

ENERGY EFFICIENCY AND RENEWABLE ENERGY TAX INCENTIVES

FEDERAL AND STATE ENERGY TAX PROGRAMS

Karl P. Fryzel and Jerome L. Garciano

July 2011



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We are experienced with all types of electric generation facilities and a range of alternative energy projects, including biomass, biofuels, hydro-electric, solar, wind and “smart grid” and other energy-efficient projects.

The Energy Group coordinates and integrates attorneys from all of our practice areas, such as project finance, M&A, corporate, patent/intellectual property, venture capital and private equity, public securities, insurance/reinsurance, bond and municipal finance, anti-trust, bankruptcy, environmental, litigation, real estate and tax to provide comprehensive legal advice to our energy and clean technology industry clients.

Karl P. Fryzel and Jerome L. Garciano are members of the Tax Department and the Energy Group. Their practice includes assisting developers and investors utilizing green development and energy tax credits and other incentives.

This volume presents certain federal and state tax incentives promoting the renewable energy and energy efficiency industries. Each section outlines the basic features and regulatory requirements for a tax program which provides financial incentives for clean technology development through renewable energy and energy efficiency projects. For additional assistance with these tax incentives please contact Karl Fryzel at 617-517-5577 (kfryzel@eapdlaw.com) or Jerome Garciano at 617-239-0285 (jgarciano@eapdlaw.com). For copies or updates to this outline please contact Amy Halloran at 617-239-0359 (ahalloran@eapdlaw.com)

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Summary Chart of Federal and State Renewable and Efficient Energy Tax Incentives - July 2011 (Geothermal)

Sec	Jurisdiction	Statute	Incentive Title	Technology	Tax	Type	Taxpayer	Period (yrs)	Amount	Maximum	Expiration
00.00 Federal Tax Incentives for Renewable Energy and Energy Efficiency											
00.01	Federal	\$45	Renewable Electricity Production	Geothermal	Income	Credit	Producer	10	\$0.022/Kwh	-	2013
00.03	Federal	\$48C	Investment In Advanced Energy Property	Geothermal	Income	Credit	Investor	-	30%	-	2009
00.13	Federal	\$168(e)(3)	Certain Energy Property	Geothermal	Income	Deduction	Owner	5	200% DB	-	2016
00.16	Federal	\$54C	New Clean Renewable Energy Bonds	Geothermal	Income	Credit	Holder	-	0 interest	-	Limit
00.19	Federal	\$25D	Residential Energy Efficient Property	Geothermal	Income	Credit	Owner	-	30%	-	2016
01.00 Alabama State Tax Incentives for Renewable Energy and Energy Efficiency											
01.01	Alabama	\$40-18-190	Alternative Energy Electricity Production Faci	Geothermal	Income	Credit	Utility	20	5%	-	2015
01.02	Alabama	\$40-9B-4	Alternative Energy Production Facilities	Geothermal	Property	Abatement	Utility	-	100%	-	2018
04.00 Arizona State Tax Incentives for Renewable Energy and Energy Efficiency											
04.01	Arizona	\$41-1511	Renewable Energy Operations	Geothermal	Income	Credit	Manufacturer	5	10%	-	2014
04.02	Arizona	\$42-12006	Renewable Energy Operations	Geothermal	Property	Abatement	Manufacturer	10-15	75%	-	2014
04.14	Arizona	\$41-1514.2	Fuels Sold to Environmental Technology Faci	Geothermal	Sales	Exemption	Purchaser	20	100%	-	-
04.16	Arizona	\$42-5061.D	Environmental Technology Facilities	Geothermal	Sales	Exemption	Manufacturer	-	100%	-	-
06.00 California State Tax Incentives for Renewable Energy and Energy Efficiency											
06.05	California	\$6010.8	Green Manufacturing Equipment	Geothermal	Sales	Exemption	Purchaser	-	100%	-	2020
08.00 Colorado State Tax Incentives for Renewable Energy and Energy Efficiency											
08.01	Colorado	\$31-20-101.3	Renewable Energy Systems	Geothermal	Property	Credit	Owner	-	Varies	-	-
08.02	Colorado	\$39-26-403	Qualifying Clean Technology	Geothermal	Sales	Refund	Purchaser	-	100%	\$50,000	2014
08.04	Colorado	\$30-11-107.3	Clean Energy Finance Districts	Geothermal	Property	Financing	Owner	-	Varies	-	-
09.00 Connecticut State Tax Incentives for Renewable Energy and Energy Efficiency											
09.01	Connecticut	\$12-412 (117)	Solar And Geothermal Systems	Geothermal	Sales	Exemption	Purchaser	-	100%	-	-
10.00 Delaware State Tax Incentives for Renewable Energy and Energy Efficiency											
10.01	Delaware	\$2040	Clean Energy Manufacturing Jobs	Geothermal	Income	Credit	Manufacturer	-	\$750/Job & \$100k	\$500,000	-
12.00 Florida State Tax Incentives for Renewable Energy and Energy Efficiency											
12.01	Florida	\$196.175	Renewable Energy Source Devices	Geothermal	Property	Exemption	Owner	10	100%	-	-
12.02	Florida	\$220.193	Renewable Energy Production	Geothermal	Income	Credit	Producer	-	\$0.01/kWh	-	2010
13.00 Georgia State Tax Incentives for Renewable Energy and Energy Efficiency											
13.01	Georgia	\$48-7-29.14	Clean Energy Property	Geothermal	Income	Credit	Owner	-	35%	\$100,000 / \$2,000	2012
15.00 Hawaii State Tax Incentives for Renewable Energy and Energy Efficiency											
15.01	Hawaii	\$235-110.9	High Technology Business Investment	Geothermal	Income	Credit	Investor	5	100%	\$1.5 million	2010
16.00 Idaho State Tax Incentives for Renewable Energy and Energy Efficiency											
16.01	Idaho	\$63-3502B	Wind And Geothermal Energy Producers	Geothermal	Property	Abatement	Producer	-	3%	-	-
16.02	Idaho	\$63-3622QQ	Renewable Energy Equipment	Geothermal	Sales	Refund	Purchaser	-	100%	-	2011
16.05	Idaho	\$63-3022C	Residential Alternative Energy Devices	Geothermal	Income	Deduction	Owner	4	100%	\$5,000	-
18.00 Indiana State Tax Incentives for Renewable Energy and Energy Efficiency											
18.01	Indiana	\$6-1.1-12-26	Renewable Energy Property	Geothermal	Property	Exemption	Owner	-	100%	-	-
20.00 Kansas State Tax Incentives for Renewable Energy and Energy Efficiency											
20.01	Kansas	\$79-32,246	New Renewable Electric Cogeneration Faciliti	Geothermal	Income	Credit	Investor	10	5-10%	-	2011
20.02	Kansas	\$79-201	Renewable Energy Equipment	Geothermal	Property	Exemption	Owner	-	100%	-	-
21.00 Kentucky State Tax Incentives for Renewable Energy and Energy Efficiency											
21.02	Kentucky	\$141.435	Renewable Energy Systems	Geothermal	Income	Credit	Owner	-	30%	\$250	2015
24.00 Maryland State Tax Incentives for Renewable Energy and Energy Efficiency											
24.01	Maryland	\$10-720	Renewable Energy Production	Geothermal	Income	Credit	Producer	5	\$0.0085/kWh	\$2.5 million	2015
24.02	Maryland	\$9-203	Solar, Geothermal, And Energy Conservation	Geothermal	Property	Credit	Owner	-	100%	-	-
24.03	Maryland	\$7-242	Renewable Energy Systems	Geothermal	Property	Exemption	Owner	-	100%	-	-
24.05	Maryland	\$11-230	Geothermal, Solar And Wind Energy Equipm	Geothermal	Sales	Exemption	Purchaser	-	100%	-	-
24.06	Maryland	\$8-240	Solar And Geothermal Heating And Cooling S	Geothermal	Property	Exemption	Owner	-	100%	-	-
25.00 Massachusetts State Tax Incentives for Renewable Energy and Energy Efficiency											
25.05	Massachusetts	64H §6(dd)	Renewable Energy Equipment In Primary Re	Geothermal	Sales	Exemption	Purchaser	-	100%	-	-
27.00 Minnesota State Tax Incentives for Renewable Energy and Energy Efficiency											
27.04	Minnesota	H.B. 2695 (2010)	Renewable Energy and Energy-Efficiency Sys	Geothermal	Property	Financing	Owner	20	Varies	10% of assessed value	-

Sec	Jurisdiction	Statute	Incentive Title	Technology	Tax	Type	Taxpayer	Period (yrs)	Amount	Maximum	Expiration
29.00 Missouri State Tax Incentives for Renewable Energy and Energy Efficiency											
29.01	Missouri	\$620.1875	Technology Business Projects	Geothermal	Income	Credit	Producer	5	5%	-	-
30.00 Montana State Tax Incentives for Renewable Energy and Energy Efficiency											
30.02	Montana	\$15-24-3111	Renewable Energy Production And Manufact	Geothermal	Property	Abatement	Owner	19	50%	\$1 million of value	-
30.03	Montana	\$15-31-124	Alternative Renewable Energy Industries	Geothermal	Income	Credit	Employer	3	1%	-	-
30.05	Montana	\$15-24-1402	Alternative Renewable Energy Generating Fa	Geothermal	Property	Assessment	Owner	10	50%	-	-
30.07	Montana	\$15-6-224	Renewable Energy Systems	Geothermal	Property	Exemption	Owner	10	100%	\$100,000 / \$20,000	-
30.12	Montana	\$15-32-201	Residential Non-Fossil Form Energy Systems	Geothermal	Income	Credit	Owner	-	100%	\$500	-
30.13	Montana	\$15-32-115	Residential Geothermal Heating Or Cooling S	Geothermal	Income	Credit	Owner	-	100%	\$1,500	-
31.00 Nebraska State Tax Incentives for Renewable Energy and Energy Efficiency											
31.01	Nebraska	\$77-27,235	Renewable Energy Production	Geothermal	Income	Credit	Producer	10	\$0.001/kwh	-	2017
32.00 Nevada State Tax Incentives for Renewable Energy and Energy Efficiency											
32.01	Nevada	\$701A.360	Renewable Energy Technologies	Geothermal	Sales	Abatement	Purchaser	3	100%	0.60%	2049
32.02	Nevada	\$701A.220	Renewable Energy Production Facilities	Geothermal	Property	Abatement	Owner	20	55%	-	2049
32.03	Nevada	\$701A.200	Renewable Energy Systems	Geothermal	Property	Exemption	Owner	-	100%	-	-
33.00 New Hampshire State Tax Incentives for Renewable Energy and Energy Efficiency											
33.01	New Hampshire	72 \$73	Renewable Generation Facilities	Geothermal	Property	Abatement	Owner	5	Varies	-	-
34.00 New Jersey State Tax Incentives for Renewable Energy and Energy Efficiency											
34.02	New Jersey	\$54:4-3.113	Renewable Energy Systems	Geothermal	Property	Exemption	Owner	-	100%	-	-
35.00 New Mexico State Tax Incentives for Renewable Energy and Energy Efficiency											
35.01	New Mexico	\$7-2A-25	Advanced Energy Systems	Geothermal	Income	Credit	Owner	-	6%	-	2015
35.04	New Mexico	S.B. 647 (2009)	Renewable-Energy Technologies	Geothermal	Property	Financing	Owner	-	Varies	40%	-
35.08	New Mexico	\$7-2A-24	Geothermal Systems	Geothermal	Income	Credit	Owner	-	30%	\$9,000	2020
35.13	New Mexico	\$7-9-114	Clean Energy Facilities	Geothermal	Gross Receipt	Deduction	Seller	10	100%	\$60m	2015
36.00 New York State Tax Incentives for Renewable Energy and Energy Efficiency											
36.01	New York	\$14	Clean Energy Enterprises	Geothermal	Income	Credit	Manufacturer	10	Formula	-	2010
36.02	New York	\$14	Clean Energy Enterprises	Geothermal	Property	Credit	Manufacturer	10	Formula	-	2010
37.00 North Carolina State Tax Incentives for Renewable Energy and Energy Efficiency											
37.01	North Carolina	\$105-129.15	Renewable Energy Systems	Geothermal	Income	Credit	Owner	5	35%	\$8,400	2015
38.00 North Dakota State Tax Incentives for Renewable Energy and Energy Efficiency											
38.01	North Dakota	\$57-38-01.8	Renewable Energy Systems	Geothermal	Income	Credit	Owner	5	15%	-	2014
38.02	North Dakota	\$57-02-08(27)	Geothermal, Solar And Wind Property	Geothermal	Property	Abatement	Owner	5	100%	-	-
38.08	North Dakota	\$57-38-01.8	Geothermal Energy Device Installation	Geothermal	Income	Credit	Owner	5	3%	-	2014
39.00 Ohio State Tax Incentives for Renewable Energy and Energy Efficiency											
39.03	Ohio	\$5709.53	Solar, Wind, And Hydrothermal Energy Syste	Geothermal	Property	Exemption	Owner	-	100%	-	-
39.07	Ohio	\$5727.75	Qualified Energy Projects	Geothermal	Property	Exemption	Owner	-	100%	-	2011
40.00 Oklahoma State Tax Incentives for Renewable Energy and Energy Efficiency											
40.01	Oklahoma	68 \$2357.32A	Zero-Emission Electricity Production	Geothermal	Income	Credit	Producer	10	\$0.0050/kWh	-	-
41.00 Oregon State Tax Incentives for Renewable Energy and Energy Efficiency											
41.01	Oregon	\$315.354	Energy Improvements	Geothermal	Income	Credit	Owner	5	35-50%	\$20 million	2013
41.02	Oregon	\$315.354	Renewable Energy Equipment Manufacturing	Geothermal	Income	Credit	Manufacturer	5	50%	\$20 million	2013
41.03	Oregon	\$307.175	Renewable Energy Systems	Geothermal	Property	Exemption	Owner	-	100%	-	2012
41.07	Oregon	\$469.185	Residential Renewable Energy Property	Geothermal	Income	Credit	Owner	-	\$300-\$900	\$900	2015
42.00 Pennsylvania State Tax Incentives for Renewable Energy and Energy Efficiency											
42.01	Pennsylvania	73 \$1649.70	Alternative Energy Production	Geothermal	Income	Credit	Producer	-	15%	\$1 million	2016
44.00 Rhode Island State Tax Incentives for Renewable Energy and Energy Efficiency											
44.01	Rhode Island	\$44-18-30(57)	Renewable Energy Systems And Equipment	Geothermal	Sales	Exemption	Purchaser	-	100%	-	-
44.02	Rhode Island	\$44-3-21	Renewable-Energy Systems	Geothermal	Property	Exemption	Owner	-	100%	-	-
44.04	Rhode Island	\$44-57-1	Residential Renewable Energy Systems	Geothermal	Income	Credit	Owner	-	[Repealed]	[Repealed]	Repealed
45.00 South Carolina State Tax Incentives for Renewable Energy and Energy Efficiency											
45.10	South Carolina	\$12-6-3588	Plant And Equipment For Renewable Energy	Geothermal	Income	Credit	Owner	-	10%	\$500,000	2015
46.00 South Dakota State Tax Incentives for Renewable Energy and Energy Efficiency											
46.01	South Dakota	\$10-6-35.8	Renewable Energy Systems	Geothermal	Property	Assessment	Owner	6	50-100%	-	-

<u>Sec</u>	<u>Jurisdiction</u>	<u>Statute</u>	<u>Incentive Title</u>	<u>Technology</u>	<u>Tax</u>	<u>Type</u>	<u>Taxpayer</u>	<u>Period (yrs)</u>	<u>Amount</u>	<u>Maximum</u>	<u>Expiration</u>
47.01	Tennessee	\$67-6-232	Manufacturers Of Clean Energy Technologies	Geothermal	Sales	Credit	Manufacturer	8	99.50%	-	-
49.00 Utah State Tax Incentives for Renewable Energy and Energy Efficiency											
49.01	Utah	\$59-7-614	Renewable Energy Systems	Geothermal	Income	Credit	Owner	-	10-25%	-	-
49.02	Utah	\$59-7-614	Renewable Energy Systems	Geothermal	Income	Credit	Owner	4	\$0.0035/kWh	\$50,000	2012
49.03	Utah	\$59-12-104(55)	Renewable Resource Electricity Generation E	Geothermal	Sales	Exemption	Purchaser	-	100%	-	2019
49.07	Utah	\$10-1-304	Renewable Resource Electricity	Geothermal	Sales	Exemption	Purchaser	-	100%	-	2019
50.00 Vermont State Tax Incentives for Renewable Energy and Energy Efficiency											
50.02	Vermont	H.B. 446 (2009).	Clean Energy Assessment Districts	Geothermal	Property	Financing	Owner	-	Varies	-	-
51.00 Virginia State Tax Incentives for Renewable Energy and Energy Efficiency											
51.09	Virginia	\$58.1-3221.4	Renewable Energy Manufacturing	Geothermal	Property	Assessment	Manufacturer	-	Varies	-	-
51.10	Virginia	\$58.1-439.12:03	Green Job Creation	Geothermal	Income	Credit	Employer	5	\$500/job	\$175,000	2014
53.00 Washington State Tax Incentives for Renewable Energy and Energy Efficiency											
53.02	Washington	\$82.08.962	Renewable Energy Equipment	Geothermal	Sales	Exemption	Purchaser	-	75-100%	-	2011
56.00 Wyoming State Tax Incentives for Renewable Energy and Energy Efficiency											
56.01	Wyoming	39-15-105(a)(viii)(	Renewable Energy Equipment	Geothermal	Sales	Exemption	Purchaser	-	100%	-	2011

00. Federal Tax Incentives for Renewable Energy and Energy Efficiency

00.01 Federal business income tax credit for renewable electricity production

GENERAL DESCRIPTION. The Federal Internal Revenue Code provides a business income tax credit in the amount of \$0.021 (2009) per kilowatt hour of electricity produced from qualifying renewable resources during a ten-year period. *IRC §45; Notice 98-27, 1998-18 IRB 14; Notice 97-30, 1997-1 CB 416; Notice 96-25, 1996-1 CB 375; Rev. Proc. 2007-65; Announcement 2009-69; INFO 2010-0025; INFO 2010-0037; Notice 2010-37; Notice 2011-40.*

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayers producing electricity from qualifying renewable resources and selling the electricity produced to an unrelated person.

QUALIFYING ACTIVITY. Taxpayer must produce electricity from qualifying renewable resources and sell the electricity produced to an unrelated person. Qualifying energy resources are wind, closed-loop biomass, open-loop biomass, geothermal energy, solar energy, small irrigation power, municipal solid waste, hydropower, marine and hydrokinetic renewables. Qualifying closed-loop biomass is any organic material from a plant that is planted exclusively for purposes of being used at a qualifying facility to produce electricity. Qualifying closed-loop biomass facilities may include facilities modified to use closed-loop biomass to co-fire with coal, with other biomass, or with both, but only if the modification is approved under the Biomass Power for Rural Development Programs or is part of a pilot project of the Commodity Credit Corporation. Qualifying open-loop biomass is any agricultural livestock waste nutrients or any solid, nonhazardous, cellulosic waste material or any lignin material that is derived from: (1) any of the following forest-related resources: mill and harvesting residues, precommercial thinnings, slash, and brush; (2) solid wood waste materials, including waste pallets, crates, dunnage, manufacturing and construction wood wastes (other than pressure-treated, chemically-treated, or painted wood wastes), and landscape or right-of-way tree trimmings, or (3) agriculture sources, including orchard tree crops, vineyard, grain, legumes, sugar, and other crop by-products or residues. Qualifying open-loop biomass does not include municipal solid waste, gas derived from the biodegradation of solid waste, or paper that is commonly recycled. Qualifying geothermal energy is energy derived from a geothermal deposit or reservoir consisting of natural heat that is stored in rocks or in an aqueous liquid or vapor (whether or not under pressure). Qualifying small irrigation power is power generated without any dam or impoundment of water through an irrigation system canal or ditch, with the nameplate capacity of more than 150 kilowatts and less than 5 megawatts. Qualifying municipal solid waste facilities include landfill gas facilities and trash combustion facilities. Qualifying hydropower production is incremental hydropower production at any hydroelectric dam that was placed in service before Aug. 9, 2005, or the hydropower production from any nonhydroelectric dam. Incremental hydropower production for any tax year is equal to the percentage of average annual hydropower production at a facility that is attributable to efficiency improvements or additions of capacity placed in service after Aug. 8, 2005 determined by using the same water flow information used to determine an historic average annual hydropower production baseline for that facility. Incremental hydropower production does not include any operational changes at the facility not directly associated with the efficiency

improvements or additions of capacity. Qualifying hydropower production must be certified by the Federal Energy Regulatory Commission. Qualifying marine and hydrokinetic energy is energy derived from waves, tides, and currents in oceans, estuaries and tidal areas; free flowing water in rivers, lakes and streams; free flowing water in an irrigation system, canal or other man-made channel, including projects that use non-mechanical structures to accelerate the flow of water for electric power production purposes; or differentials in ocean temperature (ocean thermal energy conversion). Qualifying marine and hydrokinetic energy does not include any energy that is derived from any source that uses a dam, diversionary structure or impoundment for electric power production purposes.

INCENTIVE AMOUNTS. The tax credit amount is \$0.022 (2010) per kilowatt hour (KWH) of electricity produced and sold to an unrelated person. The tax credit amount is reduced by the lesser of 50% or the ratio of government subsidies received for the tax year to the aggregate additions to the capital account attributable to the project for the tax year and all earlier tax years. Government subsidies include: (1) governmental grants received for the project; (2) proceeds from tax-exempt state or local government bonds used to finance the project; (3) directly and indirectly provided subsidized energy financing under a federal, state or local program in connection with the project; and (4) any other credit allowable with respect to any property that is part of the project.

INCENTIVE LIMITS. The tax credit amount is reduced by an amount determined by dividing the excess of the reference price for the calendar year of sale over \$0.08 (2010) per KWH by \$0.03. Reference price is the annual average contract price per KWH of electricity generated from the same qualifying energy resource and sold in the U.S. in the previous year. The tax credit amount is not available if the national average price of electricity from the resource is more than \$0.11 per KWH (2010).

INCENTIVE TIMEFRAME. The tax credit is available for a 10-year period beginning on the placed-in-service date of the qualifying facility. The tax credit for qualifying closed-loop biomass facilities expires December 31, 2013. The tax credit for qualifying open-loop biomass facilities expires December 31, 2013. The tax credit for qualifying wind facilities expires December 31, 2012. The tax credit for qualifying landfill gas facilities expires December 31, 2013. The tax credit for qualifying geothermal energy facilities expires December 31, 2013. The tax credit for qualifying solar energy facilities expired December 31, 2005. The tax credit for qualifying small irrigation facilities expired October 2, 2008. The tax credit for qualifying hydropower facilities expires December 31, 2013. The tax credit for qualifying marine and hydrokinetic energy facilities expires December 31, 2013.

00.03 Federal business income tax credit for investment in advanced energy property

GENERAL DESCRIPTION. The Federal Internal Revenue Code provides a business income tax credit in the amount of 30% of the qualifying investment in qualifying advanced energy manufacturing projects. *IRC §48C; Notice 2009-72, 2009-36 IRB; CCA 201052005.*

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayers investing in qualifying advanced energy manufacturing projects.

QUALIFYING ACTIVITY. Taxpayer must invest in a qualifying advanced energy manufacturing project. A qualifying advanced energy project is a project which re-equips, expands, or establishes a manufacturing facility for the production of: (1) property designed to be used to produce energy from the sun, wind, geothermal deposits or other renewable resources, (2) fuel cells, microturbines, or an energy storage system for use with electric or hybrid-electric motor vehicles, (3) electric grids to support the transmission of intermittent sources of renewable energy, including storage of that energy, (4) property designed to capture and sequester carbon dioxide emissions, (5) property designed to refine or blend renewable fuels, other than fossil fuels, to produce energy conservation technologies, (6) new qualifying plug-in electric drive motor vehicles, qualifying plug-in electric vehicles, or components which are designed specifically for use with those vehicles, including electric motors, generators, and power control units, or (7) other advanced energy property designed to reduce greenhouse gas emissions as may be determined by IRS. A qualifying advanced energy project must be certified by IRS, in consultation with the US Department of Energy, through a qualifying advanced energy project application process to consider and award certifications to Taxpayer. In determining which qualifying advanced energy projects to certify, IRS will take into consideration only those projects where there is a reasonable expectation of commercial viability. IRS will also take into consideration which projects: (i) will provide the greatest domestic job creation (both direct and indirect) during the tax credit period, (ii) will provide the greatest net impact in avoiding or reducing air pollutants or anthropogenic emissions of greenhouse gases, (iii) have the greatest potential for technological innovation and commercial deployment, (iv) have the lowest levelized cost of generated or stored energy, or of measured reduction in energy consumption or greenhouse gas emission (based on costs of the full supply chain), and (v) have the shortest project time from certification to completion. A qualifying advanced energy project which has been allocated a tax credit, but subsequently undergoes a “significant” change in plans, may be denied the tax credit. A “significant” change in plans is not a change that would have influenced DOE, but rather, it is any change that a reasonable person would conclude might have influenced DOE in recommending or ranking the project or the IRS in accepting the project application, had they known about the change when they were considering the application. A qualifying advanced energy project may include any portion of an investment in other projects as eligible for a credit under IRC §48C. A qualifying advanced energy project does not include any qualifying investment for which a credit is allowed under IRC §§48, 48A or 48B, or for which a payment is received under §1603 of the American Recovery and Reinvestment Tax Act of 2009. A qualifying advanced energy project does not include any portion of a project for the

production of any property which is used in the refining or blending of any transportation fuel (other than renewable fuels).

INCENTIVE AMOUNTS. The tax credit amount is 30% of the qualifying investment. The qualifying investment amount is the basis of eligible property placed in service during the taxable year. Eligible property is property (a) that is necessary for the production of specified energy property, (b) that is tangible personal property, or other tangible property, if such property is used as an integral part of the facility, and (c) with respect to which depreciation (or amortization) is allowable. Eligible property does not include a building or its structural components.

INCENTIVE LIMITS. The nationwide maximum cumulative tax credit amount is \$2.3 billion.

INCENTIVE TIMEFRAME. Taxpayer must apply for the tax credit during the initial allocation round for 2009-2010 beginning August 14, 2009 and ending on December 16, 2009. Preliminary application for US Department of Energy recommendation must be submitted by September 16, 2009. The IRS will accept or reject 2009-2010 allocation round applications by January 15, 2010. Taxpayer will have 1 year from the date IRS accepts the application during which to provide to IRS evidence that the requirements of the certification have been met. Taxpayer receiving a certification has 3 years from the date of issuance of the certification to place the project in service.

00.13 Federal income tax deduction for certain energy property

GENERAL DESCRIPTION. The Federal Internal Revenue Code provides an income tax accelerated cost recovery over 5 years for energy property. *IRC §168(e)(3)*.

ELIGIBLE TAXPAYERS. The tax deduction is available to Taxpayer owners placing in service energy property subject to cost recovery.

QUALIFYING ACTIVITY. Taxpayer must place in service energy property. Energy property is any property which is (1) equipment which uses solar energy to generate electricity, to heat or cool (or provide hot water for use in) a structure, or to provide solar process heat, excepting property used to generate energy for the purposes of heating a swimming pool; (2) equipment which uses solar energy to illuminate the inside of a structure using fiber-optic distributed sunlight but only with respect to periods ending before January 1, 2017; (3) equipment used to produce, distribute, or use energy derived from a geothermal deposit, but only, in the case of electricity generated by geothermal power, up to (but not including) the electrical transmission stage; (4) qualifying fuel cell property or qualifying microturbine property; (5) combined heat and power system property, (6) qualifying small wind energy property; or (7) equipment which uses the ground or ground water as a thermal energy source to heat a structure or as a thermal energy sink to cool a structure.

INCENTIVE AMOUNTS. The tax deduction amount is the amount MACRS specifically provides for IRC §48 energy property in the 5-year class. The depreciation method for property in the 5-year class is usually 200% declining balance, with a switch to straight-line to maximize the deduction (the 200% declining balance method). The 5-year class consists of property with an ADR midpoint of more than 4 years and less than 10 years.

INCENTIVE TIMEFRAME. The tax deduction expires December 31, 2016.

00.16 Federal income tax credit for clean renewable energy bonds

GENERAL DESCRIPTION. The Federal Internal Revenue Code provides an income tax credit in the amount of a portion of the clean renewable energy bonds' nonrefundable outstanding face amount which will permit issuance with a specified maturity or redemption date without discount and without interest cost. *IRC §54; IRC §54C; Notice 2007-26, 2007-14 IRB 870; Notice 2009-15, 2009-6 IRB 449; Notice 2009-33; IRS Announcement 2010-54.*

ELIGIBLE TAXPAYERS. Taxpayer holders of clean renewable energy bonds.

QUALIFYING ACTIVITY. Taxpayer must hold clean renewable energy bonds. A clean renewable energy bond is a registered bond issued by a qualifying issuer under the national clean renewable energy bond limitation, 95% or more of the proceeds of the issue used for capital expenditures incurred by government body or a mutual or cooperative electric company for one or more qualifying renewable energy projects. Qualifying renewable energy projects are facilities that qualify for the IRC §45(d) renewable electricity production credit. Qualifying issuers are (1) public power providers, (2) cooperative electric companies, (3) government bodies, (4) not-for-profit electric utilities that have received a loan or loan guarantee under the Rural Electrification Act of 1936 (7 USC §901-950b), and (5) clean renewable energy bond lenders. A clean renewable energy bond lender is a cooperative that is owned by, or has outstanding loans to, 100 or more cooperative electric companies and was in existence on Feb. 1, 2002, or any affiliated entity controlled by the cooperative. Qualifying renewable energy project do not include refined coal production facilities under IRC §45(d)(8) and Indian coal production facilities under IRC §45(d)(10). Qualifying renewable energy projects must be owned by a government body, a public power provider, or a cooperative electric company. Qualifying renewable energy projects may be refinanced with proceeds of a clean renewable energy bond only if the indebtedness being refinanced (including any obligation directly or indirectly refinanced by that indebtedness) was originally incurred after Aug. 8, 2005. Qualifying issuer must reasonably expects that : (1) at least 95% of the proceeds of the issue will be spent for one or more qualifying projects within the 5-year period beginning on the date of issuance of the clean renewable energy bond; (2) a binding commitment with a third party to spend at least 10% of the proceeds of the issue will be incurred within the 6-month period beginning on the date of issuance of the clean renewable energy bond on the date of the loan of those proceeds to more than one borrower; and (3) those projects will be completed with due diligence and the proceeds of the issue will be spent with due diligence. The 5-year period may be extended if the qualifying issuer establishes that the failure is due to reasonable cause and the related projects will continue to proceed with due diligence. Qualifying issuer must redeem all of the nonqualifying bonds within 90 days after the end of the extended or unextended period.

INCENTIVE AMOUNTS. The tax credit amount is the product of the tax credit rate determined by IRS for the day on which that bond was sold, multiplied by the bond's outstanding face amount. The tax credit rate for any day is the tax credit rate which IRS estimates will permit the issuance of clean renewable energy bonds with a specified

maturity or redemption date without discount and without interest cost to the qualifying issuer. The applicable credit rate for a tax credit bond on its sale date is the tax credit rate published for that date by the Bureau of Public Debt on its Internet site for State and Local Government Series securities. The tax credit for new clean renewable energy bonds is 70% of the amount that would otherwise be allowable under IRC §54A(b). The tax credit rate will apply to the first day on which there is a binding, written contract for the sale or exchange of the bond.

INCENTIVE LIMITS. The maximum annual tax credit allowable is the excess of Taxpayer's regular tax and AMT liability, over tax credits allowed under Part IV of subchapter A tax credit provisions. The nationwide maximum aggregate tax credit amount is \$1.2 billion, with an additional \$1.6 billion authorized in 2009 for clean renewable energy bonds. The nationwide maximum aggregate tax credit amount for qualifying borrowers that are governmental bodies is \$800 million. The tax credit is nonrefundable.

INCENTIVE TIMEFRAME. The tax credit for clean renewable energy bonds expired December 31, 2009. An application for an allocation of the new clean renewable energy bond limitation must be prepared and submitted in accordance with the requirements set forth in Notice 2009-33, 2009-17 IRB 865 . The application for new clean renewable energy bond limitation must have been filed with the IRS by August 4, 2009.

00.19 Federal personal income tax credit for residential energy efficient property

GENERAL DESCRIPTION. The Federal Internal Revenue Code provides a personal income tax credit in the amount of 30% the cost of residential energy efficient property, including qualifying solar electric property, qualifying solar water heating property, qualifying fuel cell property, qualifying small wind energy property, and qualifying geothermal heat pump property. *IRC §25D; IRS Notice 2009-41; INFO 2009-0240; CONEX – 152472-09; INFO 2010-0036; PLR 201035003; INFO 2010-0085; INFO 2010-0111; INFO 2010-0133; INFO 2010-0232.*

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer individuals installing residential energy efficient property.

QUALIFYING ACTIVITY. Taxpayer must install residential energy efficient property. Residential energy efficient property includes solar electric, solar hot water, fuel cell, small wind energy, and geothermal heat pump. Qualifying solar electric property uses solar energy to generate electricity for use in a dwelling unit. Qualifying solar water heating property heats water for use in a dwelling unit, if at least half of the energy used by the property for that purpose is derived from the sun. Qualifying fuel cell property is an integrated system comprised of a fuel cell stack assembly and associated balance of plant components that converts a fuel into electricity using electrochemical means, has an electricity-only generation efficiency of greater than 30%, and generates at least 0.5 kw of electricity. Qualifying small wind energy property is property that uses a wind turbine to generate electricity. Qualifying geothermal heat pump property is property that uses the ground or ground water as a thermal energy source to heat the dwelling unit or as a thermal energy sink to cool the dwelling unit, and meets the Energy Star program requirements in effect when the expenditure is made. Qualifying solar property includes solar panel or other property installed as a roof (or portion of a roof) even if it is a structural component of the structure on which it is installed. Qualifying solar water heating property must be certified for performance by the Solar Rating Certification Corporation or a comparable entity endorsed by the government of the state in which the property is installed. Qualifying solar water heating property does not include expenditures properly allocable to a swimming pool, hot tub, or any other energy-storage medium that has a function other than energy storage.

INCENTIVE AMOUNTS. The tax credit amount is 30% of the qualifying property costs. Qualifying property costs include labor costs properly allocable to the on-site preparation, assembly, or original installation of qualifying property, and expenditures for piping or wiring to interconnect qualifying property to the dwelling unit. Qualifying property costs include expenditures that are made from subsidized energy financing. Subsidized energy financing is financing provided under a federal, state, or local program, a principal purpose of which is to provide subsidized financing for projects designed to conserve or produce energy. Qualifying property costs include only the portion of the cost for nonbusiness purpose if less than 80% of the use of an item is for nonbusiness purposes. Qualifying property costs does not include an expenditures financed with an energy conservation subsidy that a public utility provides to a customer to buy or install an

energy conservation measure, which is excluded from income. Qualifying property costs include amount of any Renewable Energy Credits payments from public utilities.

INCENTIVE LIMITS. The maximum annual tax credit amount is: \$500 for each 0.5 kilowatt of capacity for qualifying fuel cell property. For qualifying fuel cell property in a dwelling unit that is jointly occupied and used during any calendar year as a residence by two or more individuals, the maximum tax credit amount for all the individuals is \$1,667 for each 0.5 kw of capacity of qualifying fuel cell property.

INCENTIVE TIMEFRAME. The tax credit expires December 31, 2016. Qualifying property costs are made when the original installation is completed. Qualifying property costs related to the construction or reconstruction of a structure are made when Taxpayer begins using the structure.

01. Alabama State Tax Incentives for Renewable Energy and Energy Efficiency

01.01 Alabama state income or excise tax credit for alternative energy electricity production facilities

GENERAL DESCRIPTION. Alabama provides an income or excise tax credit over 20 years in the amount of 5% of the capital invested in qualifying facilities, including alternative energy electricity production facilities. *Ala. Code §40-18-190 et seq.; Ala. Admin. Code §810-2-7; Ala. Dept. of Rev., Revenue Ruling No. 01-013.*

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer utilities or utility investing companies investing in the acquisition, construction, installation and equipping of alternative energy electricity production facilities. Taxpayer must be certified by the AL Department of Revenue.

QUALIFYING ACTIVITY. Taxpayer must invest in alternative energy electricity production facilities. Alternative energy electricity production facilities are facilities that produce electricity from renewable resources. Renewable energy resources are wind, biomass, black liquor, tidal or ocean current, geothermal, solar energy, small irrigation, municipal solid waste, hydropower, and hydrogen when derived or produced from some other renewable energy resource. Alternative energy electricity production facilities must have capital costs of \$100 million. Qualifying hydropower production facilities must have capital costs of \$5 million.

INCENTIVE AMOUNTS. The annual tax credit amount is 5% percent of the capital costs of the qualifying project in each of the 20 years commencing with the year during which the qualifying project is placed in service.

INCENTIVE LIMITS. The maximum tax credit allowed to be claimed is 80% of the tax due, for a qualifying alternative energy resource project. The maximum tax credit allowed to be claimed is 60% of the tax due, for qualifying hydropower production.

INCENTIVE TIMEFRAME. The tax credit period is 20 years. The tax credit is available January 1, 2012 and expires December 31, 2015.

01.02 Alabama state property tax abatement for alternative energy production facilities

GENERAL DESCRIPTION. Alabama provides state property tax abatements in the amount of 100% of the tax on plant, property, and facilities for owners of alternative energy production facilities. *Ala. Code §40-9B-4.*

ELIGIBLE TAXPAYERS. Taxpayer owners of alternative energy production facilities which are utilities, electric cooperatives, municipal electric authorities; or entities in which one or more of the foregoing owns an interest.

QUALIFYING ACTIVITY. Taxpayer must own alternative energy production facilities. An alternative energy production facility is any plant, property, or facility that produces electricity from alternative energy resources and has capital costs of at least \$100 million, or hydropower production and has capital costs of at least \$5 million.

INCENTIVE AMOUNTS. The tax abatement amount is 100% of the property tax due.

INCENTIVE TIMEFRAME. The tax abatement is available January 1, 2012 and expires December 31, 2018.

04. Arizona State Tax Incentives for Renewable Energy and Energy Efficiency

04.01 Arizona state tax credit for renewable energy operations

GENERAL DESCRIPTION. Arizona provides a corporate and personal income tax credit over 5 years in the amount of up to 10% of the total capital investment for renewable product manufacturers choosing to establish or expand their manufacturing facilities and corporate headquarters in the state. *Ariz. Rev. Stat. §43-1164.01; Ariz. Rev. Stat. §41-1511; Ariz. Admin. Code R20-1-301 et seq.*

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer manufacturers of renewable energy products expanding or locating qualifying renewable energy operations. Taxpayer must be certified by the AZ Department of Commerce.

QUALIFYING ACTIVITY. Taxpayer must invest in renewable product manufacturing. Renewable product manufacturing is the manufacturer of, or a headquarter for, systems and components that are used in manufacturing renewable energy equipment for the generation, storage, testing and research and development, and transmission of electricity from renewable resources. Renewable energy is electricity produced by sunlight, water, wind, geothermal heat, or other nonfossil renewable source. Taxpayer must fulfill minimum requirements for new full-time employment positions created: 1.5 new full-time employment positions per \$500,000 of capital investment in qualifying renewable energy manufacturing operations; or 1.0 new full-time employment position per \$200,000 increment of investment in qualifying renewable energy business headquarters. An employee must have been employed at the qualifying business location for at least 90 days during the taxable year in a permanent full-time position of at least 1,750 hours per year. Taxpayer must fulfill minimum requirements for minimum employee compensation and health benefit levels: 51% of the new full-time employment positions must make 125% of the median annual wage; and 100% of the new full-time employment positions must include health insurance coverage for the employees for which Taxpayer pays at least 80% of the premium, or an equivalent percentage of the cost for alternative health benefits models that offer standard comprehensive coverage. Taxpayer must spend at least \$250,000 in qualifying investments during each twelve-month period.

INCENTIVE AMOUNTS. The tax credit amount is 10% of the capital investment if a manufacturing renewable energy operation creates at least 1.5 full-time employees for each \$500,000 of capital invested, or a headquarters creates at least 1 full-time employee for each \$200,000 of capital invested. If the capital ratios above cannot be met, then the tax credit amount is 10% of \$500,000 per 1.5 new full-time employee in a manufacturing renewable energy operation, or \$200,000 per 1 new full-time employee in a headquarters.

INCENTIVE LIMITS. The statewide maximum annual tax credit amount is \$70 million.

INCENTIVE TIMEFRAME. The tax credit is taken over a 5-year period. The tax credit expires December 31, 2014.

04.02 Arizona state property tax abatement for renewable energy operations

GENERAL DESCRIPTION. Arizona provides a property tax abatement in assessment up to 75% for renewable product manufacturers choosing to establish or expand their manufacturing facilities and corporate headquarters in Arizona. *Ariz. Rev. Stat. Ann. § 42-12006; Ariz. Rev. Stat. §41-1511; Ariz. Admin. Code R20-1-301 et seq.*

ELIGIBLE TAXPAYERS. The tax abatement is available to Taxpayer manufacturers of renewable energy products expanding or locating qualifying renewable energy operations. Taxpayer must be certified by the AZ Department of Commerce. Taxpayer must meet certain minimum requirements for the quantity and quality of new jobs created. Taxpayer must invest at least \$25 million in facilities, equipment, land and infrastructure.

QUALIFYING ACTIVITY. Taxpayer must own taxable renewable energy property. Renewable energy is electricity produced by sunlight, water, wind, geothermal heat, or other nonfossil renewable source.

INCENTIVE AMOUNTS. The tax abatement amount reduces the property tax assessments for class 6 properties to a ratio of 5%, and class 1 properties to a ratio of 22%. Qualifying property will be designated as a class 6 property for a period of 10 years if 51% or more of the full-time employees are paid 125% to 199% of the median income in Arizona, or 15 years if 51% or more of the full-time employees are paid 200% or more of the median income in Arizona.

INCENTIVE TIMEFRAME. The tax abatement is available January 1, 2010, and expires December 31, 2014.

04.14 Arizona state sales tax exemption for fuels sold to environmental technology facilities.

GENERAL DESCRIPTION. Arizona provides a sales tax exemption in the amount of 100% for fuels sold to qualified environmental technology manufacturer, producer or processor. *Ariz. Rev. Stat. §41-1514.2; 42-5159; H.B. 2160 (2010).*

ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer purchaser of coal, petroleum, coke, natural gas, virgin fuel oil and electricity used or consumed in the generation or provision of on-site power of energy for manufacturers, producers or processors of environmental technology. Taxpayer must be certified by the AZ Department of Commerce.

QUALIFYING ACTIVITY. Taxpayer must purchase of coal, petroleum, coke, natural gas, virgin fuel oil and electricity used or consumed in the generation or provision of on-site power of energy for manufacturers, producers or processors of environmental technology. Taxpayer must manufacture, produce or process environmental technology. Environmental technology is hydroelectric, solar-thermal, photovoltaic, biomass, wind and geothermal processes.

INCENTIVE AMOUNTS. The tax exemption amount 100% of the sales tax due.

INCENTIVE TIMEFRAME. The tax exemption period is 20 years. The tax exemption is effective July 29, 2010.

04.16 Arizona state sales tax exemption for environmental technology facilities.

GENERAL DESCRIPTION. Arizona provides a sales tax exemption in the amount of 100% for qualified environmental technology manufacturers, producers or processors. *Ariz. Rev. Stat. Ann. §42-5061.D; Ariz. Rev. Stat. Ann. §42-5159; Ariz. Rev. Stat. Ann. §43-1169.*

ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer purchasers or lessors of machinery, equipment, and other personal property used as part of the construction or improvement to an environmental technology manufacturing, production or processing facility. Taxpayer must be certified by the AZ Department of Commerce.

QUALIFYING ACTIVITY. Taxpayer must purchase or lease of machinery, equipment, and other personal property used as part of the construction or improvement to an environmental technology manufacturing, production or processing facility. Environmental technology is hydroelectric, solar-thermal, photovoltaic, biomass, wind and geothermal processes.

INCENTIVE AMOUNTS. The tax exemption amount 100% of the sales tax due.

INCENTIVE TIMEFRAME. The tax exemption period is 10 years. The tax exemption is effective July 29, 2010.

06. California State Tax Incentives for Renewable Energy and Energy Efficiency

06.05 California state sales tax exemption for green manufacturing equipment

GENERAL DESCRIPTION. California provides a sales tax exemption in the amount of 100% of the sales tax due on green manufacturing equipment. *Cal. Public Resources. Cd. §26011.8; Cal. Rev. & Tax. Cd. §6010.8; S.B. 71 (2010); Cal. Alternative Energy and Advanced Transp. Fin. Auth., Regs. §§ 10030 to 10036.*

ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer purchasers of green manufacturing equipment. Taxpayer must be approved by the California Alternative Energy and Advanced Transportation Financing Authority. The Financing Authority will consider: (1) the number of jobs created by the program in California; (2) the number of businesses that have remained in California or relocated to California as a result of this program; (3) the amount of state and local revenue and economic activity generated by the program; (4) the amount of reduction in greenhouse gases, air pollution, water pollution, or energy consumption.

QUALIFYING ACTIVITY. Taxpayer must purchase green manufacturing equipment. Green manufacturing equipment includes alternative source and advanced transportation equipment. Alternative sources are the application of cogeneration technology, the conservation of energy, the use of solar, biomass, wind, geothermal, hydroelectricity under 30 megawatts, advanced electric distributive generation technology, or any other source of energy, the efficient use of which will reduce the use of fossil and nuclear fuels. Advanced transportation technologies include fuel cells.

INCENTIVE AMOUNTS. The tax exemption amount is 100% of the sales tax due.

INCENTIVE LIMITS. The statewide annual maximum tax exemption amount is \$100 million.

INCENTIVE TIMEFRAME. The tax exemption expires December 31, 2020.

08. Colorado State Tax Incentives for Renewable Energy and Energy Efficiency

08.01 Colorado state property tax credit for renewable energy systems

GENERAL DESCRIPTION. Colorado provides an option for counties and municipalities to offer state property or sales tax rebates or credits to residential and commercial property owners who install renewable energy systems on their property. *Colo. Rev. Stat. §31-20-101.3; HB 1126.*

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer owners installing renewable energy fixtures on taxpayer's residential or commercial property.

QUALIFYING ACTIVITY. Taxpayer must own renewable energy property. Renewable energy property is any fixture, product, system, device or interacting group of devices that produce electricity from renewable resources, including, photovoltaic systems, solar thermal systems, small wind systems, biomass systems, or geothermal systems.

INCENTIVE AMOUNTS. The tax credit amount varies by local jurisdiction.

08.02 Colorado state sales and use tax refund for qualifying clean technology

GENERAL DESCRIPTION. Colorado provides a sales and use tax refund in the amount of 100% the tax paid on the sale, storage, use or consumption of tangible personal property used in Colorado directly and predominately in the research and development of clean technology. *Colo. Rev. Stat. §39-26-403.*

ELIGIBLE TAXPAYERS. The tax refund is available to Taxpayer corporations or individuals purchasing tangible personal property used in Colorado directly and predominately in the research and development of clean technology. Taxpayer must employ 50 or fewer full-time employees in Colorado. Taxpayer must be certified by the CO Department of Revenue.

QUALIFYING ACTIVITY. Taxpayer must purchase property used for the research and development of clean technology. Clean technology includes renewable energy generation technologies, such as solar, wind, biofuel, and geothermal energy generation technologies; products used in renewable energy development and generation on a commercial scale; products that enhance the efficient storage, distribution, and consumption of energy; and products that mitigate human impact on the environment, including, but not limited to, products that facilitate the management of greenhouse gases, water, and waste.

INCENTIVE AMOUNTS. The tax refund amount is 100% of the sales and use tax paid.

INCENTIVE LIMITS. The maximum annual tax refund amount is \$50,000. The tax credit is not refundable if the revenue estimate prepared by the staff of the Legislative Council indicates that the amount of the total General Fund revenues for a particular fiscal year will not be sufficient to increase the total state General Fund appropriations by 6% over such appropriations for the previous fiscal year. Taxpayer who would have otherwise been eligible to claim a refund in a year in which the refund was not allowed may claim the refund in the next calendar year in which the revenue estimate allows the refund.

INCENTIVE TIMEFRAME. The tax credit expires June 30, 2014. Taxpayer apply for the tax refund by April 1 of the calendar year following the calendar year for which the tax refund is claimed.

08.04 Colorado state property tax financing for clean energy finance districts

GENERAL DESCRIPTION. Colorado provides property tax financing options for local governments funding eligible renewable-energy projects or energy-efficiency improvements by property owners. *Colo. Rev. Stat. §30-11-107.3; H.B. 1350 (2008)*.

ELIGIBLE TAXPAYERS. Taxpayer owners of taxable eligible renewable-energy projects or energy-efficiency improvements. Taxpayer must be certified by the CO Clean Energy Development Authority which is authorized to establish Clean Energy Finance Districts in the state.

QUALIFYING ACTIVITY. Taxpayer must own and finance capital improvements for energy efficiency retrofits and the installation of renewable energy fixtures. Renewable energy fixtures include solar water heating, solar thermal-electric, photovoltaics, wind, biomass, hydroelectric, geothermal-electric, biodiesel and ethanol, fuel cells that do not use fossil fuels, insulation, windows and doors, automatic energy control systems, HVAC systems, caulking and weather stripping, lighting, daylighting, energy-recovery systems, and geothermal heat pumps.

INCENTIVE AMOUNTS. The tax financing amount varies by local jurisdiction.

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09. Connecticut State Tax Incentives for Renewable Energy and Energy Efficiency

09.01 Connecticut state sales and use tax exemption for solar and geothermal systems

GENERAL DESCRIPTION. Connecticut provides a sales and use tax exemption in the amount of 100% of the tax on solar and geothermal systems. *Conn. Gen. Stat. §12-412 (117); SN 2007 (7) H.B. 5435 (2010); Special Notice 2010(9.1).*

ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer purchasers of qualifying solar and geothermal systems equipment. Taxpayer purchaser is a property owner, tenant, or contractor. Taxpayer purchaser must present certificate CERT-140, Solar Heating Systems, Solar Electricity Generating Systems, and Ice Storage Cooling Systems, to the seller when purchasing the property.

QUALIFYING ACTIVITY. Taxpayer must purchase qualifying solar and geothermal systems equipment. Qualifying solar and geothermal systems equipment includes passive and active solar water-heating systems, passive and active solar space-heating systems, solar-electric systems, and geothermal resource systems. Passive solar water or space heating system is a system that collects the heat from solar energy for heating water or air in an occupied space and delivers it to where it is needed by utilizing natural convection, conduction, and radiation without the use of powered devices such as fans and pumps. Active solar water or space heating system is a system that collects the heat from solar energy for heating water or air in an occupied space and delivers it to where it is needed through the use of powered equipment such as circulating pumps or fans. Qualifying solar systems equipment include photovoltaic modules and arrays, mounting racks and hardware, and devices used to control the operation of a solar energy system; electrical power conditioning equipment such as inverters, converters, charge controllers, voltmeter, and ammeter monitors; solar thermal collectors; a dark-colored water tank exposed to sunlight; electrical or mechanical equipment to increase the usable heat in an active solar system such as pumps or fans; and rechargeable batteries such as lead acid batteries and nickel cadmium batteries used to store electricity. Geothermal systems are systems that utilizes energy below the ground surface as a source/sink to heat or cool buildings. Geothermal systems equipment include geothermal heat pumps, including water-to-water and water-to-air type pumps; piping buried underground; and pumps to move water within pipes buried underground. Qualifying activity begins when research activities are performed and ends when the product is ready for delivery or storage, including overpacking and crating. Qualifying solar and geothermal systems equipment includes sales of services relating to the installation of eligible systems. Qualifying solar and geothermal systems equipment includes ice storage systems used for cooling by a utility ratepayer who is billed by the utility on a time-of-service metering basis. Ice storage cooling system is a system that produces ice during off-peak electricity demand periods to use for space cooling during peak periods. Qualifying ice storage systems include ice making chillers; insulated storage tanks for ice; and piping, pumps, and controls. Qualifying solar and geothermal systems equipment includes machinery, equipment, tools, materials, supplies and fuel used directly in the renewable energy and clean energy technology industries. Qualifying solar and geothermal systems equipment includes all activities performed in research, development, testing, and manufacturing. Qualifying solar and geothermal systems equipment does not include real property, permanently affixed building fixtures that are not integral and necessary to any of the

qualifying systems. Qualifying solar and geothermal systems equipment does not include items used predominantly in administration, general management, or any other activity that does not constitute the renewable energy and clean energy technology industries. Qualifying solar and geothermal systems equipment does not include any services, real property, or repair or replacement parts.

INCENTIVE AMOUNTS. The tax exemption amount is 100% of the sales tax due.

10. Delaware State Tax Incentives for Renewable Energy and Energy Efficiency

10.01 Delaware state income tax credit for new clean energy manufacturing jobs

GENERAL DESCRIPTION. Delaware provides a corporate income tax credit in the amount of \$750 per job created in clean energy manufacturing. Delaware Code Title 30, Chapter 20; *S.B. 40 (2011)*.

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer manufacturers creating new jobs in clean manufacturing.

QUALIFYING ACTIVITY. Taxpayer must hire five or more workers and invested at least \$200,000 (\$40,000 per new worker) in a qualified facility manufacturing clean energy technology devices. Clean energy technology device are: solar power devices, which shall mean devices or systems that use photovoltaic solar cells to produce electricity or that use solar energy to heat water; fuel cells, which shall mean devices or systems that use an electrochemical generator that converts the chemical energy of a fuel and an oxidant directly to electricity; wind power devices, which shall mean devices or systems that convert the motion of wind into electric power; or, geothermal power devices, which shall mean devices or systems that use the temperature differentials between the atmosphere and subterranean areas to heat or cool buildings or to heat water.

INCENTIVE AMOUNTS. The tax credit amount is \$750 per job and \$750 per \$100,000 of qualifying investment.

INCENTIVE LIMITS. The maximum annual tax credit amount is \$500,000

12. Florida State Tax Incentives for Renewable Energy and Energy Efficiency

12.01 Florida state property tax exemption for renewable energy source devices

GENERAL DESCRIPTION. Florida provides a property tax assessment exemption in the amount of 100% the cost of renewable energy source devices. *Fla. Stat. §196.175.*

ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer owners of qualifying renewable energy source devices.

QUALIFYING ACTIVITY. Taxpayer must own renewable energy source devices. A renewable energy source device is equipment which, when installed in connection with a dwelling unit or other structure, collects, transmits, stores, or uses solar energy, wind energy, or energy derived from geothermal deposits. Renewable energy source devices include: (a) solar energy collectors; (b) storage tanks and other storage systems, excluding swimming pools used as storage tanks; (c) rock beds; (d) thermostats and other control devices; (e) heat exchange devices; (f) pumps and fans; (g) roof ponds; (h) freestanding thermal containers; (i) pipes, ducts, refrigerant handling systems, and other equipment used to interconnect such systems; (j) windmills; (k) wind-driven generators; (l) power conditioning and storage devices that use wind energy to generate electricity or mechanical forms of energy; and (m) pipes and other equipment used to transmit hot geothermal water to a dwelling or structure from a geothermal deposit. Renewable energy source devices does not include conventional backup systems.

INCENTIVE AMOUNTS. The tax exemption amount is 100% of the property tax due. Renewable energy source devices operating for only a portion of the year of application for the tax exemption, must receive a proportionally reduced tax exemption.

INCENTIVE TIMEFRAME. The maximum tax exemption period is 10 years.

12.02 Florida state corporate income tax credit for renewable energy production

GENERAL DESCRIPTION. Florida provides a corporate income tax credit in the amount of \$0.01/kWh of electricity produced from renewable sources and sold to an unrelated party. *Fla. Stat. §220.193; Fla. Dept. of Rev., Regs. §§ 12C-1.0191 et seq.*

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer producers and sellers of electricity produced from renewable energy facilities. Taxpayer must be certified by the FL Department of Revenue. Taxpayer partners or members of a pass-through entity share the tax credit in the same manner as items of income and expense pass through for federal income tax purposes. When Taxpayer allocatee has received the tax credit by a pass-through, the application must identify the Taxpayer that passed the tax credit through, all Taxpayer allocatees that received the tax credit, and the percentage of the tax credit that passes through to each recipient. Taxpayer may use the tax credit on a consolidated return basis up to the amount of tax imposed upon the consolidated group.

QUALIFYING ACTIVITY. Taxpayer must produce and sell electricity produced from renewable energy facilities. Renewable energy is electrical, mechanical, or thermal energy produced from a method that uses one or more of the following fuels or energy sources: hydrogen, biomass, solar energy, geothermal energy, wind energy, ocean energy, waste heat, or hydroelectric power.

INCENTIVE AMOUNTS. The tax credit amount is equal to \$0.01/kWh of electricity produced and sold. The tax credit amount is based on the sale of the facility's entire electrical production. For expanded facilities, the tax credit amount is based on the increases in the facility's electrical production that are achieved. Expanded facility is a facility that increases its electrical production and sale by more than 5% above the facility's 2006 electrical production and sales.

INCENTIVE LIMITS. The statewide maximum annual tax credit amount is \$5 million. The statewide maximum annual tax credit amount is reached, the tax credit amount is a prorated amount based on each Taxpayer applicant's increased production and sales.

INCENTIVE TIMEFRAME. The tax credit expires June 30, 2010. Applications are due by February 1 of each year. Unused tax credit may be carried forward 5 years.

13. Georgia State Tax Incentives for Renewable Energy and Energy Efficiency

13.01 Georgia state income tax credit for clean energy property

GENERAL DESCRIPTION. Georgia provides a corporate or personal income tax credit in the amount of 35% of the cost of clean energy systems, \$0.60/square foot for lighting retrofit projects, and \$1.80/square foot for energy-efficient products installed during construction. *O.C.G. §48-7-29.14; Ga. Comp. R. & Regs. r. 560-7-8-.48.*

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer corporations and individuals placing into service clean energy property. Taxpayer must be certified by the GA Department of Revenue.

QUALIFYING ACTIVITY. Taxpayer must place clean energy property in service. Clean energy property includes solar energy equipment, Energy Star certified geothermal heat pump systems, lighting retrofit projects, energy efficient buildings, wind equipment, and biomass equipment. Solar energy equipment that uses solar radiation as a substitute for traditional energy for water heating, active space heating and cooling, passive heating, daylighting, generating electricity, distillation, desalinization, or the production of industrial or commercial process heat, as well as related devices necessary for collecting, storing, exchanging, conditioning, or converting solar energy to other useful forms of energy. Lighting retrofit project is a lighting retrofit system that employs dual switching (ability to switch roughly half the lights off and still have fairly uniform light distribution), delamping, daylighting, relamping, or other controls or processes which reduce annual energy and power consumption by 30% compared to the ASHRAE 90.1.2004. Energy efficient building is new or retrofitted buildings that are designed, constructed, and certified to exceed the standards set forth in the ASHRAE 90.1.2004 by 30%. Wind equipment is equipment required to capture and convert wind energy into electricity or mechanical power as well as related devices that may be required for converting, conditioning, and storing the electricity produced by wind equipment. Biomass equipment is equipment to convert wood residuals into electricity through gasification and pyrolysis. Solar hot water systems must be certified by the Solar Rating Certification Corporation, the FL Solar Energy Center or a comparable entity approved by the tax authority. Solar hot water systems must meet the certification standards of SRCC OG-100 or FSEC-GO-80 for solar thermal collectors and/or SRCC OG-300 or FSEC-GP-5-80 for solar thermal residential systems. Energy efficient buildings do not include single-family residential property.

INCENTIVE AMOUNTS. The tax credit amount is 35% of the cost of the system, \$0.60/square foot for lighting retrofit projects, and \$1.80/square foot for energy-efficient products installed during construction. The cost of the system is considered to be 800% the net annual rental rate for leased clean energy property. The net annual rate is the annual rental rate paid by Taxpayer less any annual rental rate received by Taxpayer from subrentals.

INCENTIVE LIMITS. The statewide maximum annual tax credit amount is \$2,500,000. The maximum annual tax credit amounts for non-single family residential purposes are: \$100,000 per installation for domestic solar water heating; \$500,000 per installation for photovoltaics, solar thermal electric applications, active space heating, biomass

equipment and wind energy systems; \$100,000 per installation for Energy Star-certified geothermal heat pumps; \$100,000 for lighting retrofit projects; \$100,000 for energy-efficient products installed during construction. The maximum annual tax credit amounts for single family residential purposes are: \$2,500 per dwelling unit for clean energy property related to solar energy equipment for domestic water heating; \$10,500 per dwelling unit applies for clean energy property related to solar energy equipment for photovoltaic, other solar thermal electric applications, and active space heating or to wind; and \$2,000 per installation for Energy Star certified geothermal heat pump systems.

INCENTIVE TIMEFRAME. The tax credit expires December 31, 2012. Unused tax credit may be carried forward 5 years. Unused tax credit may be taken against Taxpayer's quarterly or monthly payment under O.C.G. §48-7-103.

MISCELLANEOUS.

15. Hawaii State Tax Incentives for Renewable Energy and Energy Efficiency

15.01 Hawaii state income tax credit for high technology business investment

GENERAL DESCRIPTION. Hawaii provides an income tax credit over 5 years in the amount of 100% of the investment in high technology business, including non-fossil sources energy technologies. *Haw. Rev. Stat. §235-110.9; SB 199 (2009). HIDOT Letter Ruling No. 2009-02; HIDOT Letter Ruling No. 2009-03.*

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer investors in qualifying non-fossil sources energy technologies. Taxpayer must be certified by HI Department of Taxation.

QUALIFYING ACTIVITY. Taxpayer must invest in qualifying non-fossil sources energy technologies. A qualifying high technology business is a business that conducts more than 50% of its activities in qualifying research. Qualifying research includes development of energy technologies based on non-fossil sources such as wind, solar energy, hydropower, geothermal resources, ocean thermal energy conversion, wave energy, hydrogen, fuel cells, landfill gas, waste to energy, biomass including municipal solid waste, and biofuels.

INCENTIVE AMOUNTS. The tax credit amount is 100% of the equity investment, taken over 5-years.

INCENTIVE LIMITS. The maximum annual tax credit amount is \$1.5 million. The maximum annual tax credit allowable is 80% of Taxpayer's income tax liability. The maximum annual tax credit amounts over the 5-year period are: \$700,000 in the year the qualifying investment was made; \$500,000 in the first year following; \$400,000 in the second year following; \$200,000 in the third year following; and \$200,000 in the fourth year following the investment.

INCENTIVE TIMEFRAME. The tax credit is taken over 5 years as follows: 35% in the year the qualifying investment was made; 25% in the first year following; 20% in the second year following; 10% in the third year following; and 10% in the fourth year following. The tax credit expires on December 31, 2010. Taxpayer submit a written, certified statement to the HI Department of Taxation before March 31 of each year in which an investment in a qualifying high technology business was made in the previous taxable year. Unused credit may be carried forward.

16. Idaho State Tax Incentives for Renewable Energy and Energy Efficiency

16.01 Idaho state property tax abatement for wind and geothermal energy producers

GENERAL DESCRIPTION. Idaho provides a property tax abatement to the amount of 3% of the gross energy earnings of wind and geothermal energy producers. *Idaho Code §63-3502B; HB 189 (2008); HB 529 (2009).*

ELIGIBLE TAXPAYERS. The tax abatement is available to Taxpayer owners of commercial wind operating and geothermal energy production facilities. Taxpayer must not be regulated by the ID Public Utilities Commission.

QUALIFYING ACTIVITY. Taxpayer must own taxable commercial wind and geothermal energy property.

INCENTIVE AMOUNTS. The tax abatement is to the amount of 3% of the gross energy earnings.

16.02 Idaho state sales tax refund for renewable energy equipment

GENERAL DESCRIPTION. Idaho provides a state sales tax refund in the amount of 100% of sales tax paid for qualifying machinery and equipment used to generate electricity from fuel cells, low-impact hydro, wind, geothermal resources, biomass, cogeneration, solar and landfill gas. *Idaho Code §63-3622QQ.*

ELIGIBLE TAXPAYERS. The tax refund is available to Taxpayer purchasers of qualifying machinery and equipment.

QUALIFYING ACTIVITY. Taxpayer must purchase machinery and equipment used to generate electricity from fuel cells, low-impact hydro, wind, geothermal resources, biomass, cogeneration, solar and landfill gas. Qualifying machinery and equipment is property that provides any part of the process that captures the energy of the fuel cells, low impact hydro, wind, geothermal resources, biomass, cogeneration, sun, or landfill gas, converts that energy to electricity, and stores, transforms or transmits that electricity for entry into or operation in parallel with electric transmission and distribution systems. Qualifying machinery and equipment must be installed in projects that will generate at least 25 kW of electricity. Qualifying machinery and equipment must be installed in projects that are certified by a public utility, a cooperative utility, a municipal utility or the ID Public Utilities Commission. Qualifying machinery and equipment does not include: (i) hand-powered tools; (ii) property with a useful life of less than 1 year; (iii) repair parts required to restore machinery and equipment to normal working order; (iv) replacement parts that do not increase productivity, improve efficiency, or extend the useful life of machinery and equipment; (v) buildings; or (vi) building fixtures that are not integral and necessary to the generation of electricity that are permanently affixed to and become a physical part of a building.

INCENTIVE AMOUNTS. The tax refund amount is 100% of sales tax paid.

INCENTIVE TIMEFRAME. The tax refund expires June 30, 2011. The tax refund must be claimed and filed on or before the last day of the 3rd calendar year following the year in which the taxes sought to be refunded were paid.

16.05 Idaho state income tax deduction for residential alternative energy devices

GENERAL DESCRIPTION. Idaho provides an income tax deduction over 4 years in the amount of 100% of the cost of a solar, wind, geothermal, and certain biomass energy devices used for heating or electricity generation. *Idaho Code §63-3022C.*

ELIGIBLE TAXPAYERS. The tax deduction is available to Taxpayer individuals installing solar, wind, geothermal, and certain biomass energy devices used for heating or electricity generation.

QUALIFYING ACTIVITY. Taxpayer must install an alternative energy device. Alternative energy devices include solar, wind, geothermal, and certain biomass energy devices used for heating or electricity generation. Alternative energy devices include pellet stoves and EPA-certified wood stoves.

INCENTIVE AMOUNTS. The tax deduction amount is 40% of the cost in the year in which the system is installed and 20% of the cost each year for 3 years thereafter. Qualifying cost includes the cost of construction, reconstruction, remodeling, installation and acquisition of the alternative energy device.

INCENTIVE LIMITS. The maximum annual tax deduction amount is \$5,000. The maximum cumulative tax deduction amount is \$20,000 per taxpayer.

18. Indiana State Tax Incentives for Renewable Energy and Energy Efficiency

18.01 Indiana state property tax exemption for renewable energy property

GENERAL DESCRIPTION. Indiana provides a property tax assessment exemption in the amount of 100% of the cost of systems that generate energy using solar, wind, hydropower or geothermal resources. *Ind. Code §6-1.1-12-26 et seq.; H.B. 1086 (2010).*

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer owners of qualifying renewable energy property installed in real property or a mobile home. Taxpayer must fill out Form 18865 and file it with the local county auditor. Taxpayer must own the real property, mobile home, or manufactured home, or be buying the real property, mobile home, or manufactured home under contract, on the date the statement is filed.

QUALIFYING ACTIVITY. Taxpayer must own property equipped with a solar energy heating or cooling system or hydroelectric and geothermal devices installed in real property or a mobile home. A hydroelectric power device is a device installed after December 31, 1981, designed to utilize the kinetic power of moving water to provide mechanical energy or to produce electricity. A geothermal energy or cooling device is a device installed after the above date designed to utilize the natural heat from the earth to provide hot water, produce electricity, or generate heating or cooling.

INCENTIVE AMOUNTS. The tax exemption amount is 100% of the property tax due.

INCENTIVE TIMEFRAME. For qualifying mobile homes which is not assessed as real property, Taxpayer must file the statement during the 12 months before March 31 of each year for of the tax exemption.

20. Kansas State Tax Incentives for Renewable Energy and Energy Efficiency

20.01 Kansas state income tax credit for new renewable electric cogeneration facilities

GENERAL DESCRIPTION. Kansas provides an income tax credit in the amount of 5-10% of qualifying investment in new renewable electric cogeneration facilities. *Kan. Stat. Ann. §79-32,246. Kan. Admin. Regs. §110-19-1; Kansas Revenue Department Public Notice 09-09, 06/29/2009.*

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer investors in new renewable electric cogeneration facilities. Taxpayers must apply to the KS Secretary of Commerce to enter into an agreement for a tax credit and must be annually determined to be in compliance with the terms of the agreement. Taxpayer shareholders, partners or members of a pass-through entity are entitled to a percentage of the tax credit equal to a percentage of the pass-through entity's distributive income to which the Taxpayer allocates are entitled. A Taxpayer co-owner share of the tax credit is equal to the co-owner's percentage of ownership in such plant.

QUALIFYING ACTIVITY. Taxpayer must make qualifying investments in a new renewable electric cogeneration facility. A renewable electric cogeneration facility is a facility which generates electricity utilizing renewable energy resources or technologies and which is owned and operated by the owner of an industrial, commercial or agricultural process to generate electricity for use in such process to displace current or provide for future electricity use. Renewable energy resources or technologies includes wind, solar, photovoltaic, biomass, hydropower, geothermal and landfill gas resources or technologies.

INCENTIVE AMOUNTS. The tax credit amount is 10% of the qualifying investment for the first \$50 million invested, and 5% of the qualifying investment that exceeds \$50 million. Qualifying investments are expenditures made in construction of a new renewable electric cogeneration facility, for real and tangible personal property incorporated in and used as part of such facility. Qualifying investments do not include any expenditures financed by public funds or grants or any similar type of financial assistance.

INCENTIVE LIMITS. The maximum tax credit allowed to be claimed is 90% of the tax due.

INCENTIVE TIMEFRAME. The tax credit is taken over 10 years, beginning with the year the plant or its expanded capacity is placed in service. The tax credit expires December 31, 2011. Unused tax credit may be carried forward 14 years, but must be reduced by 10%.

20.02 Kansas state property tax exemption for renewable energy equipment

GENERAL DESCRIPTION. Kansas provides a property tax exemption in the amount of 100% of the cost of renewable energy equipment. *Kan. Stat. Ann. §79-201.*

ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer owners of renewable energy equipment.

QUALIFYING ACTIVITY. Taxpayer must own renewable energy equipment. 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.

INCENTIVE AMOUNTS. The tax exemption amount is 100% of the property tax due.

21. Kentucky State Tax Incentives for Renewable Energy and Energy Efficiency

21.02 Kentucky state personal income tax credit for renewable energy systems

GENERAL DESCRIPTION. Kentucky provides a personal income tax credit in the amount of 30% of the cost of installing renewable energy systems on residential and commercial property. *Ky. Rev. Stat. Ann. §141.436q.; 307 Ky. Admin. Regs. 1:040.*

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer individuals installing renewable energy systems on residential and commercial property.

QUALIFYING ACTIVITY. Taxpayer must installing renewable energy systems. Renewable energy systems include solar hot water, solar energy systems, PV panels, inverters, wind and geothermal heat pumps. Qualifying wind and solar hot water equipment must have a manufacturer's warranty of 5 years or more. Qualifying solar hot water systems must have an installer's warranty of 2 years or more, and must use collectors certified by the Solar Rating and Certification Corporation under OG-100. Qualifying solar energy systems must be installed by a North American Board of Certified Energy Practitioners-certified installer. Qualifying PV panels and inverters must meet article 690 of the National Electrical Code and be certified by Underwriters Laboratories. Qualifying wind turbines must meet the wind industry consensus standards developed by the American Wind Energy Association and U.S. Department of Energy. Qualifying wind turbines must meet the requirements of article 705 of the NEC, and must be UL-certified. Qualifying closed loop geothermal heat pumps must have EER of 14.1 and COP of 3.6. Qualifying open loop geothermal heat pump must have EER of 16.2 and COP of 3.5. Qualifying DX geothermal heat pump must have EER of 15 and COP of 3.5.

INCENTIVE AMOUNTS. The tax credit amount is 30% of the cost of the renewable energy systems. The tax credit amount is \$3.00/watt for rated capacity for PV.

INCENTIVE LIMITS. The maximum tax credit amounts are \$250 for geothermal technologies, \$500 for solar hot water and wind technologies, and the greater of \$500 or \$3.00 per watt of rated capacity for photovoltaic systems. The maximum tax credit amount is \$1,000 for installations on multi-family residential rental units or commercial property. The maximum tax credit amount is \$500 for single family residential rental unit.

INCENTIVE TIMEFRAME. The tax credit expires December 31, 2015. Unused tax credit may be carried forward 1 year.

24. Maryland State Tax Incentives for Renewable Energy and Energy Efficiency

24.01 Maryland state income tax credit for renewable energy production

GENERAL DESCRIPTION. Maryland provides a corporate or personal income tax credit in the amount of \$0.0085/kWh of renewable energy produced and \$0.005/kWh for electricity generated by co-firing. *Md. Code Ann. §10-720; H.B. 464 (2010); S.B. 958 (2011).*

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer corporations or individuals producing electricity generated from renewable sources. Taxpayer must be certified by the MD Energy Administration.

QUALIFYING ACTIVITY. Taxpayer must produce and sell to third party electricity generated by wind, geothermal energy, solar energy, hydropower, small irrigation power, municipal solid waste and biomass resources. Biomass resources include anaerobic digestion, landfill gas, wastewater-treatment gas, and cellulosic material derived from forest-related resources (excluding old-growth timber and mill residues consisting of sawdust or wood shavings), from waste pallets and crates, nonhazardous waste material segregated from other waste materials, or from agricultural sources.

INCENTIVE AMOUNTS. The tax credit amount is \$0.0085/kWh for electricity generated by eligible resources. The tax credit amount is \$0.0050/kWh for electricity generated by co-firing.

INCENTIVE LIMITS. The maximum tax credit amount is \$2.5 million over a 5-year period. The statewide aggregate maximum tax credit amount is \$25 million.

INCENTIVE TIMEFRAME. The tax credit period is 5 years. The tax credit expires December 31, 2015. The tax credit is refundable. The tax credit may be canceled if over a 3-year period, Taxpayer does not claim on average at least 10% of the maximum tax credit amount stated in the certificate.

24.02 Maryland state property tax credit for solar, geothermal, and energy conservation devices

GENERAL DESCRIPTION. Maryland provides a property tax credit in the amount of 100% the cost of solar, geothermal, and energy conservation devices. *Md. Code Ann. §9-203.*

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer owners of buildings with a solar, geothermal or qualifying energy conservation device.

QUALIFYING ACTIVITY. Taxpayer must equip buildings with a solar, geothermal or qualifying energy conservation device. Qualifying devices may be used to heat or cool the structure, to generate electricity to be used in the structure, or to provide hot water for use in the structure.

INCENTIVE AMOUNTS. The tax credit amount is 100% of the cost of solar, geothermal, and energy conservation devices.

24.03 Maryland state property tax exemption for renewable energy systems

GENERAL DESCRIPTION. Maryland provides a property tax exemption in the amount of 100% of the cost of renewable energy systems. *Md Code Ann. §7-242; H.B. 1171 (2009); S.B. 621 (2009)*.

ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer owners of renewable energy systems.

QUALIFYING ACTIVITY. Taxpayer must own geothermal, solar photovoltaic (PV), solar hot water system property and residential wind energy equipment.

INCENTIVE AMOUNTS. The tax exemption amount is 100% of the property tax due.

24.05 Maryland state sales tax exemption for geothermal, solar and wind energy equipment.

GENERAL DESCRIPTION. Maryland provides a sales tax exemption in the amount of 100% of the tax on geothermal, solar and wind energy equipment. *Md. Code Ann. §11-230; H.B. 1171 (2009); S.B. 621 (2009).*

ELIGIBLE TAXPAYERS. Taxpayer purchasers of geothermal, solar and wind energy equipment.

QUALIFYING ACTIVITY. Taxpayer must purchase of geothermal, solar energy and residential wind energy equipment. Geothermal equipment is equipment that uses ground loop technology to heat and cool a structure. Solar energy equipment is equipment that uses solar energy to heat or cool a structure, generate electricity to be used in a structure, or provide hot water for use in a structure. Residential wind energy equipment is equipment installed on a residential property that uses wind energy to generate electricity for use in a residential structure on that property. Solar energy equipment does not include equipment that is part of a non-solar energy system or that uses any type of recreational facility or equipment as a storage medium.

INCENTIVE AMOUNTS. The tax exemption amount is 100% of sales tax due.

24.06 Maryland state property tax exemption for solar and geothermal heating and cooling systems

GENERAL DESCRIPTION. Maryland provides a property tax assessment exemption in the amount of 100% of the value of solar and geothermal heating and cooling systems. *Md. Code Ann. §8-240.*

ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer owners of solar and geothermal heating and cooling system property.

QUALIFYING ACTIVITY. Taxpayer must own solar and geothermal heating and cooling systems.

INCENTIVE AMOUNTS. The tax exemption amount is 100% of the property tax due.

25. Massachusetts State Tax Incentives for Renewable Energy and Energy Efficiency

25.05 Massachusetts state sales tax exemption for renewable energy equipment in primary residences

GENERAL DESCRIPTION. Massachusetts provides a sales tax exemption in the amount of 100% of the tax on equipment directly relating to any solar, wind powered or heat pump system, which is being utilized as a primary or auxiliary power system of a principal residence. *Mass. Gen. Laws 64H §6(dd)*; *Massachusetts DOR Directive 86-2, 06/12/1986*; *Massachusetts Letter Ruling 83-91, 10/31/1983*; *Massachusetts Letter Ruling 84-88, 09/25/1984* . *Massachusetts DOR Directive 86-2, 06/12/1986*.

ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer purchasers or lessees of equipment directly relating to any solar, wind powered or heat pump system, which is being utilized as a primary or auxiliary power system of a principal residence. Taxpayer must complete and present Massachusetts Tax Form ST-12 to seller.

QUALIFYING ACTIVITY. Taxpayer must purchase or lease equipment directly relate to a solar, wind or heat pump system used as a primary or auxiliary power system for heating or otherwise supplying energy needs. Qualifying equipment includes the fans and ductwork as components of solar heating systems to taxpayers for use in their principal residences. Qualifying equipment does not includes passive air-to-air heat exchanger. Qualifying equipment does not include equipment that serves as a structural component of a dwelling, such as glass for a solar sunspace. Qualifying equipment does not include equipment if purchased for a principal residence outside the state, or if the equipment is for a commercial building or a vacation home.

INCENTIVE AMOUNTS. The tax credit amount is 100% of the sales tax due.

27. Minnesota State Tax Incentives for Renewable Energy and Energy Efficiency

27.04 Minnesota state property tax financing option for renewable energy and energy-efficiency systems

GENERAL DESCRIPTION. Minnesota provides a property tax financing option for municipalities for renewable energy and energy-efficiency systems. *H.B. 2695 (2010)*.

ELIGIBLE TAXPAYERS. The tax financing is available to Taxpayer financing renewable energy or eligible energy-efficiency improvements. The local jurisdiction must review an energy audit or renewable energy system feasibility study.

QUALIFYING ACTIVITY. Taxpayer must finance renewable energy or eligible energy-efficiency improvements. Renewable energy is energy produced by means of solar thermal, solar photovoltaic, wind, or geothermal resources. Qualifying energy improvements are (1) any renovation or retrofitting of a building to improve energy efficiency that is permanently affixed to the property and that results in a net reduction in energy consumption without altering the principal source of energy; (2) permanent installation of new or upgraded electrical circuits and related equipment to enable electrical vehicle charging; or (3) a renewable energy system attached to, installed within, or proximate to a building that generates electrical or thermal energy from a renewable energy source. Qualifying energy improvements must be performed by licensed contractors as required by ch 326B or other law or ordinance. Qualifying energy improvements do not include improvements generating energy sold, transmitted or distributed at retail, or providing for the end use of the electrical energy from an off-site facility.

INCENTIVE AMOUNTS. The tax financing amount varies by local jurisdiction. The maximum financing amount is the lesser of: (i) 10% of the assessed value of the real property on which the improvements are to be installed; or (ii) the actual costs of installing the energy improvements. Qualifying energy improvement costs include costs of necessary equipment, materials, and labor, the costs of each related energy audit or renewable energy system feasibility study, and the costs of verification of installation.

INCENTIVE TIMEFRAME. The tax financing term varies by local jurisdiction. The maximum financing term is 20 years.

29. Missouri State Tax Incentives for Renewable Energy and Energy Efficiency

29.01 Missouri state income tax credit for technology business projects

GENERAL DESCRIPTION. Missouri provides an income tax credit over 5 years in the amount of 5% of new payroll for technology business projects, including a company that owns or leases a facility that produces electricity derived from qualifying renewable energy sources or produces fuel for the generation of electricity from qualifying renewable energy sources. *Mo. Rev. Stat. §620.1875 et seq.*;

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer business owners or lessee of qualifying facilities. Taxpayer must be certified with the MO Department of Economic Development. Taxpayer must create a minimum of 10 new jobs involved in the operations of the company. Taxpayer may not have received the federal alcohol mixture credit or alcohol credit or small ethanol producer credit. Taxpayer may transfer, sell, or assign, by filing a notarized endorsement with the MO Department of Economic Development that names the transferee, the amount of tax credit transferred, and the value received for the tax credit. Taxpayer flow-through entities may allocate the tax credit to members, partners, or shareholders in proportion to their share of ownership on the last day of the Taxpayer's tax period.

QUALIFYING ACTIVITY. Taxpayer must own or lease a employing facility that produces electricity derived from qualifying renewable energy sources, produces fuel for the generation of electricity from qualifying renewable energy sources. Qualifying renewable energy sources include open-looped biomass, closed-looped biomass, solar, wind, geothermal, and hydropower. Qualifying renewable energy sources does not include ethanol distillation or production or biodiesel production.

INCENTIVE AMOUNTS. The tax credit amount is 5% of new payroll for a period of five years. An additional 0.5% of new payroll may be added if the average wage of the new payroll in any year exceeds 120% of the county average wage. An additional 0.5% of new payroll may be added if the average wage of the new payroll in any year exceeds 140% of the average wage in the county.

INCENTIVE LIMITS. The statewide maximum annual tax credit amount is \$80 million. The tax credit is refundable.

INCENTIVE TIMEFRAME. The tax credit is taken over 5 years.

30. Montana State Tax Incentives for Renewable Energy and Energy Efficiency

30.02 Montana state property tax abatement for renewable energy production and manufacturing facilities

GENERAL DESCRIPTION. Montana provides a property tax abatement in the amount of 50% of the tax on renewable energy production and manufacturing facilities. *Mont. Code Ann. §15-24-3111; Mont. Code Ann. §15-6-157.*

ELIGIBLE TAXPAYERS. The tax abatement is available to Taxpayer owners of renewable energy production and manufacturing facilities. Taxpayers must be approved by the MT Department of Environmental Quality.

QUALIFYING ACTIVITY. Taxpayer must own new renewable energy production facilities, new renewable energy manufacturing facilities, and renewable energy research and development equipment. Qualifying renewable energy manufacturing facilities are those (1) that produce materials, components or systems to convert solar, wind, geothermal, biomass, biogas or waste heat resources into useful energy, and (2) whose annual production of renewable energy equipment makes up at least half of the facility's total production. Renewable energy is energy from solar, wind, geothermal, biomass, biogas, non petroleum-based fuel cells, and waste heat sources. Qualifying renewable energy includes fuel cells and components of fuel cells that generate energy using non-fossil fuels. Biomass is any renewable organic matter, including dedicated energy crops and trees, agricultural food and feed crops, agricultural crop wastes and residues, wood wastes and residues, aquatic plants, animal wastes, municipal wastes, and other organic waste materials. Qualifying renewable energy research and development equipment is equipment used primarily for research and development of the efficient use of renewable energy sources.

INCENTIVE AMOUNTS. The tax abatement amount is 50% of the property tax due.

INCENTIVE LIMITS. The maximum tax abatement amount is the tax abatement amount for the first \$1,000,000 of qualifying renewable energy research and development equipment value.

INCENTIVE TIMEFRAME. The tax abatement is period is the construction period and the first 15 years after the facility commences operation, not to exceed 19 years.

30.03 Montana state corporate license tax credit for alternative renewable energy industries

GENERAL DESCRIPTION. Montana provides an corporate license tax credit in the amount of 1% of total wages paid to new employees in alternative renewable energy production industries. *Mont. Code Ann. §15-31-124 et seq.; Mont. Admin. R. §42.4.1602 et seq.*

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer corporations employing persons in industries producing energy by means of an alternative renewable energy source. Taxpayer must be a new corporation engaging in manufacturing for the first time in Montana or an expanding corporation or expanding or diversifying a present operation to increase total full-time jobs by at least 30%.

QUALIFYING ACTIVITY. Taxpayer must employ persons in industry producing energy by means of an alternative renewable energy source. An alternative renewable energy source is a form of energy or matter, such as solar or wind energy, or methane from solid waste, that is capable of being converted into forms of energy useful to humanity, and the technology necessary to make this conversion, when the source is not exhaustible in terms of this planet and when the source or technology is not in general commercial use. Alternative renewable energy source include solar energy; wind energy; geothermal energy; conversion of biomass; fuel cells that do not require hydrocarbon fuel; small hydroelectric generators producing less than one megawatt; or methane from solid waste. New employees are those who: (1) were not employed by the corporation within 5 years of expansion; and (2) are employed in the product's production or, effective January 17, 2008.

INCENTIVE AMOUNTS. The tax credit amount is 1% of total wages paid to new employees.

INCENTIVE TIMEFRAME. The tax credit period is 3 years. Excess tax credit may not be carried over.

30.05 Montana state property tax assessment for alternative renewable energy generating facilities

GENERAL DESCRIPTION. Montana provides property tax assessment to the amount of 50% of the value of alternative renewable energy generating facilities. *Mont. Code Ann. §15-24-1402.*

ELIGIBLE TAXPAYERS. The tax assessment exemption is available to Taxpayer owners of alternative renewable energy generating facility property. Taxpayer must be certified by the governing body of the appropriate local taxing jurisdiction.

QUALIFYING ACTIVITY. Taxpayer must own alternative renewable energy generating facility property. Qualifying generating plants are those producing 1 megawatt (MW) or more by means of an alternative renewable energy source.

INCENTIVE AMOUNTS. The tax assessment exemption amount is 50% of the property tax due, declining over 10-years.

INCENTIVE TIMEFRAME. The tax assessment exemption declines over a 10-year period.

30.07 Montana state property tax exemption for renewable energy systems

GENERAL DESCRIPTION. Montana provides a property tax exemption in the amount of 100% of the tax on renewable energy systems. *Mont. Code Ann. §15-6-224; Mont. Code Ann. §15-32-102.*

ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer owners of renewable energy systems.

QUALIFYING ACTIVITY. Taxpayer must own renewable energy systems. Renewable energy systems include solar photovoltaics, passive solar, wind, solid waste, decomposition of organic wastes, geothermal, fuel cells that do not require hydrocarbon fuel, small hydropower plants, and low-emission wood or biomass combustor systems.

INCENTIVE AMOUNTS. The tax exemption amount is 100% of the property tax due.

INCENTIVE LIMITS. The maximum tax exemption amounts are \$20,000 for single-family residential dwellings and \$100,000 for multifamily residential dwellings or a nonresidential structures.

INCENTIVE TIMEFRAME. The tax exemption period is 10 years.

30.12 Montana state personal tax credit for residential non-fossil form energy systems

GENERAL DESCRIPTION. Montana provides a personal income tax credit in the amount of 100% the cost of residential non-fossil form energy systems. *Mont. Code Ann. §15-32-201.*

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer individuals installing an energy system using a recognized non-fossil form of energy on their home.

QUALIFYING ACTIVITY. Taxpayer must install residential non-fossil form energy systems on their home. Residential non-fossil form energy systems include solar energy, including passive solar systems; wind; solid waste; the decomposition of organic wastes; geothermal; fuel cells that do not require hydrocarbon fuel; or an alternative energy system; a system that produces electric power from biomass or solid wood wastes; or a small system that uses water power by means of an impoundment that is not over 20 acres in surface area.

INCENTIVE AMOUNTS. The tax credit amount is 100% of cost of the residential non-fossil form energy systems.

INCENTIVE LIMITS. The maximum tax credit is \$500.

INCENTIVE TIMEFRAME. Unused credit may be carried forward 4 years.

30.13 Montana state personal income tax credit for residential geothermal heating or cooling system

GENERAL DESCRIPTION. Montana provides a personal income tax credit in the amount of 100% the cost of residential geothermal heating or cooling system. *Mont. Code Ann. §15-32-115.*

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer individuals installing geothermal heating or cooling systems in their new principal dwelling.

QUALIFYING ACTIVITY. Taxpayer must install a geothermal heating or cooling system in their new principal dwelling.

INCENTIVE AMOUNTS. The tax credit amount is 100% of the installation cost. Installation costs include the cost of: (a) trenching, well drilling, casing, and downhole heat exchangers; (b) piping, control devices, and pumps that move heat from the earth to heat or cool the building; (c) ground source or ground coupled heat pumps; (d) liquid-to-air heat exchanger, ductwork, and fans installed with a ground heat well that pump heat from a well into a building; and (e) design and labor.

INCENTIVE LIMITS. The maximum tax credit is \$1500.

INCENTIVE TIMEFRAME. Unused credit may be carried forward 7 years.

31. Nebraska State Tax Incentives for Renewable Energy and Energy Efficiency

31.01 Nebraska state income tax credit for renewable energy production

GENERAL DESCRIPTION. Nebraska provides an income tax credit in the amount of \$0.001/kwh of electricity generated by new zero-emission facility from renewable energy. *Neb. Rev. Stat. §77-27,235.*

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer owners of new zero-emission facilities. Taxpayers receiving a sales tax exemption with regard to a C-BED or community-based energy development project for the new zero-emission facility are not eligible.

QUALIFYING ACTIVITY. Taxpayer must produce electricity generated by a new zero-emission facility. A new zero-emission facility is an electrical generating facility located in Nebraska that utilizes an eligible renewable resources as its fuel source. Eligible renewable resources are wind, moving water, solar, geothermal, fuel cell, methane gas, or photovoltaic technology. Qualifying zero-emission facilities must not result in any pollution or emissions that are, or may be, harmful to the environment as certified by the NE Department of Environmental Quality.

INCENTIVE AMOUNTS. The tax credit amount is \$0.00100 for each kilowatt-hour of electricity generated. In 2010, the tax credit amount will be \$0.00075 for each kilowatt-hour. In 2013, the tax credit amount will be \$0.00050 for each kilowatt-hour.

INCENTIVE LIMITS. The tax credit may be used to obtain a refund of state sales and use taxes. The statewide maximum annual tax credit amount is \$750,000.

INCENTIVE TIMEFRAME. The tax credit period is 10 years. The tax credit expires December 31, 2017.

32. Nevada State Tax Incentives for Renewable Energy and Energy Efficiency

32.01 Nevada state sales tax abatement for renewable energy technologies

GENERAL DESCRIPTION. Nevada provides a sales tax abatement in the amount of 100% of the tax above 0.6% on renewable energy technologies. *Nev. Rev. Stat. §701A.230 ; Nev. Rev. Stat. §701A.360; AB 522.*

ELIGIBLE TAXPAYERS. The tax abatement is available to Taxpayer businesses purchasing renewable energy production facility property. Taxpayer must be certified by the NV Office of Energy.

QUALIFYING ACTIVITY. Taxpayer must own a renewable energy production facility and purchase renewable energy technologies. Renewable energy production facilities are real and personal property used to generate electricity from renewable energy resources including solar, wind, biomass, fuel cells, geothermal or hydro. Renewable energy production facilities do not include government-leased or residential property. Renewable energy production facilities must have a capacity of at least 10 megawatts (MW). Qualifying solar energy facilities must generate at least 25,840,000 British thermal units of process heat per hour. Biomass is organic matter that is available on a renewable basis, including, without limitation, agricultural crops and agricultural wastes and residues; wood and wood wastes and residues; animal wastes; municipal wastes; and aquatic plants. Renewable energy production facilities must meet certain job creation requirements including: (1) employing a certain number of full-time employees during construction, a percentage of whom must be Nevada residents; (2) ensuring that the hourly wage paid to the facility's employees and construction workers is a certain percentage higher than the average statewide hourly wage; (3) making a capital investment of a specified amount in the state of Nevada; and (4) providing the construction workers with health insurance, which includes coverage for the worker's dependents.

INCENTIVE AMOUNTS. The tax abatement amount is 100% sales taxes paid in excess of 0.6%. Effective July 1, 2011 the tax abatement amount is 100% sales taxes paid in excess of 0.25%.

INCENTIVE LIMITS. The maximum tax abatement amount is an abatement to 0.6% minimum sales tax.

INCENTIVE TIMEFRAME. The tax abatement period is 3 years. The tax abatement expires June 30, 2049.

32.02 Nevada state property tax abatement for renewable energy production facilities

GENERAL DESCRIPTION. Nevada provides a property tax abatement in the amount of 55% of the cost of renewable energy production facilities. *Nev. Rev. Stat. §701A.220; AB 522; Nev. Energy Comr., Regs. §§ 701A.1 to -.36, 8/13/10.*

ELIGIBLE TAXPAYERS. The tax abatement is available to Taxpayer businesses owning renewable energy production facilities. Taxpayer must be certified by the NV Office of Energy.

QUALIFYING ACTIVITY. Taxpayer must own a renewable energy production facility. Renewable energy production facilities are real and personal property used to generate electricity from renewable energy resources including solar, wind, biomass, fuel cells, geothermal or hydro. Renewable energy production facilities do not include government-leased or residential property. Renewable energy production facilities must have a capacity of at least 10 megawatts (MW). Qualifying solar energy facilities must generate at least 25,840,000 British thermal units of process heat per hour. Biomass is organic matter that is available on a renewable basis, including, without limitation, agricultural crops and agricultural wastes and residues; wood and wood wastes and residues; animal wastes; municipal wastes; and aquatic plants. Renewable energy production facilities must meet certain job creation requirements including: (1) employing a certain number of full-time employees during construction, a percentage of whom must be Nevada residents; (2) ensuring that the hourly wage paid to the facility's employees and construction workers is a certain percentage higher than the average statewide hourly wage; (3) making a capital investment of a specified amount in the state of Nevada; and (4) providing the construction workers with health insurance, which includes coverage for the worker's dependents.

INCENTIVE AMOUNTS. The tax abatement amount is 55% of the property tax due.

INCENTIVE TIMEFRAME. The tax abatement period is 20 years. The tax abatement expires June 30, 2049.

32.03 Nevada state property tax exemption for renewable energy systems

GENERAL DESCRIPTION. Nevada provides a property tax exemption in the amount of 100% of the tax on renewable energy systems. *Nev. Rev. Stat. §701A.200.*

ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer owners of renewable energy systems installed in any residential, commercial or industrial building.

QUALIFYING ACTIVITY. Taxpayer must own renewable energy systems. Renewable energy systems include solar, wind, geothermal, solid waste and hydroelectric systems used to heat or cool a building, heat or cool water used by a building, or generate electricity used by the building. Renewable energy systems may installed in any residential, commercial or industrial building.

INCENTIVE AMOUNTS. The tax exemption amount is 100% of the property tax due.

MISCELLANEOUS. Taxpayer may not claim another state tax abatement or exemption for the same commercial or industrial building.

33. New Hampshire State Tax Incentives for Renewable Energy and Energy Efficiency

33.01 New Hampshire state property tax payment in lieu of taxes for renewable generation facilities

GENERAL DESCRIPTION. New Hampshire provides a property tax payment in lieu of taxes option for municipalities for renewable generation facilities. *N.H. Rev. Stat. Ann. ch. 72:73 et seq.; N.H. Rev. Stat. Ann. ch. 362-F:4*

ELIGIBLE TAXPAYERS. The tax payment in lieu of taxes is available to Taxpayer owners of renewable generation facilities.

QUALIFYING ACTIVITY. Taxpayer must own a renewable generation facility. Renewable generation facilities are facilities which produces electric energy for resale solely by the use, as a primary energy source, of renewable energy including the land, all rights, easements, and other interests thereto, and all dams, buildings, structures, and other improvements situated thereon which are necessary or incidental to the production of power at the facility. Renewable energy includes (a) Wind energy; (b) Geothermal energy; (c) Hydrogen derived from biomass fuels or methane gas; (d) Ocean thermal, wave, current, or tidal energy; (e) Methane gas; (f) Eligible biomass technologies; (g) The equivalent displacement of electricity, as determined by the commission, by end-use customers, from solar hot water heating systems used instead of electric hot water heating.

INCENTIVE AMOUNTS. The tax payment in lieu of taxes amount varies by local jurisdiction.

INCENTIVE TIMEFRAME. The tax payment in lieu of taxes period is 5 years.

34. New Jersey State Tax Incentives for Renewable Energy and Energy Efficiency

34.02 New Jersey state property tax exemption for renewable energy systems

GENERAL DESCRIPTION. New Jersey provides a property tax exemption in the amount of 100% of the tax on renewable energy systems. *N.J. Rev. Stat. §54:4-3.113; N.J. Rev. Stat. §4:1C-11 et seq.; N.J. Rev. Stat. §54:4-23.1 et seq.*

ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer owners of renewable energy system property. Taxpayer must be certified by their local assessor. Taxpayer owners of renewable energy system property on agriculture and horticulture sites qualify if: (i) the property continues to be used as an operating farm; (ii) the property was valued, assessed, and taxed as agricultural or horticultural for the year immediately preceding installation of the renewable energy equipment; (iii) the energy generated is used primarily by the agricultural operation on the property; (iv) the Taxpayer owner has filed a conservation plan with the soil conservation district; (v) the area devoted to the renewable energy facilities is equal to no more than 20% of the area on the property devoted to agricultural purposes; and (vi) the renewable energy facilities occupy no more than 5 acres of the property.

QUALIFYING ACTIVITY. Taxpayer must own renewable energy systems used to meet on-site electricity, heating, cooling, or general energy need. Renewable energy systems include solar PV, wind, fuel cells, sustainable biomass, geothermal electric, landfill gas, hydroelectric, resource recovery, wave, and tidal systems that produce electricity, solar thermal energy, and geothermal energy. Qualifying renewable energy systems must be installed on residential, commercial, industrial, or mixed use buildings as accessory uses. Qualifying renewable energy systems must be certified by the NJ Board of Public Utilities and the Commissioner of Community Affairs.

INCENTIVE AMOUNTS. The tax exemption amount is 100% of the property tax due.

35. New Mexico State Tax Incentives for Renewable Energy and Energy Efficiency

35.01 New Mexico state income tax credit for advanced energy systems

GENERAL DESCRIPTION. New Mexico provides a corporate or personal income tax credit in the amount of 6% of the cost of advanced energy systems. *N.M. Stat. §7-9G-2; N.M. Stat. Ann. § 7-2A-25; N.M. Admin. Code §20.2.89; N.M. Stat. §62-6-28; SB 237 (2009); N.M. Taxn. and Rev. Dept., Regs. §§ 3.13.8.2, -.3, and -.6 to -.13.*

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer corporations or individuals developing and constructing qualifying advanced energy system generating facilities. Taxpayer must be certified by the NM Environment Department. Taxpayer allocatees owning at least 5% interest in a qualifying generating facility may be allocated the right to claim the tax credit without regard to the Taxpayer's relative interest in the qualifying generating facility if the business entity making the allocation provides notice to the NM Environment Department of the allocation and the Taxpayer's interest in the qualifying generating.

QUALIFYING ACTIVITY. Taxpayer must develop and construct advanced energy system generating facilities. Advanced energy system generating facilities include (a) a solar thermal electric generating facility and associated renewable energy storage facility; (b) a solar photovoltaic electric generating facility and associated renewable energy storage facility; (c) a geothermal electric generating facility; (d) a recycled energy project; and (e) a new or re-powered coal-based electric generating facility and an associated coal gasification facility. Qualifying solar photovoltaic and geothermal electric generating facilities must have a nameplate capacity of at least 1 megawatt. Qualifying generating facilities must not exceed 700 net megawatts name-plate capacity. Qualifying generating facilities must emit the lesser of: (1) what is achievable with the best available control technology; or (2) 35 thousandths pound per million British thermal units of sulfur dioxide, 25 thousandths pound per million British thermal units of oxides of nitrogen and 1 hundredth pound per million British thermal units of total particulates in the flue gas. Qualifying generating facilities must remove the greater of: (1) what is achievable with the best available control technology; or (2) 90% of the mercury from the input fuel. Qualifying generating facilities must capture and sequester or control carbon dioxide emissions so that by the later of January 1, 2017 or 18 months after the commercial operation date, no more than 1,100 pounds per megawatt-hour of carbon dioxide is emitted into the atmosphere.

INCENTIVE AMOUNTS. The tax credit amount is 6% of development and construction costs of advanced energy system generating facilities. Costs of advanced energy system generating facilities include expenditures for the development and construction of a qualifying generating facility, including permitting; site characterization and assessment; engineering; design; carbon dioxide capture, treatment, compression, transportation and sequestration; site and equipment acquisition; and fuel supply development used directly and exclusively in a qualifying generating facility.

INCENTIVE LIMITS. The maximum cumulative tax credit amount is \$60 million per qualifying generating facility.

INCENTIVE TIMEFRAME. The tax credit expires December 31, 2015. Unused tax credit may be carried forward 10 years.

35.04 New Mexico state property tax financing option for renewable-energy technologies

GENERAL DESCRIPTION. New Mexico provides a property tax financing option for municipalities for renewable-energy technologies. *S.B. 647 (2009); H.B. 233 (2010)*.

ELIGIBLE TAXPAYERS. The tax financing is available to Taxpayer owners financing renewable energy improvement on residential or commercial property.

QUALIFYING ACTIVITY. Taxpayer must Renewable energy improvement is a photovoltaic, solar thermal, geothermal or wind energy system permanently installed on real property.

INCENTIVE AMOUNTS. The tax financing amount varies by local jurisdiction.

INCENTIVE LIMITS. The maximum tax financing amount is 40% of the assessed value of the property.

35.08 New Mexico state income tax credit for geothermal systems

GENERAL DESCRIPTION. New Mexico provides an income tax credit in the amount of 30% of the purchase and installation costs of geothermal systems. *N.M. Stat. §7-2-18.24; N.M. Stat. Ann. § 7-2A-24; Regs. §§ 3.4.19.1 to -.14.*

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer purchasing and installing geothermal systems.

QUALIFYING ACTIVITY. Taxpayer must purchase and install geothermal systems. Geothermal systems are ground-coupled heat pumps. Geothermal ground-coupled heat pump is a reversible refrigerator device that provides space heating, space cooling, domestic hot water, processed hot water, processed chilled water or any other application where hot air, cool air, hot water or chilled water is required and that utilizes ground water or water circulating through pipes buried in the ground as a condenser in the cooling mode and an evaporator in the heating mode.

Geothermal systems must: be made of new equipment, components, and materials; have a minimum two-year warranty; be a complete system; and have a minimum one-ton system size.

Geothermal systems must be certified by the NV Energy, Minerals, and National Resources Department. Taxpayer must provide the following information: a copy of the most recent property tax bill for the property where the system is located, a copy of the invoice of itemized equipment and labor costs, a copy of the system's design schematic and technical specifications, a photograph of the system after installation is completed, and information about whether the system was installed using vertical or horizontal boreholes.

INCENTIVE AMOUNTS. The tax credit amount is 30% of the purchase and installation costs of the geothermal system.

INCENTIVE LIMITS. The annual maximum tax credit amount is \$9,000. The statewide annual aggregate tax credit amount is \$2 million.

INCENTIVE TIMEFRAME. The tax credit expires December 31, 2020. Unused tax credit may be carried forward 10 years.

35.13 New Mexico state gross receipts tax deduction for clean energy facilities

GENERAL DESCRIPTION. New Mexico provides a gross receipts tax deduction in the of 100% of the receipts of the development and construction of a qualified generating facility. *N.M. Stat. §7-9-114; H.B. 261 and S.B. 201 (2010); H.B. 440 (2011).*

ELIGIBLE TAXPAYERS. The tax deduction is available to Taxpayer sellers of personal property or services to clean energy facilities. Owners of clean energy facilities must be certified by the NM Environment Department.

QUALIFYING ACTIVITY. Taxpayer must sell or lease personal property or provide services to owners of clean energy facilities. A clean energy facility is a solar thermal electric generating facility, a solar photovoltaic electric generating facility, a geothermal electric generating facility, a recycled energy project, or a new or re-powered coal-based electric generating facility and an associated coal gasification facility. Receipts from selling wind generation equipment or solar generation equipment to a government for the purpose of installing a wind or solar electric generation facility may be deducted from gross receipts.

INCENTIVE AMOUNTS. The tax deduction amount is 100% of eligible generation plant costs. Eligible generation plant costs are expenditures for the development and construction of a qualified generating facility, including permitting; site characterization and assessment; engineering; design; carbon dioxide capture, treatment, compression, transportation and sequestration; site and equipment acquisition; and fuel supply development used directly and exclusively in a qualified generating facility. Eligible generation plant costs do not include expenses for which a taxpayer claims a tax credit pursuant to Section 7-2-18.25, 7-2A-25 or 7-9G-2 NMSA 1978 or a tax deduction pursuant to Section 7-9-54.3 NMSA 1978.

INCENTIVE LIMITS. The maximum cumulative tax deduction amount is the tax credit for \$60 million.

INCENTIVE TIMEFRAME. The tax deduction period for purchases is 10 years and for leases is 25 years, from the year the development of the qualifying generating facility begins and expenditures are made. The tax deduction expires December 31, 2015.

36. New York State Tax Incentives for Renewable Energy and Energy Efficiency

36.01 New York state income tax credits for clean energy enterprises

GENERAL DESCRIPTION. New York provides income tax credits in various amounts for businesses in an Empire Zone primarily engaged in research, development or manufacturing of renewable energy or energy efficiency technologies or products. *N.Y. Gen. Mun. Law §957 et seq. N.Y. General Municipal Law § 119-EE; N.Y. Tax Law §14 et seq. ; New York Technical Service Bureau Memorandum TSB-M-06(1)C, 02/01/2006 ; New York Technical Service Bureau Memorandum TSB-M-09(5)C, 04/15/2009. Publication 26, A Guide to Business Tax and Personal Income Tax Credits within Empire Zones; TSB-M-06(1)C, (2)I, Qualifying Empire Zone Enterprise (QEZE) Tax Credits; TSB-M-09(5)C, (4)I, Legislative Changes to the Empire Zones Program; Publication 30, A Guide to Sales and Use Tax Incentives Within Empire Zones; Publication 718-EZ, Empire Zones Sales and Compensating Use Tax Refund Rates; TSB-M-02(5)S, Qualifying Empire Zone Enterprise (QEZE) Exemptions (Articles 28 and 29); TSB-M-05(16)S, Qualifying Empire Zone Enterprise (QEZE) Exemptions from Sales and Compensating Use Tax; TSB-M-09(12)S, Changes to Qualifying Empire Zone Enterprise (QEZE) Program (Articles 28 and 29) - Effective September 1, 2009; New York Technical Service Bureau Memorandum TSB-M-09(5)C, 04/15/2009.*

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer Empire Zone businesses primarily engaged in research, development or manufacturing of renewable energy or energy efficiency technologies or products. Empire Zones are geographically defined areas within New York State. Taxpayer located within the zone are eligible for Empire Zone program tax benefits. Taxpayer must meeting an annual employment test and a cost-benefit ratio test. Taxpayer may be an initial clean coal electric generating facility capable of capturing carbon dioxide for sequestration or capable of being retrofitted to capture carbon dioxide for sequestration.

QUALIFYING ACTIVITY. Taxpayer must be primarily engaged in research, development or manufacturing of renewable energy or energy efficiency technologies or products. Taxpayer must have 80% or more of its property in New York utilized for research, development or manufacturing of renewable energy or energy efficiency technologies or products. Qualifying purchases must be made in a municipality that has elected to provide the tax credit. Energy efficiency improvement is any renovation or retrofitting of a building to reduce energy consumption, such as window and door replacement, lighting, caulking, weatherstripping, air sealing, insulation, and heating and cooling system upgrades, and similar improvements, determined to be cost-effective pursuant to criteria established by the authority. Energy efficiency improvement does not include lighting measures or household appliances that are not permanently fixed to real property. Renewable energy system is an energy generating system for the generation of electric or thermal energy, to be used primarily at such property, by means of solar thermal, solar photovoltaic, wind, geothermal, anaerobic digester gas-to-electricity systems, fuel cell technologies, or other renewable energy technology approved by the authority not including the combustion or pyrolysis of solid waste.

INCENTIVE AMOUNTS. The tax credit amount varies based on the statutory formula which is the product of the benefit period factor, the employment increase factor, the zone allocation factor and the tax factor.

INCENTIVE TIMEFRAME. The tax benefit period is 10 years. Qualifying clean energy enterprises must be certified by June 30, 2010.

36.02 New York state property tax credit for clean energy enterprises

GENERAL DESCRIPTION. New York provides a property tax credit in various amounts for businesses in an Empire Zone primarily engaged in research, development or manufacturing of renewable energy or energy efficiency technologies or products. *N.Y. Gen. Mun. Law §957 et seq.; N.Y. Tax Law §14 et seq. ; New York Technical Service Bureau Memorandum TSB-M-06(1)C, 02/01/2006 ; New York Technical Service Bureau Memorandum TSB-M-09(5)C, 04/15/2009. Publication 26, A Guide to Business Tax and Personal Income Tax Credits within Empire Zones; TSB-M-06(1)C, (2)I, Qualifying Empire Zone Enterprise (QEZE) Tax Credits; TSB-M-09(5)C, (4)I, Legislative Changes to the Empire Zones Program; Publication 30, A Guide to Sales and Use Tax Incentives Within Empire Zones; Publication 718-EZ, Empire Zones Sales and Compensating Use Tax Refund Rates; TSB-M-02(5)S, Qualifying Empire Zone Enterprise (QEZE) Exemptions (Articles 28 and 29); TSB-M-05(16)S, Qualifying Empire Zone Enterprise (QEZE) Exemptions from Sales and Compensating Use Tax; TSB-M-09(12)S, Changes to Qualifying Empire Zone Enterprise (QEZE) Program (Articles 28 and 29) - Effective September 1, 2009; New York Technical Service Bureau Memorandum TSB-M-09(5)C, 04/15/2009.*

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer Empire Zone businesses primarily engaged in research, development or manufacturing of renewable energy or energy efficiency technologies or products. Empire Zones are geographically defined areas within New York State. Taxpayer located within the zone are eligible for Empire Zone program tax benefits. Taxpayer must meeting an annual employment test and a cost-benefit ratio test. Taxpayer may be an initial clean coal electric generating facility capable of capturing carbon dioxide for sequestration or capable of being retrofitted to capture carbon dioxide for sequestration.

QUALIFYING ACTIVITY. Taxpayer must be primarily engaged in research, development or manufacturing of renewable energy or energy efficiency technologies or products. Taxpayer must have 80% or more of its property in New York utilized for research, development or manufacturing of renewable energy or energy efficiency technologies or products. Qualifying purchases must be made in a municipality that has elected to provide the tax credit. Energy efficiency improvement is any renovation or retrofitting of a building to reduce energy consumption, such as window and door replacement, lighting, caulking, weatherstripping, air sealing, insulation, and heating and cooling system upgrades, and similar improvements, determined to be cost-effective pursuant to criteria established by the authority. Energy efficiency improvement does not include lighting measures or household appliances that are not permanently fixed to real property. Renewable energy system is an energy generating system for the generation of electric or thermal energy, to be used primarily at such property, by means of solar thermal, solar photovoltaic, wind, geothermal, anaerobic digester gas-to-electricity systems, fuel cell technologies, or other renewable energy technology approved by the authority not including the combustion or pyrolysis of solid waste.

INCENTIVE AMOUNTS. The tax credit amount varies based on the statutory formula which is the 75% of the product of the benefit period factor, the employment increase factor and the tax factor.

INCENTIVE LIMITS. A business enterprise certified by ESD on or after April 1, 2009 is eligible for a refund or credit of tax paid on qualifying purchases during the first month after certification by ESD, based on the date on the Certificate of Eligibility and on the EZRC issued to it by ESD. The business must pass the employment test for the tax year in which a refund or credit is claimed. However, a business certified by ESD on or after April 1, 2009, is eligible for a refund or credit of any taxes paid only if the locality in which the purchase is made has elected to provide the N.Y. Tax Law §1119(d) refund or credit. If the locality has not made this election, no refund or credit of any taxes (State, MCTD and local) paid is available.

INCENTIVE TIMEFRAME. The tax credit period is 10 years. Qualifying clean energy enterprises must be certified by June 30, 2010.

37. North Carolina State Tax Incentives for Renewable Energy and Energy Efficiency

37.01 North Carolina state income tax credit for renewable energy systems

GENERAL DESCRIPTION. North Carolina provides a corporate or personal income tax credit in the amount of 35% of the cost of renewable energy systems. *N.C. Gen. Stat. §105-129.15 et seq.; HB 512 (2009); North Carolina Directive CD-08-2, 09/15/2008 ; Guidelines for Determining the Tax Credit for Investing in Renewable Energy Property, NC Dept. of Revenue, 09/15/2008; N.C. Gen. Stat. §105-129.16H.; S388 (2010); H.B. 1829 (2010).*

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer corporations or individuals purchasing and installing or leasing eligible renewable energy property. The tax credit may be used against the franchise, gross premiums, corporate and personal income tax. Taxpayer may be a donor to nonprofit organization or unit of State or local government to enable the nonprofit or government unit to acquire renewable energy property.

QUALIFYING ACTIVITY. Taxpayer must purchase and install or lease renewable energy property. Renewable energy property is: Biomass equipment that uses renewable biomass resources for biofuel production of ethanol, methanol, and biodiesel; anaerobic biogas production of methane utilizing agricultural and animal waste or garbage; or commercial thermal or electrical generation. Biomass equipment includes related devices for converting, conditioning, and storing the liquid fuels, gas, and electricity produced with biomass equipment. Hydroelectric generators located at existing dams or in free flowing waterways, and related devices for water supply and control, and converting, conditioning, and storing the electricity generated. Solar energy equipment that uses solar radiation as a substitute for traditional energy for water heating, active space heating and cooling, passive heating, daylighting, generating electricity, distillation, desalination, detoxification, or the production of industrial or commercial process heat. Solar energy equipment includes related devices necessary for collecting, storing, exchanging, conditioning, or converting solar energy to other useful forms of energy. Wind equipment required to capture and convert wind energy into electricity or mechanical power, and related devices for converting, conditioning, and storing the electricity produced. Geothermal heat pumps that is a heat pump that uses the ground or groundwater as a thermal energy source to heat a structure or as a thermal energy sink to cool a structure or uses the internal heat of the earth as a substitute for traditional energy for water heating or active space heating or cooling.. Combined heat and power systems that uses the same energy source for the simultaneous or sequential generation of electrical power, mechanical shaft power, or both, in combination with the generation of steam or other forms of useful thermal energy (including heating and cooling applications), which produces at least 20% of its total useful energy in the form of thermal energy which is not used to produce electrical or mechanical power (or combination thereof), and at least 20% of its total useful energy in the form of electrical or mechanical power (or combination thereof), the energy efficiency percentage of which exceeds 60%.

INCENTIVE AMOUNTS. The tax credit amount is 35% of the cost of renewable energy property. The cost of renewable energy property includes the cost of the equipment and

associated design; construction costs; and installation costs less any discounts, rebates, advertising, installation-assistance credits, name-referral allowances or other similar reductions. The cost of renewable energy property is not reduced by grants made under the American Recovery and Reinvestment Tax Act of 2009. The tax credit amount for a taxpayer donor is the share of the credit is calculated by dividing the taxpayer's donation by the cost of the renewable energy property constructed, purchased, or leased by the nonprofit organization or government unit and placed in service during the taxable year and then multiplying this percentage by the amount of the credit the nonprofit organization or government unit could claim if it were subject to tax.

INCENTIVE LIMITS. The maximum tax credit amount is \$2.5 million per business installation. For nonbusiness purposes, the maximum tax credit amounts are: \$3,500 per dwelling unit for residential active space heating, combined active space and domestic water-heating systems, and passive space heating; \$1,400 per dwelling unit for residential solar water-heating systems, including solar pool-heating systems; \$10,500 per installation for photovoltaic systems (also known as PV systems or solar-electric systems), wind-energy systems or certain other renewable-energy systems for residential use; \$8,400 for geothermal heat pumps and geothermal equipment that uses geothermal energy for water heating or active space heating or cooling. The maximum annual tax credit allowed to be claimed is 50% of a taxpayer's state tax liability. Renewable energy property is placed in service for a business purpose if the useful energy generated by the property is offered for sale or is used on-site for a purpose other than providing energy to a residence.

INCENTIVE TIMEFRAME. The tax credit is taken over 5 years. For renewable energy property that serves a nonbusiness purpose, the tax credit must be taken for the taxable year in which the property is placed in service. The tax credit expires December 31, 2015. Taxpayer donor must take the tax credit in the taxable year in which the property is placed in service.

MISCELLANEOUS. Taxpayer who claims a tax credit under this section based on a donation to a nonprofit organization or a unit of State or local government is not allowed to deduct the donation as a charitable contribution.

38. North Dakota State Tax Incentives for Renewable Energy and Energy Efficiency

38.01 North Dakota state income tax credit for renewable energy systems

GENERAL DESCRIPTION. North Dakota provides a corporate or personal income tax credit over 5 years in the amount of 15% the cost of renewable energy systems. *N.D. Cent. Code §57-38-01.8; H.B. 1277 (2009).*

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer corporations and individuals installing renewable energy systems. Taxpayer may be the purchaser of a renewable energy system if ownership of a system is transferred at the time installation is complete and the system is fully operational. The amount of tax credit allowed with respect to a pass-through entity's investments must be determined at the pass-through entity level. The tax credit must be allocated to corporate partners, shareholders, or members in proportion to their respective interests in the pass-through entity. Taxpayer member of a group of corporations filing a consolidated tax return using the combined reporting method may claim the tax credit against the aggregate state tax liability of all of the corporations included in the consolidated return.

QUALIFYING ACTIVITY. Taxpayer must install renewable energy systems. Renewable energy systems include geothermal, solar, biomass or wind energy property. Geothermal energy property is a system or mechanism or series of mechanisms designed to provide heating or cooling or to produce electrical or mechanical power, or any combination of these, by a method which extracts or converts the energy naturally occurring beneath the earth's surface in rock structures, water, or steam. Solar or wind energy property is a system or mechanism or series of mechanisms designed to provide heating or cooling or to produce electrical or mechanical power, or any combination of these, or to store any of these, by a method which converts the natural energy of the sun or wind. Biomass energy property is a system using agricultural crops, wastes, or residues; wood or wood wastes or residues; animal wastes; landfill gas; or other biological sources to produce fuel or electricity.

INCENTIVE AMOUNTS. The tax credit amount is 15% of cost of equipment and installation of an eligible system, 3% per year, over 5 years.

INCENTIVE TIMEFRAME. The tax credit is taken over 5-year period. The tax credit expires December 31, 2014. Unused tax credit may generally be carried forward 5 years. Unused tax credit for geothermal, solar, biomass energy devices or wind energy devices installed after December 31, 2011, may be carried forward 10 years. Unused tax credit for wind energy devices installed before January 1, 2012, may be carried forward 20 years.

38.02 North Dakota state property tax abatement for geothermal, solar and wind property

GENERAL DESCRIPTION. North Dakota provides a state tax abatement in the amount of 100% of the tax on geothermal, solar and wind property. *N.D. Cent. Code §57-02-08(27)*.

ELIGIBLE TAXPAYERS. The tax abatement is available to Taxpayer owners of solar, wind or geothermal energy property.

QUALIFYING ACTIVITY. Taxpayer must own solar, wind or geothermal energy property. Solar or wind energy property is a system or mechanism or series of mechanisms designed to provide heating or cooling or to produce electrical or mechanical power, or any combination of these, or to store any of these, by a method which converts the natural energy of the sun or wind. Geothermal energy property is a system or mechanism or series of mechanisms designed to provide heating or cooling or to produce electrical or mechanical power, or any combination of these, by a method which extracts or converts the energy naturally occurring beneath the earth's surface in rock structures, water, or steam.

INCENTIVE AMOUNTS. The tax abatement amount is 100% of the property tax due.

INCENTIVE TIMEFRAME. The tax abatement period is 5 years.

38.08 North Dakota state personal income tax credit for geothermal energy device installation

GENERAL DESCRIPTION. North Dakota provides a personal income tax credit over 5 years in the amount of 3% the cost of geothermal energy device installation. *N.D. Cent. Code §57-38-01.8 ; H.B. 1124 (2011).*

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer individuals installing geothermal energy device installation.

QUALIFYING ACTIVITY. Taxpayer must install a geothermal energy device.

INCENTIVE AMOUNTS. The tax credit amount is 3% of cost of equipment and installation of an eligible system, 0.6% per year, over 5 years.

INCENTIVE TIMEFRAME. The tax credit is taken over 5-year period. The tax credit expires December 31, 2014.

39. Ohio State Tax Incentives for Renewable Energy and Energy Efficiency

39.03 Ohio state property tax exemption for solar, wind, and hydrothermal energy systems.

GENERAL DESCRIPTION. Ohio provides property tax exemption in the amount of 100% of the tax on solar and wind energy systems and hydrothermal energy systems. *Ohio Rev. Code Ann. §5709.53; Ohio Rev. Code Ann. §1551.20; Ohio Dept. of Dev., Emergency Regs. §§ 122:23-1-01 to -11.*

ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer owners of solar and wind energy systems and hydrothermal energy systems.

QUALIFYING ACTIVITY. Taxpayer must own a solar or wind energy system or hydrothermal energy system. A solar and wind energy system is a method used directly to provide space heating or cooling, hot water, industrial process heat or mechanical or electric power by the collection, conversion or storage of solar or wind energy, including, but not limited to, active or passive solar systems. A hydrothermal energy system is any method used directly to provide a heating or cooling effect by causing a thermal exchange with the earth utilizing any water source, including ground or surface water, by use of appropriate heat exchange equipment. Qualifying energy systems must be certified by the OH Director of Development. Qualifying energy systems include a substation connected to the generation equipment is included in the exemption if the substation is owned by the same person who owns the interconnected wind turbines, solar panels, or other generation equipment

INCENTIVE AMOUNTS. The tax exemption amount is 100% of the property tax due.

39.07 Ohio state property tax exemptions for qualified energy projects

GENERAL DESCRIPTION. Ohio provides a property tax exemption in the amount of 100% of tax on qualified energy projects, with an annual service payment in lieu of taxes of \$6,000-8,000. *Ohio Rev. Code Ann. §5727.75 et seq.; S232 (2010).*

ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer owners of real and personal property that is a qualified energy project. Taxpayer must be certified by the OH Power Sitting Board and the Director of Development.

QUALIFYING ACTIVITY. Taxpayer must own a qualified energy project certified by the Director of Development. A qualified energy project is a project to provide electric power through the construction, installation, and use of a renewable energy resource facility. Renewable energy resource is solar photovoltaic or solar thermal energy, wind energy, power produced by a hydroelectric facility, geothermal energy, fuel derived from solid wastes, through fractionation, biological decomposition, or other process that does not principally involve combustion, biomass energy, biologically derived methane gas, or energy derived from nontreated by-products of the pulping process or wood manufacturing process, including bark, wood chips, sawdust, and lignin in spent pulping liquors. Renewable energy resource includes, but is not limited to, any fuel cell used in the generation of electricity, including, but not limited to, a proton exchange membrane fuel cell, phosphoric acid fuel cell, molten carbonate fuel cell, or solid oxide fuel cell; wind turbine located in the state's territorial waters of Lake Erie; storage facility that will promote the better utilization of a renewable energy resource that primarily generates off peak; or distributed generation system used by a customer to generate electricity from any such energy. Qualified energy projects must maintain a 50-80% minimum ratio of Ohio domiciled full-time equivalent employees employed in the construction or installation of the project to total full-time equivalent employees employed in the construction or installation of the project. For projects with a nameplate capacity of more than 2 megawatts, taxpayers must establish a relationship with a member of the university system of Ohio or with a person offering an apprenticeship program registered with the U.S. Department of Labor or the Ohio Apprenticeship Council to educate and train individuals for careers in the wind or solar energy industry. For projects with a nameplate capacity of 5 megawatts or greater, taxpayers must also repair all roads, bridges, and culverts affected by construction as reasonably required to restore them to their precondition condition and equip fire and emergency responders with proper equipment.

INCENTIVE AMOUNTS. The tax exemption amount is 100% of the corporate franchise tax, sales tax and property tax due. There is an annual service payment in lieu of taxes of \$6,000-8,000, depending on the type of energy project and ration of Ohio-domiciled full-time equivalent employees employed.

INCENTIVE TIMEFRAME. Applications must be submitted by December 31, 2011. Construction or installation of the energy facility must begin on or after January 1, 2009, and before January 1, 2012. The project property must be placed in service before

January 1, 2013. Cogeneration technology is exempt from property tax if the property was placed in serviced before January 1, 2017.

40. Oklahoma State Tax Incentives for Renewable Energy and Energy Efficiency

40.01 Oklahoma state income tax credit for zero-emission electricity production

GENERAL DESCRIPTION. Oklahoma provides an income tax credit in the amount of \$0.0050/kWh of zero-emission electricity production. *Okla. Stat. 68 §2357.32A; H.B. 3024 (2010)*.

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer owners of zero-emission electricity production facilities. Taxpayer must be certified by the OK Tax Commission. Taxpayer must complete Tax Form 511CR, Schedule for Other Credits. Taxpayer may transfer the tax credit at any time during the 10 years following the year of qualification.

QUALIFYING ACTIVITY. Taxpayer must produce electric power using renewable energy resources from a zero-emission facility and sell the electricity to an unrelated party. Renewable energy resources include wind, moving water, sun, and geothermal energy. Qualifying zero-emission facilities must have a rated production capacity of 1 MW or greater. Qualifying zero-emission facility must be constructed and operated in a manner that results in no pollution or emissions that are or may be harmful to the environment, as determined by the OK Department of Environmental Quality.

INCENTIVE AMOUNTS. The tax credit amount is \$0.0050/kWh for 10 years.

INCENTIVE TIMEFRAME. The tax credit period is 10 years. Unused tax credit may be carried forward 10 years. The tax credit may only be used for tax years starting in 2012.

41. Oregon State Tax Incentives for Renewable Energy and Energy Efficiency

41.01 Oregon state business tax credit for energy improvements

GENERAL DESCRIPTION. Oregon provides a business tax credit over 5 years in the amount of 35-50% the cost of energy improvements. *Or. Rev. Stat. §315.354; OAR 330-090-0105 to 330-090-0150 (2010); H.B. 3680 (2010).*

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer businesses placing energy improvements in service. Taxpayer may transfer a tax credit to a pass-through partner in return for a lump-sum cash payment (the net present value of the tax credit, using a U.S. Treasury note to determine the real rate of return, adjusted for inflation based on the Consumer Price Index) upon completion of the project. Non-profit organizations, schools, governmental agencies, tribes, and other public entities and businesses without tax liability may transfer the tax credit for an eligible project to a partner with a tax liability. Taxpayer may be a homebuilder who install renewable energy systems on the homes they construct.

QUALIFYING ACTIVITY. Taxpayer must invest in energy improvements. Energy improvements include energy conservation, recycling, renewable energy resources, renewable energy storage devices, high efficiency combined heat and power facilities, high-performance homes, and less-polluting transportation fuels, projects that use solar, wind, hydro, geothermal, biomass or fuel cells (renewable fuels only) to produce energy, displace energy, or reclaim energy from waste, weatherization projects and energy efficiency retrofit projects must be 10% more energy efficient than the existing installation; lighting retrofits must be 25% more efficient than existing lighting, and Sustainable buildings meeting established standards set by the U.S. Green Building Council's LEED silver certification. Qualifying new building projects must have all measures reduce energy use by at least 10% compared to a similar building that meets the minimum requirements of the state energy code. Qualifying energy improvements must be certified by the OR Department of Energy. Qualifying high efficiency combined heat and power facilities are a renewable energy resource facility designed to generate electrical power and thermal energy from a single fuel source with a fuel-chargeable-to-heat rate yielding annual average energy savings of 20%. Qualifying high-performance homes must be certified through the Northwest Energy Star Homes Program, and meet additional requirements outlined in the technical requirements.

INCENTIVE AMOUNTS. The tax credit amount is 35% of the cost of the energy improvements, taken over 5 years. The tax credit amount is 10% in each of the first 2 tax years in which the tax credit is claimed and 5% in each of the succeeding 3 years. The cost of the energy improvements includes those directly related to the project, including equipment cost, engineering and design fees, materials, supplies and installation costs. Taxpayers with cost of the energy improvements of \$20,000 or less may take the tax credit in 1 year. Qualifying wind facilities with an installed capacity of more than 10 megawatts, for which preliminary certification is issued on or after January 1, 2010, are eligible for a tax credit equal to 5% of eligible costs.

INCENTIVE LIMITS. The maximum tax credit amount is generally \$20 million. The maximum tax credit amount is \$10 million for renewable energy and high efficiency

combined heat and power. The maximum tax credit amounts for a homebuilder are \$9,000 per single-family home, or \$12,000 if the system is installed on a certified high-performance home. The statewide maximum annual tax credit amount is \$300 million for 2011 and \$150 million for 2012. The statewide maximum tax credit amount for qualifying large-scale wind farms is \$3.5 million for 2010, \$2.5 million for 2011, and \$1.5 million for 2012.

INCENTIVE TIMEFRAME. The tax credit is taken over 5 years. The tax credit is taken over 6 years for qualifying projects that cost more than \$10 million. The tax credit expires on December 31, 2013. Unused tax credit may be carried forward 8 years. Tax credits on qualifying large-scale wind farms will expire December 31, 2013.

41.02 Oregon state income tax credit for renewable energy equipment manufacturing facility

GENERAL DESCRIPTION. Oregon provides an income tax credit over 5 years in the amount of 50% of the cost renewable energy equipment manufacturing facility. *Or. Rev. Stat. §315.354; OAR 330-090-0105 to 330-090-0150 (2010).*

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayers constructing new or expanding existing facilities for the manufacture renewable energy systems. Taxpayers must be certified by the OR Department of Energy. Taxpayer may transfer a tax credit to a pass-through partner in return for a lump-sum cash payment (the net present value of the tax credit, using a U.S. Treasury note to determine the real rate of return, adjusted for inflation based on the Consumer Price Index) upon completion of the project.

QUALIFYING ACTIVITY. Taxpayer must construct new or expand renewable energy systems manufacturing facility. Renewable energy systems include systems that harness energy from wood waste or other wastes from farm and forest lands, non-petroleum plant or animal based biomass, the sun, wind, water, or geothermal resources. Renewable energy systems manufacturing facilities must be used solely to manufacture equipment, machinery or other products that will be used exclusively for renewable energy resource facilities. Renewable energy systems manufacturing facilities include electric vehicle manufacturing facilities.

INCENTIVE AMOUNTS. The tax credit amount is 50% of the costs of the renewable energy systems manufacturing facility, over 5 years, 10% each year. The costs of the renewable energy systems manufacturing facility include the costs of the building, excavation, machinery and equipment which is used primarily to manufacture renewable energy systems. The costs for the renewable energy systems manufacturing facility include any land purchase costs, structures, buildings, installations, excavations, machinery, equipment or devices, or any addition, reconstruction or improvements to land or existing structures, buildings, installations, excavations, machinery, equipment or devices, necessarily acquired, constructed or installed by a person in connection with the conduct of a trade or business, that is used to manufacture the equipment, machinery or other products that will be used exclusively for renewable energy resource facilities.

INCENTIVE LIMITS. The maximum tax credit amount is \$20 million. The statewide maximum annual tax credit amount is \$200 million.

INCENTIVE TIMEFRAME. The tax credit is taken over 5 years. The tax credit expires on December 31, 2013. Unused tax credit may be carried forward 3 years.

41.03 Oregon state property tax exemption for renewable energy systems

GENERAL DESCRIPTION. Oregon provides a property tax exemption in the amount of 100% of the tax on renewable energy systems. *Or. Rev. Stat. §307.175*.

ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer owners of renewable energy system property. Taxpayers whose principal business activity is directly or indirectly the production, transportation or distribution of energy are not eligible unless the system is a net metering facility.

QUALIFYING ACTIVITY. Taxpayer must own of renewable energy system property. Renewable energy system property includes solar, geothermal, wind, water, fuel cell or methane gas systems for the purpose of heating, cooling or generating electricity.

INCENTIVE AMOUNTS. The tax exemption amount is 100% of the property tax due.

INCENTIVE TIMEFRAME. The tax exemption expires June 30, 2012.

41.07 Oregon state personal income tax credit for residential renewable energy property.

GENERAL DESCRIPTION. Oregon provides a personal income tax credit in amounts described below for residential renewable energy property. *Or. Rev. Stat. §469.185 et seq.; OAR 330-070-0010 to 330-070-0097; Or. Rev. Stat. § 315.354.*

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer individuals purchasing residential renewable energy property.

QUALIFYING ACTIVITY. Taxpayer must purchase residential renewable energy property. Residential renewable energy property includes 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. Residential renewable energy property includes vehicles that run on alternative type of fuels, such as electricity, natural gas, methanol, propane and hydrogen, that are registered in the state of Oregon to operate on public roadways.

INCENTIVE AMOUNTS. The tax credit amounts are described below. For photovoltaic systems and fuel cells, the tax credit amount is \$3.00 per peak watt. For premium efficiency biomass combustion devices, the tax credit amount is 25% of the cost. For solar space and water heating systems, and wind-powered mechanical systems, the tax credit amount is \$0.60 per kWh saved during the first year. For closed-loop geothermal systems for space or water heating, the tax credit amount range from \$300 to \$900 per system. For wind turbine systems that produce electricity, the tax credit amount is the lesser of \$2.00 per kWh produced during its first year, or \$6,000 per system. For appliances recognized as premium efficiency by the OR Department of Energy, the tax credit amount is lesser of \$0.40 per kWh saved in the first year or 25% of the net cost of the appliance. For performance-tested duct systems, the tax credit amount is 25% of the cost. For air-source heat pump systems, the tax credit amount range from \$300 to \$500 per system. For condensing furnaces and boilers, the tax credit amounts are \$350 and \$225, respectively. If the heat pumps and furnaces are connected to a performance-tested duct system, they are eligible for an additional \$150 tax credit. For home charging or alternative fueling system, the tax credit amount varies. For alternative fuel vehicles the tax credit amount is 25% of the cost.

INCENTIVE LIMITS. The maximum tax credit allowed to be claimed is \$1,500 or the taxpayer's tax liability, whichever is less. The maximum tax credit amounts are: \$6,000, up to 50% of the installed cost for photovoltaic systems and fuel cells; \$300 for premium efficiency biomass combustion devices; \$1,500 for solar space and water heating systems, and wind-powered mechanical systems; \$900 for closed-loop geothermal systems for space or water heating systems; \$6,000 for wind turbine systems that produce electricity systems; the lesser of \$0.40/kW saved in the first year or 25% of the net cost of the appliance for appliances recognized as premium efficiency by the OR Department of Energy; \$250 for performance-tested duct systems; \$500 for qualifying air-source heat pump systems; \$350 for qualifying condensing furnaces; \$225 for qualifying condensing boilers; \$750 for an alternative fuel vehicle; and \$750 for an alternative fuel vehicle

charging or fueling system. Qualifying heat pumps and furnaces connected to a performance-tested duct system are eligible for an additional \$150 tax credit.

INCENTIVE TIMEFRAME. The tax credit expires on December 31, 2015. Unused tax credit may be carried forward 5 years.

42. Pennsylvania State Tax Incentives for Renewable Energy and Energy Efficiency

42.01 Pennsylvania state income tax credit for alternative energy production

GENERAL DESCRIPTION. Pennsylvania provides an income tax credit in the amount of 15% of the costs of alternative energy production projects. *73 Penn. Stat. §1649.701 et seq. Answers to Commonly Asked Questions Regarding the Alternative Energy Production (AEP) Tax Credit” – PA DOR.*

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayers developing or constructing alternative energy production projects. The tax credit may be used against personal state income taxes, corporate state income taxes, or the capital-stock & foreign state franchise tax. Taxpayer must be certified by the PA Department of Environmental Protection. Taxpayer awardees may sell or assign tax credit to another party with approval of the PA Department of Environmental Protection if no claim for the tax credit is made within 1 year of application approval. Any returns filed before the end of the 1-year period must claim as much of the tax credit as possible. Taxpayer purchaser or assignee must claim the tax credit immediately. Pass-through entities are permitted to transfer all or part of tax credit to Taxpayer shareholders, members, or partners in proportion to their share of the distributed income. Transferred credits must be redeemed during the year they are transferred. Any unused credit passed through to an individual is lost; it cannot be carried over, carried back, sold, assigned or passed through to any other entity or individual.

QUALIFYING ACTIVITY. Taxpayer must develop or construct an alternative energy production project. An alternative energy production project includes facilities that produce energy from wind, solar, biomass, geothermal, waste coal, waste energy, large-scale and low-impact hydropower, biologically derived methane gas, fuel cells and alternative fuels as defined under the Alternative Energy Portfolio Standard. Alternative energy production projects include facilities that manufacture or produce products which provide alternative energy or alternative fuels, improve energy efficiency or conserve energy, research and develop technology to provide alternative energy sources or alternative fuels, develop or enhance the transportation of alternative fuels via rail, develop new more efficient locomotives, or enhance the efficiency of existing locomotives. Qualifying alternative energy production projects must have an expected useful life of 4 years or longer.

INCENTIVE AMOUNTS. The tax credit amount is 15% of the cost of the alternative energy production project. The cost of the alternative energy production projects include all development, equipment and construction costs paid for qualifying alternative energy projects. The cost of the alternative energy production projects does not include costs paid for by any federal, state, and local government grant or subsidy.

INCENTIVE LIMITS. The maximum annual tax credit amount is \$1 million. The maximum cumulative tax credit amount varies. The maximum annual tax credit allowed to be claimed is 50% of their qualifying tax liability for that year. The statewide maximum annual tax credit amounts are: \$5 million for 2009 - 2012; \$8 million for 2013; \$10 million for 2014 - 2015; and \$2 million for 2016. The tax credit may not be applied to a joint tax return. The assigned tax credits may not be carried forward, carried back,

sold, assigned or refunded. If statewide maximum annual tax credit amounts are exceeded, each Taxpayer's credit will be pro-rated.

INCENTIVE TIMEFRAME. Taxpayer must apply for the tax credit by September 15 of the following year. The tax credit expires December 31, 2016. Unused tax credit may be carried forward 5 years.

44. Rhode Island State Tax Incentives for Renewable Energy and Energy Efficiency

44.01 Rhode Island state sales tax exemption for renewable energy systems and equipment

GENERAL DESCRIPTION. Rhode Island provides a sales tax exemption in the amount of 100% of the tax on renewable energy systems and equipment. *R.I. Gen. Laws §44-18-30(57)*.

ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer purchasers of renewable energy systems and equipment.

QUALIFYING ACTIVITY. Taxpayer must purchase of renewable energy systems and equipment. Renewable energy systems and equipment include solar photovoltaic modules or panels, or any module or panel that generates electricity from light; solar thermal collectors, including those manufactured with flat glass plates, extruded plastic, sheet metal, and/or evacuated tubes; geothermal heat pumps, including both water-to-water and water-to-air type pumps; wind turbines; towers used to mount wind turbines if specified by or sold by a wind turbine manufacturer; DC to AC inverters that interconnect with utility power lines; manufactured mounting racks and ballast pans for solar collector, module or panel installation.

INCENTIVE AMOUNTS. The tax exemption amount is 100% of the sales tax due.

44.02 Rhode Island state property tax exemption for renewable-energy systems

GENERAL DESCRIPTION. Rhode Island provides a property tax exemption in the amount of 100% of the tax on renewable-energy systems. *R.I. Gen. Laws §44-3-21*.

ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer owners of renewable energy system property.

QUALIFYING ACTIVITY. Taxpayer must own renewable energy system property.

INCENTIVE AMOUNTS. The tax exemption amount is 100% of the property tax due.

44.04 Rhode Island state income tax credit for residential renewable energy systems

GENERAL DESCRIPTION. Rhode Island provides an income tax credit in the amount of 25% of the cost of residential renewable energy systems. *R.I. Gen. Laws §44-57-1, et seq.; H.B. 6332 (2010); [Repealed]*.

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer owners, renters, contract buyers or speculative sellers of residences incorporating renewable energy systems and Taxpayer purchasers of residential renewable energy systems. Taxpayer must be certified by the RI Office of Energy Resources. Taxpayer members or partners of pass-through entities divide the tax credit in the same manner as income.

QUALIFYING ACTIVITY. Taxpayer must own, rent, or sell residences incorporating renewable energy systems or purchase residential renewable energy systems. Renewable energy systems include photovoltaic systems (on-grid and off-grid), solar hot-water systems, active solar-heating systems, wind-energy systems and geothermal-energy systems. Qualifying photovoltaic systems must have a minimum module size of 24 square feet, and must either be connected to the grid or to a battery-storage system. Qualifying solar domestic hot water system is a configuration of solar collectors, pump, heat exchanger, and storage tank designed to heat water. Solar domestic hot water system include forced circulation, integral collector storage, thermosyphon, and self-pumping. Solar domestic hot water system is considered a new system if changes occur in type or size of collectors, heat exchanger type or effectiveness, size of storage tank, or system type. Solar domestic hot water systems must have a minimum collector area of 34 square feet and must include a storage tank that holds at least 80 gallons. Qualifying active solar-heating systems must have a minimum collector area of 125 square feet, and must include a system for storing and/or distributing heat to the living area of a house. Qualifying wind energy system is a system that produces electricity through the use of wind generators or wind turbines. The electricity produced must be used directly, as in water pumping applications, or stored in batteries for household usage. Wind energy systems can be used alone or used as part of a hybrid system, in which their output is combined with photovoltaics and/or a fossil fuel generator. Wind energy systems must have a rotor diameter of at least 44 inches and a minimum factory-rated output of at least 250 watts at 28 miles per hour. Qualifying geothermal system is a system that produces and stores energy to heat buildings, cool buildings or produces hot water. Geothermal systems must have either a minimum coefficient of performance of 3.4, or an efficiency ratio of 16 or greater. Geothermal systems must have a commissioning sign-off by the manufacturer or distributor of the equipment to verify the proper installation and performance of the system. Geothermal systems must meet the following standards: ARI/ASHRAE/ISO-13256-1 for water-to-air geothermal systems; ARI/ASHRAE/ISO-13256-2 for water-to-water geothermal systems; ARI/ASHRAE/ISO-13256 GWHP for groundwater heat pumps; ARI/ASHRAE/ISO-13256 GLHP for closed-loop heat pumps. Qualifying renewable energy systems do not include passive solar space-heating systems, passive solar hot-water systems, sunspaces, solar greenhouses, photovoltaic and wind systems on boats or recreational vehicles, solar collectors for pools, existing renewable-energy systems, used renewable-energy equipment, and repairs and replacements of existing renewable-energy systems.

INCENTIVE AMOUNTS. The tax credit amount is 25% of the cost of the renewable energy system.

INCENTIVE LIMITS. The maximum annual tax credit allowed to be claimed is 100% of the excess of the tax due above the minimum tax due. The maximum tax credit amounts are the tax credit amount for \$15,000 of PV, wind-energy and active solar-heating systems and \$7,000 of solar hot-water and geothermal systems;

INCENTIVE TIMEFRAME. The tax credit may be claimed in the tax year in which the qualifying renewable energy system is placed into service or the tax year in which the qualifying renewable energy system purchased, if the system is placed in service by April 1 of the following tax year. Unused tax credit may not be carried over. The tax credit was repealed in 2010.

45. South Carolina State Tax Incentives for Renewable Energy and Energy Efficiency

45.10 South Carolina state corporate income tax credit for plant and equipment for renewable energy manufacturing operations

GENERAL DESCRIPTION. South Carolina provides a corporate income tax credit in the amount of 10% of the qualifying investments in plant and equipment for renewable energy manufacturing operations. *S.C. Code Ann. §12-6-3588; H.B. 4478 (2010).*

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer corporations placing in service plant and equipment for renewable energy manufacturing operations. Taxpayers must be approved by the SC Energy Office.

QUALIFYING ACTIVITY. Taxpayer must purchase, construct and install and place in service plant and equipment for renewable energy manufacturing operations. Renewable energy manufacturing operations are manufacturers of systems and components that are used or useful in manufacturing renewable energy equipment for the generation, storage, testing and research and development, and transmission or distribution of electricity from renewable sources, including specialized packaging for the renewable energy equipment manufactured at the facility. Renewable energy systems are solar, wind, geothermal, or other renewable energy uses. Renewable energy manufacturing operation must invest at least \$500 million in new qualifying plant and equipment. Renewable energy manufacturing operation must create 1.5 full-time jobs that pay at least 125% of the state average annual median wage for every \$500,000 of capital investment. Manufacturing is fabricating, producing, or manufacturing raw or unprepared materials into usable products, imparting new forms, qualities, properties, and combinations. Manufacturing does not include generating electricity for off-site consumption.

INCENTIVE AMOUNTS. The tax credit amount is 25% of the cost of purchasing, constructing, or installing property for distributing or dispensing renewable fuel.

INCENTIVE LIMITS. The annual maximum tax credit amount is \$500,000. The aggregate maximum tax credit amount is \$5 million.

INCENTIVE TIMEFRAME. Unused tax credits may be carried forward 15 years. The tax credit expires December 31, 2015. The tax credit is not refundable.

46. South Dakota State Tax Incentives for Renewable Energy and Energy Efficiency

46.01 South Dakota state property tax assessment credit for renewable energy systems

GENERAL DESCRIPTION. South Dakota provides a property tax assessment credit in the amount of 100% of the value of residential renewable energy systems and 50% of the value of commercial renewable energy systems. *S.D. Codified Laws §10-6-35.8 et seq.*

ELIGIBLE TAXPAYERS. The tax assessment is available to Taxpayer owners of renewable energy system property. Taxpayer may be the a purchaser of a newly constructed home. Taxpayer must be certified by the county director of equalization of the county in which the property is located and the SD Department of Revenue and Regulation.

QUALIFYING ACTIVITY. Taxpayer must own renewable energy systems on residential or commercial property. Renewable resource energy system is the equipment which produces energy from a renewable resource for on-site consumption, including a passive solar energy system. Renewable resources is a relatively non-depleting source of energy, including, but not limited to the sun, wind, and geothermal and biomass sources. Qualifying renewable energy systems does not include systems that produce energy for resale unless the system is a biomass renewable resource energy system using an anaerobic digester.

INCENTIVE AMOUNTS. For residential systems, the tax assessment credit is 100% of property tax due or the actual installed cost of the system. For commercial systems, the assessment credit is 50% of the installed cost of the system.

INCENTIVE TIMEFRAME. The Taxpayer must apply for the tax exemption by December 10th of the first year of the tax credit or the year of an ownership transfer or change in use. The tax exemption period is 6 years, with 25% reduction in the tax exemption amount in each of the last 3 years.

46.05 South Dakota state property tax exemption for small renewable energy facilities

GENERAL DESCRIPTION. South Dakota provides a property tax exemption in the amount of 70% of the project costs of small renewable energy facilities. *S.B. 58 (2010)*.

ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer owners of small renewable energy facilities.

QUALIFYING ACTIVITY. Taxpayer must own renewable energy facilities that generate up to 5 megawatts of nameplate capacity. A renewable energy facility is a facility that uses a renewable resource as its energy source for the purpose of producing electricity or energy. A renewable resource is a resource that generates electricity or energy from facilities using one or more of the following sources: (1) Wind that uses wind as the source of energy to produce electricity; (2) Solar that uses the sun as the source of energy to produce electricity or energy; (3) Hydroelectric that uses water as the source of energy to produce electricity; (4) Hydrogen that is generated from one of the sources listed in this section; (5) Biomass that uses agricultural crops and agricultural wastes and residues, wood and wood wastes and residues, animal and other degradable organic wastes, municipal solid waste, or landfill gas as the fuel to produce electricity; or (6) Geothermal that uses energy contained in heat that continuously flows outward from the earth as the source of energy to produce electricity or energy.

INCENTIVE AMOUNTS. The tax exemption amount is the greater of the first \$50,000 in project costs or 70% of all project costs.

INCENTIVE TIMEFRAME. The tax exemption period for qualifying geothermal renewable energy facilities that produce energy, but not electricity, this exemption is 4 years for residential geothermal renewable energy facilities and 3 years for commercial geothermal renewable energy facilities.

46.07 South Dakota state excise tax refunds for construction of renewable resource electric production facilities

GENERAL DESCRIPTION. South Dakota provides a sales and use tax and excise tax refund in the amount 100% of the excise taxes paid by the contractor on construction of renewable resource electric production facilities. *S.D. Codified Laws §§ 49-34A-80 to -92.*

ELIGIBLE TAXPAYERS. The tax refund is available to Taxpayer contractor constructing renewable resource electric production facilities.

QUALIFYING ACTIVITY. Taxpayer must construct renewable resource electric production facilities. A renewable resource electric production facility is a small commercial power facility that generates electricity using renewable resources, such as solar energy, wind, geothermal energy, or biomass materials. The qualifying facility must produce 10 megawatts or less of electricity as measured by nameplate rating. The qualifying facility must be located within one county and owned by a natural person, corporation, nonprofit or for profit business organization, or tribal council (if the facility is located outside the boundaries of the reservation), irrigation district, drainage district, or other political subdivision or agency of the state authorized by statute to carry on the business of developing, transmitting, utilizing, or distributing electric power.

INCENTIVE AMOUNTS. The tax refund amount is 100% of the taxes paid on construction for projects.

INCENTIVE TIMEFRAME. The tax refund expires December 31, 2012.

47. Tennessee State Tax Incentives for Renewable Energy and Energy Efficiency

47.01 Tennessee state sales and use tax credit for manufacturers of clean energy technologies

GENERAL DESCRIPTION. Tennessee provides a sales and use tax credit in the amount of 99.5% of tax on manufacturers of clean energy technologies. *Tenn. Code Ann. §67-6-232; S.B. 2300.*

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer manufacturers of clean energy technologies purchasing property. Taxpayer must make a minimum \$100 million investment, create and maintain 50 full-time jobs for 10 years that pay 150% above the Tennessee occupational average wage. Taxpayer must be certified by the TN Department of Revenue and the TN Department of Economic and Community Development. Taxpayer may not be a business engaged in the development and construction of coal fired power plants.

QUALIFYING ACTIVITY. Taxpayer must manufacture clean energy technologies and purchase qualifying property. Clean energy technology is technology resulting in energy efficiency, technology used to generate energy from biomass, geothermal, hydrogen, hydropower, landfill gas, nuclear, solar, and wind sources, and technology that is designed to result in the development of advanced coal through carbon capture and sequestration or otherwise any other manner that significantly reduces CO2 emissions per unit of energy generated. Qualifying property includes building materials, machinery, and equipment used in the qualifying facility and purchased (or leased) during the investment period. Taxpayer must establishing qualifying clean energy technology facilities meeting a minimum investment. Qualifying minimum investment is \$100 million or more in a building or buildings, either newly constructed, expanded, or remodeled along with the creation of not less than 50 full-time employee positions created primarily for the support of the operations at the qualifying facility during the investment period with average wages or salaries equal to or greater than 150% of Tennessee's average occupational wage. Qualifying tangible personal property does not include any payments with respect to leases of qualifying tangible personal property that extend beyond the investment period. Qualifying tangible personal property does not include any materials, machinery, or equipment that replaces tangible personal property that previously generated tax credit.

INCENTIVE AMOUNTS. The tax credit amount is 99.5% of sales or use taxes paid.

INCENTIVE LIMITS. The maximum tax credit allowed to be claimed is the excess of the tax due and the minimum state sales or use taxes due on the rate of 0.5%.

INCENTIVE TIMEFRAME. The maximum investment period is 8 years.

49. Utah State Tax Incentives for Renewable Energy and Energy Efficiency

49.01 Utah state income tax credit for renewable energy systems

GENERAL DESCRIPTION. Utah provides an income tax credit in amounts ranging from 10-25% the cost of renewable energy systems. *Utah Code Ann. §59-7-614; UAC R638-2.*

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayers installing residential or commercial renewable energy systems. Taxpayers must be certified by the UT State Energy Program. Taxpayer may be a non-business entity that leases a residential renewable energy system and may use the tax credit for no more than 7 years from the initiation of the lease. Taxpayer may be a business entity that leases a commercial renewable energy system. Taxpayer may be a builder for the installation of a renewable energy system on a residential unit.

QUALIFYING ACTIVITY. Taxpayer must install a residential or commercial renewable energy system. Residential renewable energy systems include active and passive solar thermal systems; solar electric systems; wind turbines; hydro (water) energy; geothermal heat pumps; direct-use geothermal; and biomass. Commercial renewable energy system is any active solar, passive solar, geothermal electricity, direct-use geothermal, geothermal heat-pump system, wind, hydro-energy, or biomass system used to supply energy to a commercial unit or as a commercial enterprise. Commercial renewable energy system may be used to supply energy to a commercial unit or as a commercial enterprise selling the energy. Commercial renewable energy systems include active and passive solar thermal systems; solar electric systems; wind turbines; hydro (water) energy; geothermal heat pumps; direct-use geothermal; and geothermal electricity; and biomass systems. Renewable energy system includes biomass systems that produce either fuel or electricity. Renewable energy system does not include biomass heating systems. Renewable energy system does not include wind, geothermal electricity, or biomass equipment capable of producing a total of 660 or more kilowatts of electricity.

INCENTIVE AMOUNTS. The tax credit amount for residential systems is 25% of the reasonable installed system costs. The tax credit amount for commercial systems is 10% of the reasonable installed system costs with total capacity of less than 660 kW.

INCENTIVE LIMITS. The maximum tax credit amount for residential systems is \$2,000 per residential unit. The maximum tax credit amount for commercial systems is \$50,000 per commercial unit.

INCENTIVE TIMEFRAME. The tax credit may expire October 1, 2012, upon a legislatively mandated review. Unused tax credit may be carried forward 4 years. A Taxpayer non-business entity that leases a residential system may use the tax credit for no more than 7 years from the initiation of the lease.

49.02 Utah state income tax credit for commercial renewable energy production

GENERAL DESCRIPTION. Utah provides an income tax credit in amount of \$0.0035 per kWh of electricity produced and sold from commercial renewable energy systems. *Utah Code Ann. §59-7-614; UAC R638-2.*

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayers producing and selling electricity from a commercial renewable energy system. Taxpayers must be certified by the UT State Energy Program. Taxpayer may be a business entity that leases a commercial renewable energy system.

QUALIFYING ACTIVITY. Taxpayer must produce and sell electricity from a commercial renewable energy systems. Commercial renewable energy system is wind, geothermal electricity, or biomass equipment capable of producing a total of 660 or more kilowatts of electricity. Renewable energy system includes biomass systems that produce either fuel or electricity. Renewable energy system does not include biomass heating systems. Commercial renewable energy system may be used to supply energy to a commercial unit or as a commercial enterprise selling the energy.

INCENTIVE AMOUNTS. The tax credit amount for commercial wind, geothermal electric, and biomass systems with a total capacity of 660 kW or greater is \$0.0035/kWh, for 4 years.

INCENTIVE TIMEFRAME. The tax credit may expire October 1, 2012, upon a legislatively mandated review. The tax credit period is 4 years. The tax credit is refundable.

49.03 Utah state sales tax exemption for renewable resource electricity generation equipment

GENERAL DESCRIPTION. Utah provides a sales tax exemption in the amount of 100% of the tax on renewable resource electricity generation equipment. *Utah Code Ann. §59-12-104(55)*.

ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer owners of equipment used to generate electricity from renewable resources.

QUALIFYING ACTIVITY. Taxpayer must purchase or lease equipment used to generate electricity from renewable resources. Renewable resources include wind, solar, biomass, landfill gas, anaerobic digestion, hydroelectricity and geothermal energy. Qualifying equipment includes wind turbines, generating equipment, control and monitoring systems, power lines, substation equipment, lighting, fencing, pipes, and other equipment for locating power lines and poles. Qualifying equipment must use renewable energy to produce electricity and must have a minimum capacity of 20 kW. Qualifying equipment includes equipment that expands an existing facility by 1 or more megawatt (MW). Qualifying equipment have an economic life of 5 or more years. Qualifying equipment does not include tools and other equipment used in construction of a new facility, contracted services required for construction, and routine maintenance activities and equipment utilized or acquired after the project is operational. Qualifying leases must be made for at least 7 years.

INCENTIVE AMOUNTS. The tax exemption amount is 100% of the sales tax due.

INCENTIVE TIMEFRAME. The tax exemption expires June 30, 2019.

49.07 Utah state sales tax exemption for renewable resource electricity

GENERAL DESCRIPTION. Utah provides a sales tax exemption in the amount of 100% of the tax on renewable resource electricity. *Utah Code Ann. §§ 10-1-304; Utah Code Ann. §59-12-104(47)*.

ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer producers and sellers of electricity from renewable resources.

QUALIFYING ACTIVITY. Taxpayer must purchase and sell electricity from renewable resources. Renewable resources include wind, solar, biomass, landfill gas, anaerobic digestion, hydroelectricity and geothermal energy.

INCENTIVE AMOUNTS. The tax exemption amount is 100% of the sales tax due.

INCENTIVE TIMEFRAME. The tax exemption expires June 30, 2019.

50. Vermont State Tax Incentives for Renewable Energy and Energy Efficiency

50.02 Vermont state property tax financing for clean energy assessment districts

GENERAL DESCRIPTION. Vermont provides a property tax financing option for municipalities for clean energy assessment districts. *H.B. 446 (2009)*.

ELIGIBLE TAXPAYERS. The tax financing is available to Taxpayer owners of clean energy property. Taxpayer must conduct an energy audit to quantify project costs, energy savings and carbon impacts.

QUALIFYING ACTIVITY. Taxpayer must own and finance clean energy property. Clean energy property are projects incorporating energy efficiency and renewable-energy technologies. Renewable-energy technologies include solar water heating, photovoltaics (PV), landfill gas, wind, biomass, hydroelectric, geothermal-electric, anaerobic digestion and fuel cells using renewable fuels. Qualifying energy-efficiency projects must be certified by Efficiency Vermont.

INCENTIVE AMOUNTS. The tax financing amount varies by local jurisdiction.

51. Virginia State Tax Incentives for Renewable Energy and Energy Efficiency

51.09 Virginia state property tax assessment for renewable energy manufacturing

GENERAL DESCRIPTION. Virginia provides a property tax assessment in various amounts on real property improvements and tangible personal property used for manufacturing products from renewable energy. *Va. Code Ann. §58.1-3221.4; Va. Code Ann. §56-576; S.B. 656 (2010).*

ELIGIBLE TAXPAYERS. The tax assessment is available to Taxpayer manufacturers using renewable energy.

QUALIFYING ACTIVITY. Taxpayer must own manufacturing property using renewable energy. Renewable energy is energy derived from sunlight, wind, falling water, biomass, sustainable or otherwise, (the definitions of which shall be liberally construed), energy from waste, municipal solid waste, wave motion, tides, geothermal power, and the proportion of the thermal or electric energy from a facility that results from the co-firing of biomass. Renewable energy does not include energy derived from coal, oil, natural gas or nuclear power.

INCENTIVE AMOUNTS. The tax assessment amount of property tax due varies by local jurisdiction.

51.10 Virginia state income tax credit for green job creation

GENERAL DESCRIPTION. Virginia provides an income tax credit in the amount of \$500 for each new green job created. *Va. Code Ann. §58.1-439.12:03; S.B. 623 (2010).*

ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer employers in green job industries.

QUALIFYING ACTIVITY. Taxpayer must create a green job with an annual salary that is \$50,000 or more. A green job is employment in industries relating to the field of renewable, alternative energies, including the manufacture and operation of products used to generate electricity and other forms of energy from alternative sources that include hydrogen and fuel cell technology, landfill gas, geothermal heating systems, solar heating systems, hydropower systems, wind systems, and biomass and biofuel systems. Qualifying green jobs must be certified by the VA Secretary of Commerce and Trade.

INCENTIVE AMOUNTS. The tax credit amount is \$500 per green job created.

INCENTIVE LIMITS. The maximum annual tax credit amount is \$175,000.

INCENTIVE TIMEFRAME. The tax credit period is 5 years, provided the green job is continuously filled through out the period. Unused tax credit may be carried forward 5 years. The tax credit expires December 31, 2014.

53. Washington State Tax Incentives for Renewable Energy and Energy Efficiency

53.02 Washington state sales and use tax exemption for renewable energy equipment

GENERAL DESCRIPTION. Washington provides a sales and use tax exemption in the amount ranging from 75 - 100% for renewable energy equipment. *Wash. Rev. Code §82.08.962; Wash. Rev. Code §82.12.962 Wash. Rev. Code §82.08.02567; Wash. Rev. Code §82.08.835.*

ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer purchasers of renewable energy equipment.

QUALIFYING ACTIVITY. Taxpayer must purchase machinery and equipment used to generate electricity using fuel cells, wind, sun, biomass energy, tidal or wave energy, geothermal, anaerobic digestion or landfill gas. Machinery and equipment include industrial fixtures, devices, and support facilities that are integral and necessary to the generation of electricity using fuel cells, wind, sun, or landfill gas as the principal source of power. Qualifying use is providing any part of the process that captures the energy of the wind, sun, or landfill gas, converts that energy to electricity, and stores, transforms, or transmits that electricity for entry into or operation in parallel with electric transmission and distribution systems. Qualifying systems must have a generating capacity of at least 1 kilowatt (kW). Qualifying machinery and equipment includes labor and services related to the installation of the equipment. Qualifying machinery and equipment does not include: (i) Hand-powered tools; (ii) property with a useful life of less than one year; (iii) repair parts required to restore machinery and equipment to normal working order; (iv) replacement parts that do not increase productivity, improve efficiency, or extend the useful life of machinery and equipment; (v) buildings; or (vi) building fixtures that are not integral and necessary to the generation of electricity that are permanently affixed to and become a physical part of a building.

INCENTIVE AMOUNTS. The tax exemption amount is 100% sales and use tax exemption due before July 1, 2011 and for solar energy systems that produce 10 kw or less of electricity, and 75% of sales and use tax due after July 1, 2011 and for solar energy systems that produce more than 10 kw of electricity.

INCENTIVE LIMITS. Taxpayer must pay sales tax to the seller and then apply for a partial refund from the Department of Revenue, instead of receiving a full sales tax exemption at the point of sale for solar energy systems that produce more than 10 kw of electricity.

INCENTIVE TIMEFRAME. The tax exemption expired June 30, 2009 for solar water heating systems. The tax exemption expires June 30, 2011 for systems generating electricity using fuel cells, wind, sun, biomass energy, tidal or wave energy, geothermal, anaerobic digestion or landfill gas. The tax exemption expires on June 30, 2013 for solar energy systems under 10 kW.

56. Wyoming State Tax Incentives for Renewable Energy and Energy Efficiency

56.01 Wyoming state excise tax exemption for renewable energy equipment

GENERAL DESCRIPTION. Wyoming provides an excise tax exemption in the amount of 100% of the tax on renewable energy equipment. *Wyo. Stat. §39-15-105(a)(viii)(N)*; *Wyo. Stat. § 39-16-105(a)(viii)(C)*; *HB 215 (2009)*; *Wyo. Dept. of Rev., Policy Statement, 9/24/09*.

ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer purchasers of equipment used to generate electricity from renewable resources. Taxpayer must have entered into a written contract with the landowner that describes the project, including equipment to be purchased and placed on the land. Taxpayer must have made payment to the landowner under terms of the contract. Taxpayer must meet other permitting and documentation requirements.

QUALIFYING ACTIVITY. Taxpayer must purchase renewable energy equipment. Renewable energy includes wind generation, solar, biomass, landfill gas, hydro, hydrogen and geothermal energy. Qualifying equipment includes wind turbines, generating equipment, control and monitoring systems, power lines, substation equipment, lighting, fencing, pipes and other equipment for locating power lines and poles. Qualifying equipment must be used to generate electricity from renewable resources with a total net rating capacity of not more than 25 kilowatts, or where the entire renewable energy system is to be for off-grid use. Qualifying equipment only includes equipment used up to the point of interconnection with an existing transmission grid. Qualifying equipment does not include: (1) tools and other equipment used in construction of a new facility; (2) contracted services required for construction and routine maintenance activities' and (3) equipment utilized or acquired after the project is operational.

INCENTIVE AMOUNTS. The tax exemption amount is 100% of excise tax due.

INCENTIVE TIMEFRAME. The tax exemption expires on December 31, 2011 for renewable energy equipment where either the project developer is the land owner, or where the project developer has, prior to January 1, 2010, entered into a written contract with a landowner. The tax exemption expires on June 30, 2012 for renewable energy equipment with a net rating capacity of 25 kW or less and systems used entirely off-grid.