy, including the production of electricity, steam, or both electricity and steam. Pellets and fuels derived from biomass are generally eligible. (Tax incentive; Tax credit; Intended audiences: Commercial, Residential, General Public/Consumer) Enacted in 2006.

Source:

[http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive\\_Code=GA08F&state=GA&CurrentPageID=1&RE=1&EE=1](http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive_Code=GA08F&state=GA&CurrentPageID=1&RE=1&EE=1)

**Corporate Clean Energy Tax Credit** (H.B. 670) - The tax credit is equal to 35% of the cost of the system, including installation. (Tax incentive; Tax credit; Intended audiences: Commercial, Industrial, Multi-Family Residential, Agricultural) Enacted in 2008.

Source: <http://www.gefa.org/Index.aspx?page=423>

**Alternative Fuel Production Facility Tax Exemption** (Georgia Code 48-8-34.4) - Tangible personal property used in or for the construction of an alternative fuel production facility dedicated to the production of ethanol, biodiesel, butanol, and their by-products are exempt from the state sales and use tax. (Tax incentive; Tax credit; Intended audiences: Individuals) Enacted in 2006.

Source: [http://www.eere.energy.gov/afdc/progs/all\\_state\\_summary.php/afdc/0](http://www.eere.energy.gov/afdc/progs/all_state_summary.php/afdc/0)

## Kentucky

**Kentucky Net Metering** (KRS § 278.465 et seq.) - In April 2008, Kentucky enacted legislation (SB 83) that expanded its net-metering law by requiring utilities to offer net metering to customers that generate electricity with photovoltaic (PV), wind, biomass, biogas or hydroelectric systems up to 30 kilowatts (kW) in capacity. If the electricity fed back to the utility by the customer exceeds the electricity supplied by the utility during a billing period, the customer is credited for excess generation at the utility's retail rate. This credit will appear on the customer's next bill and will carry forward indefinitely. Credits are not transferable. (Renewable Energy Standards; Net Metering; Intended audience: Commercial, residential, nonprofit, schools, local government, state government, agricultural, institutional) Enacted in 2008.

Source:

[http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive\\_Code=KY07R&state=KY&CurrentPageID=1&RE=1&EE=1](http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive_Code=KY07R&state=KY&CurrentPageID=1&RE=1&EE=1)

**Tax Credit for Renewable Energy Facilities** (KRS § 154.27-010 et seq.) - A renewable energy facility is defined as one that generates at least 50 kW of electricity from solar power or at least 1 MW from wind power, biomass resources, landfill gas, hydropower or similar renewable resources. The electricity must be sold to an unrelated party. The minimum investment in any renewable energy facility must be \$1 million in capital expenditure which is defined to include various non-capital costs such as labor. The tax credit allows approved facilities to receive a credit up to 100% of Kentucky income tax and the limited liability tax for projects that construct, retrofit or upgrade facilities that generate power from renewable resources. In addition, companies may also receive a sales tax incentive of up to 100% of the Kentucky sales and use tax paid (on or after the activation date) on materials, machinery and equipment used to construct, retrofit or upgrade an eligible project. (Tax incentive; Tax credit; Intended audiences: Commercial) Enacted in 2007.

Source:

[http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive\\_Code=KY25F&state=KY&CurrentPageID=1&RE=1&EE=1](http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive_Code=KY25F&state=KY&CurrentPageID=1&RE=1&EE=1)

**Sales Tax Exemption for Large-Scale Renewable Energy Projects** (KRS § 154.27-010 et seq.) - A renewable energy facility is defined as one that generates at least 50 kW of electricity from solar power or at least 1 MW from wind power, biomass resources, landfill gas, hydropower or similar renewable resources. The electricity must be sold to an unrelated party. The minimum investment in any renewable energy facility must be \$1 million in capital expenditure which is defined to include various non-capital costs such as labor. The tax credit allows approved facilities to receive a credit up to 100% of Kentucky income tax and the limited liability tax for projects that construct, retrofit or upgrade facilities that generate power from renewable resources. In addition, companies may also receive a sales tax incentive of up to 100% of the Kentucky sales and use tax paid (on or after the activation date) on materials, machinery and equipment used to construct, retrofit or upgrade an eligible project. (Tax incentive; Tax exemption; Intended audience: Commercial) Enacted in 2007.



Source:

[http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive\\_Code=KY26F&state=KY&CurrentPageID=1&RE=1&EE=1](http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive_Code=KY26F&state=KY&CurrentPageID=1&RE=1&EE=1)

**Alternative Fuel Production Tax Incentives** (Kentucky Revised Statutes 154.27-010 to 154.27-090) - The Kentucky Economic Development and Finance Authority (KEDFA) provides tax incentives to construct, retrofit, or upgrade an alternative fuel production or gasification facility that uses coal or biomass as a feedstock. The incentives may consist of: 1) a refund of up to 100% of the state sales tax paid on the purchase of personal property used to construct the facility; 2) a credit of up to 100% of an approved company's state income tax and limited liability entity tax that is generated by the project; 3) up to 4% of the wage assessment of employees whose jobs were created as a result of the construction, retrofit, upgrade or operation of a qualified facility; and 4) a credit for up to 80% of the coal severance tax paid for coal used as a feedstock. The incentives expire at the time of receipt of the authorized incentives or 25 years from activation of the project, whichever occurs first. Approved companies may recover up to 50% of their capital investment via the authorized tax incentives. The minimum capital investment for incentive eligibility is \$25 million for an alternative fuel or gasification facility that uses biomass as the primary feedstock and \$100 million for a facility that uses coal as the primary feedstock. (Tax incentive; Tax credit; Intended audiences: Utility) Enacted in 2008.

Source: [http://www.afdc.energy.gov/afdc/progs/view\\_ind.php/KY/6294](http://www.afdc.energy.gov/afdc/progs/view_ind.php/KY/6294)

**State Energy Plan Alternative Fuel Requirements** (Kentucky Revised Statutes 152.720) - The Governor's Office of Energy Policy oversees the development and implementation of Kentucky's comprehensive energy strategy. Specifically, the Governor's Office of Energy Policy is directed to develop and implement a strategy for the production of alternative transportation fuels and synthetic natural gas from fossil energy resources and biomass resources, including biodiesel and ethanol. The strategy must include the following: establishment or expansion of state government incentives for developing, constructing, or operating alternative transportation fuels and synthetic natural gas production facilities; support of alternative energy through awareness and technology development; and administration of grant programs to support energy-related research. (Regulations; Incentives; Intended audiences: Utility) Enacted in 2008.

Source: [http://www.afdc.energy.gov/afdc/progs/view\\_ind.php/KY/6051](http://www.afdc.energy.gov/afdc/progs/view_ind.php/KY/6051)

## Louisiana

### **Revision, Update and Distribution of the Booklet Biomass Energy Resources in Louisiana**

(Southeastern Regional Biomass Energy

Program) - The goal of this project is to develop a publication on biomass use and potential for energy in Louisiana. The publication will be distributed to legislators, policy-makers, planners and other individuals with an interest in developing efficient energy systems for the economies of Louisiana and other states with similar biomass resources. Amount: SERBP \$48,000; cost share \$11,029 (Education and consultation; Education) Enacted in 2005.

Source: <http://www.serbep.org/>

**Renewable Biomass Resources Program** (U.S. Department of Energy's State Energy Program) - The Renewable Biomass Resources Program developed a comprehensive, interactive Web-based database that identifies, quantifies, and geographically locates all potential renewable energy resources in the state and evaluated the economic development potential and the environmental impact of alternative farming and silvicultural practices. (Service provision, Initiative) Enacted in 2008.

Source: [http://apps1.eere.energy.gov/state\\_energy\\_program/grants\\_by\\_state.cfm/year=2006/state=LA](http://apps1.eere.energy.gov/state_energy_program/grants_by_state.cfm/year=2006/state=LA)

**Louisiana Net Metering** (La. R.S. 51:3061 et seq.) - Louisiana's rules, based largely on those in place in Arkansas, require investor-owned utilities, municipal utilities and electric cooperatives to offer net metering to customers that generate electricity using solar, wind, hydropower, geothermal or biomass resources. Residential systems up to 25 kilowatts (kW) in capacity, and commercial and agricultural systems up to 300 kW in capacity are eligible for net metering. (Renewable Energy Standards; Net Metering; Intended audiences: Commercial, residential, agricultural) Enacted in 2003.

Source:

[http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive\\_Code=LA02R&state=LA&CurrentPageID=1&RE=1&EE=1](http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive_Code=LA02R&state=LA&CurrentPageID=1&RE=1&EE=1)

**Renewable Fuels Standard** (Louisiana Revised Statutes 3:4674) - Within six months after ethanol produced in the state exceeds an annual production volume of 50 million gallons and the average wholesale price of a gallon Louisiana-manufactured ethanol, is equal to or below the average wholesale price of a gallon of regular unleaded gasoline for a period of 60 days, 2% of the total gasoline sold by volume in the state must be denatured ethanol produced from domestically grown feedstock or other biomass materials. Within six months after the cumulative monthly production of biodiesel produced in the state equals or exceeds 10 million gallons annually, 2% of the total diesel sold by volume in the state must be biodiesel produced from domestically grown feedstock. These requirements may also be met through the production of an "alternate renewable fuel" defined as a liquid fuel that is domestically produced from renewable biomass, can be used in place of ethanol or biodiesel, and meets the definition of renewable fuel in the Energy Policy Act of 2005. (Regulation; Standard; Intended audiences: Utility) Enacted in 2006.

Source: <http://www.legis.state.la.us/lss/lss.asp?doc=206106>

## Mississippi

**Biomass Program** (U.S. Department of Energy's State Energy Program) - The Biomass Program provided technical assistance to commercial, private, and non-private agencies to develop and market biomass and added-value products. It served as a marketing group for identified sources in Mississippi and promoted clean renewable energy sources as alternatives to air quality and environmental security in the future. It promoted and encouraged a biodiesel program to be used by the state office buildings for backup generation. (Regulation; Initiative; Intended audiences: Commercial, private, non-private agencies) Enacted in 2006.

Source: [http://apps1.eere.energy.gov/state\\_energy\\_program/grants\\_by\\_state.cfm/year=2006/state=MS](http://apps1.eere.energy.gov/state_energy_program/grants_by_state.cfm/year=2006/state=MS)

**Energy Investment Loan Program** (Miss. Code § 57-39-39) - Mississippi offers low-interest loans for renewable energy and energy efficiency projects (including biomass). All projects must demonstrate that they will reduce a facility's energy costs. The interest rate is 3% below the prime rate, with a maximum loan term of seven years. Loans range from \$15,000 to \$300,000. This program is supported by a revolving loan fund of \$7 million, established through federal oil overcharge funds. (Financing and Contracting; Loan; Intended audiences: Commercial, industrial) Enacted in 1989.

Source: <http://www.mississippi.org/content.aspx?url=/page/2744&#loanprgm>

## North Carolina

**Assessing Renewable Resources** (U.S. Department of Energy's State Energy Program) - The Assessing Renewable Resources activity assessed potential energy generation from biomass, solar, and hydropower sources. An estimate of current and projected energy production from these sources was completed. Near-term commercial processes for converting renewable energy into useful fuels and power will be outlined. (Education & Consultation; Consultation) Enacted in 2004.

Source: [http://apps1.eere.energy.gov/state\\_energy\\_program/grants\\_by\\_state.cfm/year=2004/state=NC](http://apps1.eere.energy.gov/state_energy_program/grants_by_state.cfm/year=2004/state=NC)



**Clean Technology Demonstration** (U.S. Department of Energy's State Energy Program) - The Clean Technology Demonstration project developed demonstration projects of commercially available technologies and techniques that focused on clean energy technologies such as fuel cells, biomass, wind, solar, and geothermal. It was included under Clean Technology Demonstration area. (Education and Consultation; Consultation) Enacted in 2004.

Source: [http://apps1.eere.energy.gov/state\\_energy\\_program/grants\\_by\\_state.cfm/year=2004/state=NC](http://apps1.eere.energy.gov/state_energy_program/grants_by_state.cfm/year=2004/state=NC)

**Local Option Green Building Initiative** (N.C. Gen. Stat. § 153A-340; SB 1597) - To encourage sustainable building practices, North Carolina law allows all counties and cities to provide reductions or partial rebates for building permit fees. To qualify for a fee reduction, buildings must meet guidelines established by the Leadership in Energy and Environmental Design (LEED) program, the Green Globes program, or another nationally recognized certification program. (Subsidies and Grants; Cost-Share; Intended audiences: Commercial, residential) Enacted in 2007.

Source:

[http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive\\_Code=NC48F&state=NC&CurrentPageID=1&RE=1&EE=1](http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive_Code=NC48F&state=NC&CurrentPageID=1&RE=1&EE=1)

**Biomass Market Development for North Carolina** (Southeastern Regional Biomass Energy Program) - The State Energy Office (SEO) will facilitate permanent establishment of the North Carolina Biomass Council (NCBC) through a subcontract with the North Carolina Solar Center (NCSC). The Council will provide consultation to the North Carolina Energy Policy Council, the SEO, and the North Carolina General Assembly on implementation of bioenergy studies and demonstration projects through the establishment of a biomass deployment roadmap for North Carolina. A biomass waste exchange website will be created, launched, and marketed, dedicated to listing and trading biomass wastes and other biomass products. This resource will be used by businesses—particularly in the agri-business sector—to access value added opportunities. Amount: SERBP \$48,000; cost share \$10,000. (Subsidies and Grants; Cost-Share) Enacted in 2005.

Source: <http://www.serbep.org/>

**Renewables in Schools Projects** (U.S. Department of Energy's State Energy Project) – The Renewables in Schools Projects improved the energy efficiency of schools by providing renewable energy demonstration projects that can be replicated at other school sites in North Carolina. These systems included solar hot water systems, day lighting systems, solar electric systems, wind energy systems, and biomass to energy conversion systems. (Education and Consultation; Education; Intended audience: Schools) Enacted in 2006.

Source: [http://apps1.eere.energy.gov/state\\_energy\\_program/grants\\_by\\_state.cfm/state=NC](http://apps1.eere.energy.gov/state_energy_program/grants_by_state.cfm/state=NC)

**North Carolina Green Business Fund** (HB 1473) - The North Carolina Green Business Fund provides funding to North Carolina organizations to encourage the development and commercialization of "promising" renewable energy and green building technologies. Grants of up to \$100,000 are available for the development of commercial innovations and applications in the biofuels industry, sustainable building practices and private sector investment in renewable energy technologies. (Subsidies and Grants; Grant; Intended audience: Commercial,

Nonprofit, Local Government, State Government, Agricultural, Institutional) Enacted in 2007.

Source: <http://www.ncscienceandtechnology.com>

**NC GreenPower Production Incentive** (NCUC Order, Docket No. E-100, Sub 90) - NC GreenPower, a statewide green-power program designed to encourage the use of renewable energy in North Carolina, offers production payments for grid-tied electricity generated by solar, wind, small hydro (10 megawatts or less) and biomass resources. NC GreenPower is an independent, nonprofit organization created by state government officials, electric utilities, nonprofit organizations, consumers, renewable-energy advocates and other stakeholders. (Subsidies and Grants; Incentives; Intended audience: Commercial, Industrial, Residential, Nonprofit, Schools, Local Government, State Government, Agricultural, Institutional) Enacted in 2003.  
Source: <http://www.ncgreenpower.org>

**Development for Biobased Technologies and Products through DOE's Energy Efficiency and Renewable Energy Programs (U.S.**

Department of Energy's State Energy Program) - The North Carolina Energy Office, in conjunction with the North Carolina Solar Center at North Carolina State University, the New Uses Council, and the Environmental and Energy Study Institute are working together to promote greater awareness and adoption of biobased fuels and products through an array of DOE EERE's outreach programs. The primary goal of this project is to increase EERE's outreach partners' understanding and awareness of biomass resources, uses, and technologies, thereby encouraging broader adoption of biobased products. (Service Provision; Initiative) Enacted in 2004.  
Source: [http://apps1.eere.energy.gov/state\\_energy\\_program/project\\_detail.cfm/sp\\_id=748](http://apps1.eere.energy.gov/state_energy_program/project_detail.cfm/sp_id=748)

**Energy Improvement Loan Program** (N.C. Gen. Stat. § 143-345.18) - North Carolina's Energy Improvement Loan Program (EILP) is available to businesses, local governments, public schools, community colleges, and nonprofit organizations for projects that include energy efficiency improvements and renewable energy systems. Loans with an interest rate of 1% are available for certain renewable-energy and energy-recycling projects. Eligible renewable-energy projects generally include solar, wind, small hydropower (less than 20 megawatts) and biomass. Loans with a rate of 3% are available for projects that demonstrate energy efficiency, energy cost savings or reduced energy demand. (Financing and Contracting; Loan; Intended audiences: Commercial, Industrial, Nonprofit, Schools, Local Government) Enacted in 2001.  
Source: <http://www.energync.net/funding/eilp.html>

**North Carolina Net Metering** (NCUC Order, Docket No. E-100, Sub 83) - In October 2005, the North Carolina Utilities Commission (NCUC) adopted an order requiring the state's three investor-owned utilities -- Progress Energy, Duke Energy and Dominion North Carolina Power -- to make net metering available to customers that own and operate systems that generate electricity using photovoltaics (solar-electric energy), wind or biomass resources. The maximum capacity of net-metered residential systems is 20 kilowatts (kW); the maximum capacity of netmetered nonresidential systems is 100 kW. Net metering is available on a first-come, first-served basis in conjunction with the utility's interconnection standards, up to an aggregate limit of 0.2% of the utility's North Carolina jurisdictional retail peak load for the previous year. (Renewable Energy Standards; Net Metering; Intended audiences: Commercial, Industrial, Residential, Nonprofit, Schools, Local Government, State Government, Tribal Government, Fed. Government, Agricultural, Institutional) Enacted in 2005.  
Source: <http://www.ncuc.commerce.state.nc.us>

**Interconnection Standards** (NCUC Order, Docket No. E-100, Sub 101) - The N.C. Utilities Commission (NCUC) adopted comprehensive interconnection standards for distributed generation in June 2008. The NCUC standards, which are similar to the Federal Energy Regulatory Commission's (FERC) interconnection standards for small generators, govern interconnection to the distribution systems of the

state's three investor-owned utilities: Progress Energy, Duke Energy and Dominion North Carolina Power. The standards apply to all state-jurisdictional interconnections (including interconnection of three-phase generators) regardless of the capacity of the generator, the voltage level of the interconnection, or whether the customer intends to offset electricity consumption or sell electricity. (Regulation; Standards; Intended audiences: Commercial, Industrial, Residential, Nonprofit, Schools, Local Government, State Government, Fed. Government, Agricultural, Institutional)  
Enacted in 2008.

Source: <http://www.ncuc.commerce.state.nc.us>

**Renewable Energy and Energy Efficiency Portfolio Standard** (N.C. Gen. Stat. § 62-2 et seq.) - North Carolina's Renewable Energy and Energy Efficiency Portfolio Standard (REPS) requires all investor-owned utilities in the state to supply 12.5% of 2020 retail electricity sales (in North Carolina) from eligible energy resources by 2021. Municipal utilities and electric cooperatives must meet a target of 10% renewables by 2018 and are subject to slightly different rules. (Regulation; Standard; Intended audience: Municipal Utility, investor-owned utility, rural electric cooperative) Enacted in 2007.

Source: <http://www.ncuc.commerce.state.nc.us>

**Renewable Energy Tax Credit (Corporate)** (N.C. Gen. Stat. § 105-129.15 et seq.) - In 1999 North Carolina's various renewable-energy tax credits were revised and unified into a statute that addresses nearly all renewables. The revised statute provides for a tax credit of 35% of the cost of renewable energy property constructed, purchased or leased by a taxpayer and placed into service in North Carolina during the taxable year. Renewable-energy equipment expenditures eligible for the tax credit include the cost of the equipment and associated design; construction costs; and installation costs less any discounts, rebates, advertising, installation-assistance credits, name-referral allowances or other similar reductions. (Tax incentive; Tax credit; Intended audience: Commercial, industrial) Enacted in 1999.

Source: <http://www.ncsc.ncsu.edu>

**Renewable Energy Tax Credit (Personal)** (N.C. Gen. Stat. § 105-129.15 et seq.) - Renewable-energy equipment expenditures eligible for the tax credit include the cost of the equipment and associated design; construction costs; and installation costs less any discounts, rebates, advertising, installation-assistance credits, name-referral allowances or other similar reductions. Under North Carolina's tax code, the allowable credit may not exceed 50% of a taxpayer's liability for the year, reduced by the sum of all other credits. (Tax incentive; Tax credit; Intended audience: Commercial, residential, multi-family residential) Enacted in 1977.

Source: <http://www.ncsc.ncsu.edu>

**Renewable Energy Property Tax Credit** (North Carolina General Statutes 105-129.15 and 105-129.16A) - Taxpayers who construct, purchase, or lease renewable energy property, are eligible for a tax credit equal to 35% of the cost of the property. Renewable energy property includes: equipment that uses renewable biomass resources to produce ethanol, methanol, biodiesel, or methane produced via anaerobic biogas, utilizing agricultural and animal waste or garbage; and related devices for converting, conditioning, and storing the liquid fuels and gas produced with the biomass equipment. The credit must be taken in five equal installments beginning with the taxable year in which the property is placed in service. A maximum funding amount of \$2,500,000 per installation applies to renewable energy property placed in service for any purpose other than residential. Property must be placed in service before January 1, 2011. (Tax incentive; Tax credit; Intended audiences: Commercial, residential, industrial, agricultural) Enacted in 2007.

Source: [http://www.afdc.energy.gov/afdc/progs/view\\_ind.php/NC/5483](http://www.afdc.energy.gov/afdc/progs/view_ind.php/NC/5483)

## South Carolina

**Biomass Energy Production Incentive** (HB 3649) - In 2007 South Carolina enacted the Energy Freedom and Rural Development Act, which provides production incentives for certain biomass-energy facilities. Eligible systems earn \$.01 per kilowatt-hour (kWh) for electricity generated and \$.30 per therm (100,000 Btu) for energy produced from biomass resources. The incentive payment for the production of electricity or thermal energy may not be claimed for both electricity and energy produced from the same biomass resource. (Subsidies and Grants; Cost-Share; Intended audiences: Commercial, industrial, agricultural) Enacted in 2007.

Source: [http://www.scstatehouse.net/sess117\\_2007-2008/bills/3649.htm](http://www.scstatehouse.net/sess117_2007-2008/bills/3649.htm)

**Renewable Energy Grant Program** (S.C. Code § 46-3-260) - The South Carolina Renewable Energy Grant Program provides grants to private and public entities located in South Carolina to assist those involved in renewable energy-related research and projects to become more competitive in obtaining federal and other grants. Matching grants up to \$200,000 are available for demonstration projects that validate the effectiveness of new and future biomass technologies and products, provided that the grant does not exceed 50% of the total cost of the demonstration project. (Subsidies and Grants; Grant; Intended audience: Commercial, industrial, nonprofit, schools, local government, state government, tribal government, agricultural, institutional) Enacted in 2007.

Source: <http://www.energy.sc.gov/index.aspx?m=29&t=90&h=405>

**Renewable Resource Use and Development Program** (U.S. Department of Energy's State Energy Program) - Helped develop biomass energy projects through national and regional programs. Supported Green Power through conference development and support for the Green Power Summit. Identified other opportunities for renewable resource development. Worked to develop biomass partnerships in transportation, production, and consumption. (Service Provision; Initiative; Intended audiences: State government, local government, NGOs, researchers) Enacted in 2005.

Source: [http://www.eere.energy.gov/state\\_energy\\_program/grants\\_by\\_state.cfm/year=2005/state=SC](http://www.eere.energy.gov/state_energy_program/grants_by_state.cfm/year=2005/state=SC)

**South Carolina Biomass Market Development Program** (U.S. Department of Energy's State Energy Program) - The South Carolina Biomass Market Development Partnership (SCBMDP) will help develop or enhance biomass-based technologies and expand markets for biomass-based technologies and markets that contribute to the economic viability of biorefineries. SCBMDP will target conferences for biomass producers to teach them to grow more viable biomass crops, and support business outreach and training. It will also develop and implement state and local incentives and collaborate with biologically based product manufacturers to increase consumer acceptance of biologically based products. (Service provision; Initiative; Intended audiences: State government, local government, NGOs, researchers) Enacted in 2004.

Source: [http://www.eere.energy.gov/state\\_energy\\_program/project\\_detail.cfm/sp\\_id=751](http://www.eere.energy.gov/state_energy_program/project_detail.cfm/sp_id=751)

**Renewable Energy Revolving Loan Program** (HB 3748 [Sec. 68]) - The Renewable Energy Revolving Loan Program provides low-interest loans to an individual or organization that plans to build a qualified renewable energy production facility. For the purposes of this loan, a renewable energy production facility is a facility that produces energy or transportation fuels from biomass, solar or wind resources. This loan may provide up to 50% of the total cost of a project, but may not exceed \$250,000 for each project. (Financing and Contracting; Loan; Intended audiences: Commercial, Industrial, Residential, Nonprofit, Schools, Local Government, State Government, Agricultural) Enacted in 2007.

Source: <http://www.energy.sc.gov/index.aspx?m=29&t=90&h=404>

**Biomass Energy Tax Credit** (S.C. Code § 12-6-3620) - The 2007 amendments provide that, for taxable years beginning after 2007, taxpayers are allowed a credit against the income tax and/or license fees for 25% of the costs incurred by the taxpayer for the purchase and installation of equipment used to create heat, power, steam, electricity or another form of energy for commercial use from a fuel consisting of at least 90% biomass resources. For taxable years beginning after 2007, the tax credit for all expenditures is limited to \$650,000 per taxpayer year, and may not exceed a taxpayer's liability for that year. Unused credits may be carried forward for 15 years. For a fiscal year, all claims may not exceed \$650,000 and must apply proportionately to all eligible claimants. (Tax incentive; Tax credit; Intended audiences: Industrial) Enacted in 2007.

Source: <http://www.scstatehouse.net/CODE/T12C006.HTM>

## Tennessee

**Tennessee Bio-Based Fuels – Economics, Consumption, and Outreach** (Southeastern Regional Biomass Energy Program) - The primary objectives of this project are to take existing bio-fuel technology to as many consumers as possible and help new technology find a proving ground throughout the state. The three main tools for carrying that message are public forums and workshops, legislation and mass media. Amount: SERBP \$48,000; cost share \$11,749. (Education and Consultation; Education) Enacted in 2005.

Source: <http://www.serbep.org>

**The Renewable Resource Development Program** (U.S. Department of Energy's State Energy Program) - Developed and administered the Million Solar Roofs initiative in Tennessee. It served as the state's biomass contact, making research and information available. It also maintained biomass resource publications and a Web site. (Education and Consultation; Education) Enacted in 2004.

Source: [http://apps1.eere.energy.gov/state\\_energy\\_program/grants\\_by\\_state.cfm/year=2004/state=TN](http://apps1.eere.energy.gov/state_energy_program/grants_by_state.cfm/year=2004/state=TN)

**Energy Efficiency Technologies and Waste Reduction in Tennessee's Forest Products Industry** (U.S. Department of Energy's State Energy Program) - The Tennessee Energy Division proposes expanding its participation in the successful DOE Industries of the Future program to include the wood products industries. First, the hardwood forest products industry in Tennessee will be profiled for its use of major energy using technologies and requirements. Second, new technologies will be identified and evaluated for their usefulness and ease of integration into ongoing operations for energy savings, waste reductions, and financial savings without major disruption to operations. Third, workshops and training will be held with Tennessee's forest products industry to explain findings, benefits to the industry, new technologies that appear most useful, and how they may be integrated into operations using numerous DOE and economic development programs and incentives. Funding: \$60,120. (Service Provision; Initiative; Intended audience: Tennessee Forest Products Industry) Enacted in 2002.

Source: [http://apps1.eere.energy.gov/state\\_energy\\_program/project\\_detail.cfm/sp\\_id=317](http://apps1.eere.energy.gov/state_energy_program/project_detail.cfm/sp_id=317)

**Small Business Energy Loan Program** (Tenn. Code § 4-3-710) - The Tennessee Energy Division offers low-interest loans of up to \$300,000, with terms of up to 7 years, for energy efficiency projects and other projects shown to save energy or decrease energy demand. Businesses with fewer than 300 employees or less than \$3.5 million in annual gross sales or receipts are eligible. The loan is offered with a 0% interest rate for businesses in the Three-Star communities, and at a 3% interest rate for all others. Loans cannot be used for new construction or business startup. All renewable energy technologies are eligible under the program's guidelines. In addition to low-interest loans, the Energy Division offers free audits and technical assistance. (Financing and Contracting; Loan; Intended audiences: Commercial, industrial) Enacted in 1987.

Source: [http://www.state.tn.us/ecd/energy\\_sbcl.htm](http://www.state.tn.us/ecd/energy_sbcl.htm)



### **Provision for Establishing an Alternative Fuel Research and Development Program**

(Tennessee Code 54-1-136) – The Tennessee Department of Agriculture is authorized to develop and implement an alternative fuel research program to stimulate public and private research in fuel-related conversion technology. This research should address converting Tennessee agricultural products, such as soybeans, switchgrass, and other biomass, into alternative fuels, as well as the production capabilities needed to deliver such alternative fuels to Tennessee consumers. (Service provision; Initiative; Intended audiences: Researchers) Enacted in 2006.

Source: [http://www.afdc.energy.gov/afdc/progs/view\\_ind.php/TN/6063](http://www.afdc.energy.gov/afdc/progs/view_ind.php/TN/6063)

## **Texas**

**The Innovative Renewable Energy Demonstration Program** (U.S. Department of Energy's State Energy Program) - Focused on projects that create awareness and provide education and promotion of renewable energy. It helped build a renewable energy infrastructure, establish employment opportunities, and demonstrate the benefits of distributed generation. (Education and Consultation; Education) Enacted in 2006. Source: [http://apps1.eere.energy.gov/state\\_energy\\_program/grants\\_by\\_state.cfm/state=TX](http://apps1.eere.energy.gov/state_energy_program/grants_by_state.cfm/state=TX)

**City Public Service First E85 Fleet, Biomass-Derived Ethanol in Texas** (U.S. Department of Energy's State Energy Program) - City Public Service's (CPS) fleet has become the first in Texas to use corn- and forestry-derived ethanol as an alternative fuel. CPS began fueling 130 flexible fuel vehicles (FFVs), which amounts to 37% of its light-duty vehicles, with the environmentally friendly fuel at the beginning of June. Through the use of E85, CPS is exceeding its alternative fuel and vehicle requirements under the Energy Policy Act. (Regulation; Initiative; Intended audiences: City Transportation Fleet) Enacted in 2005. Source: [http://apps1.eere.energy.gov/state\\_energy\\_program/project\\_brief\\_detail.cfm/pb\\_id=891](http://apps1.eere.energy.gov/state_energy_program/project_brief_detail.cfm/pb_id=891)

**Harvesting Mesquite Biomass for Energy on Texas Rangelands** (U.S. Department of Energy's State Energy Program) - Specific objectives of this research are to (1) refine existing technology for harvesting, baling and loading mesquite biomass, (2) quantify costs associated with harvesting and baling mesquite by determining harvest costs in different density stands and by determining length of time needed before harvest of mesquite regrowth is economical, (3) determine the potential of mesquite wood for conversion to ethanol using Pearson Technology, and (4) enhance cost-share applications through outreach and information transfer to consumers, farmers and industry. Mesquite biomass could be used for a variety of energy products, including ethanol, as feedstock for small wood-fired power plants or possibly green diesel. Initial projections indicate that the mesquite biomass source is abundant in the north Texas region and could easily supply several 5-megawatt wood-fired generators. Total funding: \$74,842. (Service Provision; Initiative; Intended audiences: Rangeland owners) Enacted in 2003. Source: [http://apps1.eere.energy.gov/state\\_energy\\_program/project\\_detail.cfm/sp\\_id=613](http://apps1.eere.energy.gov/state_energy_program/project_detail.cfm/sp_id=613)

**Texas Net Metering** (16 TAC § 25.242(h)(4)) - Public Utility Commission of Texas Substantive Rule § 25.242(h) requires any integrated investor-owned utility (IOU) that has not unbundled in accordance with § 39.051 of the federal Public Utility Regulatory Policy Act (PURPA) to provide specific net-metering options for customers that operate qualifying facilities (QFs) of 100 kilowatts (kW) or less that use nonrenewable- energy resources, and to qualifying facilities of 50 kW or less that use renewable-energy resources. For eligible facilities, there is no statewide limit on the number of customers who may net meter, and there is no statewide limit on the total aggregate net-metered capacity under the rules. (Renewable Energy Standards; Net Metering; Intended audiences: Commercial, industrial, residential) Enacted in 2007.



Source: <http://www.puc.state.tx.us/rules/subrules/electric/25.242/25.242ei.cfm>

**Alternative Energy in New State Construction** (Texas Government Code § 2166.401 et seq.) - Texas requires state government departments to compare the cost of providing energy alternatives for new and reconstructed state government buildings and for certain construction or repair to energy systems and equipment. The governing body must determine economic feasibility for each function by comparing the estimated cost of providing energy for the function using conventional design practices and energy systems with the estimated cost of providing energy for the function using alternative energy devices during the economic life of the building. (Regulation; Standard; Intended audiences: State government) Enacted in 1995.

Source: [http://www.seco.cpa.state.tx.us/sa\\_codes.html](http://www.seco.cpa.state.tx.us/sa_codes.html)

**Fuel Mix and Emissions Disclosure** (TX PUC Rules §25.475) - Texas retail electric providers (REP) are required to disclose certain information to customers on an "Electricity Facts Label". (Regulation; Standard; Intended audience: Utility) Enacted in 2004.

Source: <http://www.powertochoose.org/>

**Interconnection Standards** (16 TAC § 25.211 et seq.) - The Texas Public Utility Regulatory Act (PURA) of 1999 included a provision that "a customer is entitled to have access 'to on-site distributed generation'" [§39.101(b)(3)]. This provision led the Public Utility Commission of Texas (PUCT) to adopt interconnection standards (Substantive Rules §25.211 and §25.212) in 1999. The rules apply to electrical generating facilities (consisting of one or more on-site distributed-generation units) located at a customer's point of delivery, with a maximum capacity of 10 megawatts (MW) and connected at a voltage less than 60 kilovolts (kV). The total capacity of a facility's individual on-site distributed generation units may exceed 10 MW. However, no more than 10 MW of capacity will be interconnected at any point in time at the point of common coupling. (Regulation; Standard; Intended audience: Commercial, industrial, residential) Enacted in 1999.

Source: <http://www.puc.state.tx.us/rules/subrules/electric/index.cfm>

**Renewable Generation Requirement** (Tex. Utilities Code § 39.904) - The Public Utility Commission of Texas (PUCT) adopted rules for the state's Renewable Energy Mandate, establishing a renewable portfolio standard (RPS), a renewable-energy credit (REC) trading program, and renewable-energy purchase requirements for competitive retailers in Texas. The 1999 standard called for 2,000 megawatts (MW) of new renewables to be installed in Texas by 2009, in addition to the 880 MW of existing renewables generation at the time. In August 2005, S.B. 20 increased the renewable-energy mandate to 5,880 MW by 2015 (about 5% of the state's electricity demand). The 2005 legislation also set a target of reaching 10,000 MW of renewable energy capacity by 2025. (Regulation; Standards; Intended audience: (Investor-Owned Utility, Retail supplier [Municipal Utilities and co-ops may opt-in]) Enacted in 1999.

Source: <http://www.puc.state.tx.us/rules/subrules/electric/25.173/25.173ei.cfm>

**Renewable Diesel Tax Credit** (Energy Policy Act of 2005 (H.R. 6)) - Amends the biodiesel tax credits to include renewable diesel fuel that is derived from biomass by a thermal depolymerization process. The credit is \$1 per gallon of renewable diesel. To qualify, the fuel must meet ASTM D975 or D396 standards. (Tax incentive; Tax Credit) Enacted in 2005.

Source: [http://www.seco.cpa.state.tx.us/re\\_biodiesel-incentives.htm](http://www.seco.cpa.state.tx.us/re_biodiesel-incentives.htm)

**Renewable Energy Systems Property Tax Exemption** (Texas Statutes § 11.27) - The Texas property tax code allows an exemption of the amount of the appraised property value that arises from the installation or construction of a solar or wind-powered energy device that is primarily for the production and distribution of thermal, mechanical, or electrical energy for on-site use, or devices used to store that

energy. "Solar" is broadly defined to include a range of biomass technologies. (Tax incentive, Tax exemption; Intended audience: Commercial, industrial, residential) Enacted in 1981.

Source: [http://www.seco.cpa.state.tx.us/re\\_incentives.htm](http://www.seco.cpa.state.tx.us/re_incentives.htm)

**Alternative Fuel Program Support** (Executive Order RP 29) - The Texas Energy Planning Council, facilitated by the Railroad Commission of Texas, was created in November 2003 to advise the Governor on a balanced plan to provide the energy needed to fuel Texas' future economic growth and prosperity. The final report, Texas Energy Plan 2005: Energy Security for a Bright Tomorrow, was submitted to the Governor in January 2005. The report identifies gaps between the state's energy supply and energy demand and recommends a plan to close or minimize these gaps. The Council explored ways to diversify future energy supplies via liquefied natural gas, nuclear, and clean coal technology as well as through renewable energy sources such as wind power, biomass, and fuel cells. (Education and Consultation; Consultation) Enacted in 2003.

Source:

<http://www.suncoastresources.com/Services/Fuels/Biodiesel/BiodieselIncentivesTexas/tabid/261/Default.aspx>

## Virginia

**State Buildings Energy Reduction Plan** (Executive Order 48) - The "Energy Efficiency in State Government" set out to reduce non-renewable energy purchases and increase overall energy savings. In addition, the order instructs the Commonwealth to encourage the private sector to adopt energy-efficient building standards by giving preference when leasing facilities for state use to facilities meeting LEED or EPA Energy Star Ratings. Agencies and institutions must also purchase or lease Energy Star rated equipment and appliances for all classifications for which an Energy Star designation is available. (Regulation; Initiative; Intended audiences: State Government, institutional) Enacted in 2007.

Source: <http://dmme.virginia.gov/contactus.shtml>

**Voluntary Renewable Energy Portfolio Goal** (SB 1416) - Under the goal, investor-owned utilities are encouraged to procure a percentage of the power sold in Virginia from eligible renewable energy sources. In addition to allowing for RPS program cost recovery to participating utilities, the Virginia State Corporation Commission (SCC) will provide a performance incentive in the form of an increased rate of return (profit) for each "RPS Goal" attained. Eligible energy resources include solar, wind, geothermal, hydropower, wave, tidal, and biomass energy. Hydropower excludes pumped storage, and the amount of wood derived from trees that would be otherwise used by Virginia lumber and pulp manufacturers is capped at 1.5 million tons annually. Electricity must be generated or purchased in Virginia or in the interconnection region of the regional transmission entity. (Regulation; Initiative; Intended audiences: Utility) Enacted in 2007.

Source: <http://www.mme.state.va.us/>

**Virginia Net Metering** (Va. Code § 56-594) - Virginia's net-metering law applies to residential generating systems up to 10 kilowatts (kW) in capacity and non-residential systems up to 500 kW in capacity. The maximum capacity for non-residential systems was raised from 25 kW to 500 kW by SB 651 of 2004. In 2006, HB 1541 extended eligibility to all systems that generate electricity using renewable energy, defined as "energy derived from sunlight, wind, falling water, sustainable biomass, energy from waste, wave motion, tides, and geothermal power." Net metering is available on a first-come, first-served basis until the rated generating capacity owned and operated by customer-generators reaches 1% of an electric distribution company's adjusted Virginia peak-load forecast for the previous year. Net metering is available to customers of investor-owned utilities and electric cooperatives, but not to customers of municipal utilities. (Renewable Energy Standards; Net Metering;

Intended audiences: Commercial, Residential, Nonprofit, Schools, Local Government, State Government, Institutional) Enacted in 1999.

Source: <http://www.mme.state.va.us>

**Interconnection Standards** (Va. Code § 56-578) - The Virginia State Corporation Commission (SCC) first developed simplified interconnection rules for systems eligible for net metering in 2000. The rules were revised in 2005 after the capacity limit for non-residential systems was raised from 25 kilowatts (kW) to 500 kW. The rules were revised again in 2006 by permitting lease financing for net-metered systems and extending net metering to all systems that generate electricity using renewable energy, defined as "energy derived from sunlight, wind, falling water, sustainable biomass, energy from waste, wave motion, tides, and geothermal power." (Regulation; Standards; Intended audiences: Commercial, Industrial, Residential, Nonprofit, Schools, Local Government, State Government, Federal Government) Enacted in

1999.

Source: <http://www.scc.state.va.us>