STATE FINANCIAL INCENTIVES FOR RENEWABLE ENERGY

A STATE PROGRAM SUMMARY



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SUMMARY REMARKS

This document is intended to be an overview of state renewable energy financial incentives available in each state including: tax incentives, grants, loans, rebates, production incentives and industry recruitment programs. References are included for the code or authority for more detailed information on regulations.

Not covered in this summary are federal, outreach or voluntary programs. A separate section examines the renewables portfolio standards for the states. It is important to remember that the information in this summary is a snapshot in time, as legislative changes are ongoing in most states.

Of the programs covered, rebate, loan and grant programs are the most prevalent incentives. By contrast, there are very few industry recruitment efforts to attract renewable energy equipment manufacturers to any given state.

Most states have a combination of corporate, property and sales tax credits, deductions or exemptions. The corporate credits range from 10 to 35 percent against the cost of the equipment; however, there are often program investment parameters that must be met.

In some states, property taxes are collected at the local level, so the state provides a local option of providing a property tax incentive for renewable energy devices. The incentives can take the form of exemptions, exclusions and credits—and, are often based on a value model. If a renewable system costs \$2,000 and the conventional system is \$1,000, then the renewable system is assessed at \$1,000.

Personal income tax credits or deductions to cover the expense of purchasing and installing renewable energy equipment are available in many states. The terms and eligible technologies vary by state.

STATE FINANCIAL INCENTIVES FOR RENEWABLE ENERGY

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OVERVIEW

STATE FINANCIAL INCENTIVES FOR RENEWABLE ENERGY

STATE	Personal Tax	Corporate Tax	Sales Tax	Property Tax	Rebates	Grants	Loans	Industry Recruit.	Leasing /	Production Incentive
Alabama	1-S					1-S				
Alaska			1-S				1-S			
Arizona	2-S		1-S							
Arkansas		1-S						1-S		
California	2-S	1-S		1-S	2-S	3-S	2-S	1-S		
Colorado	1-S	1-S								
Connecticut				1-S		2-S	1-S			
Delaware					1-S					
Florida			1-S							
Georgia	1-S	1-S								
Hawaii	2-S	3-S	2-S					1-S		
Idaho	1-S						1-S			
Illinois				1-S	1-S	3-S				
Indiana				1-S		5-S				
Iowa		1-S	2-S	3-S		1-S	3-S			
Kansas	1-S	1-S		1-S		1-S				
Kentucky										
Louisiana										
Maine										
Maryland	2-S	2-S	2-S	2-S	1-S		2-S			
Massachusetts	2-S	3-S	1-S	1-S	1-S	2-S				
Michigan		3 5	10	1.0		1-S				
Minnesota			2-S	1-S	1-S		2-S			2-S
Mississippi				1.0			1-S			
Missouri		1-S					1-S			
Montana	3-S	1-S		1-S		1-S	1-S	1-S		
Nebraska		1-S					1-S			
Nevada			1-S	2-S						
New Hampshire				1-S						
New Jersey			1-S		1-S					
New Mexico		1-S								
New York	1-S	1-S		1-S	3-S	1-S	1-S			
North Carolina	1-S	1-S		1-S			1-S	1-S		
North Dakota	1-S	1-S	1-S	2-S						
Ohio	1-S	2-S	1-S	1-S			1-S			
Oklahoma		1-S						1-S		
Oregon	1-S	1-S		1-S		1-S	1-S			
Pennsylvania						1-S				
Rhode Island	1-S		1-S	1-S	2-S	1-S				
South Carolina										
South Dakota				1-S						
Tennessee							1-S			
Texas		1-S		1-S				1-S		
Utah	1-S	1-S								
Vermont			1-S	1-S						
Virginia			1.0	1-S			1-S	1-S		
Washington			1-S		1-S			1-S		
West Virginia		1-S	1.0	1-S	1.0			1.0		
Wisconsin		1-S		1.0	1-S	2-S	1-S			
Wyoming					1.0		- 10			

S = State

Alabama

Personal Tax Grants

Wood Burning Space Heating System Deduction

Eligible Technologies: Biomass, Fuel

Cells

Applicable Sectors: Residential

Amount: cost of installation

Max. Limit: unlimited

Terms: deduction must be taken in year of project's completion

Authority: Code of Ala. § 40-18-15

(a)(16) (2001) Summary:

This code allows resident taxpayers a deduction from the taxpayer's adjusted gross income for state income tax purposes. The deduction is for the tota cost of installation for conversion from gas or electricity to wood when the system is used as the primary energy source for heating one's home for the taxable year during which the conversion was completed. Note that this incentive is for conversion from gas or electric, not for first time installation of a wood burning system.

Renewable Fuels Program - Biomass

Eligible Technologies: Biomass, Renewable Transportation Fuels, Fuel

Cells

Applicable Sectors: Commercial,

Industrial Amount: Varies Max. Limit: \$75,000

Terms: interest subsidy varies

Authority: N/A

Summary:

Alabama's Science, Technology, and Energy Division of the Department of **Economic and Community Affairs** offers interest subsidies on loans for the installation of qualifying biomass energy and waste fuel systems in commercial, industrial, agricultural, or institutional facilities. Qualifying projects include the installation of, or modifications to, equipment for the production of hot water, steam or hot air from biomass. Also eligible is equipment for biomass fuel storage, preparation, and transport, as well as equipment (such as pollution controls) incidental to the production of biomass fuels.

1

Alaska Sales Tax Loans Power Project Revolving Loan Fund

Motor Fuel Tax Credit for Ethanol

Eligible Technologies: Renewable

Transportation Fuels

Heat, Active Solar Space Heat, Solar Thermal Electric, Photovoltaics, Wind, Renewable Transportation Fuels, Waste

Applicable Sectors: Transportation

Amount: \$.06/gallon Max. Limit: \$.08/gallon

Expiration Date: 6/30/04

Authority: Alaska Stat. § 43.40.010

Summary:

Gasohol used on Alaska's highways is taxed at the same rate as gasoline (8¢ per gallon). However, the rate is reduced to 2¢ per gallon when gasoho is sold for consumption in a designated area and during the period that gasohol is required under state or federal law. At this time, the State of Alaska requires gasohol to be sold in Anchorage from October 27 to March 1. Gasohol is fully tax exempt if blended using wood alcohol or alcohol produced from the processing of waste seafood, and if produced within the first five years of a facility's processing such alcohol.

Eligible Technologies: Solar Water

Applicable Sectors: Local Government, Utilities

Amount: varies Max. Limit: none

Terms: interest rate tied to municipal

bonds

Authority: AS 42.45.010

Summary:

Created by the Alaska State Legislature and administered by the Alaska Energy Authority, this fund provides loans to local utilities, local governments, regional and village corporations, village councils, nonprofit marketing cooperatives, and independent power producers. It is designed for the development or upgrade of small-scale power production facilities, conservation facilities, and bulk fuel storage facilities. This includes energy production, transmission and distribution, and waste energy conservation facilities that depend on fossil fuel, wind power, tidal, geothermal, biomass, hydroelectric, solar, or other non-nuclear energy sources. The loan term is related to the life of the project. Interest rates are the lesser of the average weekly yield of municipal bonds for the 12 months preceding the date of loan, or a rate the Division determines will allow the project to be financially feasible.

Arizona	Personal Tax	Personal Tax	Sales Tax
	Qualifying Wood Stove Deduction	Solar and Wind Energy Systems Credit	Solar and Wind Equipment Sales Tax Exemption
	Eligible Technologies: Biomass	Eligible Technologies: Passive Solar Space Heat, Solar Water Heat, Active Solar Space Heat, Solar Thermal Electric, Photovoltaics, Wind	Eligible Technologies: Passive Solar Space Heat, Solar Water Heat, Active Solar Space Heat, Solar Thermal Electric, Photovoltaics, Wind
	Applicable Sectors: Residential	Applicable Sectors: Residential	Applicable Sectors: Commercial, Industrial, Residential, Utilities
	Amount: Cost excluding taxes	Amount: 25%	Max. Limit: Up to \$5,000
	Max. Limit: \$500	Max. Limit: \$1,000	Expiration Date: None
	Effective Date: 12/31/93	Terms: Year installed	
	Expiration Date: None	Effective Date: 1/1/95	
	Authority: ARS 43-1027	Authority: ARS 43-1083	Authority: ARS 42-5061
	Summary:	Summary:	Summary:
	This incentive allows Arizona taxpayers to deduct the cost of converting an existing wood fireplace to a qualifying wood stove. The cost may not exceed \$500. Qualifying wood stoves must meet the standards of performance for new wood heaters manufactured after July 1990, or sold after July 1992. This deduction is for taxable years after December 31, 1993.	of 25% of the cost of a solar or wind energy device. The credit can be	This retail sales tax exemption applies to solar and wind energy equipment. Solar includes passive solar heating, active solar space heating, solar water heating, and photovoltaics. Qualifying wind systems include wind electric generators and wind-powered water pumps. This exemption is allowed on equipment up to \$5,000.

Arkansas

Corporate Tax Industry Recruitment

Credit

Advanced Biofuels Tax Credit

Eligible Technologies: Renewable Transportation Fuels, Waste

Eligible Technologies: Photovoltaics, Fuel Cells, Electric Vehicles, Microturbines, Stirling Engines

Emerging Manufacturing Facilities

Applicable Sectors: Commercial, Industrial, Transportation

Amount: 30% of the cost of buildings,

equipment, etc.

Max. Limit: \$50,000 + 50% of any remaining income tax liability
Terms: 14-year carry forward
Date Enacted: 3/19/99
Effective Date: 1/1/97
Authority: Act 900 of 2001

Applicable Sectors: Industrial,

Transportation

Amount: 50% of facility costs

Max. Limit: none

Terms: 14 year carryforward Date Enacted: 1/1/00

Authority: AR Code 15-4-2101; Act 976 of 1999 and Act 1284 of 2001

Authority 2: AR Code § 2-8-109; Acts

1999 No. 1367 Summary:

This industrial recruitment incentive provides a 30% credit for the cost of buildings, equipment and intellectual property necessary to produce advanced biofuels, including ethanol o methanol and/or their derivatives. The credit is intended to offset the first \$50,000 of income tax liability arising during the credit year and 50% of any remaining income tax liability for the year. Any unused credit may be carried forward for a maximum of 14 taxable years after the credit year in which the credit originated.

Summary:

The Arkansas Emerging Technology Development Act of 1999 (amended 2001) provides for an economic incentive to attract manufacturers of high tech/high growth energy technologies. The act established a state income tax credit of 50% of the amount spent to purchase or construct a facility that designs, develops or produces photovoltaics (solar cells), electric vehicle components, fuel cells, microturbines, Stirling engines, or devices that are reliant on nanotechnology. The cost can include land, infrastructure, renovation, building improvements, and machinery. Any portion of the unclaimed tax credit may be carried forward for a maximum of 14 years.

California

Personal Tax Corporate Tax			
Solar & Wind Energy System Credit	Solar Tax Deduction	Solar & Wind Energy System Credit	
Eligible Technologies: Photovoltaics, Wind	Eligible Technologies:	Eligible Technologies: Photovoltaics, Wind	
Applicable Sectors: Residential	Applicable Sectors: Residential	Applicable Sectors: Commercial	
Amount: \$4.50	Amount: 100% of interest from loan	Amount: \$4.50/W	
Date Enacted: 10/8/01	Date Enacted: 10/1/01	Date Enacted: 10/8/01	
Effective Date: 1/1/01	Effective Date: 10/1/01	Effective Date: 1/1/01	
Expiration Date: 12/31/05 Authority: SB 17	Authority: CA Revenue and Taxation Code 17208.1	Expiration Date: 12/31/05 Authority: Section 23684	
Summary: California's Solar (and Wind) Energy System Credit (SB17x2 Tax Credit) was approved on Oct. 8, 2001. The law provides personal and corporate income tax credits for the purchase and installation of solar energy systems, defined as photovoltaic or wind driven systems with a peak generating capacity of up to, but not more than 200 kilowatts. After Jan. 1, 2001and before Jan. 1, 2004, the credit is equal to the lesser of 15% of the cost paid for the purchase and installation of a solar energy system after deducting the value of any municipal, state, or federal sponsored financial incentives, or \$4.50 per rated watt of the solar and wind energy system. After Jan. 1, 2004 and before Jan. 1, 2006, a credit of 7.5 percent of the cost of an installed solar energy system will be available.	conditioning, lighting, solar, advanced metering of energy usage, windows, insulation, zone heating products, and weatherization systems. Customers of publicly owned utility companies that do not offer customer financing may be able to deduct the interest from a home equity	Summary: California's Solar (and Wind) Energy System Credit (SB17x2 Tax Credit) was approved on Oct. 8, 2001. The law provides personal and corporate income tax credits for the purchase and installation of solar energy systems, defined as photovoltaic or wind driven systems with a peak generating capacity of up to, but not more than 200 kilowatts. After Jan. 1, 2001and before Jan. 1, 2004, the credit is equal to the lesser of 15% of the cost paid for the purchase and installation of a solar energy system after deducting the value of any municipal, state, or federal sponsored financial incentives, or \$4.50 per rated watt of the solar and wind energy system. After Jan. 1, 2004 and before Jan. 1, 2006, a credit of 7.5 percent of the cost of an installed solar energy system will be available.	

California

Property Tax Rebates Rebates CA Property Tax Exemption for Solar **Emerging Renewables Buydown** SELFGEN--Self Generation Program Program Systems Eligible Technologies: Solar Water Eligible Technologies: Solar Thermal Eligible Technologies: Photovoltaics, Wind, Fuel Cells Heat, Active Solar Space Heat, Solar Electric, Photovoltaics, Wind, Fuel Cells Thermal Electric, Photovoltaics, Solar Mechanical Energy Applicable Sectors: Commercial. Applicable Sectors: Commercial, Applicable Sectors: Commercial, Industrial. Residential Industrial. Residential. Agricultural Residential Amount: 100% of project value Rebate: Up to \$4.50/watt or 50% of Rebate: Level 1 = lesser of \$4.50/watt or system purchase price (whichever is 50% of project cost; Level 2 = lesser of less) \$2.50/watt or 40% of project cost; Level 3 = lesser of \$1.00/watt or 30% of project Max. Limit: Maximum system size = 1.5 Date Enacted: 3/98 Max. Limit: No limit MW Date Enacted: 1/1/99 Date Enacted: 3/27/01 Expiration Date: 12/31/04 Expiration Date: 1/1/06 Authority: CA Revenue and Taxation Authority: Assembly Bill 970 Code, Section 73 Summary: Summary: Summary: According to the California Revenue and The California Energy Commission On March 27, 2001, the California Public Taxation Code, section 73, when provides rebates for the purchase of four Utilities Commission announced new assessing property for property tax types of renewable energy generating incentive programs to encourage purposes, active solar energy systems systems (photovoltaics, small wind residential and commercial customers to installed between January 1, 1999 and turbines--10 kilowatts or less, fuel cells install grid-tied renewables and clean DG January 1, 2006 are not subject to using renewable fuels, and solar thermal resources. The Self-Generation Incentive property taxes. Active solar energy systems) through its Emerging Program provides incentives to Renewables Buy-Down Program. The system means a system that uses solar encourage customers to produce energy program offers a rebate of \$4.50/watt or using microturbines, small gas turbines, devices, which are thermally isolated from living space or any other area where 50% off the price of purchasing the wind turbines, photovoltaics, fuel cells, the energy is used, to provide for the system, whichever is less. and internal combustion engines. The collection, storage, or distribution of solar incentives include payments of \$1 energy. Active solar energy system does \$4.50/Watt depending on the technology not include solar swimming pool heaters used and will be funded at \$125 million or hot tub heaters. Active solar energy annually through 2004. systems may be used for any of the following: Domestic, recreational, therapeutic, or service water heating; Space conditioning; Production of electricity; Process heat; and Solar mechanical energy.

California

Grants Grants **Grants Energy Innovations Small Grant Program** Solar Energy & Distributed Generation Solar Schools Program Grant Eligible Technologies: Passive Solar Eligible Technologies: Solar Water Eligible Technologies: Photovoltaics Space Heat, Solar Thermal Electric, Heat, Fuel Cells, Cogeneration, Pool Photovoltaics, Wind, Biomass, Hydro, Solar Water Heating, PV Battery Backup Renewable Transportation Fuels, Geothermal Electric. Fuel Cells Applicable Sectors: Commercial. Applicable Sectors: Residential Applicable Sectors: Schools Industrial, Nonprofit Amount: Not funded for Fiscal Year Amount: 90% of the purchase and 2002/03 installation cost Max. Limit: \$75,000 Max. Limit: \$750 for solar energy Max. Limit: System cost including systems; \$2,000 for distributed installation must not exceed \$8.50 per generation systems Date Enacted: 1997 Effective Date: 1/1/01 Terms: 20 kW maximum of photovoltaics in each school district Expiration Date: 1/1/06 Effective Date: 10/02 Expiration Date: 9/2002 Authority: Senate Bill 90; Assembly Bill Authority: Senate Bill 1345; PRC 1890 sections 25619 & 25620.10 Summary: Summary: Summary: The Energy Innovations Small Grant Program funding: solar domestic water The Solar Schools Program offers a (EISG) Program provides up to \$75,000 heating; solar swimming pool heating; rebate of up to 90 percent of the to small businesses, non-profits. and battery backup (electricity storage) purchase and installation cost of PV individuals and academic institutions to for photovoltaic systems. Distributed systems. School districts may also conduct research that establishes the generation systems are eligible for arrange for a loan from the California funding (must meet efficiency and feasibility of new, innovative energy Energy Commission's Energy Efficiency concepts. Research projects must target environmental specifications): Financing Program to cover the one of the six PIER program areas: (1) remaining 10 percent of project cost. The microcogeneration; gas turbines; fuel Industrial/Agriculture/Water End-use cells; reciprocating internal combustion Solar Schools Program's funds are Efficiency; (2) Building End-use engines; and electricity storage. No available for a maximum of 20 kilowatts Efficiency; (3) Environmentally Preferred more than 20% of the program funding of PV within each school district and Advanced Generation; (4) Renewable may be used for solar swimming pool system cost must not exceed \$8.50 per Generation; (5) Energy-Related heating systems, and no more than 20% watt. These 20 kW may be installed as Environmental Research; and (6) of the funds may used for battery backup one system or as multiple systems on Strategic Energy Research. The projects or electricity storage systems. Up to \$750 different schools within a district. must address a California energy is available for eligible solar energy problem and provide a potential benefit systems except swimming pool heating to California electric ratepayers. applications, which are eligible for a maximum of \$250 per system. Up to \$2,000 or 10% of the total system cost, which ever is less, is available for eligible distributed generation systems.

California

Loans Loans Industry Recruitment Industrial Energy Financing Program Public Leadership Solutions for Energy **Energy Technology Export Program** Eligible Technologies: Passive Solar Eligible Technologies: Solar Thermal Eligible Technologies: Photovoltaics, Electric, Solar Thermal Process Heat, Space Heat, Solar Water Heat, Active Landfill Gas, Wind, Fuel Cells, Biogas Photovoltaics, Landfill Gas, Wind, Solar Space Heat, Solar Thermal Biomass, Geothermal Electric, Fuel Electric, Photovoltaics, Wind, Biomass, Cells, Cogeneration, Biogas Hydro. Renewable Transportation Fuels. Applicable Sectors: Commercial, Applicable Sectors: Industrial Applicable Sectors: Schools, Local Government. State Government Industrial Amount: \$250,000 total funding for fiscal Amount: \$500,000 - \$10,000,000 Amount: \$2 million year 2002/03 Max. Limit: \$25,000 per pre-construction Max. Limit: \$10 million/applicant; \$40 Max. Limit: None activity with applicant providing at least million/company 50 percent of the total cost of the Terms: Annual Funding: Solicitation Terms: Bonds are tax exempt; interest Terms: Tax-exempt market rates: for rates are dependent on the borrower's short-term or variable rate loans, begins May 24, 2002, with proposals due currently as low as 3%; low longer-term no later than July 26, 2002. Awards rates ranging from 4.5-5% up to projects made in September 2002. Effective Date: Fall 2002 Effective Date: 3/14/02 Effective Date: 1988 Summary: Summary: Summary: The California Consumer Power and This loan pool overcomes limitations of this program of the California Energy Conservation Financing Authority (the other State energy loan programs by Commission provides assistance in Power Authority or CPA) is offering below supporting larger transactions, a broader developing overseas energy projects as market rate loans to manufacturing range of eligible technologies, and longer well as overseas trade opportunities. The companies that will use the loan for the loan terms. Loan amounts of \$2 million or program offers many services for purchase and installation of renewable more with no maximum are available for companies looking to invest in projects energy systems, energy-efficient up to the expected life of the project. Taxabroad or make sales abroad. Program equipment, or clean distributed exempt market rates: for short-term or offerings include an Energy Technology Export Directory of California companies, generation systems on their own site(s); variable rate loans are currently as low foreign market and trade analyses, trade or a company that manufactures as 3%; low longer-term rates range from renewable energy distributed generation 4.5-5% up to projects' useful life. Fixed or missions, orientation visits (foreign systems or components in California. variable rate debt options are available officials are invited to California), and Eligible technologies include and bonds issued under the program will Commission counsel to foreign photovoltaics, solar thermal electric, fuel be insured. Agencies still can claim governments. cells, small and large wind turbines, rebates, buydowns, and grants from biogas, landfill gas, biomass, geothermal other sources. electric, solar industrial process heating, and waste heat recovery.

Colorado

Personal Tax Corporate Tax Alternative Fuel Vehicle Personal Tax Alternative Fuel Vehicle Corporate Tax Credit Incentive Type: Personal Tax Credit Incentive Type: Personal Tax Credit Eligible Technologies: Renewable Eligible Technologies: Renewable Transportation Fuels, Renewable Fuel Transportation Fuels, Renewable Fuel Vehicles Vehicles Applicable Sectors: Commercial, Applicable Sectors: Commercial, Residential Residential Authority: C.R.S. §39-22-516 Authority: C.R.S. §39-22-516 Summary: Summary: Under the provisions established by Under the provisions established by C.R.S. §39-22-516 tax credits are C.R.S. §39-22-516 tax credits are available for the purchase of an available for the purchase of an alternative fuel vehicle, for a motor alternative fuel vehicle, for a motor vehicle converted to use alternative vehicle converted to use alternative fuel, or for the replacement of the fuel, or for the replacement of the power source with a power source that power source with a power source that uses alternative fuel. uses alternative fuel.

Connecticut Property Tax Grants

Local Option for Property Tax
Eligible Technologies: Passive Solar
Space Heat, Solar Water Heat, Active
Solar Space Heat, Photovoltaics,
Wind, Hydro, Cogeneration

Applicable Sectors: Commercial, Industrial, Residential

Amount: varies
Max. Limit: varies

Terms: Applies to the first 15 assessment years following construction

Expiration Date: 10/1/06

Authority: C.G.S. Ch. 203, Sec.12-81-56,57,62,63

Summary:

The state of Connecticut allows municipalities the option of offering property tax exemptions for certain renewable energy systems. Such systems include solar space and wate heating, photovoltaics, wind systems, fuel cells, and micro-hydro. Adoption of this exemption varies from one municipality to another. In some cases, the exemption applies to the total value of the qualifying renewable energy system and can be applied to residential, commercial, and industrial property.

Photovoltaic Program

Eligible Technologies: Photovoltaics

Applicable Sectors: Commercial,

Industrial, Institutional

Amount: Up to \$6/Watt
Max. Limit: \$6/Watt; maximum
percentage limitations may apply
Terms: Incentive may take form of

grant, loan, equity investment, or other actions

Effective Date: 10/2002

Expiration Date: Proposals due 2/28/03

Summary:

The Connecticut Clean Energy Fund (CCEF), the state's public benefits fund will award \$1 million to companies that present proposals for installing photovoltaic systems to power commercial, industrial and institutional buildings. Projects must involve a Connecticut electric ratepayer located in the Connecticut Light & Power or United Illuminating service territories.

Fuel Cell Initiative Grant

Eligible Technologies: Fuel Cells

Grants

Applicable Sectors: Commercial, Industrial, Nonprofit, Schools, Local Government

Amount: Varies

Max. Limit: \$8.8 million for all three

project categories Effective Date: 12/20/02

Expiration Date: Round 1 proposals

due 1/30/03

Summary:

The Connecticut Clean Energy Fund (CCEF) has announced a request for proposals (RFP) to conduct commercial and demonstration projects under the CCEF Fuel Cell Initiative. CCEF is the state's public benefits fund financed by a surcharge levied against the state's electrical ratepayers. The Fund is administered by Connecticut Innovations, Incorporated which is a quasi-public agency of the State of Connecticut.

Connecticut

Loans

Energy Conservation Loans
Eligible Technologies: Passive Solar
Space Heat, Solar Water Heat, Active
Solar Space Heat, Photovoltaics,
Wind, Biomass, Geothermal Heat
Pumps

Applicable Sectors: Residential, Multifamily (1-4 units)

Amount: \$400 -- \$10,000 Max. Limit: \$10,000

Terms: up to 10 years

Authority: C.G.S. 32-315-7

Summary:

Single-Family Energy Conservation Loans from \$400 to \$10,000 are available through the Connecticut Housing Investment Fund (CHIF) to owners of 1 - 4 family homes who meet established income limits for family size and location. These loans may be used for a variety of conservation improvements including alternative energy heating systems. Interest rates (currently 1%, 3 % and 6 %) vary in accordance with the borrower's family size and income. The repayment period may be up to 10 years. According to the CHIF, about a dozen loans per year are used for solar or geothermal applications.

Delaware

Rebates

Energy Alternatives Rebate Eligible Technologies: Solar Water Heat, Photovoltaics, Wind, Geothermal Heat Pumps

Applicable Sectors: Commercial,

Industrial, Residential

Rebate: 35%

Max. Limit: Varies by technology

Date Enacted: 12/13/01 Effective Date: 1/11/02

Authority: 26 Del. C. § 1014(a)

Summary:

Under the program, energy alternatives rebates are available for the installation of qualifying photovoltaic, solar water heating, wind turbine, and geothermal heat pump systems. Rebates are available for systems located within the Delmarva Power and Light Company service territory, and the purchaser must be a customer of Conectiv Power Delivery.

Florida

Sales Tax

Solar Energy Equipment Exemption Eligible Technologies: Solar Water Heat, Solar Thermal Electric,

Photovoltaics

Applicable Sectors: Commercial,

Industrial, Residential

Amount: all
Max. Limit: none
Date Enacted: 7/1/97
Expiration Date: 7/1/05
Authority: Chapter 212.08 (7)

Authority 2: Fla. Stat. § 212.08 (2001)

Summary:

Reenacted in 1997, the Florida Solar Energy Industries Association acknowledges that this exemption is of more philosophical and public relations import than economic significance. While the incentive shows the state's support for solar energy, it is expected that sales increases as a direct result of the incentive will be modest. The Florida sales tax rate is 6% with a local option to raise it to 7%.

Georgia

Personal Tax Corporate Tax

Alternative Fuel Vehicle Tax Credit Eligible Technologies: Renewable Fuel Vehicles

Applicable Sectors: Residential

Amount: varies

Max. Limit: \$5,000 per vehicle Effective Date: 1/1/98

Authority: O.C.G.A. § 48-7-40.16

Summary:

Georgia offers a credit against the tax imposed for the purchase or lease of a new low-emission vehicle or zeroemission vehicle that is registered in the state. The amount is \$2,500 per new low-emission vehicle and \$5,000 per new zero-emission vehicle. Georgia also allows a credit for the conversion of a conventionally fueled vehicle to a converted vehicle that is registered in the state. The amount of this credit is equal to the cost of conversion, with a maximum credit of \$2,500 per converted vehicle. Furthermore, a tax credit is available to any business enterprise for the purchase or lease of each electric vehicle charger that is located in Georgia. The amount of this credit is \$2,500 per charger. The amount of any tax credit offered cannot exceed a taxpayer's income tax liability.

Alternative Fuel Vehicle Tax Credit Eligible Technologies: Renewable

Fuel Vehicles

Applicable Sectors: Commercial

Amount: varies

Max. Limit: \$5,000 per vehicle

Effective Date: 1/1/98

Authority: O.C.G.A. § 48-7-40.16

Summary:

Georgia offers a credit against the tax imposed for the purchase or lease of a new low-emission vehicle or zeroemission vehicle that is registered in the state. The amount is \$2,500 per new low-emission vehicle and \$5,000 per new zero-emission vehicle. Georgia also allows a credit for the conversion of a conventionally fueled vehicle to a converted vehicle that is registered in the state. The amount of this credit is equal to the cost of conversion, with a maximum credit of \$2,500 per converted vehicle. Furthermore, a tax credit is available to any business enterprise for the purchase or lease of each electric vehicle charger that is located in Georgia. The amount of this credit is \$2,500 per charger. The amount of any tax credit offered cannot exceed a taxpayer's income tax liability.

Hawaii	Personal Tax	Personal Tax	Corporate Tax
	Residential Solar Energy System Credit	Wind Energy System Personal Tax Credit	Ethanol Production Investment Tax Credit
	Eligible Technologies: Passive Solar Space Heat, Solar Water Heat, Active Solar Space Heat, Solar Thermal Electric, Photovoltaics	Eligible Technologies: Wind	Eligible Technologies: Renewable Transportation Fuels
	Applicable Sectors: Residential	Applicable Sectors: Residential	Applicable Sectors: Commercial
	Amount: 35%	Amount: 20%	Amount: approximately \$0.30/gallon
	Max. Limit: \$1,750 for single family home; \$350 per unit of multi-unit complex	Max. Limit: none	Max. Limit: \$4.5 million per facility per year (depends on facility size)
	Terms: N/A	Terms: N/A	Terms: maximum of 10 years (see summary for details)
	Date Enacted: 1/1/90	Date Enacted: 1/1/90	Date Enacted: 6/30/00
	Expiration Date: 7/1/2003	Expiration Date: 7/1/2003	Effective Date: 1/1/02
	Authority: HRS 235-12(b)(2)-(3)	Authority: HRS 235-12(b)(1)	Authority: Act 289 (Senate Bill 2221)
	equipment and installation of a residential solar system that produces thermal or electrical energy for heating, cooling, or reducing the use of fossil fuel. The credit is to be applied in the	Summary: This income tax credit allows individuals and corporations a credit of 20% of the cost of equipment and installation of a residential or non-residential wind energy system. The credit is to be applied in the year in which the system is purchased and placed into use, and there is no limit to the total amount of the credit. Tax credits that exceed the taxpayer's income tax liability may be used as credit against the taxpayer's income tax liability in subsequent years until exhausted.	2221), which provides an ethanol investment tax credit (30% of each \$1 million per 1 million gallons per year capacity), roughly equal to thirty cents per gallon, subject to investment

Hawaii

Corporate Tax	Corporate Tax	Sales Tax
Solar Energy System Credit	Wind Energy System Corporate Tax	Alcohol Fuels Exemption
	Credit	
Eligible Technologies: Passive Solar Space Heat, Solar Water Heat, Active Solar Space Heat, Photovoltaics	Eligible Technologies: Wind	Eligible Technologies: Renewable Transportation Fuels
Applicable Sectors: Commercial Amount: 35%	Applicable Sectors: Commercial, Residential Amount: 20%	Applicable Sectors: General Public, Transportation Amount: 100% exemption from sales
Amount. 55%	Amount. 20%	tax
Max. Limit: none	Max. Limit: none	
Terms: N/A	Terms: N/A	Effective Date: Tax year 2002
Date Enacted: 1/1/90	Date Enacted: 1/1/90	Date Enacted: 6/30/02
Expiration Date: 7/1/2003	Expiration Date: 7/1/2003	Expiration Date: 12/31/06
Authority: HRS 235-12(b)(4)	Authority: HRS 235-12(b)(1)	Authority: H.R.S. § 237-27.1
Common ii	Course and the	C
applied in the year in which the system is purchased and placed into use. This	individuals and corporations a credit of 20% of the cost of equipment and installation of a residential or non-	Summary: Alcohol fuels are exempt from the 4% state excise tax on retail sales.

Hawaii

Rebates	Industry Recruitment
Reduced Highway Taxes for	High Technology Business Investment
Alternative Fuels	Tax Credit
Eligible Technologies: Renewable	Eligible Technologies: Solar Water
Transportation Fuels, alternative fuels	Heat, Active Solar Space Heat, Solar Thermal Electric, Solar Thermal
	Process Heat, Photovoltaics, Landfill
	Gas, Wind, Biomass, Hydro,
	Renewable Transportation Fuels,
	Geothermal Electric, Fuel Cells,
	Geothermal Heat Pumps, ocean
	thermal, wave energy
Applicable Sectors: General Public	Applicable Sectors: Industrial
	Ph
Amount: varies depending on fuel type	Amount: 100% (over five years)
Max. Limit: varies depending on fuel	Max. Limit: \$2,000,000 (over five
type	years)
Effective Date: 4/4/02	Effective Detect 7/4/04
Effective Date: 1/1/02	Effective Date: 7/1/01
Date Enacted: 5/24/01	
Date Enacted: 3/24/01	Expiration Date: 12/31/05
Authority: Act 143 (HB1345, Relating	Authority: §235-110.9
to Energy Content of Fuels)	7.64.10.1147. 32.00 1.10.10
Summary:	Summary:
Act 143 (HB1345, Relating to Energy	On July 1, 2001, Hawaii became the
Content of Fuels) was signed on May	only state in the nation to offer a 100%
24, 2001. It encourages the use of	tax credit on an equity investment in a
alternative fuels by adjusting the fuel	qualified high tech business (QHTB).
tax to reflect the energy content of	
alternative fuels and reducing the fuel	
tax rate of alternative fuels for several	
years.	
l	

Idaho

Personal Tax

Solar, Wind and Geothermal Deduction

Eligible Technologies: Passive Solar Space Heat, Solar Water Heat, Active Solar Space Heat, Solar Thermal Electric, Photovoltaics, Wind, Geothermal Electric

Applicable Sectors: Residential

Amount: 40% 1st year 20% next 3 Max. Limit: \$5,000 per year

Terms: N/A

Authority: Idaho Statutes 63-3022C

Summary:

This statute allows taxpayers an income tax deduction of 40% of the cost of a solar, wind or geothermal device used for heating or electricity generation. Taxpayers can apply this 40% deduction in the year in which the system is installed and can also deduct 20% of the cost for three years thereafter. The maximum deduction in any one year is \$5,000

Low-Interest Loans for Renewable Resource Energy Program

Loans

Eligible Technologies: Solar Water Heat, Active Solar Space Heat, Photovoltaics, Wind, Biomass, Hydro, Geothermal Heat Pumps

Applicable Sectors: Commercial,

Industrial, Residential

Amount: varies

Max. Limit: residential: \$1,000 - \$10,000; commercial: \$1,000 -

\$100,000

Terms: 4% interest, 5-year term of

loan

Authority: N/A

Summary:

This low interest loan program, administered by the Energy Division of the Idaho Department of Water Resources, makes funds available at a 4% interest rate for active solar, photovoltaic, wind, geothermal, hydropower and biomass energy projects. The program also makes loans for energy conservation projects. Residential loans are available from \$1,000 to \$10,000. In commercial and industrial sectors there is no minimum loan amount but there is a maximum cap of \$100,000. Loans are repaid in five years or less.

Illinois	Property Tax	Rebates	Grants
	Special Assessments for Renewable Energy Systems	Renewable Energy Resources Program Rebates	Alternative Energy Bond Fund Program
	0, ,	Eligible Technologies: Solar Water	Eligible Technologies: Solar Water
	Space Heat, Solar Water Heat, Active	Heat, Active Solar Space Heat,	Heat, Active Solar Space Heat, Solar
	Solar Space Heat, Photovoltaics,	Photovoltaics	Thermal Electric, Photovoltaics,
	Wind, Geothermal Electric		Landfill Gas, Wind, Biomass, Hydro,
			Renewable Transportation Fuels, Geothermal Electric
			Councillar Electric
	Applicable Sectors: Commercial,	Applicable Sectors: Commercial,	Applicable Sectors: Commercial,
	Industrial, Residential	Industrial, Residential, Nonprofit,	Industrial
		Schools, Local Government, State Government, Associations	
	Amount: Solar equipment is valued at	Rebate: 50% for solar thermal; 60%	Amount: up to 100% of cost
	no more than a conventional energy	for PV	Amount. up to 100% of cost
	system.		
	Max. Limit: None	Max. Limit: \$5,000; \$6/watt for PV	Max. Limit: \$1,000,000
		Date Enacted: 12/1997	Date Enacted: 1979
		Effective Date: 1/1/98	
		Expiration Date: 12/2007	
	Authority: 35 ILCS 200/10-10	Authority: Public Act 90-561 (HB 362)	
	Summary:	Summary:	Summary:
	This statute allows for a special	This program is funded by the	This grant program funds capital
	assessment of solar energy systems	Renewable Energy Resources Trust	projects of any renewable energy
	for property tax purposes. Solar equipment is valued at no more than a	Fund, the state's public benefits fund. RERP distributes funds in the form of	technologyincluding biofuels, solar, wind, hydro, geothermal, and landfill
	conventional energy system. Eligible		and digester gases at up to 100
	equipment includes active and passive	• • • • • •	percent of capital cost. Grants range
	systems, as well as wind and	Energy 50% with a maximum of	from \$60,000 to \$1,000,000, and
	geothermal systems.	\$5,000; PV	current appropriations for the program
		60 % with a maximum of \$6/watt and \$5,000	are \$5 million. Note that this fund is not available for residential projects.
		ψ3,000	available for residential projects.

Illinois

Grants Grants Renewable Energy Resources Clean Energy Community Foundation Grants Program Grants Eligible Technologies: Passive Solar Eligible Technologies: Solar Water Space Heat, Solar Thermal Electric, Heat, Active Solar Space Heat, Solar Thermal Process Heat, Wind, Photovoltaics, Wind, Biomass, Hydro, Biomass, Fuel Cells Fuel Cells Applicable Sectors: Nonprofit, Applicable Sectors: Commercial, Schools, Local Government, State Industrial, Residential, Nonprofit, Government Schools, Local Government, State Government, Associations Amount: 50 - 60%; varies by Amount: varies technology Max. Limit: varies Max. Limit: \$150,000 - \$2.75 million; varies by technology Terms: see summary Date Enacted: 12/1997 Effective Date: 2001 Effective Date: 1/1/98 Expiration Date: 12/2007 Authority: 220 ILCS 5/16-111.1 Authority: Public Act 90-561 (HB 362) Summary: Summary: The ICECF supports programs and Grant funds may only be used for projects that will improve energy actual equipment and installation expenses. Eligible applicants include efficiency, develop renewable energy resources, and preserve and enhance associations, individuals, private natural areas throughout Illinois. companies, public and private schools, colleges and universities, not-for-profit organizations and units of state and local government. Applications are accepted on an ongoing basis. Potential recipients for program funding must be located within the service area of an investor-owned or a municipal gas or electric utility or an electric cooperative that imposes the Renewable Energy Resources and Coal Technology Development Assistance Charge.

Indiana	Property Tax	Grants	Grants
	Renewable Energy Systems Exemption Eligible Technologies: Solar Water	Alternative Fuel Transportation Grant Program Eligible Technologies: Renewable	Alternative Power and Energy Grant Program Eligible Technologies: Solar Water
	Heat, Active Solar Space Heat, Wind, Hydro, Geothermal Electric, Geothermal Heat Pumps	Transportation Fuels, Renewable Fuel Vehicles, Fuel Cells	Heat, Active Solar Space Heat, Solar Thermal Electric, Photovoltaics, Wind, Biomass, Hydro, Renewable Transportation Fuels, Geothermal Electric, Waste
	Applicable Sectors: Commercial, Industrial, Residential	Applicable Sectors: Commercial, Nonprofit, Local Government	Applicable Sectors: Commercial, Nonprofit, Schools, Local Government
	Amount: all	Amount: \$2,000 - \$10,000	Amount: 20% - 30% of project costs
	Max. Limit: none Terms: N/A Date Enacted: 1975; revised 1979, 1981	Max. Limit: \$10,000	Max. Limit: \$30,000
	Authority: 50 IAC 6.1		
	Summary:	Summary:	Summary:
	The code includes two provisions that make it more encompassing and effective than those we have identified in other states. First, the statutes exempt from property taxes the entire renewable energy device and affiliated equipment, including equipment for storage and distribution. This differs from the property tax exemptions for renewable energy systems provided in most other states which typically allow for the renewable energy system to be valued at no more than the value of a conventional systemnot exempted altogether. Second, Indiana's code explicitly includes renewable energy systems attached to mobile homes.	Businesses, non-profit institutions and units of local government (including public school systems) are eligible to apply for grants. Projects eligible for grants include those that involve the purchase of alternative fuel vehicles, the conversion of conventionally fueled	Businesses, non-profit institutions and units of local government (including public schools) are eligible to apply for grants. Eligible projects include non-transportation applications of solar, wind, geothermal, hydropower, alcohol

Indiana Grants Grants Distributed Generation Grant Program Energy Demonstration Project Grants Indiana Biomass Grant Program

Eligible Technologies: Photovoltaics, Landfill Gas, Wind, Biomass, Fuel Cells, Cogeneration Eligible Technologies: Passive Solar Space Heat, Solar Water Heat, Photovoltaics, Wind, Biomass, Hydro, Geothermal Electric, Waste Eligible Technologies: Biomass, Renewable Transportation Fuels

Applicable Sectors: Commercial, Industrial, Schools, Local Government

State Government

Amount: \$5,000 - \$30,000

Applicable Sectors: Commercial, General Public, Nonprofit

Applicable Sectors: Industrial,

General Public, Utilities

Max. Limit: \$30,000

Max. Limit: \$30,000

Terms: n/a Authority: N/A

Amount: varies

Amount: \$20,000

Summary:

Projects should be technically feasible for full-scale operation. Commercially proven projects are preferred. Eligible projects are those that demonstrate measurable energy savings in kWh, Btu or other units of measurement. Projects must be conducted in Indiana and should comply with all applicable environmental, safety and legal regulations. In addition, projects must provide baseload power of at least 20 kW for the facility at which they are located and should have a thermal efficiency of 50% or greater. Cogeneration projects are strongly encouraged.

Summary:

This program makes small-scale grants for projects that demonstrate energy efficiency and renewable energy technologies for businesses, institutions, or units of local government. Must demonstrate a commercially available technology-research projects will not be funded. Must demonstrate a novel technology or application of an available technology, or a technology that is uncommon in Indiana. Each project must include a public education component, integrated into an educational program or a public facility that provides tours.

Summary:

The program focuses on project partnerships among local and regional organizations, researchers, industries, utilities and government. Grants of up to \$20,000 per project will be available to successful applicants. Projects should have near-term commercialization potential, should not duplicate the work of others and should capitalize on in-state expertise and resources.

Iowa	Corporate Tax	Sales Tax	Sales Tax
	•	Ethanol Based Fuels Exemption	Wind Energy Equipment Exemption
	Eligible Technologies: Renewable Transportation Fuels	Eligible Technologies: Renewable Transportation Fuels	Eligible Technologies: Wind
	Applicable Sectors: retail service stations	Applicable Sectors: Transportation	Applicable Sectors: Commercial, Residential
	Amount: 2.5 cents per gallon	Amount: \$.01 per gallon	Amount: 100% of project value
	Max. Limit: none	Max. Limit: none	Max. Limit: none
	Effective Date: 1/1/02	Terms: N/A	Terms: N/A
	Expiration Date: 6/30/07	Date Enacted: N/A Expiration Date: 6/30/2007	
	Authority: House File 716 Summary: This gives a tax credit to retail service stations at which more than 60% of the total gallons of gasoline sold and dispensed through one or more metered pumps is ethanol-blended for tax years beginning on or after January 1, 2002. The amount of the tax credit for each eligible service station is two and one-half cents multiplied by the total number of gallons of ethanol blended gasoline sold and dispensed through all metered pumps located at that service station during the tax year in excess of sixty percent of all gasoline sold and dispensed through metered pumps at that service station during the tax year.	Authority: Iowa Code 452A.21, Summary: This specific excise tax exemption allows those who blend conventional motor fuel with alcohol to produce ethanol to file for a refund for the "difference between taxes paid on the	Authority: Iowa Code 422.45(48) Summary: This statute exempts from the state sales tax the total cost of wind energy equipment and all materials used to manufacture, install or construct wind energy systems. The exemption does not cover the sales taxes paid by a company in purchasing equipment to construct a plant to manufacture wind systems.

Iowa

Property Tax	Property Tax	Property Tax
Property Tax Exemption for Solar	Local Option Special Assessment of	Methane Gas Conversion Property Tax
Systems	Wind Energy Devices	Exemption
Eligible Technologies: Passive Solar	Eligible Technologies: Wind	Eligible Technologies: Renewable
Space Heat, Solar Water Heat, Active		Fuels
Solar Space Heat, Solar Thermal		
Electric, Photovoltaics, Wind		
Applicable Sectors: Commercial,	Applicable Sectors: Commercial,	Applicable Sectors: Commercial,
Industrial, Residential	Industrial, Residential	Industrial, Residential
Amount: 100% of project value	Amount: local option	Amount: 100%
, ,	·	
Max. Limit: No limit	Max. Limit: local option	Max. Limit: None
	- N/A	
Terms: Five full assessment years	Terms: N/A	Terms: N/A
Effective Date: 1/1/78		
Authority: Iowa Code, Chapter 441.21	Authority: Iowa Code 427B.26, 441-	Authority: Iowa Code 427.1(29)
Summary:	Summary:	Summary:
According to Iowa Code, Chapter	This statute allows any city or county	This statute exempts from the state
441.21, when assessing property for	to assess wind energy conversion	property tax personal property, real
tax purposes, assessors shall	equipment at a special valuation for	property, and improvements to real
disregard any market value added by a solar energy system to a building for	may include residential, commercial or	property used to collect and convert methane gas to energy. If the property
the first five full assessment years.	industrial. Those local governments	also burns another fuel, "the
Solar energy systems are defined as	offering this special assessment must	exemption shall apply to that portion of
any system capable of collecting and	follow state guidelines. In the first	the value of such property, which
converting solar radiation into thermal,	assessment year, the wind energy	equals the ratio that its use of methane
mechanical, or electric energy, or a	conversion equipment is to be	gas bears to total fuel consumed."
system that utilizes the basic building	assessed at zero percent (0%) of its	
design to maximize solar heat gain in	cost. For the second through sixth	
the cold season and minimize solar	assessment years, the valuation of the	
heat gain in the hot season.	property is to be a percent of its cost which increases by five percentage	
	points each assessment year. For the	
	seventh and succeeding assessment	
	years, the valuation of the property is	
	to be at thirty percent of its cost.	
I	I	I I

lowa	Grants	Loans	Loans
	Cranta for Engrav Efficiency and	Alternate Energy Develoing Lean	Jawa Building Energy Management

Iowa Building Energy Management Grants for Energy Efficiency and Alternate Energy Revolving Loan Renewable Energy Research Program Eligible Technologies: Passive Solar Eligible Technologies: Solar Water Eligible Technologies: Passive Solar Space Heat, Solar Water Heat, Active Heat, Active Solar Space Heat, Solar Space Heat, Solar Water Heat, Active Solar Space Heat, Solar Thermal Thermal Electric, Photovoltaics, Wind, Solar Space Heat, Solar Thermal Electric, Photovoltaics, Wind, Biomass, Hydro Electric, Photovoltaics, Wind, Biomass, Hydro, Renewable Biomass, Hydro, Renewable Transportation Fuels, Geothermal Transportation Fuels Electric. Waste Applicable Sectors: Commercial, Applicable Sectors: Commercial, Applicable Sectors: Nonprofit, Local Industrial, Residential, Transportation, Industrial, Residential Government, State Government, Agricultural Hospitals, Private Colleges Amount: varies Amount: Half of financed project cost Amount: varies Max. Limit: based on available funds Max. Limit: \$250,000 Max. Limit: varies Terms: one-year period with potential Terms: 0% interest on half of the Terms: varies for continuation beyond first year financed project cost Maximum loan term of 20 years Date Enacted: 5/1/86 Date Enacted: 1996 Authority: Iowa Code § 266.39C Authority: Iowa Code 476.46 Authority: Iowa Code 473.19 Summary: Summary: Summary: The Center provides grants to eligible The AERLP provides loan funds to any One of the primary goals of the organizations for energy research on individual or organization that wants to program is to make energy topics that have strong relevance to build renewable energy production improvements for participating Iowa. Eligible organizations are Iowa's facilities in Iowa. Renewable energy agencies and organizations budget colleges and universities, lowa-based includes technologies such as solar, neutral. This is possible by making private non-profit organizations, and biomass, wind, and small hydro. available loans that can be repaid by lowa-based foundations. Private sector Successful applicants receive a single the energy savings that result from the research partnerships are encouraged low-interest loan that consists of a project. The program follows three combination of AERLP funds and Research grants are awarded in two phases: (1) memorandum of broad categories: renewable energy lender-provided funds. The AERLP agreement (MOA), (2) building energy and energy efficiency. provides 50% of the total loan, up to a analysis, and (3) implementation. After maximum of \$250,000 at 0% interest. signing a MOA, the participating The remainder of the loan is made by organization receives a six month the lender at market rate. The interest-free loan for the energy maximum loan term allowed for the analysis, which is performed by an AERLP funds is 20 years. auditing firm pre-qualified by the Department of Natural Resources. Implementation plans include only those energy improvements which will pay for themselves within their useful

lives.

Iowa

Loans

Renewable Fuel Fund

Eligible Technologies: Biomass, Renewable Transportation Fuels

Applicable Sectors: Commercial, Industrial

Amount: 20% forgiveable loan, 80%

traditional loan

Max. Limit: \$400,000

Terms: prime rate

Summary:

The maximum amount per project is \$400,000. Approximately 20% of the money awarded to a project is in the form of a grant and the remaining 80% in the form of a low interest loan. The interest rate on the loan is typically the prime rate. Research and development projects are not eligible for this program. A sample of funded projects include six ethanol plants, two soy process plants and a methane recapture program for hog farmers.

Kansas	Personal Tax	Corporate Tax	Property Tax
	Alternative Fuel Vehicle Personal Tax Credit	Alternative Fuel Vehicle Corporate Tax	
	Eligible Technologies: Renewable Fuel Vehicles	Eligible Technologies: Renewable Fuel Vehicles	Eligible Technologies: Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydro, Geothermal Electric
	Applicable Sectors: Commercial,	Applicable Sectors: Commercial,	Applicable Sectors: Commercial,
	Industrial, Residential	Industrial, Residential	Industrial, Residential, Utilities
	Max. Limit: \$3,000; \$5,000; \$50,000 for vehicles; 50% of the total amount for each alternative-fuel fueling station, not to exceed \$200,000	for vehicles; 50% of the total amount	Amount: 100%
	Terms: Carryover for 3 years Date Enacted: 5/13/99 Effective Date: 1/1/96 Expiration Date: 12/31/04 Authority: SB 45	Terms: Carryover for 3 years Date Enacted: 5/13/99 Effective Date: 1/1/96 Expiration Date: 12/31/04 Authority: SB 45	Effective Date: 1/1/99 Authority: Kansas Statutes 79-201
	Summary: This bill allows taxpayers that purchase qualified alternative-fueled vehicles or alternative-fuel fueling stations to receive a credit on their state income taxes.		Summary: This statute exempts renewable energy equipment from property taxes. Renewable energy includes wind, solar thermal electric, photovoltaic, biomass, hydropower, geothermal, and landfill gas resources or technologies that are actually and regularly used predominantly to produce and generate electricity.

Kansas

Grants

State Energy Program Grants

Eligible Technologies: Passive Solar Space Heat, Solar Water Heat, Active Solar Space Heat, Solar Thermal Electric, Solar Thermal Process Heat, Photovoltaics, Landfill Gas, Wind, Biomass, Hydro, Renewable Transportation Fuels, Renewable Fuel Vehicles, Geothermal Electric, Fuel Cells, Geothermal Heat Pumps, Waste, Cogeneration, Energy Education

Applicable Sectors: Commercial, Industrial, Nonprofit, Schools, Local Government, Transportation, Construction, Utilities, State Government

Amount: Varies by project

Summary:

The Kansas Corporation Commission Energy Programs offers approximately \$400,000 in grants each year to accelerate the deployment of energy efficiency and renewable energy technologies and education and to facilitate the commercialization of emerging and underutilized energy efficiency and renewable energy technologies. Grants are available to fund state agencies, counties, municipalities, universities, schools, non-profit organizations, small businesses, consultants, and others. This grant is not availble to homeowners. All renewable energy technologies are eligible.

Personal Tax	Personal Tax	Corporate Tax
	Personal Income Tax Credit for Green	
Clean Energy Incentive Act	Buildings	Clean Energy incentive Act
Eligible Technologies: Solar Water	Eligible Technologies: Photovoltaics,	Eligible Technologies: Solar Water
Heat, Active Solar Space Heat,	Wind, Fuel Cells	Heat, Active Solar Space Heat, Solar
Photovoltaics, Landfill Gas, Biomass		Thermal Process Heat, Photovoltaics, Landfill Gas, Biomass
Applicable Sectors: Commercial, Residential	Applicable Sectors: Commercial, Industrial, Multi-Unit Residential	Applicable Sectors: Commercial, Industrial
Amount: 15%	Amount: 6-8% Green Bldg; 20-25% PV; 25% Wind; 30% Fuel Cell	Amount: 15%
Max. Limit: \$1000 for solar thermal; \$2000 for PV	Terms: 10-year carry forward	Max. Limit: \$1000 for solar thermal; - \$2000 for PV
Date Enacted: 7/1/2000	Date Enacted: 7/1/01	Date Enacted: 7/1/2000
Effective Date: 7/1/00	Effective Date: 7/1/01	Effective Date: 7/1/2000
Expiration Date: 7/1/2004	Expiration Date: 12/31/11	Expiration Date: 7/1/2004
Authority: Maryland Code: Tax -	Authority: Maryland Code: Tax -	Authority: Maryland Code: Tax -
General § 10-719 10-720	General § 10-722 (HB 8 of 2001)	General § 10-719 10-720
Summary:	Summary:	Summary:
The Maryland Clean Energy Incentive	Credits apply to three types of	The Maryland Clean Energy Incentive
Act, which went into effect on July 1,	alternative energy sources:	Act, which went into effect on July 1,
2000, provides Maryland sales tax exemptions or income tax credits when	photovoltaics, wind turbines and fuel cells. Tax credits for alternate energy	2000, provides Maryland sales tax exemptions or income tax credits when
purchasing certain qualifying high	sources can only be claimed if they	purchasing certain qualifying high
efficiency Energy Star appliances,	serve a green whole building, a green	efficiency Energy Star appliances,
electric and hybrid-electric vehicles,	base building, or green tenant space.	electric and hybrid-electric vehicles,
and certain renewable resource energy	Newly constructed buildings must be	and certain renewable resource energy
systems.	located on a qualified brownfields site,	systems.
	or in a priority funding area, and not in	
	a wetlands area.	

Corporate Tax	Sale Tax	Sales Tax
Corporate Income Tax Credit for	Sales Tax ExemptionFuel Cells	Wood Heating Fuel Exemption
Green Buildings		
Eligible Technologies: Photovoltaics, Wind, Fuel Cells	Eligible Technologies: Fuel Cells	Eligible Technologies: Biomass
Willia, Fuel Cells		
Applicable Sectors: Commercial,	Applicable Sectors:	Applicable Sectors: Residential
Industrial, Multi-Unit Residential		
Amount: 6-8% Green Bldg; 20-25%	Amount: 100%	Amount: 100%
PV; 25% Wind; 30% Fuel Cell	7 unodini. 10070	7 tinodini. 10070
Terms: 10-year carry forward	Max. Limit: none	Max. Limit: None
Date Enacted: 7/1/01	Date Enacted: 7/1/2000	
Effective Date: 7/1/01: eligible costs;	Effective Date: 7/1/2000	
credits: 2003 tax year Expiration Date: 12/31/11	Expiration Date: 7/1/2004	
Authority: Maryland Code: Tax -	Expiration Date: 7/1/2004 Authority: Maryland Code: Tax -	Authority: Maryland Code: Tax -
General § 10-722 (HB 8 of 2001)	General § 11-226	General § 11-207
Summary:	Summary:	Summary:
Credits apply to three types of	The Maryland Clean Energy Incentives	
alternative energy sources:	Act provides for a sales tax exemption	sales tax all wood or "refuse-derived"
photovoltaics, wind turbines and fuel cells. Tax credits for alternate energy	for fuel cells that: (i) generate electricity and heat using an	fuel used for heating purposes. This exemption applies to residential use
sources can only be claimed if they	electrochemical process; (ii) have an	only
serve a green whole building, a green	electricity-only generation efficiency	
base building, or green tenant space. Newly constructed buildings must be	greater than 35%; and (iii) have a generating capacity of at least 2 kW.	
located on a qualified brownfields site,	generating capacity of at least 2 kvv.	
or in a priority funding area, and not in		
a wetlands area.		

Property Tax	Property Tax	Rebates
Local OptionCorporate Property Tax	Special Property Assessment	Residential Solar Rebates
Credit		
Eligible Technologies: Solar Water	Eligible Technologies: Solar Water	Eligible Technologies: Photovoltaics
Heat, Active Solar Space Heat, Geothermal Heat Pumps	Heat, Active Solar Space Heat	
Councilia Float Campo		
Applicable Sectors: Commercial,	Applicable Sectors: Commercial,	Applicable Sectors: Residential
Industrial	Industrial, Residential	
Amount: Varies		Rebate: \$1,600 for systems 500 W to
		999 W; \$3,200 for systems 1 kW and
		larger
Max. Limit: Varies		Expiration Date: Currently expired; other funds may become available in
		near future
Terms: Up to three years		
Authority: Maryland Code: Property	Authority: Maryland Code: Tax -	
Tax § 9-203	Property § 8-240	
Summary:	Summary:	Summary:
This code allows counties to provide a	Title 8 of Maryland's property tax code	Residential PV rebates are periodically
credit against the corporate property tax for buildings equipped with a solar,	allows for a state-wide special assessment provision for solar heating	offered by the Maryland Energy Administration using money from oil
geothermal or qualifying energy	and cooling systems. Under this	overcharge funds. Mostly recently, a
conservation device used to heat or	provision, such systems are to be	limited number of rebates were
cool a structure. Under this provision, counties determine the amount of the	assessed at not more than the value of a conventional system for property tax	available under the Maryland Solar Roofs Program. Although the pre-
credit and are given the freedom to	purposes if no conventional system	qualification and application forms
define solar, geothermal, and energy	exists in the building.	were due by October 15, 2002, rebates
conservation devices. Counties also		may become available once again at a
determine the length of time that the credit may be available up to a		later date.
maximum of three years.		

Loans
State Agency Loan Program
Eligible Technologies: Solar Thermal Electric, Photovoltaics, Wind
Applicable Sectors: State Government
Amount: Varies
Terms: 0% interest; 1% administrative fee
Effective Date: 1991
Summary: The State Agency Loan Program was established in 1991 using funds from the Energy Overcharge Restitution Fund (EORF). Through this revolving loan program, the Maryland Energy Administration provides loans to state agencies for cost-effective energy efficiency improvements in state facilities. Approximately \$1,000,000 in new loans are awarded each fiscal year. State agencies pay zero interest with a one percent administration fee. Since its inception, SALP has funded over \$6 million to upgrade lighting and other components in almost 2.5 million square feet of state building space.

Massachusetts

Personal Tax	Personal Tax	Corporato Tox
Alternative Energy and Energy	Renewable Energy State Income Tax	Corporate Tax Alternative Energy and Energy
Conservation Patent Exemption	Credit	Conservation Patent Exemption
Eligible Technologies: Passive Solar Space Heat, Solar Water Heat, Active Solar Space Heat, Solar Thermal Electric, Photovoltaics, Wind, Biomass, Hydro, Renewable Transportation Fuels, Geothermal Electric, Waste	Eligible Technologies: Solar Water Heat, Active Solar Space Heat, Photovoltaics, Wind	Eligible Technologies: Passive Solar Space Heat, Solar Water Heat, Active Solar Space Heat, Solar Thermal Electric, Photovoltaics, Wind, Biomass, Hydro, Renewable Transportation Fuels, Geothermal Electric, Waste
Applicable Sectors: Commercial, Industrial, Residential	Applicable Sectors: Residential	Applicable Sectors: Commercial, Industrial, Residential
Amount: 100% deduction	Amount: 15%	Amount: 100% deduction
Terms: Allowable for 5 years Date Enacted: 1/1/79	Max. Limit: \$1,000	Terms: Allowable for 5 years Date Enacted: 1/1/79
Authority: M.G.L. ch. 62, sec. 2(a)(2)(G) Summary: Massachusetts offers both corporate and personal income tax deductions for any income received from the sale of or royalty income from a patent that is deemed beneficial for energy conservation or alternative energy development. The Commissioner of Energy Resources determines whether a patent is eligible, and part of the criteria is that the patent is " of economic value, practicable, and necessary." This deduction, if granted, may be used for five years after it is granted. This deduction is unique among incentives in that it targets patents and not simply real property.	Authority: M.G.L Ch. 62, sec. 6(d) Summary: This statute, which was enacted in 1979, provides a 15% credit against the state income tax for the cost of a renewable energy system (including installation) installed on an individual's primary residence. The maximum limit to the credit is \$1,000 and can be carried over in the case that the credit is greater than one's income tax liability in one year. Eligible technologies include solar thermal, solar water and space heat, photovoltaics, wind, and hydro systems.	Authority: M.G.L. ch. 62, sec. 2(a)(2)(G) Summary: Massachusetts offers both corporate and personal income tax deductions for any income received from the sale of or royalty income from a patent that is deemed beneficial for energy conservation or alternative energy development. The Commissioner of Energy Resources determines whether a patent is eligible, and part of the criteria is that the patent is " of economic value, practicable, and necessary." This deduction, if granted, may be used for five years after it is granted. This deduction is unique among incentives in that it targets patents and not simply real property.

Massachusetts

Corporate Tax	Corporate Tax	Sales Tax
Solar and Wind Energy System	Solar and Wind Power Systems Excise	Renewable Energy Equipment Sales
Deduction	Tax	Tax Exemption
Eligible Technologies: Solar Water Heat, Active Solar Space Heat, Wind	Eligible Technologies: Solar Water Heat, Active Solar Space Heat, Wind	Eligible Technologies: Solar Water Heat, Active Solar Space Heat, Solar Thermal Electric, Photovoltaics, Wind, Geothermal Heat Pumps
Applicable Sectors: Commercial, Industrial	Applicable Sectors: Commercial, Industrial	Applicable Sectors: Residential
Amount: 100%	Amount: All	Amount: 100%
Max. Limit: None Terms: Length of depreciation period	Max. Limit: None Terms: Length of depreciation	Max. Limit: None Date Enacted: 1/1/77
Authority: M.G.L. ch .63, sec. 38H	Authority: M.G.L ch. 63, sec. 38H(f)	Authority: M.G.L. ch. 64H, sec. 6(dd)
Summary: Businesses that purchase a qualifying solar or wind-powered "climate control unit" or "water heating unit" are allowed to deduct from net income, for state tax purposes, costs incurred from installing the unit. The installation must be located in Massachusetts and used exclusively in the trade or business of the corporation.		Summary: This statute exempts from the state sales tax solar, wind, and heat pump systems and all related equipment. This exemption is limited to systems which will be used in an individual's principal residence and is not available to commercial users.

Massachusetts

Property Tax	Rebates	Grants
Local Property Tax Exemption for	Clustered PV Installation Program	Green Buildings Initiative
Hydropower Equipment Eligible Technologies: Solar Water Heat, Active Solar Space Heat, Solar Thermal Electric, Photovoltaics, Wind, Hydro	Eligible Technologies: Photovoltaics	Eligible Technologies: Passive Solar Space Heat, Solar Water Heat, Active Solar Space Heat, Photovoltaics, Wind, Fuel Cells, Geothermal Heat Pumps, Daylighting
Applicable Sectors: Commercial, Industrial, Residential, Utilities	Applicable Sectors: Commercial, Residential	Applicable Sectors: Commercial, Nonprofit, Local Government, State Government
Amount: All	Rebate: Varies by cluster program	Amount: \$20,000 (feasibility studies); \$500,000 (design & construction); \$30,000 (education)
Max. Limit: None Terms: 20 years maximum exemption; facility must pay host community 5% of gross income for preceding year		Effective Date: 2002
Authority: M.G.L. ch. 59, sec. 5, cl. (45A)		
Summary: Hydropower facilities are exempt from local property tax for a period of 20 years from the date of completion of the facility if construction commences after January 1, 1979. To qualify for this exemption, the owner of the plant must agree to pay the host community at least 5% of the plant's gross income for the preceding calendar year in lieu of taxes. Eligible hydropower facilities include all real property relating to hydroelectric power generation (land and buildings) and tangible property (turbines and other equipment).	Summary: The incentive is partially performance-based in that 70% of the rebate will be paid after the system has successfully operated for 30 days, with the remaining 30% paid as quarterly production payments over three years at a rate of \$0.38/kWh of electrical output produced by the PV system. The total production payment is capped at 30% of the installation incentive. The total installation incentive varies from grantee to grantee but is capped at up to \$5.00/Watt (AC output).	Summary: The Massachusetts Green Building Initiative, launched in March 2002, provides competitive awards to fund the planning and construction of renewable technologies in all types of Green Buildings. The Initiative selects awardees on a competitive basis from two separate categories of applicants: public and tax-exempt nonprofit organizations, and private and other nonprofit organizations.

Massachusetts

Grants

Green Schools Initiative

Eligible Technologies: Passive Solar Space Heat, Solar Water Heat, Active Solar Space Heat, Photovoltaics, Wind, Fuel Cells, Geothermal Heat Pumps, Daylighting

Applicable Sectors: Schools

Amount: Up to \$20,000 for feasibility grants; Up to \$630,000 for design and construction assistance grants

Effective Date: 2002

Summary:

The Massachusetts Green Schools Initiative provides information services, and funding for feasibility studies, design, construction, and ongoing green education activities of green public schools employing renewable technologies. This program is the result of a new partnership between the Massachusetts Technology Collaborative's Renewable Energy Trust and the Massachusetts Department of Education's School Building Assistance Program.

Michigan

Grants

Community Energy Project Grants
Eligible Technologies: Passive Solar
Space Heat, Solar Water Heat, Active
Solar Space Heat, Solar Thermal
Electric, Solar Thermal Process Heat,
Photovoltaics, Wind, Renewable Fuel
Vehicles

Applicable Sectors: Nonprofit, Local

Government
Amount: varies
Max. Limit: \$5,000
Effective Date: 10/1/01

Expiration Date: N/A (no annual

solicitation)
Summary:

The grants are for one year, with a maximum limit of \$5,000 per grant. An organization may only submit one proposal for each project option, but may submit one proposal for each of

the five project options.

Minnesota

Sales Tax	Sales Tax	Property Tax
PV Sales Tax Exemption	Wind Sales Tax Exemption	Wind and Photovoltaic Systems Exemption
Eligible Technologies: Photovoltaics	Eligible Technologies: Wind	Eligible Technologies: Photovoltaics, Wind
Applicable Sectors: Residential	Applicable Sectors: Commercial, Industrial, Residential, General Public, Nonprofit, Utilities	Applicable Sectors: Commercial, Residential, Utilities
Amount: All	Amount: All	Max. Limit: none
Max. Limit: None	Max. Limit: None	Terms: see summary
Date Enacted: 8/1/01 Effective Date: 8/1/01	Date Enacted: 7/1/98	Effective Date: 1/1/92
Expiration Date: 7/31/05		
Authority: Minn. Stat. § 297A.67 (28c) Summary: Under the bill, the following products are exempted from the state sales tax: residential lighting fixtures and compact fluorescent bulbs that carry the energy star label; - electric heat pump hot water heaters with an energy factor of at least 1.9; - natural gas hot water heaters with an energy factor of at least 0.62; and - photovoltaic devices and natural gas furnaces with at least a .92 fuel efficiency rating.	Authority: Statute 297A.68, Summary: Wind energy conversion systems used as an electric power source are exempt from sales tax, and the materials used to manufacture, install, construct, repair, or replace them are also exempt from sales tax. "Wind energy conversion system" (WECS) means any device, such as a wind charger, windmill, or wind turbine, which converts wind energy to a form of usable energy.	Authority: Minn. Stat. § 272.02, Summary: Note that in lieu of a property tax on wind energy systems, a production tax was implemented in 2002. Wind systems greater than 12 MW are taxed at a rate of 0.12 cents/kWh; systems between 2 MW and 12 MW are taxed at a rate of 0.036 cents/kWh; and systems between 0.25 MW and 2 MW are taxed at a rate of 0.012 cents/kWh. Wind systems under 0.25 MW are exempt from the production tax.

Minnesota

Loans	Loans	Production Incentive
Agricultural Improvement Loan	Value-Added Stock Loan Participation	Ethanol Production Incentive
Program for Wind Energy	Program	
Eligible Technologies: Wind	Eligible Technologies: Wind	Eligible Technologies: Biomass, Renewable Transportation Fuels
Applicable Sectors: farms	Applicable Sectors: Commercial, Residential	Applicable Sectors: Industrial
Amount: RFA provides up to 45% of loan	Amount: RFA provides up to 45%of loan	Amount: 11 to 20 cents/gallon; 1.5 cents/kWh
Max. Limit: RFA provides up to \$125,000 of loan principal	Max. Limit: RFA provides up to \$24,000 of loan principal	Max. Limit: \$3.75 million/year; \$37 million annual cap
Terms: up to 10 years	Terms: up to 8 years	Date Enacted: 1997
Date Enacted: 1/1/95	Date Enacted: 1/1/94	Expiration Date: 6/30/2010
Authority: MS2000 41B.043	Authority: MS2000 41B.046	Authority: MS2000 41A.09
Summary:	Summary:	Summary:
This low interest loan program, which	This low-interest loan program, which	This incentive is for producers of
is administered by the Department of Agriculture through the Rural Finance	is administered by the Department of Agriculture through the Rural Finance	ethanol, anhydrous alcohol, and wet alcohol fermented in Minnesota and
Authority, provides loans to farmers for	Authority (RFA), was created in 1994	produced at plants that began
improvements to or additions to	and is designed to help farmers buy	production by June 30, 2000. Makers
permanent facilities. In 1995 wind	into wind generation cooperatives.	of ethanol or anhydrous alcohol
energy conversion equipment was added to the definition of agricultural	Under current rules, the maximum size of an individual project supported by a	produced on or before June 30, 2000, or ten years after the start of
improvements. Like Minnesota's Stock	wind energy cooperative is 1 MW. Like	
Loan Program, this is a "participation	Minnesota's Agricultural Improvement	receive 20 cents/gallon. Makers of wet
loan," whereby the loans are made by	Loan Program, this is a "participation	alcohol will receive at least 11
individual financial institutions working	loan" whereby the loans are made by	cents/gallon, with the exact amount
with the Rural Finance Authority. The	individual financial institutions working	dependant on an alcohol purity formula
Rural Finance Authority has a Master Participation Agreement with over 400	with the RFA. The RFA purchases up	devised by the state. Payments will be made to either the original producer or
financial institutions throughout the	the RFA portion is 4.0%, while the rate	
state; this agreement governs the	on the remaining portion is negotiated	Once a plant's production capacity
responsibilities of the various parties in	between the borrower and the lender.	reaches 15,000,000 gallons per year,
such participation loans.	The program is funded through a	no additional increment will qualify for
	revolving account.	the payment.

Minnesota

Production Incentive

Wind, Hydro, Digester Energy Generation Incentive Eligible Technologies: Wind, Hydro, on-farm anaerobic digester Applicable Sectors: Commercial, Residential, Nonprofit, tribal council

Amount: 1.5 cents per kWh

Max. Limit: none

Terms: available for 10 years Date Enacted: 7/1/97; revised 2001

Effective Date: 7/1/99 (hydro); 1/1/97

(wind); 7/1/01 (digester) Authority: MS2001 216C.41

Summary:

Minnesota's program is unique in its offering of payments for actual energy output. There is an advantage in programs that offer credits or payments based on production rather than for investment: production payments and credits place a premium on project output and hence quality-not just rated capacity which may or may not be fully utilized once installed.

Mississippi

Loans

Energy Investment Program
Eligible Technologies: Solar Water
Heat, Active Solar Space Heat, Solar
Thermal Electric, Photovoltaics,
Biomass, Hydro, Renewable
Transportation Fuels, Geothermal
Electric, Waste

Applicable Sectors: Commercial,

Industrial Amount: 85% Max. Limit: \$300,000

Terms: 3% below prime rate; 10-year

payback

Date Enacted: 1/1/89 Authority: N/A Summary:

The Energy Division of Mississippi's **Development Authority administers** this program, which makes low-interest loans for a wide variety of renewable and non-renewable energy projects. Eligible technologies include solar thermal, solar space heat, solar process heat, photovoltaics, alternative fuels, geothermal, biomass, hydropower, and recycling facilities. All projects must demonstrate that they will reduce energy costs. The interest rate is three percent (3%) below the prime rate with a ten-year payback period. The maximum loan amount is \$300,000. This \$7 million revolving loan fund was established through federal oil overcharge funds.

Missouri

Corporate Tax Loans Wood Energy Producers Production Energy Loan Program Credit Eligible Technologies: Passive Solar Eligible Technologies: Biomass Space Heat, Solar Water Heat, Active Solar Space Heat, Photovoltaics, Wind, Biomass Applicable Sectors: Commercial, Applicable Sectors: Local Industrial Government, Public K-12 Schools Amount: \$5 per ton Amount: varies Max. Limit: None Max. Limit: varies Terms: Carryforward up to four years Terms: determined individually Effective Date: 1/1/97 Date Enacted: 1/1/91 Authority: Missouri Revised Statutes Authority: Missouri Revised Statutes 135.300-135.311 640.651 through 640.686 Summary: Summary: The Wood Energy Tax Credit, effective This statute-based loan program is January 1, 1997, allows corporations administered by the Energy Center of processing Missouri forestry industry Missouri under the Department of residues into fuels an income tax credi Natural Resources. The loans are of \$5.00 per ton of processed material available for energy efficiency and Any amount of credit which exceeds renewable energy projects and are available to public schools (K-12) and the tax due by the company in the year local governments. The next sectors to of production may be carried over to a subsequent taxable year, not to be targeted for assistance in the future exceed four years. A credit earned include private schools and hospitals. under this program may also be The loans are provided at a fixed transferred to third parties for use interest rate below the market rate and within this five-year period. To be repayment schedules are determined considered an eligible fuel, the forestry on an individual project basis. industry residues must have undergone some thermal, chemical or mechanical process(es) sufficient to alter the residues into a fuel product.

Montana

Personal Tax	Personal Tax	Personal Tax
Commercial or Net Metering System Investment Credit	Residential Alternative Energy System Tax Credit	
Eligible Technologies: Solar Thermal Electric, Solar Thermal Process Heat, Photovoltaics, Landfill Gas, Wind, Biomass, Hydro, Geothermal Electric, Fuel Cells	Eligible Technologies: Photovoltaics, Wind, Biomass, Hydro, Fuel Cells, Geothermal Heat Pumps, Low- Emission Wood Stoves, Nonfossil Energy Gen	Eligible Technologies: Geothermal Heat Pumps
Applicable Sectors: Commercial, Industrial	Applicable Sectors: Residential	Applicable Sectors: Residential
Amount: 35%; \$5,000 minimum investment	Max. Limit: \$500	Max. Limit: \$1,500
Date Enacted: 5/5/01	Terms: 5 years	Terms: 8 years
Effective Date: 1/1/02	Effective Date: 1/1/02	Date Enacted: 5/5/01
Expiration Date: None		Effective Date: 1/1/02
'		Expiration Date: None
Authority: MCA 15-32-402 through 15-	Authority: MCA 15-32-201 through 15-	·
32-406	32-203	as amended by SB 506 in 2001
an individual, corporation, partnership, or small business corporation which makes an investment of \$5,000 or more in a commercial system or a net metering system that generates energy by means of an alternative	Summary: Residential taxpayers who install an energy system using a recognized nonfossil form of energy on their home after 12/31/01 are eligible for a tax credit equal to the amount of the cost of the system and installation of the system, not to exceed \$500. The tax credit may be carried over for the next four taxable years.	Summary: This statute allows residents to claim an income tax credit of up to \$1,500 for the installation cost of a geothermal energy system in their principal dwelling. If the credit is not used for the year the system is installed, then it may be carried forward for the next 7 taxable years.

Montana

Corporate Tax	Property Tax	Grants
Corporate Tax Corporate or Net Metering System Investment Credit Eligible Technologies: Solar Thermal Electric, Solar Thermal Process Heat, Photovoltaics, Landfill Gas, Wind, Biomass, Hydro, Geothermal Electric, Fuel Cells Applicable Sectors: Commercial, Industrial	Property Tax Renewable Energy Systems Exemption Eligible Technologies: Passive Solar Space Heat, Solar Water Heat, Active Solar Space Heat, Solar Thermal Electric, Photovoltaics, Wind, Biomass, Hydro, Waste Applicable Sectors: Commercial, Residential	Renewable EnergyUSB Renewable Energy Fund Eligible Technologies: Passive Solar Space Heat, Solar Water Heat, Active Solar Space Heat, Solar Thermal Electric, Photovoltaics, Wind, Biomass, Hydro, Geothermal Electric, Geothermal Heat Pumps Applicable Sectors: Commercial, Industrial, Residential, General Public
Amount: 35%; \$5,000 minimum investment Date Enacted: 5/5/01 Effective Date: 1/1/02 Expiration Date: None Authority: MCA 15-32-402 through 15-32-406	Amount: \$20,000 for single family, \$100,000 multi family Max. Limit: N/A Terms: 10 years Authority: MCA 15-6-201(b)(3)	Amount: \$5,000 to \$1.5 million
Summary: This statute allows a 35% tax credit for an individual, corporation, partnership, or small business corporation which makes an investment of \$5,000 or more in a commercial system or a net metering system that generates energy by means of an alternative renewable energy source. The credit is for manufacturing plants that produce alternative energy generating equipment, a business facility for which the alternative energy generating equipment supplies - on a direct contract sales basis - the basic energy needed, or alternative energy generating equipment in which the investment for which a credit is being claimed was made.	taxation the value added by a qualified renewable energy source. Qualified equipment includes active and passive solar, wind, hydropower, solid waste, and the decomposition of organic wastes. Such equipment is exempt	established its Universal System

Montana

Loans	Industry Recruitment
Alternative Energy Revolving Loan	Commercial or Net Metering System
Program	Investment Credit
Eligible Technologies: Photovoltaics,	Eligible Technologies: Solar Thermal
Landfill Gas, Wind, Biomass, Hydro, Fuel Cells, Geothermal Heat Pumps	Electric, Solar Thermal Process Heat, Photovoltaics, Landfill Gas, Wind,
ruei Celis, Geothermai Heat Pumps	Biomass, Hydro, Geothermal Electric,
	Fuel Cells
	1 401 50115
Applicable Sectors: Commercial,	Applicable Sectors: Commercial,
Residential	Industrial
Amount: \$10,000	Amount: 35%; \$5,000 minimum
	investment
Max. Limit: \$10,000	Date Enacted: 5/5/01
Terms: 5 years	Effective Date: 1/1/02
Date Enacted: 5/5/01	
Effective Date: 7/1/01	
Authority: MCA 75-25-101	Authority: Montana Code 15-32-
	401/15-32-402, as amended by SB 506 in 2001
Summary:	Summary:
The Alternative Energy Revolving Loan	1
Program (AERLP) provides loans to	an individual, partnership or
individuals and small businesses for	corporation which makes an
the purpose of building alternative	investment of \$5,000 or more in a wind
energy systems for residences and	electricity generating system or
small businesses to generate energy	facilities to manufacture wind energy
for their own use and for net metering.	equipment. Eligible property includes
The program is administered by the	wind energy system equipment,
Department of Environmental Quality, which is responsible for developing the	transmission lines, and equipment used in the manufacture of wind
rules.	energy devices. The credit must be
Tuics.	taken the year the equipment is placed
	in service; however, excess credit may
	be carried over for the following 7
	years. Certain rules apply when using
	other state or federal financial
	incentives.
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Nebraska

Corporate Tax Loans

Ethanol Production Incentive Eligible Technologies: Renewable Transportation Fuels

Dollar and Energy Savings Loans Eligible Technologies: Solar Water Heat, Active Solar Space Heat, Solar Thermal Electric, Photovoltaics, Wind, Biomass, Hydro, Renewable Transportation Fuels, Renewable Fuel Vehicles, Geothermal Electric, Waste

Applicable Sectors: Commercial,

Industrial

Applicable Sectors: Commercial, Residential, Agricultural, Local

Government Amount: 5% or less

Amount: 18 cents/gallon; 7.5 cents/gallon for expansions Max. Limit: Varies; see below

Date Enacted: 1990 Effective Date: 1993

Expiration Date: Varies by provision

Max. Limit: Varies Date Enacted: 1/1/90

Authority: R.R.S. Neb. § 66-1344

Summary:

New ethanol facilities in Nebraska producing a minimum of 100,000 gallons annually, before denaturing, or or before June 30, 2004 are eligible to receive a tax credit of 18 cents per gallon for 96 consecutive months if they were not in production on or before September 1, 2001. Payments begin with the first calendar month for which the facility is eligible to receive such credit and end not later than June through their private lending institution. 30, 2012. Facilities are eligible to receive payments for 48 consecutive months until June 30, 2008 if the facility did not received credits prior to June 1, 1999.

Summary:

Those seeking a loan under this program first approach their own financial institution, which approves the project on financial terms before contacting the State Energy Office for its approval. The State Energy Office then buys half of the loan at 0% interest so that the total interest on the loan "from the borrower's perspective" will be half the market rate obtained

Nevada	Sales Tax	Property Tax	Property Tax
	Renewable Energy Sales Tax	Renewable Energy Producers Property	
	Exemption	Tax Exemption	Exemption
	Eligible Technologies: Solar Thermal	Eligible Technologies: Solar Water	Eligible Technologies: Passive Solar
	Electric, Photovoltaics, Wind,	Heat, Active Solar Space Heat, Solar	Space Heat, Solar Water Heat, Active
	Biomass, Hydro, Geothermal Electric,	Thermal Electric, Solar Thermal	Solar Space Heat, Photovoltaics,
	Fuel Cells, Waste	Process Heat, Photovoltaics, Wind, Biomass, Waste	Wind, Hydro, Geothermal Electric, Geothermal Heat Pumps, Waste
		Diomass, waste	Geomennai neat Fumps, waste
	Applicable Sectors: Commercial,	Applicable Sectors: Commercial,	Applicable Sectors: Commercial,
	Residential	Industrial	Industrial, Residential
	Amount: Exempt from local sales	Amount: 50%	Amount: 100%
	taxes; only required to pay 2% state		
	sales tax		
	Effective Date: 1/1/02	Date Enacted: 1993	Max. Limit: None
	Expiration Date: 6/30/03		
	Authority: NRS 374.307	Authority: NRS 361.0685	Authority: NRS 361.079
	Summary:	Summary:	Summary:
	The sales/use tax rate for any sales,	Enacted in 1993, but most recently	This statute states that any value
	storage, consumption or use of	revised by SB 227 on June 1, 2001,	added by a qualified renewable energy
	products or systems designed or	this statute allows a 50% property tax	source shall be subtracted from the
	adapted to use renewable energy to generate electricity and all of its	exemption for any business that: 1) uses a process where at least 50% of	assessed value of any residential, commercial or industrial building for
	integral components is 2% in all	the material or product is recycled, or	property tax purposes. Qualified
	counties for those purchases made	2) includes a facility for the generation	equipment includes solar, wind,
	from January 1, 2002 through June 30,	of electricity from recycled material,	geothermal, solid waste, and hydro.
	2003. Sales, storage, consumption or	whose primary purpose is the	This exemption applies for all years
	use of such products or systems are	conservation of energy or the	following installation.
	exempt from any local taxes pursuant	substitution of other sources of energy	
	to chapters 374, 374A, 377, 377A or	for fossil sources of energy.	
	377B of the Nevada Revised Statutes.		
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New Hampshire

Property Tax

Local Option Property Tax Exemption for Renewable Energy

Eligible Technologies: Passive Solar Space Heat, Solar Water Heat, Active Solar Space Heat, Photovoltaics, Wind, Wood heating

Applicable Sectors: Residential Amount: varies: local option Max. Limit: varies: local option

Date Enacted: 1/1/76

Authority: 5 NH RSA 72:61-72

Summary:

New Hampshire's local option property tax statute allows each city and town to offer an exemption on residential property taxes in the amount of the assessed value of a renewable energy system used on the property. Eligible technologies may include solar (photovoltaics, solar space heating, solar water heating, passive solar), wind, and wood-fired central heating systems. Cities and towns must adopt the exemption provision separately for each energy source.

New Jersey

Sales Tax Rebates Solar and Wind Energy Systems New Jersey Clean Energy Program Exemptions Eligible Technologies: Passive Solar Eligible Technologies: Photovoltaics, Space Heat, Solar Water Heat, Active Wind, Biomass, Fuel Cells Solar Space Heat, Solar Thermal Electric, Photovoltaics, Wind, Biomass, Hydro, Renewable Transportation Fuels, Water Pumping Applicable Sectors: Commercial, Applicable Sectors: Commercial, Industrial, Residential, Utilities Residential Amount: All Rebate: \$0.15 - \$5/watt Max. Limit: None Max. Limit: 30% - 60% of system costs Date Enacted: 9/11/80 Date Enacted: 1999 Effective Date: 9/11/80 Effective Date: 2001 Expiration Date: 2008 Authority: NJSA 54:32B-8.33 and regulations: N.J.A.C. 14:25-1 Summary: Summary: New Jersey offers a full exemption New Jersey's 1999 electricity from the state 6% sales tax for all solar restructuring legislation provides for and wind equipment. This exemption is investments in energy efficiency and available to all taxpayers. In addition, renewable energy through the reference to New Jersey's technical "Societal Benefits Charge" collected from all electric public utility sufficiency standards is necessary. These standards for solar equipment customers. In March 2001, the NJ were established in order to certify Board of Public Utilities approved eligible solar energy equipment for the funding for renewable energy state's sales and use tax exemptions. programs, including a customer-sited The statute defines all relevant solar renewables rebate program energy equipment including equipment administered by the state's utilities. for passive solar design.

New Mexico

Corporate Tax

Renewable Energy Production Tax

Eligible Technologies: Solar Thermal

Electric, Photovoltaics, Wind

Applicable Sectors: Commercial,

Industrial

Amount: 1 cent/kWh

Max. Limit: first 400,000 MWh Terms: eligible for 10 consecutive

years

Date Enacted: 3/4/02 Effective Date: 7/1/02 Authority: SB 187

Summary:

Signed by New Mexico's governor in March 2002, S.B. 187 provides a tax credit against the corporate income tax of one cent per kilowatt-hour for companies that generate electricity from wind power or solar energy. The credit is applicable only to the first 400,000 megawatt-hours of electricity in each of 10 consecutive years. To qualify, an energy generator must use a zero-emissions generation technology and have capacity of at least 20 megawatts.

New York	Personal Tax	Corporate Tax	Property Tax
	Solar Electric Generating Equipment Tax Credit	Green Building Tax Credit Program	Solar and Wind Energy Systems Exemption
	Eligible Technologies: Photovoltaics	Eligible Technologies: Photovoltaics, Fuel Cells	Eligible Technologies: Solar Water Heat, Active Solar Space Heat, Solar Thermal Electric, Solar Thermal Process Heat, Photovoltaics, Wind, Biomass
	Applicable Sectors: Residential	Applicable Sectors: Commercial, Residential, Construction	Applicable Sectors: Commercial, Industrial, Residential, Farms
	Amount: 25%	Amount: Fuel cells \$1/w, PV \$3/w - DC capacity	Terms: 15-year exemption
	Max. Limit: \$3,750	Max. Limit: Fuel cells 30% capitalized costs; PV 100% building integrated, 25% non-integrated	Date Enacted: 1977; amended 1990, 2002
	Terms: 5-year carry forward	Terms: Distributed over 5 years; transferable; indefinite carry forward	Effective Date: before 7/1/88 or betw 1/1/91 & 1/1/06
	Date Enacted: 8/2/97	Date Enacted: 2000 Expiration Date: 2004	Expiration Date: 2006
	Authority: 1997 A 8660		Authority: NYS Real Property Tax Law Title 2, Sec. 487
		Authority: Laws of 2000, Ch. 63, Part	Authority 2: S.B. 6592 of 2001
	Summary:	Summary:	Summary:
	Passed by the New York legislature in August 1997, this personal income tax credit applies to expenditures on solar electric equipment used on residential property. This tax credit provision was passed as part of a bill that includes provisions for the net metering of the same equipment. The credit is for twenty-five (25%) percent of the cost of equipment and installation of photovoltaic systems.	Projects can qualify for credits under six different program components: 1) Whole Building Credit (owner or tenant) where base building and all tenant space are green; 2) Base Building Credit (owner) for non-dwelling spaces; 3) Tenant Space Credit (owner or tenant) where the	The exemption applies to systems which are (a) existing or constructed prior to July 1, 1988 or (b) constructed subsequent to January 1, 1991 and prior to January 1, 2006. The intent of the law is to encourage the installation of solar, wind and farm waste energy equipment systems and ensure property owners that their real property taxes will not increase as a result of the installation of these systems. The amount of the exemption is equal to the increase in assessed value attributable to the solar, wind, or farm waste energy system.
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New York

Rebates	Rebates	Rebates
Energy \$mart New Construction	Long Island Solar Pioneer Program	PV Incentive Program
Program Eligible Technologies: Photovoltaics, Geothermal Heat Pumps, Daylighting	Eligible Technologies: Photovoltaics	Eligible Technologies: Photovoltaics
Applicable Sectors: Commercial, Industrial, Nonprofit, Local Government, State Government, Multi- family Buildings, Schools, Institutions	Applicable Sectors: Commercial, Residential	Applicable Sectors: Commercial, Industrial, Residential, Nonprofit, Schools, Local Government, State Government, Institutional
Rebate: PV: lesser of \$5/watt and 70% of incremental cost	Rebate: \$5/watt for first 500 kW installed; \$4/watt for next 1 MW installed capacity	Rebate: \$4 - \$5
Max. Limit: \$300,000 for BIPV; \$100,000 for other solar and daylighting	Distributions: 31 as of 7/2002; 129 pending LIPA inspection and approval	Max. Limit: 70% of total installed costs for systems 10kW-15kW
Effective Date: 7/1/01	Terms: up to 10 kW	Terms: Incentives are passed on to eligible customers through eligible installers
Expiration Date: 12/31/2003	Effective Date: 1999	Effective Date: 10/2002
Summary: NYSERDA will provide incentives of up to \$300,000 per project for design and installation of building-integrated photovoltaics, and up to \$100,000 per project for design and installation of advanced solar and daylighting technologies only in Custom and Whole Building Design projects. Incentives are capped at 70% of the incremental cost of the design and installation of eligible measures for advanced solar and daylighting technologies and the lesser of \$5 per watt ac or 70% of the incremental cost of BIPV.	Summary: As of August 1, 2002, LIPA's rebate is set at \$5 per watt (up to \$60,000) for the first 500 kW of PV installed. Maximum eligible system size is 10 kW. After the 500kW threshold has been reached, the rebate will adjust to \$4 dollars per kW for the next 1000kW of installed PV systems.	Summary: The New York State Energy Research and Development Authority (NYSERDA) provides incentives of \$4 to \$5 per Watt to eligible installers for the installation of approved, grid-connected, PV systems under 15kW. Incentives are only available to eligible installers and incentives must be passed on to customers. Once eligible, installers reserve incentives for approved systems, for specific customers, on a first-come, first-served basis, for as long as funds (~\$2.5 million) are available. The program continuously accepts applications from installers who would like to participate in the program. The goal is to increase the network of eligible installers across the State, offering customers a choice of qualified or certified installers in their area.

New York

Rebates	Grants	Loans
Residential Photovoltaics Progam	Renewables R&D Grant Program	Energy \$mart Loan
Eligible Technologies: Photovoltaics	Eligible Technologies: Solar Thermal Electric, Photovoltaics, Wind, Biomass, Hydro, Renewable Transportation Fuels	Eligible Technologies: Solar Water Heat, Active Solar Space Heat, Solar Thermal Electric, Photovoltaics, Wind
Applicable Sectors: Residential	Applicable Sectors: Commercial, Industrial, Residential, Utilities	Applicable Sectors: Commercial, Industrial, Residential, Nonprofit, multi- family housing
Rebate: Varies by Utility	Amount: 50%	Amount: 4.5% below market rate
	Max. Limit: \$200,000	Terms: 5-year term
		Date Enacted: 1999
		Effective Date: 2001
Summary: The New York State Energy Research and Development Authority's Residential Photovoltaics Program was initiated to stimulate the photovoltaics market by installing high-quality, well-designed, reliable, grid-connected photovoltaic systems at residences in New York State. Homeowners who install interconnected photovoltaic systems are eligible for rebates from authorized dealers.	Summary: This collaborative research program is run by the New York State Energy Research and Development Authority (NYSERDA). The Authority typically makes solicitations for research projects on an annual basis with annual funds averaging \$2 million. Funds are available to support research projects, typically involving product development and commercialization activities, that target either commercial, industrial, residential and utilities sectors. The program funds up to 50% of a project's costs with expenditures running between \$10,000 and \$200,000 per project. Eligible technologies include solar thermal electric, photovoltaics, hydropower, alternative fuels, wind, and biomass.	agricultural, non-profit, or multifamily facility is eligible for this program,

North Carolina

Personal Tax	Corporate Tax	Property Tax	
Renewable Energy Tax Credit	Renewable Energy Tax Credit	Active Solar Heating and Cooling Systems Exemptions	
Eligible Technologies: Passive Solar Space Heat, Solar Water Heat, Active Solar Space Heat, Solar Thermal Electric, Photovoltaics, Wind, Biomass, Hydro, Renewable Transportation Fuels	Eligible Technologies: Passive Solar Space Heat, Solar Water Heat, Active Solar Space Heat, Solar Thermal Electric, Solar Thermal Process Heat, Photovoltaics, Wind, Biomass, Hydro, Renewable Transportation Fuels, Daylighting	Eligible Technologies: Solar Water Heat, Active Solar Space Heat	
Applicable Sectors: Residential	Applicable Sectors: Commercial, Industrial, Residential	Applicable Sectors: Commercial, Industrial, Residential	
Amount: 35%	Amount: 35%	Amount: no more than conventional equipment	
Max. Limit: varies by technology	Max. Limit: \$250,000	Max. Limit: none	
Terms: distributed over 5 years	Terms: distributed over 5 years	Terms: N/A	
Date Enacted: 1977; revised 1994, 1999	Date Enacted: 1977; revised 1994, 1999	Date Enacted: 1977	
Effective Date: 1/1/2000	Effective Date: 1/1/2000		
Expiration Date: 1/1/2006	Expiration Date: 1/1/2006		
Authority: NCGS 105-129.15,16A	Authority: NCGS 105-129.15,16A	Authority: NCGS 105-277	
Summary: North Carolina revised its renewable energy tax credits in 1999. The various older statutes were repealed and a unified statute that addresses nearly all renewables was enacted. The new statute provides for an expanded 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. The new tax credits became effective January 1, 2000.	Summary: North Carolina revised its renewable energy tax credits in 1999. The various older statutes were repealed and a unified statute that addresses nearly all renewables was enacted. The new statute provides for an expanded 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. The new tax credits became effective January 1, 2000.	Summary: This property tax exclusion allows for active solar heating and cooling systems to be assessed at not more than the value of a conventional system for the purposes of property taxation. This applies only to active solar systems and does not include any land or structural elements of buildings such as walls and roofs. Specifically, "system" includes all controls, tanks, pumps, heat exchangers and other equipment used directly and exclusively for the conversion of solar energy for heating or cooling. Not included are land or structural elements of the building such as walls and roofs nor other equipment ordinarily contained in the structure. Residential, commercial, and industrial property are eligible for this exclusion.	

North Carolina

Loans	Industry Recruitment
Energy Improvement Loan Program	Renewable Energy Equipment Manufacturer
Eligible Technologies: Solar Water Heat, Active Solar Space Heat, Solar Thermal Electric, Solar Thermal Process Heat, Photovoltaics, Wind, Riomass, small bydro (<20 MW)	Eligible Technologies: Solar Water Heat, Active Solar Space Heat, Solar Thermal Electric, Photovoltaics, Wind, Fuel Cells
Biomass, small hydro (<20 MW) Applicable Sectors: Commercial, Industrial, Nonprofit, Schools, Local Government	Applicable Sectors: Industrial
Amount: varies	Amount: 25% of construction
Max. Limit: \$500,000 Terms: 1% interest rate; 10-year maximum term	Max. Limit: no limit Terms: up to 10 years
Date Enacted: 8/3/01	Date Enacted: 1/1/00
Effective Date: 8/02	Effective Date: 1/1/00 Expiration Date: none
Authority: Session Law 2001-338 (HB 332)	
Summary: 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 hydro (less than 20 megawatts) and biomass. A rate of 3% is available for projects that demonstrate energy efficiency, energy cost-savings or reduced energy demand.	Summary: In addition to the 35% corporate tax credit for renewable energy installations, North Carolina offers a corporate income tax credit to manufacturers of renewable energy products and equipment. The credit is equal to 25% of the installation and equipment costs of construction with no maximum limit. However, the credit cannot exceed a taxpayer's tax liability in one year. If the credit does exceed the manufacturer's tax liability, the credit may be carried forward for up to ten years. This tax incentive can be used in conjunction with the federal corporate tax credit and accelerated depreciation allowances; however, any amount of the facility's costs provided by federal, state, or local grants cannot be included in the calculation of the allowable credit.

North Dakota

Personal Tax Sales Tax Corporate Tax Geothermal, Solar and Wind Credit Geothermal, Solar and Wind Large Wind Sales Tax Exemptions Eligible Technologies: Passive Solar Eligible Technologies: Passive Solar Eligible Technologies: Wind Space Heat, Solar Water Heat, Active Space Heat, Solar Water Heat, Active Solar Space Heat, Solar Thermal Solar Space Heat, Solar Thermal Electric, Solar Thermal Process Heat, Electric, Solar Thermal Process Heat, Photovoltaics, Wind, Geothermal Photovoltaics, Wind, Geothermal Electric, Geothermal Heat Pumps Electric, Geothermal Heat Pumps Applicable Sectors: Commercial, Applicable Sectors: Commercial, Applicable Sectors: Commercial, Residential Industrial, Residential Industrial, Residential Amount: 15% (3% per year for 5 Amount: 15% (3% per year for 5 Amount: 100% vears) years) Max. Limit: none Max. Limit: none Max. Limit: none Date Enacted: 3/26/2001 Date Enacted: 3/26/2001 Terms: construction must begin by January 2011 Effective Date: 1/1/2001 Effective Date: 1/1/2001 Date Enacted: 4/2001 Expiration Date: 1/1/2011 Effective Date: 6/30/2001 Expiration Date: 1/1/2011 Expiration Date: 1/2011 Authority: ND Century Code 57-38-Authority: ND Century Code 57-38-Authority: ND Century Code 57-39.2-Summary: Summary: Summary: This statute allows any taxpayer -This statute allows any taxpayer -In April 2001, North Dakota enacted a individual or corporation - to claim an individual or corporation - to claim an sales tax exemption for wind facilities income tax credit of 3% per year for income tax credit of 3% per year for of 100 kW or larger. To be eligible, five years for the cost of equipment five years for the cost of equipment construction must begin by January 1, and installation of a geothermal, solar, and installation of a geothermal, solar, 2011. The state also has a property tax or wind energy device. That is, tax or wind energy device. That is, tax incentive for these systems. payers can claim this 3% credit in the payers can claim this 3% credit in the year of installation and the four year of installation and the four subsequent years. If the eligible device subsequent years. If the eligible device is part of a system that uses other is part of a system that uses other energy sources, only the portion of the energy sources, only the portion of the system that uses geothermal, solar, or system that uses geothermal, solar, or wind energy is eligible. To claim this wind energy is eligible. To claim this credit, individuals must use the long credit, corporations must complete form - Form 37. Schedule 2 on their return.

North Dakota

Property Tax	Property Tax
Geothermal, Solar and Wind Property	Large Wind Property Tax Incentive
Exemption	
Eligible Technologies: Passive Solar	Eligible Technologies: Wind
Space Heat, Solar Water Heat, Active Solar Space Heat, Solar Thermal	
Electric, Solar Thermal Process Heat,	
Photovoltaics, Wind, Geothermal	
Electric, Geothermal Heat Pumps	
Applicable Sectors: Commercial,	Applicable Sectors: Commercial,
Industrial, Residential	Industrial, Residential
Amount: 100%	Amount: 70%
Max. Limit: none	Max. Limit: none
Terms: 5 years	Terms: construction begins by
	1/1/2011
	Date Enacted: 3/2001 Effective Date: 1/1/2001
	Expiration Date: 1/2011
Authority: ND Century Code 57-02-	Authority: ND Century Code 57-02
Summary:	Summary:
North Dakota exempts from local	North Dakota modified its property tax
property taxes any solar, wind, or	incentives for large wind systems with
geothermal energy device. Qualifying	its 2001 bill that reduces property
systems can be stand alone or part of a conventional system, but in the case	taxes by 70% for wind facilities of 100 kW or larger. To be eligible,
where the solar, wind, or geothermal	construction must begin by January 1,
system is part of a conventional	2011. The state also has a sales tax
energy system, only the renewable	exemption for these systems.
energy portion of the total system is eligible. This exemption is applied only	
during the five year period following	
installation. To apply for this	
exemption, system owners must	
contact their local tax assessor or their county director of tax equalization.	
distribution of tax equalization.	

Ohio	Personal Tax	Corporate Tax	Corporate Tax
	Ethanol Investment Tax Credit	Conversion Facilities Corporate Tax Exemption	Ethanol Investment Tax Credit
	Eligible Technologies: Renewable Transportation Fuels	Eligible Technologies: Solar Thermal Electric, Photovoltaics, Wind, Biomass, Renewable Transportation Fuels, Waste	Eligible Technologies: Renewable Transportation Fuels
	Applicable Sectors: Residential	Applicable Sectors: Commercial, Industrial	Applicable Sectors: Commercial, Industrial
	Amount: 50% of sum invested Max. Limit: \$5,000 per taxpayer per certified ethanol plant	Amount: all Max. Limit: none	Amount: 50% of sum invested Max. Limit: \$5,000 per taxpayer per certified ethanol plant
	Date Enacted: 3/21/02	Terms: all years upon certification	Date Enacted: 3/21/02
	Effective Date: taxable year 2002 Expiration Date: taxable year 2012 Authority: Am. Sub. S.B. 144	Date Enacted: 7/13/78 Authority: ORC 5709.455709.53	Effective Date: tax year 2003 Expiration Date: tax year 2013 Authority: Am. Sub. S.B. 144
	Summary: This nonrefundable tax credit for personal taxpayers who invest in a certified ethanol plant is available beginning in taxable year 2002 and ending in taxable year 2012. The credit against the personal income tax must be claimed for the taxable year during which the investment was made. The amount of the credit equals 50% of the amount the taxpayer invests in the plant, not to exceed \$5,000 per taxpayer per certified ethanol plant (regardless of the number of years in which the taxpayer makes investments).	of fossil fuel sources of energy with alternative fuels or technologies; "thermal efficiency improvements"	Summary: Beginning in tax year 2003 and ending in tax year 2013, there is a nonrefundable tax credit for corporate taxpayers that invests in certified ethanol plants. The amount of the credit equals 50% of the amount the taxpayer invests in the plant, not to exceed \$5,000 per taxpayer per certified ethanol plant (regardless of the number of years in which the taxpayer makes investments). The corporate credit should be claimed in the tax year immediately following the calendar year in which the investment was made.

Ohio	Sales Tax	Property Tax	Loans

Conversion Facilities Sales Tax Exemption

Eligible Technologies: Solar Thermal Electric, Photovoltaics, Wind, Biomass, Renewable Transportation

Fuels, Waste

Applicable Sectors: Commercial,

Industrial

Amount: all Max. Limit: none

Date Enacted: 7/13/78

Authority: ORC 5709.45--5709.53

Summary:

The code applies to tangible property used in energy conversion, thermal efficiency improvements and solid waste energy conversion. Generally, 'conversion" refers to the replacement of fossil fuel sources of energy with alternative fuels or technologies; "thermal efficiency improvements" refers to the recovery of waste heat or steam produced in any commercial or industrial processes: and "solid waste conversion" refers to the use of waste to produce energy AND the utilization of such energy. Technologies included are solar thermal systems, photovoltaic systems, wind, biomass, and waste recovery systems.

Conversion Facilities Property Tax Exemption

Eligible Technologies: Solar Thermal Electric, Photovoltaics, Wind, Biomass, Renewable Transportation Fuels, Waste

Applicable Sectors: Commercial,

Industrial

Amount: all Max. Limit: none

Terms: all years upon certification

Date Enacted: 7/13/78

Authority: ORC 5709.45--5709.53

Summary:

The code applies to tangible property used in energy conversion, thermal efficiency improvements and solid waste energy conversion. Generally, "conversion" refers to the replacement of fossil fuel sources of energy with alternative fuels or technologies; "thermal efficiency improvements" refers to the recovery of waste heat or steam produced in any commercial or industrial processes: and "solid waste conversion" refers to the use of waste to produce energy AND the utilization of such energy. Technologies included are solar thermal systems, photovoltaic systems, wind, biomass, and waste recovery systems.

Renewable Energy Loans

Eligible Technologies: Solar Water Heat, Photovoltaics, Wind, Biomass, Hydro, Fuel Cells

Applicable Sectors: Commercial, Industrial, Residential, Nonprofit, Schools, Local Government

Amount: varies

Max. Limit: \$25,000 for residents;

\$500,000 for businesses

Terms: 5-year max. term for residents; 8-year max. term for businesses

Date Enacted: 1999

Effective Date: First Quarter, 2002 Authority: Ohio Revised Code, Sections 4928.61 - 4928.63

Summary:

Established by the Ohio General Assembly under the 1999 electric restructuring act (Senate Bill 3), the Fund was created to provide an incentive for purchasing and implementing energy-efficient and renewable energy projects. It reduces the interest rate—by approximately half—on standard bank loans for those qualifying Ohio residents and businesses that borrow money to implement energy efficiency or renewable energy projects.

Oklahoma

Corporate Tax Industry Recruitment

Zero Emissions Facilities Production Tax Credit

Eligible Technologies: Wind, Hydro, Geothermal Electric

Applicable Sectors: Commercial, Industrial

Amount: \$0.0075 kWh for electricity generated prior to 1/1/04; \$0.0050 kWh after 1/1/04, but prior to 1/1/07; \$0.0025 kWh after 1/1/07, but prior to 1/1/12

Terms: Credits may be claimed for 10 years

Date Enacted: 1/1/02 Effective Date: 1/1/03

Authority: Oklahoma Statutes §68-

Summary:

The amount of the credit varies depending on when the electricity is generated. For electricity generated prior to January 1, 2004, the amount o the credit is seventy-five one hundredths of one cent (\$0.0075) for each kilowatt-hour of electricity generated by zero-emission facilities. For electricity generated after January 1, 2004, but prior to January 1, 2007, the amount of the credit is fifty one hundredths of one cent (\$0.0050) per kilowatt-hour for electricity generated by zero-emission facilities. For electricity generated after January 1, 2007, but prior to January 1, 2012, the amount of the credit is twenty-five one hundredths of one cent (\$0.0025) per kilowatt-hour of electricity generated by zero-emission facilities.

Credit for Manufacturers of Small Wind Turbines

Eligible Technologies: Wind

Applicable Sectors: Industrial

Amount: Based on square footage of rotor swept area: \$25/ft2 for 2003; \$12.50/ft2 for 2004; \$6.25/ft2 for 2005

Terms: Credit is transferable during the 10 years following qualification

Effective Date: 1/1/03 Expiration Date: 12/31/05

Authority: Oklahoma Statutes §68-

Summary:

Oklahoma offers a credit to the manufacturers of small wind turbines for tax years 2003 through 2005.
Oklahoma manufacturers of wind turbines with a rated capacity of between 1 kW and 50 kW are eligible for the credit if they agree in advance to allow their production and claims to be audited by the Oklahoma Tax Commission. They must also be able to show that they have made economic development investments in Oklahoma over the period of time for which the credit was claimed that exceed the amount of credit claimed.

Oregon	Personal Tax	Corporate Tax	Property Tax
	Residential Energy Tax Credit	Business Energy Tax Credit (BETC)	Renewable Energy Systems Exemption
	Eligible Technologies: Passive Solar Space Heat, Solar Water Heat, Active Solar Space Heat, Photovoltaics, Wind, Renewable Fuel Vehicles, Fuel Cells, Geothermal Heat Pumps, Renewable Vehicle Charging and Refueling	Eligible Technologies: Passive Solar Space Heat, Solar Water Heat, Active Solar Space Heat, Solar Thermal Electric, Photovoltaics, Wind, Biomass, Hydro, Renewable Transportation Fuels, Geothermal Electric, Geothermal Heat Pumps, Waste, Recycling	Eligible Technologies: Passive Solar Space Heat, Solar Water Heat, Active Solar Space Heat, Solar Thermal Electric, Solar Thermal Process Heat, Photovoltaics, Wind, Hydro, Geothermal Electric, Fuel Cells, Geothermal Heat Pumps, Methane Gas
	Applicable Sectors: Residential	Applicable Sectors: Commercial, Industrial, Transportation, Utilities	Applicable Sectors: Commercial, Industrial, Residential
	Amount: Varies by technology	Amount: 35% of project costs	Amount: 100%
	Max. Limit: \$1,500	Max. Limit: \$10,000,000 per project	Max. Limit: N/A
	Date Enacted: 1977	Terms: min 1 year payback	Terms: N/A
	Effective Date: 1/1/78 Expiration Date: None Authority: OAR 330-070-0010 to 330-070-0097 (for ORS 469.160-469.180)	Date Enacted: 1/1/80 Expiration Date: None Authority: OAR 330-090-0105 to 330- 090-0150	Date Enacted: 1/1/76 Expiration Date: 2012 Authority: OAR 150-307.175
	Summary: Homeowners and renters who pay Oregon income taxes are eligible for the Residential Energy Tax Credit if they purchase premium-efficiency appliances, heating and cooling systems, duct systems, closed-loop geothermal space or water heating systems, solar water and space heating systems, photovoltaics, wind, fuel cells, and alternative fuel vehicles and charging or fueling systems. This tax credit was enacted by the legislature in 1977 and became effective beginning with tax year 1978.	Summary: Oregon's Business Energy Tax Credit is for investments in energy conservation, recycling, renewable energy resources, or less-polluting transportation fuels. Any Oregon business may qualify. As examples, projects may be in manufacturing plants, stores, offices, apartment buildings, farms, and transportation. The 35-percent tax credit is taken over five years: 10 percent the first and second years and 5 percent for each year thereafter. Any unused credit can be carried forward up to eight years.	Summary: Oregon's property tax exemption states that the added value to any property from the installation of a qualifying renewable energy system not be included in the assessment of the property's value for property tax purposes. Qualifying renewables include solar, geothermal, wind, water, fuel cell or methane gas systems for the purpose of heating, cooling or generating electricity. This exemption is intended for end users and does not apply to property owned by anyone directly or indirectly involved in the energy industry.

Oregon

Grants Loans

New Renewable Energy Resources **Unsolicited Proposal**

Eligible Technologies: Photovoltaics, Landfill Gas, Wind, Biomass, Hydro, Geothermal Electric, Digester Gas, Waste

Small Scale Energy Loan Program (SELP)

Eligible Technologies: Passive Solar Space Heat, Solar Water Heat, Active Solar Space Heat, Solar Thermal Electric, Photovoltaics, Wind, Biomass, Hydro, Renewable Transportation Fuels, Geothermal Electric, Waste, Cogeneration, Waste Heat Recovery

Applicable Sectors: Commercial, Industrial, Residential, General Public, Nonprofit, Schools, Local Government State Government

Amount: \$1.5 million for overall

program in 2002 Date Enacted: 2002

Effective Date: 2002

Applicable Sectors: Commercial, Industrial, Residential, Nonprofit, Schools, Local Government, State Government

Amount: Typically \$20,000 - \$20

million

Max. Limit: None

Terms: Repayment to match term of

bonds

Date Enacted: 5/20/80 Effective Date: 5/20/80

Authority: OAR 330-110-0005 to 330-

110-0055

Summary:

The Energy Trust of Oregon (Energy Trust) is a nonprofit organization created to invest public purpose funding for energy efficiency and renewable energy in Oregon over the next 10 years. This mandate emerged from energy reform legislation (Senate Bill 1149) passed in 1999, which included a 3% system-benefits charge to apply to Portland General Electric and Pacific Power ratepayers in the state.

Summary:

The Oregon Small Scale Energy Loan Program (SELP) is administered by the Oregon Office of Energy and was created in 1981 after voters approved an amendment to the Oregon Constitution in 1980 authorizing the sale of bonds to finance small scale, local energy projects. The funding source is unlike most other state renewable energy loan programs, which are funded by revolving funds. The sale of bonds is made on a periodic basis and, occasionally, to accommodate a particularly large loan request.

Pennsylvania

Grants

Alternative Fuels Incentive Grant Fund

Eligible Technologies: Renewable Transportation Fuels, Refueling/recharging facility Applicable Sectors: Commercial, Industrial, Residential, General Public, Nonprofit

Amount: 20% of eligible costs Max. Limit: Up to 15% of total fund

Date Enacted: 1/1/92

Summary:

The Pennsylvania Department of **Environmental Protection administers** this program which provides financial assistance and information on alternative fuels and vehicles. The Alternative Fuels Incentive Grant Fund (AFIG) was created in 1992 and is maintained by \$3.4 to \$4 million annually from a tax on the state's utilities. Eligible applicants for incentive grants are school districts, municipal authorities, political subdivisions, nonprofit entities and corporations or partnerships, and Pennsylvania residents. Eligible alternative motor fuels and fuel systems are compressed and liquefied natural gas, ethanol (E85), methanol (M85), hydrogen, hythane, electricity, fuels from biological materials or coal, and other fuels considered eligible under the Energy Policy Act of 1992

Rhode Island

Personal Tax	Sales Tax	Property Tax
Renewable Energy Personal Tax Credit	Renewable Energy Sales Tax Credit	Renewable Energy Property Tax Credit
Eligible Technologies: Solar Water Heat, Active Solar Space Heat, Solar	Eligible Technologies: Solar Water Heat, Active Solar Space Heat, Solar	Eligible Technologies: Solar Water Heat, Active Solar Space Heat, Solar
Thermal Electric, Photovoltaics, Wind	Thermal Electric, Photovoltaics, Wind	Thermal Electric, Photovoltaics, Wind
Applicable Sectors: Commercial, Residential	Applicable Sectors: Commercial, Industrial, Residential, General Public, Nonprofit	Applicable Sectors: Commercial, Industrial, Residential, General Public, Nonprofit
Amount: Varies by technology and year	Amount: All	
Max. Limit: based on max. system cost of \$7,000 for solar hot water; \$15,000 system cost for others	Max. Limit: N/A	
Date Enacted: 2/00	Terms: N/A	
Effective Date: 1/1/01	Date Enacted: 2/00	Date Enacted: 2/00
Expiration Date: 12/04	Expiration Date: 12/04	Expiration Date: 12/04
Authority: RI General Laws 44-56-1	Authority: RI General Laws 44-56-1	Authority: RI General Laws 44-56-1
Summary: Eligible technologies for Rhode Island's personal renewable energy tax credit include photovoltaics, solar hot water and space heating systems, and wind systems. Non-eligible technologies include: passive solar space heating system, passive solar hot water system, sunspace or solar greenhouse, PV and wind systems on boats or recreational vehicles, solar pool collectors, existing renewable energy systems, used equipment, repairs and replacements of existing renewable energy systems.	Summary: Rhode Island division of taxation offers a sales tax refund for qualifying renewable energy systems. Eligible technologies include photovoltaics, solar hot water, solar space heating, and wind systems.	Summary: Like the property tax provisions of many other states, Rhode Island law states that renewable energy systems cannot be assessed at more than the value of a conventional heating, hot water, or other energy production system. Qualifying technologies include photovoltaics, solar hot water systems, and active solar space heating system.

Rhode Island

Rebates	Rebates
PV & Wind Rebate Program	Small Customer Incentive Program for Green Power Marketers
Eligible Technologies: Photovoltaics, Wind	Eligible Technologies: Photovoltaics, Landfill Gas, Wind, Biomass, Hydro, Geothermal Electric, Fuel Cells
Applicable Sectors: Commercial, Industrial, Residential	Applicable Sectors: Retail electricity suppliers registered in RI
Rebate: \$3/watt (PV); \$1.50/watt (wind)	Rebate: \$125/resid first 5,000; \$75/resid. thereafter; \$250/business - first 1,000; then \$175/business
Max. Limit: 50% of system cost	Date Enacted: 1996
Terms: Wind systems < 10kW Effective Date: 2000	Date Enacted: 1996 Effective Date: 9/2001 Expiration Date: 12/2002
Authority: RI Utility Restructuring Act of 1996	Authority: Rhode Island Utility Restructuring Act of 1996
Summary: Through the Rhode Island Renewable Energy Collaborative (the Collaborative) and approved vendors, a \$3/watt buy-down up to 50% of the system cost is available to the state's residents, businesses and industries for the installation of photovoltaic systems. Similarly, a buy-down program of \$1.50/watt up to 50% of the system cost for wind generators of less than 10kW capacity is available.	

South Dakota

Property Tax

Renewable Energy Systems Exemption

Eligible Technologies: Passive Solar Space Heat, Solar Water Heat, Active Solar Space Heat, Photovoltaics, Wind, Biomass, Renewable Transportation Fuels, Geothermal Electric

Applicable Sectors: Commercial,

Residential

Amount: 50% commercial; 100%

residential Max. Limit: None Terms: For 3 years

Authority: SD Codified Laws 10-6-

35.20 Summary:

This statute exempts from local property taxes renewable energy systems on residential and commercial property. The exemption applies to the entire assessed value of residential systems and 50% of the installed cost of commercial systems, and it may be taken for three years after installation. This exemption is not allowed for systems which produce energy for resale.

Tennessee

Loans

Small Business Energy Loan Program

Eligible Technologies: Solar Water Heat, Active Solar Space Heat, Solar Thermal Electric, Photovoltaics, Wind, Biomass, Hydro, Renewable Transportation Fuels, Geothermal Electric, Waste

Applicable Sectors: Commercial,

Industrial Amount: varies Max. Limit: \$100,000 Terms: up to 7 years Date Enacted: 4/1/88

Summary:

Created in 1988, this loan program is administered by the Energy Division within the Tennessee Department of Economic and Community Development. Loans are available up to \$100,000, with terms up to 7 years. Loans cannot be used for new construction or business startup. All renewable energy technologies are eligible under the program's guidelines. Nearly \$7.8 million has been lent out to date, but few of the loans were for renewable energy projects.

Texas	Corporate Tax	Property Tax	Industry Recruitment
IEXAS	Solar Energy Device Franchise Tax	Solar and Wind-Powered Energy	Solar Energy System Manufacturer
	Deduction	Systems Exemption	Franchise Tax Exemption
	Eligible Technologies: Passive Solar Space Heat, Solar Water Heat, Active Solar Space Heat, Photovoltaics, Wind, Biomass	Eligible Technologies: Passive Solar Space Heat, Solar Water Heat, Active Solar Space Heat, Photovoltaics, Wind	Eligible Technologies: Passive Solar Space Heat, Solar Water Heat, Active
	Applicable Sectors: Commercial Amount: 100% from capital or 10%	Applicable Sectors: Residential Amount: 100%	Applicable Sectors: Industrial Amount: all
	from profit		
	Max. Limit: none Terms: N/A	Max. Limit: none Terms: N/A	Max. Limit: none Terms: N/A
	Authority: Texas Statutes and Codes 2F@171.107		Authority: Texas Statutes and Codes 2F@171.056
	Summary: The franchise tax is Texas's equivalent to a corporate tax; their primary elements are the same. This statute allows a corporation to deduct the cost of a solar energy device in one of two ways: (1) the total cost of the system	Summary: This statute exempts taxpayers from any value added by a qualified renewable energy source for property	Summary: For solar equipment manufacturers, Texas code states that "A corporation engaged solely in the business of manufacturing, selling, or installing solar energy devices is exempted from the franchise tax." The franchise tax is Texas's equivalent to a corporate tax; their primary elements are the same. There is no ceiling on this exemption, so it is a substantial incentive for solar manufacturers.

Utah Personal Tax

Renewable Energy Systems Tax

Eligible Technologies: Passive Solar Space Heat, Solar Water Heat, Active Solar Space Heat, Solar Thermal Electric, Photovoltaics, Wind, Hydro

Applicable Sectors: Commercial,

Residential
Amount: 25%
Max. Limit: \$2,000
Effective Date: 1/1/01
Expiration Date: 12/31/06

Authority: Utah Code Annotated 59-

10-134 Summary:

This individual income tax credit for renewable energy systems on residential buildings applies to 25% of the cost of installation of a system up to a maximum credit of \$2,000 per system. Eligible technologies include active and passive solar systems, wind, or hydroenergy. The tax credit applies to systems placed in service from January 1, 2001, through December 31, 2006. There is also a corporate tax credit which applies to 10% of the cost of installation of a system up to a maximum credit of \$50,000.

Corporate Tax

Renewable Energy Systems Tax

Eligible Technologies: Passive Solar Space Heat, Solar Water Heat, Active Solar Space Heat, Solar Thermal Electric, Photovoltaics, Wind, Biomass, Hydro

Applicable Sectors: Commercial,

Industrial, Residential Amount: 10% Max. Limit: \$50,000 Effective Date: 1/1/01 Expiration Date: 12/31/06

Authority: Utah Code Annotated 59-

10-134 Summary:

This corporate income tax credit for renewable energy systems applies to 10% of the cost of installation of a system up to \$50,000. Eligible technologies include active and passive solar systems, photovoltaics, biomass, hydropower, and wind. For residential buildings owned by the business, the credit is 25% of the cost of installation of a system up to a maximum credit of \$2,000 per system. This tax credit expires on December 31, 2006.

Vermont

Sales Tax **Property Tax** Sales Tax Exemption Local Option for Property Tax Exemption Eligible Technologies: Solar Water Eligible Technologies: Solar Water Heat, Photovoltaics, Wind, Fuel Cells, Heat, Active Solar Space Heat, Solar Anaerobic digestion Thermal Electric, Photovoltaics, Wind, Hydro, Renewable Transportation **Fuels** Applicable Sectors: Commercial, Applicable Sectors: Commercial, Residential, Agricultural Industrial, Residential Amount: 100% of sales tax for purchase Date Enacted: 1999, amended 2002 Authority: 32 V.S.A. Sec. 9741 as Authority: 32 V.S.A. Sec. 3845 amended by Sec. 6 of S. 138 of 2002 Summary: Summary: Vermont's 5% sales tax exemption for The state of Vermont allows renewable energy systems, passed as municipalities the option of offering part of bill H. 0548, titled, THE property tax exemptions for certain MISCELLANEOUS TAX REDUCTION renewable energy systems. Such systems include, "but not be limited to ACT OF 1999, originally applied only to net metered systems. With the 2002 grist mills, windmills, facilities for the amendments (S. 138), the exemption collection of solar energy or the now applies to net metered systems as conversion of organic matter to well as to home and business methane, and all component parts renewable energy systems not thereof including land upon which the connected to the grid. In addition, sola facility is located, not to exceed onehalf acre." Adoption of this exemption hot water systems are now eligible for varies from one municipality to the exemption. another, but typically the exemption applies to the total value of the qualifying renewable energy system and can be applied to residential, commercial, and industrial real and personal property.

Virginia

Property Tax	Loans	Industry Recruitmen
Local Option Property Tax Exemption	Low Income Loan Program for Energy Conservation Improvements	Solar Manufacturing Incentive Gr Program
Space Heat, Solar Water Heat, Active Solar Space Heat, Solar Thermal Electric, Photovoltaics	Eligible Technologies: Passive Solar Space Heat, Solar Water Heat, Active Solar Space Heat, Solar Thermal Electric, Photovoltaics, Wind, Biomass, Hydro, Geothermal Electric, Waste	Eligible Technologies: Photovoli
• •	Applicable Sectors: Existing residential	Applicable Sectors: Commercia Industrial
Amount: varies: local option	Amount: 100% of equity	Amount: Varies
•	Max. Limit: \$25,000	Max. Limit: Varies
Terms: N/A	Terms: up to 20 years	Terms: N/A
Date Enacted: 1/1/77		Effective Date: 1/1/96
,	Authority 1: Code of Virginia 36- 55.31:1	Expiration Date: 12/31/07
Summary:	Summary:	Summary:
town to exempt or partially exempt solar energy equipment or recycling equipment from local property taxes. Residential, commercial, or industrial property is eligible. The statute broadly defines solar energy equipment as any "application which would otherwise require a conventional source of energy." Recycling equipment is defined as equipment which is "integral to the recycling process and for use primarily for the purpose of abating or preventing pollution of the atmosphere or waters."	This home improvement loan program, which was created under HUD Title 1 in 1978, is administered by the Virginia Housing Development Authority. The program makes low interest loans available for low and moderate income homeowners for repairs to existing homes that reduce energy consumption or reduce dependence on conventional energy sources. All renewable energy technologies are eligible. The interest rate is 6.75%, and in addition there is an annual Federal Housing Association insurance charge of 1% of the loan amount. Loan amounts range from \$1,000 to \$25,000 for terms from six months up to twenty years. (A lien on the property is required for all loan amounts.) Homeowners can borrow up to 100% of the equity in their home. About one hundred loans per year are made.	industrial recruitment program in renewable energy industry is Virg PV Manufacturer Grant program. Created in 1995 and administere jointly by the Virginia Department Mines, Minerals, and Energy and Virginia Economic Development Partnership, this fund makes avaup to \$4.5 million per year throug 2007 for the manufacture of photovoltaic panels in Virginia. Thincentive is paid at a rate of up to cents per watt for panels sold in a calendar year, up to six megawat

Washington	Sales Tax	Rebates	Industry Recruitment
_	Sales Tax Exemption	Plug and Play Off-Grid PV Buydown	High Technology Product Manufacturers Excise Tax Exemption
	Eligible Technologies: Photovoltaics, Landfill Gas, Wind, Fuel Cells	Eligible Technologies: Photovoltaics	Eligible Technologies: Solar Water Heat, Active Solar Space Heat, Solar Thermal Electric, Photovoltaics, Wind, Biomass, Hydro, Renewable Transportation Fuels, Geothermal Electric, Waste
	Applicable Sectors: Commercial, Industrial, Residential, General Public, Nonprofit, Utilities	Applicable Sectors: Commercial, Industrial, Residential, General Public, Schools, Local Government, Utilities	Applicable Sectors: Commercial, Industrial
	Amount: 100%	Rebate: 20% of costs	Amount: 100%
	Max. Limit: None	Max. Limit: \$375 to \$3,750	Max. Limit: none
	Terms: Systems > 200 watts	Terms: Must exceed cost of line extension; Low-cost financing	Terms: N/A
	Date Enacted: 5/8/2001 Effective Date: 7/1/2001 Expiration Date: 6/30/2009	Date Enacted: 10/1998	Date Enacted: 1/1/96 Expiration Date: 1/1/2004 Authority 1: RCW 82.63
	Summary:	Summary:	Summary:
	On May 8, 2001, the Governor of Washington signed legislation, H.B. 1859, expanding the sales and use tax exemption for solar, wind, and landfill gas electric generating facilities to include fuel cells. In addition, the exemption now applies to smaller systems those that have a generating capacity of at least 200 watts, instead of the previous requirement of at least 200kW. This tax exemption takes effect July 1, 2001.	The Washington State 5,000 Solar Rooftops by 2005 Collaborative is introducing four pre-packaged, pre-engineered modular systems. Purchasers of up to one hundred of these off grid 'Plug and Play" solar electric systems will be awarded rebates by the Collaborative. These modular systems are an open standard that can be purchased from any Washington Solar Energy Industries Association dealer. Installation of the system must displace fossil fuel use.	This statute exempts qualifying high technology manufacturers from the state corporate excise tax. Their definition of high technology includes the development of alternative energy resources. The exemption is 100% with no limit. This exemption sunsets in the year 2004.

West Virginia

Corporate Tax Property Tax Credit for Wind Facilities **Exemption for Wind Facilities** Eligible Technologies: Wind Eligible Technologies: Wind Applicable Sectors: Utilities Applicable Sectors: Utilities Amount: 5% of capacity Amount: 5% of assessed value Date Enacted: May 2001 Date Enacted: May 2001 Effective Date: July 2001 Effective Date: July 2001 Authority 1: W. Va. Code § 11-13-20 Authority 1: W. Va. Code § 11-6A-5a W. Va. Code § 11-13-20 Summary: Summary: West Virginia passed legislation in West Virginia passed legislation in May 2001 that lowers the property tax May 2001 that lowers the Business and Operation Tax (B&O) affecting on utility-owned wind turbines from utilities using wind-power generation. 100% to 5% of assessed value. This Under the new legislation, the B&O change took effect in July 2001. Tax has been reduced from 40% of a turbine's capacity to 5% of that turbine's capacity. This change took effect in July 2001.

Wisconsin

Property Tax	Grants	Grants
Solar and Wind Energy Equipment Exemption	Renewable Transportation Fuels Technical Assistance	Wisconsin Focus on Energy
Eligible Technologies: Passive Solar Space Heat, Solar Water Heat, Active Solar Space Heat, Solar Thermal Electric, Photovoltaics, Wind	Eligible Technologies: Renewable Transportation Fuels	Eligible Technologies: Passive Solar Space Heat, Solar Water Heat, Active Solar Space Heat, Photovoltaics, Wind, Biomass, Hydro, Geothermal Heat Pumps
Applicable Sectors: Commercial, Industrial, Residential, Utilities	Applicable Sectors: Commercial, Nonprofit, Local Government, Utilities, State Government, Tribal Gov'ts	Applicable Sectors: Commercial, Residential, Nonprofit, Schools, Local Government, State Government
Amount: 100%	Amount: up to 50%	Amount: Varies by grant
Max. Limit: none	Max. Limit: \$15,000	Max. Limit: \$50,000
Terms: dual-use equipment excluded	Terms: performance based	Effective Date: March 2002
Authority 1: Wisconsin Statutes 70.111(18)	Date Enacted: 1/1/91	
Summary:	Summary:	Summary:
This statute exempts taxpayers from any value added by a qualified renewable energy source for property tax purposes. Qualified equipment includes any active solar equipment and any wind devices as well as transmission equipment, but "does not include equipment or components that would be present as part of a conventional energy system or a system that operates without mechanical means."	The Wisconsin Energy Bureau in Madison administers this program, which offers grants for feasibility studies regarding the production of renewable-energy-derived transportation fuels. The fund was created in 1991 using petroleum violation escrow. These grants are available to businesses, municipalities, and non-profit organizations.	Several grants for renewable energy projects are available from Wisconsin Focus on Energy, a public-private partnership that provides energy efficiency and renewable energy information and services to the state's energy utility customers. Maximum grant awards are \$50,000, covering up to 50% of project cost.

Wisconsin

Rebates Loans Cash Back Reward Focus on Energy Loan Program Eligible Technologies: Solar Water Eligible Technologies: Solar Water Heat, Active Solar Space Heat, Heat, Photovoltaics, Wind Photovoltaics, Wind, Biomass, Hydro, Geothermal Heat Pumps Applicable Sectors: Commercial, Applicable Sectors: Residential Industrial, Residential, Nonprofit, Schools, Local Government, State Government Rebate: \$200 - \$50,000 Amount: \$1,000 - \$20,000 Max. Limit: \$50,000 or 50% Max. Limit: \$20,000 Terms: 1.99% APR; 3 - 10 year term Terms: Payments based on estimated annual energy production Effective Date: March 2002 Effective Date: March 2002 Summary: Summary: The Cash-Back Reward program is A low-interest rate loan is available to based on the estimated annual energy homeowners to finance renewable energy measures on existing one- or production of electric and residential non-electric renewable energy two-family, owner-occupied homes. systems. Eligible renewable energy Participants must reside in the territory projects must be customer-sited and of an electric utility participating in the located in the territory of a utility Wisconsin Focus on Energy participating in the Wisconsin Focus Renewable Energy Program (see web on Energy Renewable Energy Program site above). Specific eligible measures (see Web site above). All customers are: solar water heating systems, are eligible to receive rewards for photovoltaic solar electric systems, installing PV, wind, solar hot water, or and wind systems. All work financed hydroelectric systems. Only with this loan must be installed by a commercial, industrial, and agricultural participating contractor. customers are eligible to receive awards for biomass, geothermal heat pumps, or solar space heat systems.

State	Arizona	California	Connecticut
Incentive Type	Environmental Portfolio Standard	Renewables Portfolio Standard	Renewable Portfolio Standard
Eligible Technologies	Solar Thermal Electric, Photovoltaics, Wind, Biomass, Hydro, Geothermal Electric, Waste	Solar Thermal Electric, Photovoltiacs, Landfill Gas, Wind, Biomass, Hydro, Geothermal Electric, Waste, Waste Tire, Digester Gas	Solar, Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydro, Fuel Cells, Waste
Applicable Sectors Initial Minimum	Utilities 0.2% 3/30/2001	Utilities 1.0%	Utilities
Effective Date Enacted	2001	9/12/2002	4/29/1998
Effective Date	3/30/2001	0/12/2002	1/1/2000
Expiration Date	2012		7/1/2009
Credit Trading			Yes
Authority	ACC Rules R14-2-1618	SB 1078 of 2002	CT Public Act No. 98-28, Section 25
Standards	0.2%, 2001; 0.4%, 2002; 0.6%, 2003; 0.8%, 2004; 1.0%, 2005; 1.05%, 2006; 1.1%, 207-2012	20% by 2017	Class I Renewables: .5%, 2000; .75%, 2001; 1.0%, 2002; 1.5%, 2003; 2.0%, 2004; 2.5%, 2005; 3.0%, 2006; 4.0%, 2007; 5.0%, 2008; 6.0%2009 Class II Renewables: 5.5%, 2000; 6%, 2005; 7%, 2009.
Comments	Of these amounts, solar electric must make up 50% in 2001, increasing to 60% for 2004 through 2012.	Most aggressive RPS by requiring utilities to purchase 20% of their electricity from renewable sources by 2017.	Class I renewable energy sources include solar, wind, new sustainable biomass, landfill gas, and fuel cells. Class II sources include trashto-energy facilities, biomass facilities not included in Class I, and approved hydro facilities.

State	Hawaii	Illinois	lowa
Incentive Type	Renewable Portfolio Standard Goal	Renewables Portfolio Goal	Alternative Energy Law (AEL)
Eligible Technologies	Solar Water Heat, Active Solar Space Heat, Solar Thermal Electric, Solar Thermal Process Heat, Photovoltaics, Landfill Gass, Wind, Biomass, Hydro, Geothermal Electric, Fuel Cells, Geothermal Heat Pumps, Waste, Cogerneration, Ocean Thermal Energy, Wave Energy	Photovoltaics, Wind, Biomass	Photovoltaics, Wind, Biomass, Hydro, Waste
Applicable Sectors Initial Minimum Effective	Utilities 7.0%	Utilities 5.0%	Rate-Regulated Utilities
Date Enacted	6/25/2001	6/22/2001	1/1/1991
Effective Date	12/31/2003	7/1/2001	
Expiration Date			
Credit Trading			
Authority	Act 272 of 2001	20 ILCS 688/5	Code of Iowa 476.41-476.45
•			
Standards	Net Electricity Sales: 7%, 2003; 8%, 2005; 9%, 2010	5%, 2010; 15%, 2020	105 average MW
Comments	Existing renewables, about 7% statewide may be counted in this total. This differs from states requiring "new" renewables.	Does not include an implementation schedule. HB1599 authorizes \$500 million of new state revenue bonds for the support of development of technologies in the state.	Law requires investor-owned utilities to purchase a combined total of 105 average MW of their generation from renewable and small hydropower sources.

State	Maine	Massachusetts	Minnesota
Incentive Type	Renewables Portfolio Standard	Renewable Portfolio Standard	Non-Mandated Renewable
	O a la matte a manala El a atrica	Oalan Thanna al Elantoia	Energy Objective
Eligible Technologies	Solar Thermal Electric, Photovoltaics, Wind, Biomass,	Solar Thermal Electric, Photovoltaics, Landfill Gas,	Photovoltaics, Wind, Biomass, Hydro
	Hydro, Renewable	Wind, Biomass, Fuel Cells,	,
	Transportation Fuels, Waste	Ocean Thermal, Wave, Tidal	
	Liver		Lieve
Applicable Sectors	Utilities	4.00/	Utilities
Initial Minimum	30.0%	1.0%	1.0%
Effective	0/38/4000	11/10/1007	2005 2001
Date Enacted	9/28/1999 11/4/1999	11/19/1997 4/1/2002	7/1/2005
Effective Date	11/4/1999	4/1/2002	12/31/2015
Expiration Date Credit Trading			12/31/2013
Authority	35-A M.R.S.A, 3210 (LD 1804	M.G.L. Ch. 25A, Sec. 11F, Ch.	MN Statutes 2001 216B 1691
Additionty	Public Law 316); ME PUC	164 of the Acts of 1997; 225	3.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.
	65.404, Ch. 311	CMR 14.00	
Standards	30% total retail electric sales	1%, 2003; 1.5%, 2004; 2%,	1%, 2005; and increasing by
		2005; 2.5%, 2006; 3%, 2007; 3.5%, 2008; 4%, 2009;	1% each year until reaching 10% in 2015.
		additional 1% each year until	10 /0 111 2013.
		ended by DOER.	
	Mainala DDC is the highest in	Cumpliara con most	At least 0.5% of the approv
Comments	Maine's RPS is the highest in the U.S. at 30%, but it is less	Suppliers can meet compliance by submitting	At least 0.5% of the energy must be generated by biomass
	than its renewables use at	Alternative Compliance	energy technologies by 2010,
	more than 50% (hyrdopower	Payments. \$50 per megawatt-	and 1% by 2015.
	and biomass).	hour or 5 cents per kilowatt- hour, whichever is higher.	
		inour, willone vol 13 mgner.	

State		Nevada	New Jersey
Incentive Type	Xcel Energy Wind Generation	Renewable Portfolio Standard	Renewables Portfolio
Eligible Technologies	Mandate Wind, Biomass	Solar Thermal Electric,	Standards Photovoltaics, Landfill Gas,
Eligible reclinologies	Willia, Biolifiado	Photovoltaics, Wind, Biomass,	Wind, Biomass, Hydro,
		Geothermal Electric	Geothermal Electric, Fuel
			Cells, Waste, Wave, Tidal
Amplicable October	Utilities	Utilities	Utilities
Applicable Sectors Initial Minimum	Otilities	5.0%	2.5%
Effective		1/1/2003	2.070
Date Enacted		6/8/2001	6/1/2001
Effective Date		1/1/2003	9/1/2001
Expiration Date			
Credit Trading			Yes
Authority	216B.2423, 216B.2424	NRS 704.7801, as amended by SB 372 in 2001	NJSA 48; 3-49: Electric Discount and Energy
			Competition Act
Standards	425 MW wind, 125 MW	5%, 2003; 7%, 2005; 9%,	0.5% 2001; 1%, 2006; and,
	biomass, 12/31/2001; 400 MW additional wind, 12/31/2012.	2007; 11%, 2009; 13%, 2011; 15%, 2013.	additional 0.5% per year, until reaching 4% in 2012.
	.,		J
Comments	The Minnesota Legislature has		
	required Xcel Energy (formerly Northern States Power) to	renewable energy must be generated from solar	
	build or contract for wind	renewable energy systems.	
	power/biomass.		

State	Texas	Wisconsin
Incentive Type	Renewable Generation	Renewable Portfolio Standard
Eligible Technologies	Requirement Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Hydro, Geothermal Electric, Wave, Tidal	Solar Thermal Electric, Photovoltaics, Wind, Biomass, Hydro, Geothermal Electric, Fuel Cells, Tidal, Wave Action
Applicable Sectors	Electric Utilities	Utilities
Initial Minimum	400 MW	0.5%
Effective	1/1/2002	12/1/2001
Date Enacted	12/16/1999	4/28/1998; 10/27/1999
Effective Date	1/1/2002	6/23/1905
Expiration Date	Vac	12/31/2010 Yes
Credit Trading	Yes Sect. 39.904 of the Texas	Wisconsin Statute 196.378
Authority	Utilities Code; PUCT Substantive Rule 25.173	Wisconsin Statute 190.376
Standards	400 MW, 2002; 850 MW, 2004; 1,400 MW, 2006; 2,000 MW, 2008-2019.	0.5%, 2001; 0.85%, 2003; 1.2%, 2005; 1.55%, 2007; 1.9%, 2009; 2.2%, 2010.
Comments	Qualifying systems are those installed after September 1999. The RPS applies to all retail energy providers including municipal and cooperative utilities.	