2000-2013

Arizona State Biomass Policies and Instruments

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Tax Policy:

**Qualifying Wood Stove Deduction (1994)** – This incentive allows Arizona taxpayers to deduct the cost of converting an existing wood fireplace to a qualifying wood stove. The purchase cost and installation of all necessary equipment is tax deductible, up to a maximum $500 deduction. Qualifying wood stoves must meet the performance standards for new wood heaters manufactured after July 1990, or sold after July 1992 pursuant to 40 Code of Federal Regulations part 60, and subpart AAA. This deduction is for taxable years after December 31, 1993.

**Property Tax Assessment for Renewable Energy Equipment** – Renewable energy equipment owned by utilities and other entities operating in Arizona is assessed at 20% of its depreciated cost for the purpose of determining property tax. “Renewable energy equipment” is defined as “electric generation facilities, electric transmission, electric distribution, gas distribution or combination gas and electric transmission and distribution and transmission and distribution cooperative property that is located in this state, that is used or useful for the generation, storage, transmission or distribution of electric power, energy or fuel derived from solar, wind or other nonpetroleum renewable sources not intended for self-consumption, including materials and supplies and construction work in progress, but excluding licensed vehicles and property valued under sections 42-14154 and 42-14156.

**Healthy Forest Enterprise Incentives Program** – The statute requires all departments to purchase products certified by Energy Star or the federal energy management program (FEMP) in all categories that are available unless the products are shown not to be cost-effective on a life cycle cost basis. The statute also required the Department of Commerce to adopt energy conservation standards for all new capital projects including buildings designed and constructed by school districts, community college districts and universities. The Department of Commerce selected ASHRAE Standard 90.1-2004, which is also a prerequisite for LEED certification. Moreover, Biofuels not specified but: “3. “Processing” means: (a) Any change in the physical structure of qualifying forest products removed from a qualifying project into a marketable commercial product or component of a product that has commercial value to a consumer or purchaser and that is ready to be used with or without further altering its form.

**Energy Equipment Property Tax Exemption** – Arizona’s property tax exemption was established in June 2006 (HB 2429) and originally applied only to “solar energy devices and any other device or system designed for the production of solar energy for on-site consumption.” For property tax assessment purposes, these devices are considered to add no value to the property. A “solar energy device” for the purpose of this incentive is defined as “a system or series of mechanisms designed primarily to provide heating, to provide cooling, to produce electrical power, to produce mechanical power, to provide solar daylighting or to provide any combination of the foregoing by means of collecting and transferring solar generated energy into such uses either by active or passive means. Such systems may also have the capability of storing such energy for future utilization. Passive systems shall clearly be designed as a solar energy device such as a trombe wall and not merely a part of a normal structure such as a window.” HB 2332, signed in July of 2009, expanded the exemption to include other renewable energy technologies, as well as combined heat and power systems, and energy efficient building components.

**Renewable Energy Business Tax Incentives** – Arizona SB 1403, signed in July of 2009, created tax incentives intended to draw renewable energy product manufacturers to Arizona. Specifically, income tax credits and property tax incentives are available for companies choosing to establish or expand their manufacturing facilities and corporate headquarters in Arizona. To be eligible the business must meet certain minimum requirements for the quantity and quality of new jobs created. Some of these requirements were amended in May 2010 by Senate Bill 1201. Different incentive levels are available depending on how many full-time jobs are created and the salary for those jobs. Businesses must first submit an application to the AZ Department of Commerce to be approved as an eligible facility. The law provides for continual review of the business by the Department of Commerce to ensure that the business is still meeting the various requirements. If approved, the business may be eligible for income tax credits or property tax incentives.
Rules and Regulations:

Renewable Energy Standard – In November 2006, the Arizona Corporation Commission adopted final rules to expand the state's Renewable Energy Standard to 15% by 2025, with 30% of the renewable energy to be derived from distributed energy technologies (~2,000 megawatts). Utilities subject to the RES must obtain renewable energy credits (RECs) (equal to one kilowatt-hour) from eligible renewable resources to meet 15% of their retail electric load by 2025 and thereafter. Of this percentage, 30% (i.e. 4.5% of total retail sales) must come from distributed renewable resources by 2012 and thereafter. One-half of the distributed renewable energy requirement must come from residential applications and the remaining one-half from nonresidential, non-utility applications.

Energy Efficiency Standards for State Buildings – Arizona has some requirements for their buildings contained within their statutes. A.R.S. § 34-451 requires the Department of Administration, the Department of Transportation and the Arizona Board of Regents to reduce their energy use by 15% by July 1, 2011 using July 1, 2001 through June 30, 2002 as the baseline year. As a whole, the three building systems reduced their energy usage on a BTU per square foot basis by 15.8%, meeting the requirements of the statute.
Market Activity:

**APS – Renewable Energy Incentive Program** – Through the Renewable Incentive Program, Arizona Public Service (APS) offers customers who install various renewable energy sources the opportunity to sell the credits associated with the energy generated to APS. Other renewables (i.e., biomass) installed by non-residential customers can apply to receive a PBI. APS will evaluate the project to determine if it is able to qualify renewable energy incentives. Incentive amount is performance-based and are available for Electricity Generators, Thermal Systems & Heat.

**Arizona Net Metering** - Under Arizona’s rules, net metering is available to customers who generate electricity using solar, wind, hydroelectric, geothermal, biomass, biogas, combined heat and power (CHP) or fuel cell technologies. The ACC did not set a firm kilowatt limit on system size capacity. Instead, systems must be sized to meet all or part of a customer’s electric load in that the system may not exceed 125% of the customer's total connected load. Net metering is accomplished using a single bi-directional meter. Any customer net excess generation (NEG) will be carried over to the customer’s next bill at the utility's retail rate, as a kilowatt-hour (kWh) credit. Any NEG remaining at the customer's last monthly bill in a calendar year will be paid to the customer at the utility's avoided cost payment. Credited to customer’s next bill at utility's retail rate; granted to utility at end of calendar year.

Disbursements:

**Interconnection Guidelines (ongoing)** – In June 2007, the Arizona Corporation Commission (ACC) initiated a rulemaking process to establish statewide interconnection standards for distributed generation (DG). This proceeding is still in progress. Until the new official rules go into effect, the commission has recommended that the utilities use the Interconnection Document as a guide. This document applies to systems up to 10 megawatts (MW) in capacity. The state’s utilities independently developed interconnection agreements for distributed generation (DG) prior to the ACC's ongoing proceeding to establish statewide standards. The Salt River Project (SRP), which is not regulated by the ACC on utility matters, developed DG interconnection guidelines and an interconnection agreement based on draft rules and a report released by the ACC in 1999 and 2000, respectively. SRP’s rules include technical protection requirements, a flow chart of interconnection procedures and a two-page interconnection application. The rules establish separate requirements for units based on system capacity. The rules establish separate requirements for units based on system capacity: Class I: 50 kilowatts (kW) or less, single or three-phase; Class II: 51 kW to 300 kW, three-phase; Class III: 301 kW to five megawatts (MW), three-phase; Class IV: greater than 5 MW, three-phase.

Cost-Share and Grants:

**UES Renewable Energy Credit Purchase Program** – Through the Renewable Incentive Program, UniSource Energy Services (UES) offers customers who install various renewable energy sources the opportunity to sell the credits associated with the energy generated to UES. In 2008 UES expanded the list of qualified renewables that receive incentives to include all technologies eligible for Arizona’s Renewable Energy Standard (RES). On-grid small hydro, biomass-biogas systems, pool heating (non-residential only), space cooling, and geothermal (electric, cooling and heating systems) are all eligible to receive Performance-Based Incentives (PBIs). Biomass Cooling, Biomass Thermal, and Biomass Electric programs are available, and incentive amount is performance-based.

Government Services: