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Green Tax Incentive Compendium: Federal and State Tax Incentives for Renewable Energy and Energy Efficiency

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The Compendium

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 Jerome Garciano at 617.557.5944 or (jgarciano@rc.com).

About the Author



Jerome L. Garciano, Esq., CPA

Jerome Garciano is an attorney in the firm's Real Estate Group whose practice focuses on state and federal tax financing incentives affecting the built environment. Mr. Garciano provides tax and finance support for developers, lenders, syndicators, investors, nonprofit sponsors, and government agencies in renewable energy and real estate developments using the Historic, New Markets, Renewable Energy, and Low-Income Housing Tax Credits. He is a LEED accredited professional and has advised clients on utilizing energy efficiency and renewable energy tax incentives. He also works on tax policy initiatives promoting green energy and real estate development. He is also a certified public accountant and has worked as a finance associate at a national nonprofit organization and a financial services firm.

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Summary Chart of Federal/State Renewable Energy and Energy Efficiency Tax Incentives - July 2014 (Eastern U.S.)

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	Biomass	Income	Credit	Producer	10	\$0.023/Kwh	-	2013
00.01	Federal	\$45	Renewable Electricity Production	Wind	Income	Credit	Producer	10	\$0.023/Kwh	-	2013
00.01	Federal	\$45	Renewable Electricity Production	Methane	Income	Credit	Producer	10	\$0.011/Kwh	-	2013
00.01	Federal	\$45	Renewable Electricity Production	Geothermal	Income	Credit	Producer	10	\$0.023/Kwh	-	2013
00.01	Federal	\$45	Renewable Electricity Production	Hydroelectric	Income	Credit	Producer	10	\$0.011/Kwh	-	2013
00.01	Federal	\$45	Renewable Electricity Production	Marine	Income	Credit	Producer	10	\$0.011/Kwh	-	2013
00.02	Federal	\$48	Investment In Energy Property	Fuel cell	Income	Credit	Owner	5	30%	\$1,500/0.5 kw	2016
00.02	Federal	\$48	Investment In Energy Property	Solar	Income	Credit	Owner	5	30%	-	2016
00.02	Federal	\$48	Investment In Energy Property	Geothermal	Income	Credit	Owner	5	10%	-	2016
00.02	Federal	\$48	Investment In Energy Property	Wind	Income	Credit	Owner	5	10%	-	2016
00.02	Federal	\$48	Investment In Energy Property	Biomass	Income	Credit	Owner	5	10%	\$200/kw	2016
00.02	Federal	\$48	Investment In Energy Property	Cogeneration	Income	Credit	Owner	5	10%	-	2016
00.03	Federal	\$48C	Investment In Advanced Energy Property	Solar Electric	Income	Credit	Investor	-	30%	\$30 million	2013
00.03	Federal	\$48C	Investment In Advanced Energy Property	Wind	Income	Credit	Investor	-	30%	\$30 million	2013
00.03	Federal	\$48C	Investment In Advanced Energy Property	Geothermal	Income	Credit	Investor	-	30%	\$30 million	2013
00.03	Federal	\$48C	Investment In Advanced Energy Property	Alternative Fuel	Income	Credit	Investor	-	30%	\$30 million	2013
00.03	Federal	\$48C	Investment In Advanced Energy Property	Electric Vehicle	Income	Credit	Investor	-	30%	\$30 million	2013
00.04	Federal	\$30C	Qualifying Alternative Fuel Vehicle Refueling Property	Alternative Fuel	Income	Credit	Owner	-	30%	\$30,000	2013
00.04	Federal	\$30C	Qualifying Alternative Fuel Vehicle Refueling Property	Electric Vehicle	Income	Credit	Owner	-	30%	\$30,000	2013
00.04	Federal	\$30C	Qualifying Alternative Fuel Vehicle Refueling Property (2-	Fuel cell	Income	Credit	Owner	-	30%	\$30,000	2014
00.05	Federal	\$40	Certain Alternative Fuels	Alternative Fuel	Income	Credit	Producer	-	\$0.60/ gal	\$1.5 million	2011
00.05	Federal	\$40	Certain Alternative Fuels	Ethanol	Income	Credit	Producer	-	\$0.10/gal	\$1.5 million	2011
00.05	Federal	\$40	Certain Alternative Fuels	Biofuel	Income	Credit	Producer	-	\$1.01/gal	\$1.5 million	2013
00.06	Federal	\$40A	Biodiesel Fuels	Biodiesel	Income	Credit	Producer	-	\$1.00/gal	15 million gallons	2013
00.06	Federal	\$40A	Biodiesel Fuels (Small Agri)	Biodiesel	Income	Credit	Producer	-	\$0.10/gal	15 million gallons	2013
00.07	Federal	\$30	Plug-In Electric Vehicles	Electric Vehicle	Income	Credit	Owner	-	10%	\$2,500	2011
00.08	Federal	\$30D	New Qualifying Plug-In Electric Drive Motor Vehicles	Electric Vehicle	Income	Credit	Owner	-	\$7,500	-	Limit
00.08	Federal	\$30D	New Qualifying Plug-In Electric Drive Motor Vehicles	Electric Vehicle	Income	Credit	Owner	-	10%	\$2,500	2013
00.09	Federal	\$30B	Alternative Motor Vehicles	Fuel cell	Income	Credit	Purchaser	-	\$4,000-\$40,000	-	2014
00.09	Federal	\$30B	Alternative Motor Vehicles	Alternative Fuel	Income	Credit	Purchaser	-	\$2,500-\$20,000	-	2010
00.09	Federal	\$30B	Alternative Motor Vehicles	Electric Vehicle	Income	Credit	Purchaser	-	\$1,500-\$10,400	-	2011
00.10	Federal	\$45L	New Energy Efficient Homes	Energy Efficiency	Income	Credit	Builder	-	\$1,000-\$2,000	-	2013
00.11	Federal	\$45M	Energy Efficient Appliances (Dishwashers)	Energy Efficiency	Income	Credit	Manufacturer	-	\$50-\$75	4% gross receipts	2013
00.11	Federal	\$45M	Energy Efficient Appliances (Clothes washers)	Energy Efficiency	Income	Credit	Manufacturer	-	\$225	4% gross receipts	2013
00.11	Federal	\$45M	Energy Efficient Appliances (Refrigerators)	Energy Efficiency	Income	Credit	Manufacturer	-	\$150-\$200	4% gross receipts	2013
00.12	Federal	\$179D	Energy Efficient Commercial Buildings	Energy Efficiency	Income	Deduction	Owner	-	100%	\$1.80/SF	2013
00.13	Federal	\$168(e)(3)	Certain Energy Property	Solar	Income	Deduction	Owner	5	200% DB	-	2016
00.13	Federal	\$168(e)(3)	Certain Energy Property	Geothermal	Income	Deduction	Owner	5	200% DB	-	2016
00.13	Federal	\$168(e)(3)	Certain Energy Property	Fuel cell	Income	Deduction	Owner	5	200% DB	-	2016
00.13	Federal	\$168(e)(3)	Certain Energy Property	Biomass	Income	Deduction	Owner	5	200% DB	-	2016
00.14	Federal	\$168(l)	Cellulosic Biofuel Plant Property	Biofuel	Income	Deduction	Owner	-	50%	-	2013
00.15	Federal	\$54C	New Clean Renewable Energy Bonds	Biomass	Income	Credit	Holder	-	0 interest	-	Limit
00.15	Federal	\$54C	New Clean Renewable Energy Bonds	Wind	Income	Credit	Holder	-	0 interest	-	Limit
00.15	Federal	\$54C	New Clean Renewable Energy Bonds	Methane	Income	Credit	Holder	-	0 interest	-	Limit
00.15	Federal	\$54C	New Clean Renewable Energy Bonds	Geothermal	Income	Credit	Holder	-	0 interest	-	Limit
00.15	Federal	\$54C	New Clean Renewable Energy Bonds	Solar	Income	Credit	Holder	-	0 interest	-	Limit
00.15	Federal	\$54C	New Clean Renewable Energy Bonds	Irrigation	Income	Credit	Holder	-	0 interest	-	Limit
00.15	Federal	\$54C	New Clean Renewable Energy Bonds	Hydroelectric	Income	Credit	Holder	-	0 interest	-	Limit
00.15	Federal	\$54C	New Clean Renewable Energy Bonds	Marine	Income	Credit	Holder	-	0 interest	-	Limit
00.16	Federal	\$54D	Qualifying Energy Conservation Bonds	Energy Efficiency	Income	Credit	Holder	-	0 interest	-	Limit
00.16	Federal	\$54D	Qualifying Energy Conservation Bonds	Alternative Fuel	Income	Credit	Holder	-	0 interest	-	Limit
00.17	Federal	\$25C	Nonbusiness Energy Property	Energy Efficiency	Income	Credit	Owner	-	10%	\$500	2013
00.18	Federal	\$25D	Residential Energy Efficient Property	Solar Electric	Income	Credit	Owner	-	30%	-	2016
00.18	Federal	\$25D	Residential Energy Efficient Property	Solar Thermal	Income	Credit	Owner	-	30%	-	2016
00.18	Federal	\$25D	Residential Energy Efficient Property	Fuel cell	Income	Credit	Owner	-	30%	\$500/0.5kw	2016
00.18	Federal	\$25D	Residential Energy Efficient Property	Wind	Income	Credit	Owner	-	30%	-	2016
00.18	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 Facilities	Wind	Income	Credit	Utility	20	5%	-	2015
01.01	Alabama	\$40-18-190	Alternative Energy Electricity Production Facilities	Alternative Fuel	Income	Credit	Utility	20	5%	-	2015
01.01	Alabama	\$40-18-190	Alternative Energy Electricity Production Facilities	Biomass	Income	Credit	Utility	20	5%	-	2015
01.01	Alabama	\$40-18-190	Alternative Energy Electricity Production Facilities	Marine	Income	Credit	Utility	20	5%	-	2015

Sec	Jurisdiction	Statute	Incentive Title	Technology	Tax	Type	Taxpayer	Period (yrs)	Amount	Maximum	Expiration
01.01	Alabama	§40-18-190	Alternative Energy Electricity Production Facilities	Geothermal	Income	Credit	Utility	20	5%	-	2015
01.01	Alabama	§40-18-190	Alternative Energy Electricity Production Facilities	Solar Electric	Income	Credit	Utility	20	5%	-	2015
01.01	Alabama	§40-18-190	Alternative Energy Electricity Production Facilities	Irrigation	Income	Credit	Utility	20	5%	-	2015
01.01	Alabama	§40-18-190	Alternative Energy Electricity Production Facilities	Methane	Income	Credit	Utility	20	5%	-	2015
01.01	Alabama	§40-18-190	Alternative Energy Electricity Production Facilities	Hydroelectric	Income	Credit	Utility	20	5%	-	2015
01.01	Alabama	§40-18-190	Alternative Energy Electricity Production Facilities	Fuel cell	Income	Credit	Utility	20	5%	-	2015
01.02	Alabama	§40-9B-4	Alternative Energy Production Facilities	Wind	Property	Abatement	Utility	-	100%	-	2018
01.02	Alabama	§40-9B-4	Alternative Energy Production Facilities	Alternative Fuel	Property	Abatement	Utility	-	100%	-	2018
01.02	Alabama	§40-9B-4	Alternative Energy Production Facilities	Biomass	Property	Abatement	Utility	-	100%	-	2018
01.02	Alabama	§40-9B-4	Alternative Energy Production Facilities	Marine	Property	Abatement	Utility	-	100%	-	2018
01.02	Alabama	§40-9B-4	Alternative Energy Production Facilities	Geothermal	Property	Abatement	Utility	-	100%	-	2018
01.02	Alabama	§40-9B-4	Alternative Energy Production Facilities	Solar	Property	Abatement	Utility	-	100%	-	2018
01.02	Alabama	§40-9B-4	Alternative Energy Production Facilities	Irrigation	Property	Abatement	Utility	-	100%	-	2018
01.02	Alabama	§40-9B-4	Alternative Energy Production Facilities	Methane	Property	Abatement	Utility	-	100%	-	2018
01.02	Alabama	§40-9B-4	Alternative Energy Production Facilities	Hydroelectric	Property	Abatement	Utility	-	100%	-	2018
01.02	Alabama	§40-9B-4	Alternative Energy Production Facilities	Fuel cell	Property	Abatement	Utility	-	100%	-	2018
01.03	Alabama	§40-18-15(a)(16)	Wood-Burning Heating Systems	Biomass	Income	Deduction	Owner	-	100%	-	-
09.00 Connecticut State Tax Incentives for Renewable Energy and Energy Efficiency											
09.01	Connecticut	§12-412 (117)	Solar And Geothermal Systems	Solar	Sales	Exemption	Purchaser	-	100%	-	-
09.01	Connecticut	§12-412 (117)	Solar And Geothermal Systems	Geothermal	Sales	Exemption	Purchaser	-	100%	-	-
09.02	Connecticut	§12-214(a)	Alternative Energy And Motor Vehicle Systems	Solar	Business	Exemption	Manufacturer	-	100%	-	-
09.02	Connecticut	§12-214(a)	Alternative Energy And Motor Vehicle Systems	Wind	Business	Exemption	Manufacturer	-	100%	-	-
09.02	Connecticut	§12-214(a)	Alternative Energy And Motor Vehicle Systems	Hydroelectric	Business	Exemption	Manufacturer	-	100%	-	-
09.02	Connecticut	§12-214(a)	Alternative Energy And Motor Vehicle Systems	Biomass	Business	Exemption	Manufacturer	-	100%	-	-
09.02	Connecticut	§12-214(a)	Alternative Energy And Motor Vehicle Systems	Alternative Fuel	Business	Exemption	Manufacturer	-	100%	-	-
09.02	Connecticut	§12-214(a)	Alternative Energy And Motor Vehicle Systems	Electric Vehicle	Business	Exemption	Manufacturer	-	100%	-	-
09.03	Connecticut	§12-412(113)	Fuel Cell Manufacturing Facilities	Fuel cell	Sales	Exemption	Purchaser	-	100%	-	-
09.04	Connecticut	§16-46e(d)	State Rebates For Efficient Furnaces And Boilers	Energy Efficiency	Income	Exclusion	Rebatee	-	\$500	-	-
09.05	Connecticut	§12-587	Sales Or Import Of Alternative Fuel Commercial Heating	Alternative Fuel	Income	Exemption	Seller	-	100%	-	-
09.06	Connecticut	§12-217mm	Energy Efficient Green Building	Energy Efficiency	Income	Credit	Owner	-	5-11%	\$150-250/SF	-
09.07	Connecticut	§12-81(56),(57)	Renewable Energy Systems	Solar	Property	Exemption	Owner	-	100%	-	-
09.07	Connecticut	§12-81(56),(57)	Renewable Energy Systems	Wind	Property	Exemption	Owner	-	100%	-	-
09.07	Connecticut	§12-81(56),(57)	Renewable Energy Systems	Fuel cell	Property	Exemption	Owner	-	100%	-	-
09.07	Connecticut	§12-81(56),(57)	Renewable Energy Systems	Methane	Property	Exemption	Owner	-	100%	-	-
09.07	Connecticut	§12-81(56),(57)	Renewable Energy Systems	Marine	Property	Exemption	Owner	-	100%	-	-
09.07	Connecticut	§12-81(56),(57)	Renewable Energy Systems	Hydroelectric	Property	Exemption	Owner	-	100%	-	-
09.07	Connecticut	§12-81(56),(57)	Renewable Energy Systems	Biomass	Property	Exemption	Owner	-	100%	-	-
09.08	Connecticut	§12-412k	Residential Energy-Efficient Products	Energy Efficiency	Sales	Exemption	Purchaser	-	100%	-	-
09.09	Connecticut	§12-635	Energy Conservation Programs Serving Low-Income Pe	Energy Efficiency	Income	Credit	Investor	-	60-100%	-	-
10.00 Delaware State Tax Incentives for Renewable Energy and Energy Efficiency											
10.01	Delaware	30 §2040	Clean Energy Manufacturing Jobs	Solar	Income	Credit	Manufacturer	-	\$750/Job & \$100k	\$500,000	-
10.01	Delaware	30 §2040	Clean Energy Manufacturing Jobs	Fuel cell	Income	Credit	Manufacturer	-	\$750/Job & \$100k	\$500,000	-
10.01	Delaware	30 §2040	Clean Energy Manufacturing Jobs	Wind	Income	Credit	Manufacturer	-	\$750/Job & \$100k	\$500,000	-
10.01	Delaware	30 §2040	Clean Energy Manufacturing Jobs	Geothermal	Income	Credit	Manufacturer	-	\$750/Job & \$100k	\$500,000	-
11.00 District of Columbia State Tax Incentives for Renewable Energy and Energy Efficiency											
11.01	District of Columbia	§47-1508(a)(12)	Cogeneration Equipment Personal Property Tax Exempt	Cogeneration	Property	Exemption	Owner	-	100%	-	-
11.02	District of Columbia	§47-1508(a)(11)	Solar Energy Systems	Solar	Property	Exemption	Owner	-	100%	-	-
12.00 Florida State Tax Incentives for Renewable Energy and Energy Efficiency											
12.01	Florida	§193.624	Residential Renewable Energy Source Devices	Solar	Property	Exemption	Owner	10	100%	-	-
12.01	Florida	§193.624	Residential Renewable Energy Source Devices	Wind	Property	Exemption	Owner	10	100%	-	-
12.01	Florida	§193.624	Residential Renewable Energy Source Devices	Geothermal	Property	Exemption	Owner	10	100%	-	-
12.02	Florida	§220.193	Renewable Energy Production	Biomass	Income	Credit	Producer	-	\$0.01/kWh	\$1 million	2016
12.02	Florida	§220.193	Renewable Energy Production	Solar	Income	Credit	Producer	-	\$0.01/kWh	\$1 million	2016
12.02	Florida	§220.193	Renewable Energy Production	Geothermal	Income	Credit	Producer	-	\$0.01/kWh	\$1 million	2016
12.02	Florida	§220.193	Renewable Energy Production	Wind	Income	Credit	Producer	-	\$0.01/kWh	\$1 million	2016
12.02	Florida	§220.193	Renewable Energy Production	Marine	Income	Credit	Producer	-	\$0.01/kWh	\$1 million	2016
12.02	Florida	§220.193	Renewable Energy Production	Hydroelectric	Income	Credit	Producer	-	\$0.01/kWh	\$1 million	2016
12.03	Florida	§220.192	Alternative Fuel Vehicle Property	Biomass	Income	Credit	Investor	-	75%	\$1 million	2016
12.03	Florida	§220.192	Alternative Fuel Vehicle Property	Biodiesel	Income	Credit	Investor	-	75%	\$1 million	2016
12.03	Florida	§220.192	Alternative Fuel Vehicle Property	Ethanol	Income	Credit	Investor	-	75%	\$1 million	2016
12.04	Florida	§212.08(7)(hh)	Solar Energy Systems	Solar	Sales	Exemption	Purchaser	-	100%	-	-
12.05	Florida	§212.08(7)(hhh)	Alternative Fuel Distribution Property	Biomass	Sales	Refund	Purchaser	-	100%	-	2016
12.05	Florida	§212.08(7)(hhh)	Alternative Fuel Distribution Property	Biodiesel	Sales	Refund	Purchaser	-	100%	-	2016
12.05	Florida	§212.08(7)(hhh)	Alternative Fuel Distribution Property	Ethanol	Sales	Refund	Purchaser	-	100%	-	2016
13.00 Georgia State Tax Incentives for Renewable Energy and Energy Efficiency											
13.01	Georgia	§48-7-29.14	Clean Energy Property	Solar Electric	Income	Credit	Owner	4	35%	\$500,000 / \$2,500	2014

Sec	Jurisdiction	Statute	Incentive Title	Technology	Tax	Type	Taxpayer	Period (yrs)	Amount	Maximum	Expiration
13.01	Georgia	\$48-7-29.14	Clean Energy Property	Solar Thermal	Income	Credit	Owner	4	35%	\$100,000 / \$2,500	2014
13.01	Georgia	\$48-7-29.14	Clean Energy Property	Biomass	Income	Credit	Owner	4	35%	\$500,000 / \$2,500	2014
13.01	Georgia	\$48-7-29.14	Clean Energy Property	Wind	Income	Credit	Owner	4	35%	\$500,000 / \$2,500	2014
13.01	Georgia	\$48-7-29.14	Clean Energy Property	Geothermal	Income	Credit	Owner	4	35%	\$100,000 / \$2,000	2014
13.01	Georgia	\$48-7-29.14	Clean Energy Property	Energy Efficiency	Income	Credit	Owner	4	\$1.80/SF	\$100,000	2014
13.02	Georgia	\$48-8-3(83)	Biomass Materials	Biomass	Sales	Exemption	Purchaser	-	100%	-	-
13.03	Georgia	\$48-7-40.16	Low and Zero Emission Vehicles And Chargers	Electric Vehicle	Income	Credit	Purchaser	-	10-20%	\$2,500/\$5,000	-
13.03	Georgia	\$48-7-40.16	Low and Zero Emission Vehicles And Chargers	Alternative Fuel	Income	Credit	Purchaser	-	10-20%	\$2,500/\$5,000	-
13.04	Georgia	\$48-8-3(82)	Energy-Efficient Products	Energy Efficiency	Sales	Exemption	Purchaser	Annual	100%	-	-
13.05	Georgia	\$48-7-29.14	Biomass Material Transportation	Biomass	Income	Credit	Transporter	Annual	per ton	-	2014
13.06	Georgia	\$48-7-40	Alternative Energy Manufacturing	Solar	Income	Credit	Manufacturer	5	\$4,000 / job	-	-
13.06	Georgia	\$48-7-40	Alternative Energy Manufacturing	Wind	Income	Credit	Manufacturer	5	\$4,000 / job	-	-
13.06	Georgia	\$48-7-40	Alternative Energy Manufacturing	Electric Vehicle	Income	Credit	Manufacturer	5	\$4,000 / job	-	-
13.06	Georgia	\$48-7-40	Alternative Energy Manufacturing	Biofuel	Income	Credit	Manufacturer	5	\$4,000 / job	-	-
13.06	Georgia	\$48-7-40	Alternative Energy Manufacturing	Biomass	Income	Credit	Manufacturer	5	\$4,000 / job	-	-
13.07	Georgia	\$48-7-29.18	Alternative Fuel Vehicles	Electric Vehicle	Income	Credit	Purchaser	-	\$12,000/\$20,000	\$250,000	2017
13.07	Georgia	\$48-7-29.18	Alternative Fuel Vehicles	Alternative Fuel	Income	Credit	Purchaser	-	\$12,000/\$20,000	\$250,000	2017
17.00 Illinois State Tax Incentives for Renewable Energy and Energy Efficiency											
17.01	Illinois	35 §200/10-10	Solar and Wind Energy Property	Solar	Property	Exemption	Owner	-	100%	-	2016
17.01	Illinois	35 §200/10-10	Solar and Wind Energy Property	Wind	Property	Exemption	Owner	-	100%	\$108,000/Mw valuation	2016
17.02	Illinois	35 §10/5	Renewable Energy and Conservation Job Creation	Various	Income	Credit	Employer	10 or 15	Varies	-	-
17.03	Illinois	35 §105/3-10	Alternative Fuel Purchase	Alternative Fuel	Sales	Exemption	Purchaser	-	20%	-	2018
18.00 Indiana State Tax Incentives for Renewable Energy and Energy Efficiency											
18.01	Indiana	§6-1.1-12-26	Renewable Energy Property	Solar	Property	Exemption	Owner	-	100%	-	-
18.01	Indiana	§6-1.1-12-26	Renewable Energy Property	Wind	Property	Exemption	Owner	-	100%	-	-
18.01	Indiana	§6-1.1-12-26	Renewable Energy Property	Hydroelectric	Property	Exemption	Owner	-	100%	-	-
18.01	Indiana	§6-1.1-12-26	Renewable Energy Property	Geothermal	Property	Exemption	Owner	-	100%	-	-
18.02	Indiana	§6-3.1-27	Biodiesel And Blended Biodiesel Production	Biodiesel	Income	Credit	Producer	-	\$1.00/gal	-	2014
18.03	Indiana	§6-3.1-28	Ethanol Production	Ethanol	Income	Credit	Producer	-	\$0.125/gal	\$2-3 million	2014
18.04	Indiana	§6-3.1-1	Alternative Fuel Vehicle Manufacturing	Alternative Fuel	Income	Credit	Manufacturer	-	15%	-	2016
18.04	Indiana	§6-3.1-1	Alternative Fuel Vehicle Manufacturing	Electric Vehicle	Income	Credit	Manufacturer	-	15%	-	2016
18.05	Indiana	§6-3-2-5	Installation Of Insulation	Energy Efficiency	Income	Deduction	Owner	-	100%	\$1,000	-
18.06	Indiana	§6-3-2-5.3	Solar Powered Roof Vent Or Fan	Solar	Income	Deduction	Owner	-	50%	\$1,000	-
21.00 Kentucky State Tax Incentives for Renewable Energy and Energy Efficiency											
21.01	Kentucky	§154.27-010	Renewable Energy Facilities	Solar	Income	Credit	Producer	-	50%	-	-
21.01	Kentucky	§154.27-010	Renewable Energy Facilities	Wind	Income	Credit	Producer	-	50%	-	-
21.01	Kentucky	§154.27-010	Renewable Energy Facilities	Biomass	Income	Credit	Producer	-	50%	-	-
21.01	Kentucky	§154.27-010	Renewable Energy Facilities	Methane	Income	Credit	Producer	-	50%	-	-
21.01	Kentucky	§154.27-010	Renewable Energy Facilities	Hydroelectric	Income	Credit	Producer	-	50%	-	-
21.01	Kentucky	§154.27-010	Renewable Energy Facilities	Alternative Fuel	Income	Credit	Producer	-	50%	-	-
21.01	Kentucky	§154.27-010	Renewable Energy Facilities	Various	Income	Credit	Producer	-	50%	-	-
21.02	Kentucky	§141.436	Renewable Energy Systems	Solar Thermal	Income	Credit	Owner	-	30%	\$500	2015
21.02	Kentucky	§141.436	Renewable Energy Systems	Solar electric	Income	Credit	Owner	-	\$3.00/w	\$500	2015
21.02	Kentucky	§141.436	Renewable Energy Systems	Wind	Income	Credit	Owner	-	30%	\$500	2015
21.02	Kentucky	§141.436	Renewable Energy Systems	Geothermal	Income	Credit	Owner	-	30%	\$250	2015
21.03	Kentucky	§154.27-010	Renewable Energy Facilities	Solar	Sales	Exemption	Purchaser	25	100%	-	-
21.03	Kentucky	§154.27-010	Renewable Energy Facilities	Wind	Sales	Exemption	Purchaser	25	100%	-	-
21.03	Kentucky	§154.27-010	Renewable Energy Facilities	Biomass	Sales	Exemption	Purchaser	25	100%	-	-
21.03	Kentucky	§154.27-010	Renewable Energy Facilities	Methane	Sales	Exemption	Purchaser	25	100%	-	-
21.03	Kentucky	§154.27-010	Renewable Energy Facilities	Hydroelectric	Sales	Exemption	Purchaser	25	100%	-	-
21.03	Kentucky	§154.27-010	Renewable Energy Facilities	Alternative Fuel	Sales	Exemption	Purchaser	25	100%	-	-
21.03	Kentucky	§154.27-010	Renewable Energy Facilities	Various	Sales	Exemption	Purchaser	25	100%	-	-
21.04	Kentucky	§141.422	Biodiesel And Renewable Diesel	Biodiesel	Income	Credit	Producer	-	\$1.00/gal	-	-
21.05	Kentucky	§141.4244	Cellulosic Ethanol Or Ethanol Fuel	Ethanol	Income	Credit	Producer	-	\$1.00/gal	-	-
21.06	Kentucky	§141.435	Energy Efficient Commercial Property	Energy Efficiency	Income	Credit	Owner	-	30%	\$1,000	2015
21.07	Kentucky	§139.518	Energy Efficient Manufacturing Machinery And Equipmen	Energy Efficiency	Sales	Exemption	Purchaser	25	100%	-	-
21.08	Kentucky	§141.435	Energy Efficient Residential Property	Energy Efficiency	Income	Credit	Owner	-	30%	\$500	2015
21.09	Kentucky	§141.437	Energy Star Homes	Energy Efficiency	Income	Credit	Builder	-	\$400-\$800/home	-	2015
23.00 Maine State Tax Incentives for Renewable Energy and Energy Efficiency											
23.01	Maine	36 §2017	Qualifying Community Wind Energy Property	Wind	Sales	Refund	Purchaser	-	100%	-	-
23.02	Maine	36 §5219-X	Biofuel Production	Biofuel	Income	Credit	Producer	-	\$0.05/gal	-	-
24.00 Maryland State Tax Incentives for Renewable Energy and Energy Efficiency											
24.01	Maryland	§10-720	Renewable Energy Production	Wind	Income	Credit	Producer	5	\$0.0085/kWh	\$2.5 million	2015
24.01	Maryland	§10-720	Renewable Energy Production	Geothermal	Income	Credit	Producer	5	\$0.0085/kWh	\$2.5 million	2015
24.01	Maryland	§10-720	Renewable Energy Production	Solar	Income	Credit	Producer	5	\$0.0085/kWh	\$2.5 million	2015
24.01	Maryland	§10-720	Renewable Energy Production	Hydroelectric	Income	Credit	Producer	5	\$0.0085/kWh	\$2.5 million	2015

Sec	Jurisdiction	Statute	Incentive Title	Technology	Tax	Type	Taxpayer	Period (yrs)	Amount	Maximum	Expiration
24.01	Maryland	§10-720	Renewable Energy Production	Irrigation	Income	Credit	Producer	5	\$0.0085/kWh	\$2.5 million	2015
24.01	Maryland	§10-720	Renewable Energy Production	Methane	Income	Credit	Producer	5	\$0.0085/kWh	\$2.5 million	2015
24.01	Maryland	§10-720	Renewable Energy Production	Biomass	Income	Credit	Producer	5	\$0.0085/kWh	\$2.5 million	2015
24.01	Maryland	§10-720	Renewable Energy Production	Various	Income	Credit	Producer	5	\$0.0085/kWh	\$2.5 million	2015
24.02	Maryland	§9-203	Solar, Geothermal, And Energy Conservation Devices	Solar	Property	Credit	Owner	-	100%	-	-
24.02	Maryland	§9-203	Solar, Geothermal, And Energy Conservation Devices	Geothermal	Property	Credit	Owner	-	100%	-	-
24.02	Maryland	§9-203	Solar, Geothermal, And Energy Conservation Devices	Energy Efficiency	Property	Credit	Owner	-	100%	-	-
24.03	Maryland	§7-242	Renewable Energy Systems	Geothermal	Property	Exemption	Owner	-	100%	-	-
24.03	Maryland	§7-242	Renewable Energy Systems	Solar electric	Property	Exemption	Owner	-	100%	-	-
24.03	Maryland	§7-242	Renewable Energy Systems	Solar Thermal	Property	Exemption	Owner	-	100%	-	-
24.03	Maryland	§7-242	Renewable Energy Systems	Wind	Property	Exemption	Owner	-	100%	-	-
24.04	Maryland	§9-1501	Renewable Energy And Energy-Efficiency Systems	Energy Efficiency	Property	Financing	Owner	-	Varies	-	-
24.04	Maryland	§9-1501	Renewable Energy And Energy-Efficiency Systems	Various	Property	Financing	Owner	-	Varies	-	-
24.05	Maryland	§11-230	Geothermal, Solar And Wind Energy Equipment	Geothermal	Sales	Exemption	Purchaser	-	100%	-	-
24.05	Maryland	§11-230	Geothermal, Solar And Wind Energy Equipment	Solar	Sales	Exemption	Purchaser	-	100%	-	-
24.05	Maryland	§11-230	Geothermal, Solar And Wind Energy Equipment	Wind	Sales	Exemption	Purchaser	-	100%	-	-
24.06	Maryland	§8-240	Solar And Geothermal Heating And Cooling Systems	Solar	Property	Exemption	Owner	-	100%	-	-
24.06	Maryland	§8-240	Solar And Geothermal Heating And Cooling Systems	Geothermal	Property	Exemption	Owner	-	100%	-	-
24.07	Maryland	§10-726	Cellulosic Ethanol Technology Research And Developm	Ethanol	Income	Credit	Researcher	-	10%	-	2016
24.08	Maryland	§10-727	Biodiesel Heating Fuel	Biodiesel	Income	Credit	Purchaser	-	\$0.03/gal	\$500	2012
24.09	Maryland	§10-722	Green Building	Solar electric	Income	Credit	Owner	-	20-25%	\$3.00/w	2011
24.09	Maryland	§10-722	Green Building	Fuel cell	Income	Credit	Owner	-	30%	\$1,000/kw	2011
24.09	Maryland	§10-722	Green Building	Wind	Income	Credit	Owner	-	25%	-	2011
24.09	Maryland	§10-722	Green Building	Energy Efficiency	Income	Credit	Owner	-	6-8%	\$120/SF	2011
24.10	Maryland	§9-242	LEED Silver Or Better Green Buildings	Energy Efficiency	Property	Credit	Owner	-	100%	-	-
24.11	Maryland	§11-207	Wood Heating Fuel	Biofuel	Sales	Exemption	Purchaser	-	100%	-	-
24.12	Maryland	§5A-303	LEED Gold Historical Buildings	Energy Efficiency	Income	Credit	Owner	-	25%	\$3 million	2017
24.13	Maryland	§11-226	Energy-Efficient Equipment	Energy Efficiency	Sales	Exemption	Purchaser	-	100%	-	-
24.14	Maryland	§11-207(a)	Solar And Residential Wind Equipment	Solar	Sales	Exemption	Purchaser	-	100%	-	-
24.14	Maryland	§11-207(a)	Solar And Residential Wind Equipment	Wind	Sales	Exemption	Purchaser	-	100%	-	-
24.15	Maryland	§11-210(e)	Energy Star Windows And Doors Manufacturing Equipm	Energy Efficiency	Sales	Exemption	Manufacturer	-	100%	-	-
25.00 Massachusetts State Tax Incentives for Renewable Energy and Energy Efficiency											
25.01	Massachusetts	63 §38H	Solar Or Wind Powered Systems	Solar	Income	Deduction	Owner	-	100%	-	-
25.01	Massachusetts	63 §38H	Solar Or Wind Powered Systems	Wind	Income	Deduction	Owner	-	100%	-	-
25.02	Massachusetts	59 §5 (45, 45A)	Renewable Energy Property	Solar	Property	Exemption	Owner	20	100%	-	-
25.02	Massachusetts	59 §5 (45, 45A)	Renewable Energy Property	Wind	Property	Exemption	Owner	20	100%	-	-
25.02	Massachusetts	59 §5 (45, 45A)	Renewable Energy Property	Hydroelectric	Property	Exemption	Owner	20	100%	-	-
25.03	Massachusetts	62 §2(a)(2)(G)	Energy Conservation Or Alternative Energy Patents	Energy Efficiency	Income	Deduction	Owner	5	100%	-	-
25.03	Massachusetts	62 §2(a)(2)(G)	Energy Conservation Or Alternative Energy Patents	Various	Income	Deduction	Owner	5	100%	-	-
25.04	Massachusetts	62 §6(d)	Renewable Energy Systems In Primary Residences	Solar	Income	Credit	Owner	-	15%	\$1,000	-
25.04	Massachusetts	62 §6(d)	Renewable Energy Systems In Primary Residences	Wind	Income	Credit	Owner	-	15%	\$1,000	-
25.05	Massachusetts	64H §6(dd)	Renewable Energy Equipment In Primary Residences	Solar	Sales	Exemption	Purchaser	-	100%	-	-
25.05	Massachusetts	64H §6(dd)	Renewable Energy Equipment In Primary Residences	Wind	Sales	Exemption	Purchaser	-	100%	-	-
25.05	Massachusetts	64H §6(dd)	Renewable Energy Equipment In Primary Residences	Geothermal	Sales	Exemption	Purchaser	-	100%	-	-
25.06	Massachusetts	64H §6(s)	Wind Turbine Equipment in Furnishing Electricity	Wind	Sales	Exemption	Purchaser	-	100%	-	-
25.06	Massachusetts	64A §1	Cellulosic Biofuel	Biofuel	Sales	Exemption	Purchaser	-	\$0.21/gal	-	2017
26.00 Michigan State Tax Incentives for Renewable Energy and Energy Efficiency											
26.01	Michigan	§125.2681	Renewable Energy Renaissance Zones	Wind	Varies	Abatement	Owner	15	100%	-	-
26.01	Michigan	§125.2681	Renewable Energy Renaissance Zones	Solar	Varies	Abatement	Owner	15	100%	-	-
26.01	Michigan	§125.2681	Renewable Energy Renaissance Zones	Biomass	Varies	Abatement	Owner	15	100%	-	-
26.01	Michigan	§125.2681	Renewable Energy Renaissance Zones	Biodiesel	Varies	Abatement	Owner	15	100%	-	-
26.01	Michigan	§125.2681	Renewable Energy Renaissance Zones	Fuel cell	Varies	Abatement	Owner	15	100%	-	-
26.01	Michigan	§125.2681	Renewable Energy Renaissance Zones	Various	Varies	Abatement	Owner	15	100%	-	-
26.02	Michigan	§207.821	Alternative Energy Technology Manufacturing And Resea	Fuel cell	Property	Exemption	Owner	-	100%	-	2012
26.02	Michigan	§207.821	Alternative Energy Technology Manufacturing And Resea	Solar electric	Property	Exemption	Owner	-	100%	-	2012
26.02	Michigan	§207.821	Alternative Energy Technology Manufacturing And Resea	Solar Thermal	Property	Exemption	Owner	-	100%	-	2012
26.02	Michigan	§207.821	Alternative Energy Technology Manufacturing And Resea	Wind	Property	Exemption	Owner	-	100%	-	2012
26.02	Michigan	§207.821	Alternative Energy Technology Manufacturing And Resea	Cogeneration	Property	Exemption	Owner	-	100%	-	2012
26.02	Michigan	§207.821	Alternative Energy Technology Manufacturing And Resea	Methane	Property	Exemption	Owner	-	100%	-	2012
26.02	Michigan	§207.821	Alternative Energy Technology Manufacturing And Resea	Ethanol	Property	Exemption	Owner	-	100%	-	2012
26.02	Michigan	§207.821	Alternative Energy Technology Manufacturing And Resea	Biodiesel	Property	Exemption	Owner	-	100%	-	2012
26.02	Michigan	§207.821	Alternative Energy Technology Manufacturing And Resea	Biomass	Property	Exemption	Owner	-	100%	-	2012
26.02	Michigan	§207.821	Alternative Energy Technology Manufacturing And Resea	Various	Property	Exemption	Owner	-	100%	-	2012
26.03	Michigan	§208.1101	Biofuel Service Station Conversion	Biofuel	Income	Credit	Owner	-	30%	\$20,000	2012
26.04	Michigan	§211.9(j)	Biomass Gasification And Methane Digester Property	Biomass	Property	Exemption	Owner	-	100%	-	-
26.05	Michigan	§207.1008	Biofuel	Biofuel	Sales	Exemption	Purchaser	-	to \$0.12/gal	-	-

Sec	Jurisdiction	Statute	Incentive Title	Technology	Tax	Type	Taxpayer	Period (yrs)	Amount	Maximum	Expiration
28.00 Mississippi State Tax Incentives for Renewable Energy and Energy Efficiency											
28.01	Mississippi	§27-7-22.29	Alternative Energy Job Creation	Various	Income	Credit	Employer	20	\$1,000/emp	100% liab	-
28.02	Mississippi	§57-75-5	Solar Panel Manufacturers	Solar	Sales	Exemption	Manufacturer	-	100%	-	-
28.03	Mississippi	§57-75-5	Solar Panel Manufacturers	Solar	Franchise	Exemption	Manufacturer	-	100%	-	-
28.04	Mississippi	§57-113-1	Clean Energy Manufacturing Facilities	Wind	Income	Exemption	Manufacturer	10	100%	-	-
28.04	Mississippi	§57-113-1	Clean Energy Manufacturing Facilities	Biomass	Income	Exemption	Manufacturer	10	100%	-	-
28.04	Mississippi	§57-113-1	Clean Energy Manufacturing Facilities	Solar	Income	Exemption	Manufacturer	10	100%	-	-
28.04	Mississippi	§57-113-1	Clean Energy Manufacturing Facilities	Various	Income	Exemption	Manufacturer	10	100%	-	-
28.05	Mississippi	§57-113-1	Clean Energy Manufacturing Facilities	Wind	Franchise	Exemption	Manufacturer	10	100%	-	-
28.05	Mississippi	§57-113-1	Clean Energy Manufacturing Facilities	Biomass	Franchise	Exemption	Manufacturer	10	100%	-	-
28.05	Mississippi	§57-113-1	Clean Energy Manufacturing Facilities	Solar	Franchise	Exemption	Manufacturer	10	100%	-	-
28.05	Mississippi	§57-113-1	Clean Energy Manufacturing Facilities	Various	Franchise	Exemption	Manufacturer	10	100%	-	-
28.06	Mississippi	§57-113-1	Clean Energy Manufacturing Facilities	Wind	Sales	Exemption	Manufacturer	10	100%	-	-
28.06	Mississippi	§57-113-1	Clean Energy Manufacturing Facilities	Biomass	Sales	Exemption	Manufacturer	10	100%	-	-
28.06	Mississippi	§57-113-1	Clean Energy Manufacturing Facilities	Solar	Sales	Exemption	Manufacturer	10	100%	-	-
28.06	Mississippi	§57-113-1	Clean Energy Manufacturing Facilities	Various	Sales	Exemption	Manufacturer	10	100%	-	-
28.07	Mississippi	§27-7-22.35	Biomass Fuel Production Facilities	Biomass	Income	Credit	Investor	-	5%	-	-
28.08	Mississippi	§27-7-22.35	Biomass Fuel Production Facilities	Biomass	Sales	Exemption	Investor	-	100%	-	-
33.00 New Hampshire State Tax Incentives for Renewable Energy and Energy Efficiency											
33.01	New Hampshire	72 §73	Renewable Generation Facilities	Wind	Property	Abatement	Owner	5	Varies	-	-
33.01	New Hampshire	72 §73	Renewable Generation Facilities	Geothermal	Property	Abatement	Owner	5	Varies	-	-
33.01	New Hampshire	72 §73	Renewable Generation Facilities	Biomass	Property	Abatement	Owner	5	Varies	-	-
33.01	New Hampshire	72 §73	Renewable Generation Facilities	Methane	Property	Abatement	Owner	5	Varies	-	-
33.01	New Hampshire	72 §73	Renewable Generation Facilities	Marine	Property	Abatement	Owner	5	Varies	-	-
33.01	New Hampshire	72 §73	Renewable Generation Facilities	Solar Thermal	Property	Abatement	Owner	5	Varies	-	-
33.01	New Hampshire	72 §73	Renewable Generation Facilities	Various	Property	Abatement	Owner	5	Varies	-	-
33.02	New Hampshire	72 §61	Residential Renewable-Energy Systems	Solar	Property	Exemption	Owner	-	-	-	-
33.02	New Hampshire	72 §61	Residential Renewable-Energy Systems	Wind	Property	Exemption	Owner	-	-	-	-
33.02	New Hampshire	72 §61	Residential Renewable-Energy Systems	Biofuel	Property	Exemption	Owner	-	-	-	-
34.00 New Jersey State Tax Incentives for Renewable Energy and Energy Efficiency											
34.01	New Jersey	§54:10A	Alternative Energy Technology Company	Various	Income	Credit	Investor	3	30%	\$500,000	-
34.02	New Jersey	§54:4-3.113	Renewable Energy Systems	Solar electric	Property	Exemption	Owner	-	100%	-	-
34.02	New Jersey	§54:4-3.113	Renewable Energy Systems	Wind	Property	Exemption	Owner	-	100%	-	-
34.02	New Jersey	§54:4-3.113	Renewable Energy Systems	Fuel cell	Property	Exemption	Owner	-	100%	-	-
34.02	New Jersey	§54:4-3.113	Renewable Energy Systems	Biomass	Property	Exemption	Owner	-	100%	-	-
34.02	New Jersey	§54:4-3.113	Renewable Energy Systems	Geothermal	Property	Exemption	Owner	-	100%	-	-
34.02	New Jersey	§54:4-3.113	Renewable Energy Systems	Methane	Property	Exemption	Owner	-	100%	-	-
34.02	New Jersey	§54:4-3.113	Renewable Energy Systems	Hydroelectric	Property	Exemption	Owner	-	100%	-	-
34.02	New Jersey	§54:4-3.113	Renewable Energy Systems	Cogeneration	Property	Exemption	Owner	-	100%	-	-
34.02	New Jersey	§54:4-3.113	Renewable Energy Systems	Marine	Property	Exemption	Owner	-	100%	-	-
34.02	New Jersey	§54:4-3.113	Renewable Energy Systems	Solar Thermal	Property	Exemption	Owner	-	100%	-	-
34.02	New Jersey	§54:4-3.113	Renewable Energy Systems	Various	Property	Exemption	Owner	-	100%	-	-
34.03	New Jersey	§54:32B-8.3	Solar Energy Equipment	Solar	Sales	Exemption	Purchaser	-	100%	-	-
34.04	New Jersey	§54:32B	Cogeneration Facility Equipment	Cogeneration	Sales	Exemption	Purchaser	-	100%	-	-
34.05	New Jersey	§54:209.4	Wind Energy Facilities	Wind	Income	Credit	Investor	10	100%	-	2015
34.06	New Jersey	§54:32B-8.55	Zero Emissions Vehicles	Electric Vehicle	Sales	Exemption	Purchaser	-	100%	-	-
36.00 New York State Tax Incentives for Renewable Energy and Energy Efficiency											
36.01	New York	§499-aaaa	Photovoltaic Equipment Expenditures Installed In New Yc	Solar electric	Property	Abatement	Owner	4	20%	\$62,500	2012
36.02	New York	4 §487	Solar, Wind & Biomass Energy Systems	Solar	Property	Exemption	Owner	15	100%	-	2014
36.02	New York	4 §487	Solar, Wind & Biomass Energy Systems	Wind	Property	Exemption	Owner	15	100%	-	2014
36.02	New York	4 §487	Solar, Wind & Biomass Energy Systems	Biomass	Property	Exemption	Owner	15	100%	-	2014
36.03	New York	§28(a)	Biofuel Production	Biofuel	Income	Credit	Producer	4	\$0.15/gal	\$2.5 million	2012
36.04	New York	§210(24)	Alternative Fuel Vehicle and Electric Vehicle Refueling Pr	Alternative Fuel	Income	Credit	Owner	-	50%	\$5,000	2017
36.04	New York	§210(24)	Alternative Fuel Vehicle and Electric Vehicle Refueling Pr	Electric Vehicle	Income	Credit	Owner	-	50%	5000	2017
36.05	New York	§487-a	Energy Conservation Improvements	Energy Efficiency	Property	Exemption	Owner	-	100%	-	-
36.06	New York	22 §210.39	Clean Heating Fuel Purchase	Biodiesel	Income	Credit	Purchaser	-	\$0.01/gal/%	\$0.20/gal	2016
36.07	New York	22 §210.37	Solar And Fuel Cell System Equipment	Solar	Income	Credit	Owner	-	25%	\$5,000	-
36.07	New York	22 §210.37	Solar And Fuel Cell System Equipment	Fuel cell	Income	Credit	Owner	-	20%	\$1,500	-
36.08	New York	28 §1115 (ee)	Residential Solar-Energy Systems Equipment	Solar	Sales	Exemption	Purchaser	-	100%	-	-
36.09	New York	28 §1115 (a)(1)	Wind Farm Components	Wind	Sales	Exemption	Purchaser	-	100%	-	-
36.10	New York	22 §210.37	Fuel Cell Electric Generating Equipment	Fuel cell	Income	Credit	Purchaser	-	100%	\$1,500	-
36.11	New York	§470	Green Building Property Tax Exemption	Energy Efficiency	Property	Exemption	Owner	10	0-100%	-	-
36.12	New York	§1115(42)	Alternative Fuel Sales	Alternative Fuel	Sales	Exemption	Purchaser	-	20-100%	-	2014
36.13	New York	§499-aaa	Green Roofs	Energy Efficiency	Property	Abatement	Owner	-	\$5.23/sf	-	2019
37.00 North Carolina State Tax Incentives for Renewable Energy and Energy Efficiency											
37.01	North Carolina	§105-129.15	Renewable Energy Systems	Biomass	Income	Credit	Owner	5	35%	\$10,500	2015

Sec	Jurisdiction	Statute	Incentive Title	Technology	Tax	Type	Taxpayer	Period (yrs)	Amount	Maximum	Expiration
37.01	North Carolina	\$105-129.15	Renewable Energy Systems	Hydroelectric	Income	Credit	Owner	5	35%	\$10,500	2015
37.01	North Carolina	\$105-129.15	Renewable Energy Systems	Solar electric	Income	Credit	Owner	5	35%	\$10,500	2015
37.01	North Carolina	\$105-129.15	Renewable Energy Systems	Solar Thermal	Income	Credit	Owner	5	35%	\$1,400	2015
37.01	North Carolina	\$105-129.15	Renewable Energy Systems	Wind	Income	Credit	Owner	5	35%	\$10,500	2015
37.01	North Carolina	\$105-129.15	Renewable Energy Systems	Geothermal	Income	Credit	Owner	5	35%	\$8,400	2015
37.02	North Carolina	\$105-275(45)	Solar Energy Electric System	Solar electric	Property	Assessment	Owner	-	80%	-	-
37.03	North Carolina	\$105-277(g)	Active Solar Heating And Cooling Systems	Solar Thermal	Property	Abatement	Owner	-	100%	-	-
37.04	North Carolina	\$105-129.16D	Renewable Fuel Facilities	Alternative Fuel	Income	Credit	Owner	3-7	25-35%	-	2013
37.05	North Carolina	\$105-129.16F	Biodiesel Production	Biodiesel	Income	Credit	Producer	-	100%	\$500,000	2013
37.06	North Carolina	\$105-164.13D	Residential Energy-Efficient Appliances	Energy Efficiency	Sales	Exemption	Purchaser	Annual	100%	-	-
37.07	North Carolina	\$105-164.13(11)	Alternative Fuels	Alternative Fuel	Sales	Exemption	Purchaser	-	100%	-	-
37.08	North Carolina	\$105-130.25	Cogeneration Power Plants	Cogeneration	Income	Credit	Producer	-	10%	-	-
39.00 Ohio State Tax Incentives for Renewable Energy and Energy Efficiency											
39.01	Ohio	\$1710.01	Special Energy Improvement Districts	Solar	Property	Financing	Owner	-	Varies	-	-
39.02	Ohio	\$5709.53	Solar, Wind, And Hydrothermal Energy Systems	Solar	Property	Exemption	Owner	-	100%	-	-
39.02	Ohio	\$5709.53	Solar, Wind, And Hydrothermal Energy Systems	Wind	Property	Exemption	Owner	-	100%	-	-
39.02	Ohio	\$5709.53	Solar, Wind, And Hydrothermal Energy Systems	Geothermal	Property	Exemption	Owner	-	100%	-	-
39.03	Ohio	\$5733.46	Ethanol Plant Investment	Ethanol	Income	Credit	Owner	-	50%	\$5,000	2012
39.04	Ohio	\$3706	Energy Conversion And Thermal Efficiency Improvement	Solar Thermal	Property	Exemption	Owner	-	100%	-	-
39.04	Ohio	\$3706	Energy Conversion And Thermal Efficiency Improvement	Solar electric	Property	Exemption	Owner	-	100%	-	-
39.04	Ohio	\$3706	Energy Conversion And Thermal Efficiency Improvement	Wind	Property	Exemption	Owner	-	100%	-	-
39.04	Ohio	\$3706	Energy Conversion And Thermal Efficiency Improvement	Biomass	Property	Exemption	Owner	-	100%	-	-
39.04	Ohio	\$3706	Energy Conversion And Thermal Efficiency Improvement	Methane	Property	Exemption	Owner	-	100%	-	-
39.04	Ohio	\$3706	Energy Conversion And Thermal Efficiency Improvement	Cogeneration	Property	Exemption	Owner	-	100%	-	-
39.04	Ohio	\$3706	Energy Conversion And Thermal Efficiency Improvement	Various	Property	Exemption	Owner	-	100%	-	-
39.05	Ohio	\$5747.77	Alternative Fuel Retailers	Biodiesel	Income	Credit	Seller	-	\$0.035-0.130	-	2011
42.00 Pennsylvania State Tax Incentives for Renewable Energy and Energy Efficiency											
42.01	Pennsylvania	72 §5453.201	Commercial Wind Farms	Wind	Property	Exemption	Owner	-	100%	-	-
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	Solar	Sales	Exemption	Purchaser	-	100%	-	-
44.01	Rhode Island	\$44-18-30(57)	Renewable Energy Systems And Equipment	Wind	Sales	Exemption	Purchaser	-	100%	-	-
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	Solar	Property	Exemption	Owner	-	100%	-	-
44.02	Rhode Island	\$44-3-21	Renewable-Energy Systems	Wind	Property	Exemption	Owner	-	100%	-	-
44.02	Rhode Island	\$44-3-21	Renewable-Energy Systems	Geothermal	Property	Exemption	Owner	-	100%	-	-
44.03	Rhode Island	\$44-30-20	Hydroelectric Power Installation	Hydroelectric	Income	Credit	Owner	-	10%	\$50,000	-
44.04	Rhode Island	\$44-57-1	Residential Renewable Energy Systems	Solar electric	Income	Credit	Owner	-	25%	\$15,000	-
44.04	Rhode Island	\$44-57-1	Residential Renewable Energy Systems	Solar Thermal	Income	Credit	Owner	-	25%	\$7,000	-
44.04	Rhode Island	\$44-57-1	Residential Renewable Energy Systems	Wind	Income	Credit	Owner	-	25%	\$15,000	-
44.04	Rhode Island	\$44-57-1	Residential Renewable Energy Systems	Geothermal	Income	Credit	Owner	-	25%	\$7,000	-
44.05	Rhode Island	\$44-57-4(a)(6)	Residential Solar Property	Solar	Property	Exemption	Owner	-	100%	-	-
45.00 South Carolina State Tax Incentives for Renewable Energy and Energy Efficiency											
45.01	South Carolina	\$12-6-3587	Solar Energy Or Small Hydropower Systems	Solar	Income	Credit	Owner	-	25%	-	-
45.01	South Carolina	\$12-6-3587	Solar Energy Or Small Hydropower Systems	Hydroelectric	Income	Credit	Owner	-	25%	-	-
45.02	South Carolina	\$12-6-3620	Biomass Energy Systems	Biomass	Income	Credit	Owner	-	25%	\$650,000	-
45.03	South Carolina	\$12-6-3600(A)(1)	Biodiesel Motor Fuel Production	Biodiesel	Income	Credit	Producer	5	\$0.075-\$0.30/gal	25 million gal	2016
45.04	South Carolina	\$12-6-3631(A)	Ethanol And Biodiesel Research	Biodiesel	Income	Credit	Researcher	-	25%	\$100,000	2011
45.05	South Carolina	\$12-6-3376(A)	Plug-In Hybrid Vehicles	Electric Vehicle	Income	Credit	Purchaser	-	\$2,000	-	2016
45.06	South Carolina	\$12-6-3610(A)	Renewable Fuel Distribution, Processing And Dispensing	Alternative Fuel	Income	Credit	Owner	3	25%	-	2019
45.07	South Carolina	\$12-36-2120(71)	Hydrogen And Fuel Cell Equipment	Fuel cell	Sales	Exemption	Purchaser	-	100%	-	-
45.08	South Carolina	\$48-52-870	Energy Efficient Manufactured Homes	Energy Efficiency	Income	Credit	Purchaser	-	\$750	-	2019
45.09	South Carolina	\$12-36-2110	Energy Efficient Manufactured Homes	Energy Efficiency	Sales	Exemption	Purchaser	-	100%	-	2019
45.10	South Carolina	\$12-6-3588	Plant And Equipment For Clean Energy Manufacturing O	Wind	Income	Credit	Owner	-	10%	\$500,000	2020
45.10	South Carolina	\$12-6-3588	Plant And Equipment For Clean Energy Manufacturing O	Solar	Income	Credit	Owner	-	10%	\$500,000	2020
45.10	South Carolina	\$12-6-3588	Plant And Equipment For Clean Energy Manufacturing O	Geothermal	Income	Credit	Owner	-	10%	\$500,000	2020
45.10	South Carolina	\$12-6-3588	Plant And Equipment For Clean Energy Manufacturing O	Various	Income	Credit	Owner	-	10%	\$500,000	2020
45.11	South Carolina	\$12-6-3600	Alternative Motor Vehicles	Alternative Fuel	Income	Credit	Owner	-	20%	-	-
45.11	South Carolina	\$12-6-3600	Alternative Motor Vehicles	Electric Vehicle	Income	Credit	Owner	-	20%	-	-
45.11	South Carolina	\$12-6-3600	Alternative Motor Vehicles	Fuel cell	Income	Credit	Owner	-	20%	-	-
47.00 Tennessee State Tax Incentives for Renewable Energy and Energy Efficiency											
47.01	Tennessee	\$67-6-232	Manufacturers Of Clean Energy Technologies	Biomass	Sales	Credit	Manufacturer	8	99.50%	-	-
47.01	Tennessee	\$67-6-232	Manufacturers Of Clean Energy Technologies	Geothermal	Sales	Credit	Manufacturer	8	99.50%	-	-
47.01	Tennessee	\$67-6-232	Manufacturers Of Clean Energy Technologies	Fuel cell	Sales	Credit	Manufacturer	8	99.50%	-	-
47.01	Tennessee	\$67-6-232	Manufacturers Of Clean Energy Technologies	Hydroelectric	Sales	Credit	Manufacturer	8	99.50%	-	-
47.01	Tennessee	\$67-6-232	Manufacturers Of Clean Energy Technologies	Methane	Sales	Credit	Manufacturer	8	99.50%	-	-
47.01	Tennessee	\$67-6-232	Manufacturers Of Clean Energy Technologies	Solar	Sales	Credit	Manufacturer	8	99.50%	-	-

Sec	Jurisdiction	Statute	Incentive Title	Technology	Tax	Type	Taxpayer	Period (yrs)	Amount	Maximum	Expiration
47.01	Tennessee	\$67-6-232	Manufacturers Of Clean Energy Technologies	Wind	Sales	Credit	Manufacturer	8	99.50%	-	-
47.01	Tennessee	\$67-6-232	Manufacturers Of Clean Energy Technologies	Various	Sales	Credit	Manufacturer	8	99.50%	-	-
47.02	Tennessee	\$67-4-2109(m)	Green Energy Supply Chain Manufacturers	Various	Income	Credit	Manufacturer	-	100% incr charge	-	2028
47.03	Tennessee	\$67-5-601	Green Energy Production Facilities	Wind	Property	Exemption	Owner	-	67-87.5%	-	-
47.03	Tennessee	\$67-5-601	Green Energy Production Facilities	Solar	Property	Exemption	Owner	-	67-87.5%	-	-
47.03	Tennessee	\$67-5-601	Green Energy Production Facilities	Geothermal	Property	Exemption	Owner	-	67-87.5%	-	-
47.03	Tennessee	\$67-5-601	Green Energy Production Facilities	Fuel cell	Property	Exemption	Owner	-	67-87.5%	-	-
47.04	Tennessee	\$67-4-2108(a)(5)	Green Energy Production Facilities	Wind	Franchise	Exemption	Owner	-	100%	-	-
47.04	Tennessee	\$67-4-2108(a)(5)	Green Energy Production Facilities	Solar	Franchise	Exemption	Owner	-	100%	-	-
47.04	Tennessee	\$67-4-2108(a)(5)	Green Energy Production Facilities	Geothermal	Franchise	Exemption	Owner	-	100%	-	-
47.04	Tennessee	\$67-4-2108(a)(5)	Green Energy Production Facilities	Fuel cell	Franchise	Exemption	Owner	-	100%	-	-
50.00 Vermont State Tax Incentives for Renewable Energy and Energy Efficiency											
50.01	Vermont	32 §3845	Alternate Energy Source Systems	Wind	Property	Exemption	Owner	-	100%	-	-
50.01	Vermont	32 §3845	Alternate Energy Source Systems	Solar	Property	Exemption	Owner	-	100%	-	-
50.01	Vermont	32 §3845	Alternate Energy Source Systems	Methane	Property	Exemption	Owner	-	100%	-	-
50.02	Vermont	24 §1751(3)	Clean Energy Assessment Districts	Solar Thermal	Property	Financing	Owner	-	Varies	-	-
50.02	Vermont	24 §1751(3)	Clean Energy Assessment Districts	Solar electric	Property	Financing	Owner	-	Varies	-	-
50.02	Vermont	24 §1751(3)	Clean Energy Assessment Districts	Methane	Property	Financing	Owner	-	Varies	-	-
50.02	Vermont	24 §1751(3)	Clean Energy Assessment Districts	Wind	Property	Financing	Owner	-	Varies	-	-
50.02	Vermont	24 §1751(3)	Clean Energy Assessment Districts	Biomass	Property	Financing	Owner	-	Varies	-	-
50.02	Vermont	24 §1751(3)	Clean Energy Assessment Districts	Hydroelectric	Property	Financing	Owner	-	Varies	-	-
50.02	Vermont	24 §1751(3)	Clean Energy Assessment Districts	Geothermal	Property	Financing	Owner	-	Varies	-	-
50.02	Vermont	24 §1751(3)	Clean Energy Assessment Districts	Fuel cell	Property	Financing	Owner	-	Varies	-	-
50.02	Vermont	24 §1751(3)	Clean Energy Assessment Districts	Various	Property	Financing	Owner	-	Varies	-	-
50.03	Vermont	32 §9741(46)	Renewable-Energy Systems	Cogeneration	Sales	Exemption	Purchaser	-	100%	-	-
50.03	Vermont	32 §9741(46)	Renewable-Energy Systems	Solar Thermal	Sales	Exemption	Purchaser	-	100%	-	-
50.03	Vermont	32 §9741(46)	Renewable-Energy Systems	Methane	Sales	Exemption	Purchaser	-	100%	-	-
50.03	Vermont	32 §9741(46)	Renewable-Energy Systems	Various	Sales	Exemption	Purchaser	-	100%	-	-
50.04	Vermont	32 §5930z	Solar Energy Equipment On Business Properties	Solar	Income	Credit	Owner	-	30%	-	2016
51.00 Virginia State Tax Incentives for Renewable Energy and Energy Efficiency											
51.01	Virginia	\$15.2-958.3	Clean Energy Assessment Districts	Energy Efficiency	Property	Financing	Owner	-	Varies	-	-
51.01	Virginia	\$15.2-958.3	Clean Energy Assessment Districts	Various	Property	Financing	Owner	-	Varies	-	-
51.02	Virginia	\$58.1-3660	Solar Energy Property	Solar	Property	Exemption	Owner	5	100%	-	-
51.03	Virginia	\$58.1-439.12:02.	Biodiesel And Green Diesel Production	Biodiesel	Income	Credit	Producer	3	\$0.01/gal	\$5,000	-
51.04	Virginia	\$58.1-438.1	Clean-Fuel Vehicle And Refueling Property	Electric Vehicle	Income	Credit	Purchaser	-	10-20%	-	-
51.04	Virginia	\$58.1-438.1	Clean-Fuel Vehicle And Refueling Property	Alternative Fuel	Income	Credit	Purchaser	-	10-20%	-	-
51.05	Virginia	\$58.1-439.1	Clean Fuel Vehicle Job Creation	Alternative Fuel	Income	Credit	Manufacturer	3	\$700/job	-	2014
51.05	Virginia	\$58.1-439.1	Clean Fuel Vehicle Job Creation	Electric Vehicle	Income	Credit	Manufacturer	3	\$700/job	-	2014
51.06	Virginia	\$58.1-3221.2	Energy Efficient Buildings	Energy Efficiency	Property	Assessment	Owner	-	Varies	-	-
51.07	Virginia	\$58.1-609.1(18)	Energy-Efficient Products	Energy Efficiency	Sales	Exemption	Purchaser	Annual	100%	-	2012
51.08	Virginia	\$58.1-322(D)(12).	Sales And Use Tax Paid On Energy Conservation Perso	Energy Efficiency	Income	Deduction	Purchaser	-	20%	\$500	-
51.09	Virginia	\$58.1-3221.4	Renewable Energy Manufacturing	Solar	Property	Assessment	Manufacturer	-	Varies	-	-
51.09	Virginia	\$58.1-3221.4	Renewable Energy Manufacturing	Wind	Property	Assessment	Manufacturer	-	Varies	-	-
51.09	Virginia	\$58.1-3221.4	Renewable Energy Manufacturing	Hydroelectric	Property	Assessment	Manufacturer	-	Varies	-	-
51.09	Virginia	\$58.1-3221.4	Renewable Energy Manufacturing	Biomass	Property	Assessment	Manufacturer	-	Varies	-	-
51.09	Virginia	\$58.1-3221.4	Renewable Energy Manufacturing	Cogeneration	Property	Assessment	Manufacturer	-	Varies	-	-
51.09	Virginia	\$58.1-3221.4	Renewable Energy Manufacturing	Methane	Property	Assessment	Manufacturer	-	Varies	-	-
51.09	Virginia	\$58.1-3221.4	Renewable Energy Manufacturing	Marine	Property	Assessment	Manufacturer	-	Varies	-	-
51.09	Virginia	\$58.1-3221.4	Renewable Energy Manufacturing	Geothermal	Property	Assessment	Manufacturer	-	Varies	-	-
51.09	Virginia	\$58.1-3221.4	Renewable Energy Manufacturing	Various	Property	Assessment	Manufacturer	-	Varies	-	-
51.10	Virginia	\$58.1-439.12:05	Green Job Creation	Fuel cell	Income	Credit	Employer	5	\$500/job	\$175,000	2014
51.10	Virginia	\$58.1-439.12:05	Green Job Creation	Methane	Income	Credit	Employer	5	\$500/job	\$175,000	2014
51.10	Virginia	\$58.1-439.12:05	Green Job Creation	Geothermal	Income	Credit	Employer	5	\$500/job	\$175,000	2014
51.10	Virginia	\$58.1-439.12:05	Green Job Creation	Solar	Income	Credit	Employer	5	\$500/job	\$175,000	2014
51.10	Virginia	\$58.1-439.12:05	Green Job Creation	Hydroelectric	Income	Credit	Employer	5	\$500/job	\$175,000	2014
51.10	Virginia	\$58.1-439.12:05	Green Job Creation	Wind	Income	Credit	Employer	5	\$500/job	\$175,000	2014
51.10	Virginia	\$58.1-439.12:05	Green Job Creation	Biomass	Income	Credit	Employer	5	\$500/job	\$175,000	2014
51.10	Virginia	\$58.1-439.12:05	Green Job Creation	Biofuel	Income	Credit	Employer	5	\$500/job	\$175,000	2014
51.10	Virginia	\$58.1-439.12:05	Green Job Creation	Various	Income	Credit	Employer	5	\$500/job	\$175,000	2014
54.00 West Virginia State Tax Incentives for Renewable Energy and Energy Efficiency											
54.01	West Virginia	\$11-13-2o	Wind Energy Generation	Wind	Business	Abatement	Owner	-	70%	-	-
54.02	West Virginia	\$11-6A-5a	Wind Energy Systems	Wind	Property	Assessment	Utility	-	25%	-	-
54.03	West Virginia	\$11-15-9k(a)(1)(A)	Energy-Efficient Products	Energy Efficiency	Sales	Exemption	Purchaser	Annual	100%	-	2010
54.04	West Virginia	\$11-13Z-1	Residential Solar Energy Installations	Solar	Income	Credit	Owner	-	30%	\$2,000	2013
54.05	West Virginia	\$11-6D-1	Alternative Fuel Vehicles and Refueling Infrastructure	Alternative Fuel	Income	Credit	Owner	-	35-62.5%	\$7,500-25,000/v	2021
54.05	West Virginia	\$11-6D-1	Alternative Fuel Vehicles and Refueling Infrastructure	Alternative Fuel	Income	Credit	Owner	-	35-62.5%	\$200,000-\$250,000	2021

Sec	Jurisdiction	Statute	Incentive Title	Technology	Tax	Type	Taxpayer	Period (yrs)	Amount	Maximum	Expiration
55.00 Wisconsin State Tax Incentives for Renewable Energy and Energy Efficiency											
55.01	Wisconsin	§70.111(18)	Biogas, Solar, Wind-Energy Systems	Solar	Property	Exemption	Owner	-	100%	-	-
55.01	Wisconsin	§70.111(18)	Biogas, Solar, Wind-Energy Systems	Wind	Property	Exemption	Owner	-	100%	-	-
55.01	Wisconsin	§70.111(18)	Biogas, Solar, Wind-Energy Systems	Biomass	Property	Exemption	Owner	-	100%	-	-
55.02	Wisconsin	§66.0627 (8)	Renewable Energy And Energy-Efficiency Projects	Energy Efficiency	Property	Financing	Owner	-	21%	-	-
55.02	Wisconsin	§66.0627 (8)	Renewable Energy And Energy-Efficiency Projects	Various	Property	Financing	Owner	-	Varies	-	-
55.03	Wisconsin	§77.54(56)	Renewable Energy Systems	Biomass	Sales	Exemption	Purchaser	-	100%	-	-
55.03	Wisconsin	§77.54(56)	Renewable Energy Systems	Wind	Sales	Exemption	Purchaser	-	100%	-	-
55.03	Wisconsin	§77.54(56)	Renewable Energy Systems	Solar	Sales	Exemption	Purchaser	-	100%	-	-
55.03	Wisconsin	§77.54(56)	Renewable Energy Systems	Methane	Sales	Exemption	Purchaser	-	100%	-	-
55.04	Wisconsin	§71.28(4)(b)	Biodiesel Fuel Production	Biodiesel	Income	Credit	Producer	-	\$0.10/gal	\$1 million	2014
55.05	Wisconsin	§71.28(5j)(b)	Ethanol And Biodiesel Fuel Pump	Biodiesel	Income	Credit	Owner	-	25%	\$5,000/station	2017
55.06	Wisconsin	§71.28	Vehicle And Energy-Efficiency Research Activities	Electric Vehicle	Income	Credit	Researcher	-	10%	-	-
55.07	Wisconsin	§71.07(3rm)	Woody Biomass Equipment	Biomass	Income	Credit	Owner	-	10%	\$100,000	2015

00. Federal Tax Incentives for Renewable Energy and Energy Efficiency

00.01 Federal business income tax credit for renewable electricity production

A. GENERAL DESCRIPTION. The Federal Internal Revenue Code provides a business income tax credit in the amount of \$0.023 (2014) 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; Notice 2012-35; Notice 2013-29; Notice 2013-33; PLR 201308021; Notice 2014-36; Notice 2014-39.*

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

C. 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, municipal solid waste, hydropower, marine and hydrokinetic renewables.

1. 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.
2. 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.
3. Qualifying open-loop biomass generally 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.

4. Qualifying open-loop biomass does not include municipal solid waste, gas derived from the biodegradation of solid waste, or paper that is commonly recycled.
5. 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).
6. 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.
7. Qualifying municipal solid waste facilities include landfill gas facilities and trash combustion facilities, and does not include paper which is commonly recycled and which has been segregated from other solid waste.
8. 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.
9. Qualifying hydropower production must be certified by the Federal Energy Regulatory Commission.

10. 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).
11. 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.

D. INCENTIVE AMOUNTS. The tax credit amount is \$0.023 (2014) per kilowatt hour (KWH) of electricity produced and sold to an unrelated person.

1. 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.

E. 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 per KWH by \$0.0485 (2014). 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.

F. INCENTIVE TIMEFRAME. The tax credit is available for a 10-year period beginning on the placed-in-service date of the qualifying facility.

1. The tax credit for qualifying closed-loop biomass facilities expired December 31, 2013. Qualifying closed-loop biomass facilities must begin construction on or before December 31, 2013.
2. The tax credit for qualifying open-loop biomass facilities expired December 31, 2013. Qualifying open-loop biomass facilities must begin construction on or before December 31, 2013.
3. The tax credit for qualifying wind facilities expired December 31, 2013. Qualifying wind facilities must begin construction on or before December 31, 2013.
4. The tax credit for qualifying landfill gas facilities expired December 31, 2013. Qualifying landfill gas facilities must begin construction on or before December 31, 2013.
5. The tax credit for qualifying geothermal energy facilities expired December 31, 2013. Qualifying geothermal facilities must begin construction on or before December 31, 2013.
6. The tax credit for qualifying solar energy facilities expired December 31, 2005.
7. The tax credit for qualifying hydropower facilities expired December 31, 2013. Qualifying hydropower facilities must begin construction on or before December 31, 2013.
8. The tax credit for qualifying marine and hydrokinetic energy facilities expired December 31, 2013. Qualifying marine and hydrokinetic energy facilities must begin construction on or before December 31, 2013.

G. MISCELLANEOUS.

1. Taxpayer may make an irrevocable election to take a 30% tax credit under IRC §48 instead of the tax credit above.
2. Taxpayer may apply establish the beginning of construction by starting physical work of a significant nature or by meeting the safe harbor of paying or incurring 5% or more of the total cost of the facility.

00.02 Federal business income tax credit for investment in energy property

A. GENERAL DESCRIPTION. The Federal Internal Revenue Code provides a business income tax credit in the amount of 10 or 30% the basis of qualifying energy property investments. *IRC §48; Treas. Reg §1.48-1 through -9; Rev Rul 70-236; Rev Rul 79-183; Notice 2008-68, 2008-34 IRB 418; PLR 200947027; PLR 201043023; PLR 201043023; PLR 201121005; CCA 201122017; PLR 201142022; PLR 201142005; PLR 201308005; PLR 201310001; Notice 2014-39.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer owners placing qualifying energy property in service.

C. QUALIFYING ACTIVITY. Taxpayer must place qualifying energy property in service. Qualifying energy property is fuel cell property, solar energy property, small wind energy property, geothermal property, geothermal heat pump systems property, microturbine property and combined heat and power system property. Qualifying energy property must meet performance and quality standards prescribed by regulations, which are in effect at the time of the acquisition of the property. Qualifying fuel cell property is an integrated system comprised of a fuel cell stack assembly and associated balance of plant components which converts a fuel into electricity using electrochemical means, that has a nameplate capacity of at least 0.5 kilowatt of electricity using an electrochemical process, and has an electricity-only generation efficiency greater than 30%. Qualifying solar energy property is equipment which uses solar energy to generate electricity, to heat or cool (or provide hot water for use in) a building or structure, or to provide solar process heat. Qualifying small wind energy property is property that uses a wind turbine that has a nameplate capacity of not more than 100 kilowatts to generate electricity. Qualifying geothermal property is equipment used to produce, distribute, or use energy derived from a geothermal deposit including well-head and "downhole" equipment (such as screening or slotted liners, tubing, downhole pumps, and associated equipment). Qualifying geothermal heat pump system property is equipment that 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. Qualifying microturbine property is a stationary microturbine power plant that has (1) a nameplate capacity of less than 2,000 kilowatts and (2) an electricity-only generation efficiency of not less than 26% at International Standard Organization conditions.

Qualifying combined heat and power system property is property which 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%.

1. Qualifying solar energy property includes equipment that uses solar energy to illuminate the inside of a structure using fiber-optic distributed sunlight.
2. Qualifying solar energy property includes reflective roof surfaces when installed with rooftop photovoltaic solar generation system.
3. Qualifying solar energy property includes a building's structural components that use solar energy to produce electricity. Qualifying solar energy property includes installed solar roof-mounted system except to the extent that Regs. §1.48-9 requires that a portion of the basis of the property is allocable to any portion of such property that performs the function of a roof, e.g., protection from rain, snow, wind, sun, hot or cold temperatures or that provides structural support or insulation.
4. Qualifying solar energy property includes the photovoltaic (PV) curtain wall (in its component parts) which generated electricity through the use of solar energy and also enclosed the building.
5. Qualifying solar energy property does not include property used to generate energy for the purpose of heating a swimming pool.
6. Qualifying geothermal equipment does not need to be specially designed for geothermal use, but must be used exclusively for geothermal use.
7. Qualifying energy property includes storage devices.

D. INCENTIVE AMOUNTS. The tax credit amount is 30% of the cost of fuel cell property, solar energy property and small wind energy property. The tax

credit amount is 10% the cost of geothermal property used to produce, distribute, or use energy, geothermal heat pump systems property used to heat or cool a structure, qualifying microturbine property and qualifying combined heat and power system property.

1. Qualifying costs includes property financed with nonqualifying nonrecourse financing, subsidized financing or tax-exempt private activity bonds.

E. INCENTIVE LIMITS. The maximum annual tax credit amount is \$1,500 for each 0.5 kilowatt of capacity for qualifying fuel cell property and \$200 for each kilowatt of capacity for qualifying microturbine property.

F. INCENTIVE TIMEFRAME. The tax credit for qualifying fuel cell property expires December 31, 2016. The tax credit for qualifying solar energy property expires December 31, 2016. The tax credit for qualifying small wind property expires December 31, 2016. The tax credit for qualifying combined heat and power system property expires December 31, 2016. The tax credit for qualifying microturbine property expires December 31, 2016. Unused tax credit may be carried back 1 year and carried forward 20 years.

G. MISCELLANEOUS.

1. The tax credit may be recaptured if the energy property is disposed of or otherwise ceases to be energy property before the end of the 5-year period after the property is placed in service. There is a 20% recapture of credit for each full year the property ceases to be qualifying energy property. Recapture is not triggered if a disposition or cessation occurs 5 years or more after the date the property is placed in service.

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

A. 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; Notice 2013-12.*

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

C. 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.

1. 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.

2. A qualifying advanced energy project may include any portion of an investment in other projects as eligible for a credit under IRC §48C.
3. 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.
4. 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).

D. 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.

1. Eligible property does not include a building or its structural components.

E. INCENTIVE LIMITS. The nationwide maximum cumulative tax credit amount is \$2.3 billion. Phase II program has approximately \$150 million of tax credit available for reallocation. The maximum tax credit amount is \$30 million per project.

F. INCENTIVE TIMEFRAME. Taxpayer must apply for the tax credit during the Phase II program

round beginning February 7, 2013 and ending on July 23, 2013. Preliminary application for US Department of Energy recommendation must be submitted by April 9, 2013. The IRS will accept or reject Phase II program round applications by November 15, 2013. 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.

G. MISCELLANEOUS.

1. The basis of qualifying property must be reduced by the amount of tax credit received.
2. Rules similar to the rules relating to the treatment of qualifying progress expenditures under former IRC §46(c) and (d) apply.

00.04 Federal business income tax credit for qualifying alternative fuel vehicle refueling property

A. GENERAL DESCRIPTION. The Federal Internal Revenue Code provides a business income tax credit in the amount of 30% of the cost of installing qualifying alternative fuel vehicle refueling property. *IRC §30C; Notice 2007-43, 2007-22 IRB 1318; PLR 201034007.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer owners of qualifying alternative fuel vehicle refueling property.

1. Taxpayer selling the property to a tax-exempt purchaser may claim the tax credit. Taxpayer seller must clearly disclose to the tax-exempt purchaser the amount of any tax credit allowable for that property.

C. QUALIFYING ACTIVITY. Taxpayer must own qualifying alternative fuel vehicle refueling property. Qualifying alternative fuel vehicle refueling property is property for the storage or dispensing of a clean-burning fuel or electricity into the fuel tank or battery of a motor vehicle propelled by such fuel or electricity. The storage or dispensing of the fuel or electricity must be at the point of delivery into the fuel tank or battery of

the motor vehicle. Clean-burning fuels are fuels at least 85% of the volume of which consists of ethanol, natural gas, compressed natural gas, liquefied natural gas, liquefied petroleum gas, hydrogen or any mixture of biodiesel and diesel fuel, determined without regard to any use of kerosene and containing at least 20% biodiesel.

1. Qualifying alternative fuel vehicle refueling property does not include a building or its structural components.
2. Qualifying alternative fuel vehicle refueling property must not be used predominantly outside the U.S. and may be used predominantly in a U.S. possession.
3. Qualifying alternative fuel vehicle refueling property does not include the cost of any property taken into account under the expensing rules of IRC §179.
4. Qualifying alternative fuel vehicle refueling property does not include hydrogen refueling station that dispenses hydrogen into fork lift trucks.

D. INCENTIVE AMOUNTS. The tax credit amount is 30% of the cost of qualifying alternative fuel vehicle refueling property. The cost of qualifying alternative fuel vehicle refueling property includes the cost of acquiring or constructing the qualifying alternative fuel vehicle refueling property or of converting conventional refueling property into qualifying alternative fuel vehicle refueling property.

1. The cost of qualifying alternative fuel vehicle refueling property does not include costs that are properly allocable to land or to a building and its structural components. Costs properly allocable to land include costs related to the acquisition of land on which the qualifying alternative fuel vehicle refueling property is located and expenses for permits, legal fees, project management, or engineering to the extent such expenses are related to the land.
2. The cost of qualifying alternative fuel vehicle refueling property does not include any amount that is taken into account under IRC §179 (relating to the election to expense certain depreciable business assets).
3. If converted qualifying alternative fuel vehicle refueling property is treated as

reconditioned or rebuilt property, the cost of the qualifying alternative fuel vehicle refueling property includes the cost of reconditioning or rebuilding the non-qualifying alternative fuel vehicle property, but does not include the basis of the non-qualifying alternative fuel vehicle property. For converted qualifying alternative fuel vehicle refueling property, the cost of the qualifying alternative fuel vehicle refueling property includes both the adjusted basis of the non-qualifying alternative fuel vehicle property immediately before the conversion and the cost of the conversion.

4. The cost of qualifying alternative fuel vehicle refueling property that is dual-use property used to store and/or dispense both alternative fuel and conventional fuel, includes the cost of the dual-use property only to the extent such cost exceeds the cost of equivalent conventional refueling property.

E. INCENTIVE LIMITS. The maximum annual tax credit amounts are \$30,000 per location, for qualifying alternative fuel vehicle refueling property used in a trade or business and \$1,000 per location, for qualifying alternative fuel vehicle refueling property installed on property which is used as a principal residence.

1. The maximum tax credit allowable for qualifying alternative fuel vehicle refueling property installed on property which is used as a principal residence cannot exceed for any taxable year the difference between Taxpayer's regular tax (reduced by certain other credits) and Taxpayer's tentative minimum tax.

F. INCENTIVE TIMEFRAME. The tax credit expired December 31, 2013. For qualifying alternative fuel vehicle refueling property relating to hydrogen, the tax credit expires December 31, 2014. Unused tax credit for qualifying refueling property used in a trade or business may be carried back 1 year and forward 20 years.

G. MISCELLANEOUS.

1. The tax credit may be recaptured if the alternative fuel vehicle refueling property ceases to qualify as qualifying alternative fuel vehicle refueling property.

2. Taxpayer's basis in qualifying alternative fuel vehicle refueling property is reduced by the amount of the tax credit.
3. Taxpayer may elect not to have IRC §30C apply, upon which no tax credit will be allowed.

00.05 Federal business income tax credit for certain alternative fuels

A. GENERAL DESCRIPTION. The Federal Internal Revenue Code provides a business income tax credit in amounts ranging from \$0.10 to \$1.01 per gallon for the production and sale or use of alcohol fuel and alcohol fuel mixtures. *IRC §40; IRS. Notice 2009-6, Sec. 3(a), 2009-3 IRB; IRC §87; AM2010-004; AM2010-002; PLR 201042018; PLR 201125008.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer producers and sellers or users of alcohol-based fuels which are suitable for use in an internal combustion engine.

1. Taxpayers who have a productive capacity for alcohol not in excess of 60 million gallons are eligible small ethanol producers. For pass-through entities, the limit amount applies at the entity level and at the interest-holder level.
2. Taxpayers producing cellulosic biofuel must be registered with the IRS.

C. QUALIFYING ACTIVITY. Taxpayer must produce and sell or use alcohol-based fuels. Alcohol-based fuels are alcohol mixtures, alcohol fuels, second generation biofuel and ethanol. An alcohol mixture is a mixture of alcohol and gasoline or of alcohol and a special fuel, which is sold by Taxpayer producer to any person for use as a fuel, or used by Taxpayer as a fuel. Alcohol fuel includes methanol and ethanol, and the alcohol gallon equivalent of ethyl tertiary butyl ether, or other ethers produced from such alcohol. Second generation biofuel is any alcohol, ether, ester, or hydrocarbon that is produced in the U.S. and derived from any lignocellulosic or hemicellulosic matter that is available on a renewable or recurring basis, including dedicated energy crops and trees, wood and wood residues, plants, grasses, agricultural residues, fibers, animal wastes and other waste materials, and municipal solid waste, and any cultivated algae, cyanobacteria, or lemna. Ethanol production is

any alcohol which is ethanol and is sold by Taxpayer producer to another person for use as a fuel, or used by Taxpayer as a fuel.

1. Qualifying production does not include casual off-farm production.
2. Qualifying alcohol does not include alcohol produced from petroleum, natural gas, or coal, or any alcohol with a proof of less than 150.
 - (i). Alcohol proof does not include denaturants, which are additives that make the alcohol unfit for human consumption. Denaturants are taken into account in determining the volume of alcohol eligible for the per-gallon incentive and cannot exceed 2% of volume.
3. Qualifying fuel does not include fuel that is produced outside the United States for use as a fuel outside the United States.
4. Qualifying second generation biofuel must be both produced in the United States and used as fuel in the United States.
5. Qualifying fuel does not include fuels containing significant water, sediment, or ash content, such as black liquor.
6. Qualifying fuel does not include any liquid fuel derived from a pulp or paper manufacturing process.

D. INCENTIVE AMOUNTS. The tax credit amount is equal to the sum of: (1) the alcohol mixture credit, (2) the alcohol credit, the small ethanol producer credit, and (3) the second generation biofuel producer credit. The alcohol and alcohol mixture credit is equal to \$0.50 for each gallon of alcohol that is used as a fuel or blended into a fuel mixture. The small ethanol producer tax credit is equal to \$0.10 for each gallon. The second generation biofuel producer credit of any taxpayer is equal to the \$1.01 for each gallon of qualifying second generation biofuel production.

1. The tax credit amount may not double count second generation biofuel in an alcohol mixture or second generation biofuel as ethanol.
2. The alcohol and alcohol mixture credit is reduced to \$0.45 for at-least-150-but-less-than-190 proof alcohol.

E. INCENTIVE LIMITS. The maximum annual tax credit amount is \$1.5 million.

F. INCENTIVE TIMEFRAME. The tax credit expired December 31, 2011. For qualifying second generation biofuel projects, the tax credit expired December 31, 2013. Unused tax credit may be carried back 1 year and carried forward 20 years, or 3 years in the event of expiration of the tax credit.

G. MISCELLANEOUS.

1. The tax credit may be recaptured if the alcohol is separated from the mixture or the mixture is used other than as a fuel.
2. For qualifying alcohol fuels projects, the tax credit is allowable against the alternative minimum tax.
3. Taxpayer must include in gross income the amount of the tax credit determined with respect to Taxpayer for the taxable year.

00.06 Federal business income tax credit for biodiesel fuels

A. GENERAL DESCRIPTION. The Federal Internal Revenue Code provides a business income tax credit in the amounts of \$1.00 per gallon of biodiesel, biodiesel mixtures, renewable biomass diesel and renewable biomass diesel mixtures produced and sold or used and \$0.10 per gallon of small agri-biodiesel produced. *IRC §40A; Prop Reg §1.40A-1; IRC §87; PLR 201005017; CCA 200945035; AM 2010-002; CCA 201144024.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer producers, sellers, and users of biodiesel and biodiesel mixtures.

1. Small agri-biodiesel producer Taxpayers have a productive capacity for agri-biodiesel not in excess of 60 million gallons.
2. Any portion of the small agri-biodiesel producer credit may be apportioned pro rata among patrons of the organization on the basis of the quantity or value of business done with or for such patrons for the taxable year.

C. QUALIFYING ACTIVITY. Taxpayer must produce, sell and use biodiesel used to make biodiesel mixtures or produce agri-biodiesel. A qualifying

biodiesel mixture is a mixture of biodiesel and diesel fuel which is sold by Taxpayer, in a trade or business, to any person for use as a fuel, or is used by Taxpayer as a fuel. Qualifying agri-biodiesel production is any agri-biodiesel which is produced by an eligible small agri-biodiesel producer which is sold to another person for use in the production of a qualifying biodiesel mixture, as a fuel in a trade or business, or to sell at retail to another person, placing such agri-biodiesel in the fuel tank; or is used or sold by the eligible small agri-biodiesel producer for any purpose described above.

1. Qualifying biodiesel includes diesel fuel derived from biomass using a thermal depolymerization process which meets the registration requirements for fuels and fuel additives established by the EPA under section 211 of the Clean Air Act, and the requirements of the ASTM D975 or D396. Thermal depolymerization processes use heat and pressure, with or without the presence of catalysts.
 - (i). Qualifying biodiesel does not include any liquid to which a IRC §40 credit may be determined.
2. Taxpayer users must obtain a certification from the producer or importer of the biodiesel which identifies the product produced and the percentage of biodiesel and agri-biodiesel in the product.
3. Qualifying production does not include casual off-farm production.

D. INCENTIVE AMOUNTS. The tax credit amount is the sum of three separate credits: (1) the biodiesel mixture credit; (2) the biodiesel credit; (3) the small agri-biodiesel producer credit.

1. The biodiesel mixture credit equals \$1.00 per gallon of biodiesel used by Taxpayer in the production of a qualifying biodiesel mixture.
2. The biodiesel credit equals \$1.00 per gallon of biodiesel which is not in a mixture with diesel fuel used by Taxpayer as a fuel in a trade or business or sold by Taxpayer at retail to a person and placed in the fuel tank of such person's vehicle.
3. The small agri-biodiesel producer credit equals \$0.10 per gallon of qualifying agri-biodiesel production.

E. INCENTIVE LIMITS. The maximum tax credit amount is the tax credit for 15 million gallons.

F. INCENTIVE TIMEFRAME. The tax credit expired December 31, 2013.

G. MISCELLANEOUS.

1. The tax credit may be recaptured if any person separates the biodiesel from a qualifying biodiesel mixture, or uses the mixture other than as a fuel.
2. The tax credit may be recaptured if any person mixes retail sold biodiesel or uses such biodiesel other than as a fuel.
3. Taxpayer must include in gross income the amount of tax credit determined with respect to Taxpayer for the taxable year.

00.07 Federal income tax credit for plug-in electric vehicles

A. GENERAL DESCRIPTION. The Federal Internal Revenue Code provides an income tax credit in the amount of 10% of the cost of any qualifying plug-in electric vehicle placed in service. *IRC §30; IRS Notice 2009-58.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayers owners of a qualifying plug-in electric vehicle. The original use of the vehicle must begin with Taxpayer. Taxpayer must acquire the vehicle for use or lease and not for resale.

1. Taxpayer selling the property to a tax exempt purchaser may claim the tax credit. Taxpayer seller must clearly disclose to the tax exempt purchaser the amount of any tax credit allowable for that property.

C. QUALIFYING ACTIVITY. Taxpayer must own a qualifying plug-in electric vehicle. A qualifying plug-in electric vehicle is a vehicle which is manufactured primarily for use on public streets, roads and highways, has a gross vehicle weight rating of less than 14,000 pounds, is propelled to a significant extent by an electric motor that draws electricity from a battery that has a capacity of at least 4 kilowatt hours (at least 2.5 kilowatt hours in the case of a 2- or 3-wheeled vehicle), and is capable of being recharged from an external source of electricity.

1. Qualifying plug-in electric vehicles must be acquired for use or lease by the taxpayer and not for resale and made by a specified manufacturer.
2. Taxpayer purchasers may rely on the certification by the domestic manufacturer—or domestic distributor in the case of a foreign vehicle—that a particular make, model, and model year of vehicle qualifies.

D. INCENTIVE AMOUNTS. The tax credit amount is 10% of the cost of any qualifying plug-in electric vehicle.

E. INCENTIVE LIMITS. The maximum tax credit amount is \$2,500 per vehicle.

F. INCENTIVE TIMEFRAME. The tax credit expired December 31, 2011.

G. MISCELLANEOUS. Taxpayer may not take tax credit under IRC §30D.

1. The tax credit may be recaptured if the qualifying property stops being property eligible for the tax credit.

00.08 Federal business income tax credit for new qualifying plug-in electric drive motor vehicles

A. GENERAL DESCRIPTION. The Federal Internal Revenue Code provides a business income tax credit in the amount of \$2,500 plus \$417 for each kilowatt hour of traction battery capacity not less than five kilowatt hours for each new qualifying plug-in electric drive motor vehicle placed in service. *IRC §30D; IRS Notice 2009-89; CONEX-150568-09; INFO 2010-0009; INFO 2010-0121; INFO 2011-0071; INFO 2011-0073; IRS Notice 2012-54; IRS Notice 2013-67.*

B. ELIGIBLE TAXPAYERS. Taxpayer owners of new qualifying plug-in electric drive motor vehicle, including the lessor of a vehicle subject to a lease.

1. Taxpayer selling the property to a tax exempt purchaser may claim the tax credit. Taxpayer seller must clearly disclose to the tax exempt purchaser the amount of any tax credit allowable for that property.

C. **QUALIFYING ACTIVITY.** Taxpayer must own a new qualifying plug-in electric drive motor vehicle predominately used in the U.S. A new qualifying plug-in electric drive motor vehicle is a motor vehicle which draws propulsion using a traction battery with not less than 5 kilowatt hours of capacity and uses an offboard source of energy to recharge the battery. A new qualifying plug-in electric drive motor vehicle must have received the applicable certificate of conformity under the title II of the Clean Air Act.

1. A new qualifying plug-in electric drive motor vehicle does not include low-speed vehicles or electric golf carts.
2. A qualified 2- or 3-wheeled plug-in electric vehicle is a vehicle which has 2 or 3 wheels, draws propulsion using a traction battery with at least 2.5 kilowatt hours of capacity and uses an offboard source of energy to recharge the battery, is manufactured primarily for use on public streets, roads, and highways, is capable of achieving a speed of 45 miles per hour or greater.
3. Taxpayer may rely on domestic manufacturer's (or, in case of foreign manufacturer, its domestic distributor's) certification that both particular make, model, and model year of vehicle qualifies as 2- or 3-wheeled plug-in electric motor vehicle and the amount of credit allowable with respect to the vehicle.

D. **INCENTIVE AMOUNTS.** The tax credit amount is \$2,500 plus \$417 for each kilowatt hour of traction battery capacity in excess of four kilowatt hours. Traction battery capacity is measured in kilowatt hours from a 100% state of charge to a 0% state of charge. The tax credit amount is 10% of the cost of a qualified 2- or 3-wheeled plug-in electric vehicle.

E. **INCENTIVE LIMITS.** The maximum tax credit amount is \$7,500. The maximum tax credit amount for a qualified 2- or 3-wheeled plug-in electric vehicle is \$2,500.

1. The tax credit is not allowed with respect to the portion of the cost of any property taken expensed under IRC §179.

F. **INCENTIVE TIMEFRAME.** The tax credit will be reduced when the total number of new qualifying plug-in electric drive motor vehicles sold for use in the U.S. is at least 250,000. The phase out percentages are 50% for the first 2 calendar quarters of the phase-out period, 25% for the third and fourth calendar quarters of the phase-out period, and 0% for each later calendar quarter. The tax credit for individual taxpayers may not be carried forward to future years or back to past years.

1. The tax credit for qualified 2- or 3-wheeled plug-in electric vehicles expired December 31, 2013.

G. **MISCELLANEOUS.**

00.09 Federal business income tax credit for alternative motor vehicles

A. **GENERAL DESCRIPTION.** The Federal Internal Revenue Code provides a business income tax credit in amounts ranging from \$8,000 - \$40,000 for the purchase of alternative motor vehicles which include qualifying fuel cell motor vehicles, advanced lean-burn technology motor vehicles, qualifying hybrid motor vehicles, qualifying alternative fuel motor vehicles, and vehicles converted into qualifying plug-in electric drive motor vehicles. *IRC §30B; Notice 2010-42; INFO 2011-0008.*

B. **ELIGIBLE TAXPAYERS.** The tax credit is available to Taxpayer purchasers of alternative motor vehicles.

1. Taxpayer selling the property to a tax exempt purchaser may claim the tax credit. Taxpayer seller must clearly disclose to the tax exempt purchaser the amount of any tax credit allowable for that property.

C. **QUALIFYING ACTIVITY.** Taxpayer must purchase an alternative motor vehicle for original use or lease in the United States. An alternative motor vehicle is a vehicle that has received a certificate that it meets or exceeds the applicable Tier II emission level established in regulations prescribed by the US Environmental Protection Agency for that make and model year vehicle. Alternative motor vehicles must be made by a specified manufacturer. Alternative motor

vehicles are qualifying fuel cell motor vehicles, advanced lean burn technology motor vehicles, qualifying hybrid motor vehicles, qualifying alternative fuel motor vehicles, and qualifying plug-in electric drive motor vehicles.

1. A qualifying fuel cell motor vehicle is a motor vehicle that is propelled by power from one or more cells that convert chemical energy directly into electricity by combining oxygen with hydrogen fuel that is stored on board the vehicle in any form and which may or may not require reformation before use.
2. An advanced lean burn technology motor vehicle is a passenger automobile or a light truck with an internal combustion engine that is designed to operate primarily using more air than is necessary for complete combustion of the fuel, incorporates direct injection, and achieves at least 125% of the 2002 model year city fuel economy.
3. A qualifying hybrid motor vehicle is a motor vehicle that draws propulsion energy from onboard sources of stored energy which are both an internal combustion or heat engine using consumable fuel, and a rechargeable energy storage system, and has a maximum available power (from the rechargeable energy storage system) in the range of 4% - 15% for passenger automobile and light trucks to vehicles with a GVWR in excess of 14,000 pounds. Qualifying hybrid motor does not include new qualifying plug-in electric drive motor vehicles as defined in IRC §30D.
4. A qualifying alternative fuel motor vehicle is any motor vehicle that is capable of operating only on an alternative fuel. Alternative fuel is compressed natural gas, liquefied natural gas, liquefied petroleum gas, hydrogen, and any liquid at least 85% of the volume of which consists of methanol.
5. A qualifying plug-in electric drive motor vehicle is a motor vehicle which draws propulsion using a traction battery with at least 4 kilowatt hours of capacity and an offboard source of energy to recharge the battery and which for a passenger vehicle or light truck that has a GVWR of no more than 8,500 pounds, has received a certificate of conformity under the Clean Air Act and meets or exceeds

the equivalent California low emission vehicle standard under §243(e)(2) of the Clean Air Act; and in the case of a vehicle having a GVWR of 6,000 pounds or less, the Bin 5 Tier II emission standard, and in the case of a vehicle having a GVWR of more than 6,000 pounds but not more than 8,500 pounds, the Bin 8 Tier II emission standard.

D. INCENTIVE AMOUNTS. The tax credit amount equals the total of: (1) the qualifying fuel cell motor vehicle credit; (2) the qualifying advanced lean burn technology motor vehicle credit; (3) the qualifying hybrid motor vehicle credit; (4) the qualifying alternative fuel motor vehicle credit; and (5) the plug-in conversion credit. The tax credit amount is generally based on the vehicle's relative fuel efficiency, and may vary considerably.

1. The qualifying fuel cell motor vehicle credit amount ranges from \$4,000 - \$40,000 for vehicles with a gross vehicle weight ratings (GVWR) ranging from 8,500 - 26,000 pounds. The qualifying fuel cell motor vehicle credit for passenger car or light truck is further increased to reflect fuel efficiency in amounts ranging from \$1,000 - \$4,000 for vehicles achieving 150% - 300% of the 2002 model year city fuel economy (2002 MYCFE).
2. The qualifying advanced lean burn technology motor vehicle credit amount ranges from \$400 - \$2,400 per vehicle, for achieving a 2002 MYCFE in the range of 125% to 250%. The qualifying advanced lean burn technology motor vehicle credit amount is increased by a conservation credit amount of \$250 - \$1,000 for lifetime fuel savings in the range of 1,200 -3,000 gallons of gasoline.
3. The qualifying hybrid motor vehicle credit amount is an amount equal to the applicable percentage of the qualifying incremental hybrid cost of the vehicle. The applicable percentage ranges from 20% - 40% for vehicle achieving an increase in city fuel economy relative to a comparable vehicle ranging from 30% - 50%. The qualifying incremental hybrid cost of any vehicle is equal to the amount of the excess of the manufacturer's suggested retail price for the vehicle over the price for a comparable vehicle, to the

extent that amount does not exceed amounts ranging from \$7,500 to \$26,000 for vehicles with a GVWR ranging from 14,000 – 26,000 pounds.

- (i). The tax credit for a passenger car or light truck that qualifies as a hybrid motor vehicle is determined under the same tables that would apply if the vehicle qualifying as an advance lean burn technology vehicle.
4. The qualifying alternative fuel motor vehicle credit amount is the applicable percentage of the incremental cost of the vehicle. The applicable percentage for a qualifying alternative fuel motor vehicle is 50% plus an additional 30% if the vehicle has received a Clean Air Act or California law certificate of conformity and meets or exceeds the most stringent standard available for certification under the Clean Air Act or California law for that make and model year vehicle. The incremental cost is the excess of the manufacturer's suggested retail price (MSRP) for the vehicle over the MSRP for a gasoline or diesel fuel motor vehicle of the same model to the extent the amount does not exceed amounts ranging \$5,000 - \$40,000 for vehicles with a GVWR ranging from 8,500 -26,000 pounds.

E. INCENTIVE LIMITS. The maximum cumulative tax credit amount is the tax credit for 60,000 qualifying advanced lean burn technology motor vehicles and 60,000 qualifying hybrid motor vehicles.

1. The tax credit is not allowed for the portion of the cost of any property expensed under IRC §179.

F. INCENTIVE TIMEFRAME. The tax credit expired December 31, 2010, for hybrid motor vehicles that are passenger cars or light trucks and expired December 31, 2009 for hybrid motor vehicles that are not passenger cars or light trucks. The tax credit for advanced lean burn technology motor vehicles expired December 31, 2010. The tax credit for qualifying alternative fuel motor vehicles expired December 31, 2010. The tax credit for vehicles converted into qualifying plug-in electric drive motor vehicle expired December 31, 2011. The tax credit for vehicles converted into qualifying fuel cell motor vehicles expires

December 31, 2014. Unused tax credit for businesses may be carried back 1 year and carried forward 20 years. Unused tax credit for individuals may not be carried back or forward.

G. MISCELLANEOUS.

1. The tax basis of the qualifying property must be reduced by the amount of the tax credit allowed, determined without regard to the IRC §30B(g) rules treating part of the tax credit as a general business credit and limiting the use of the remainder.
2. Taxpayer may elect not to take the tax credit.

00.10 Federal business income tax credit for new energy efficient homes

A. GENERAL DESCRIPTION. The Federal Internal Revenue Code provides a business income tax credit in the amount of \$2,000 (or \$1,000) for each qualifying new energy efficient home (or manufactured home) which is constructed by an eligible contractor and acquired by a person from the eligible contractor for use as a residence. *IRC §45L; Notice 2008-35, 2008-12 IRB.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer contractors constructing qualifying new energy efficient homes. An eligible contractor is the person that constructed a qualifying new energy efficient home.

1. Taxpayer must own and have basis in the qualifying energy efficient home (or the qualifying energy efficient manufactured home) during its construction (or production). A Taxpayer that hires a third party contractor is the eligible contractor and the third party contractor is not an eligible contractor.

C. QUALIFYING ACTIVITY. Taxpayer must construct a qualifying new energy efficient home that is acquired by a person for use as a residence. A qualifying new energy efficient home is new home that has a projected level of annual heating and cooling costs that is 50% (or 30%) less than a comparable dwelling constructed in accordance with the standards of chapter 4 of the 2006 International Energy Conservation Code.

D. INCENTIVE AMOUNTS. The tax credit amount is \$2,000 for a 50% home or a 50% manufactured home and \$1,000 for certain manufactured homes.

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. The tax credit expired December 31, 2013.

G. MISCELLANEOUS.

00.11 Federal income tax credit for energy efficient appliances

A. GENERAL DESCRIPTION. The Federal Internal Revenue Code provides an income tax credit to manufacturers of qualifying energy efficient appliance dishwashers, clothes washers and refrigerators. *IRC §45M*.

B. ELIGIBLE TAXPAYERS. Taxpayer manufacturers of qualifying dishwashers, clothes washers and refrigerators.

C. QUALIFYING ACTIVITY. Taxpayer must manufacture qualifying energy efficient appliances. Qualifying energy efficient appliances are dishwasher, clothes washer and refrigerator that qualifies for the tax credit. A qualifying dishwasher is a residential dishwasher subject to the energy conservation standards established by the US Department of Energy which uses no more than 280 - 295 kilowatt hours per year and 4.00 - 4.25 gallons per cycle. A qualifying clothes washer is a residential model clothes washer, including a commercial residential-style coin operated washer which meets or exceeds a 2.4 - 2.8 modified energy factor and have a maximum water consumption factor of 3.5 - 4.2. A qualifying refrigerator is a residential-model automatic-defrost refrigerator-freezer that has an internal volume of at least 16.5 cubic feet, which must consume at least 20% - 30% fewer kilowatt hours per year than the 2001 energy conservation standards.

1. Qualifying energy efficient appliances must be appliances that exceed the Taxpayer's average production of that category of appliance in the 2 previous calendar years.

D. INCENTIVE AMOUNTS. The tax credit amount is equal to the applicable amount multiplied by the eligible production.

1. For qualifying dishwashers the applicable amount ranges from \$50 - \$75 per appliance.
2. For qualifying clothes washers the applicable amount ranges from \$225 per appliance.
3. For qualifying refrigerators the applicable amount is: \$150 - \$200 per appliance.

E. INCENTIVE LIMITS. The maximum annual tax credit amount is 4% of Taxpayer's average annual gross receipts for the 3 previous tax years. The maximum cumulative tax credit amount is \$25 million.

1. Highest-range efficiency refrigerators and large high-range efficiency clothes washer are not taken into account under the cumulative tax credit amount.

F. INCENTIVE TIMEFRAME. The tax credit is available for the production in calendar years 2008 through 2013.

G. MISCELLANEOUS.

00.12 Federal income tax deduction for energy efficient commercial buildings

A. GENERAL DESCRIPTION. The Federal Internal Revenue Code provides an income tax deduction in the amount of 100% of the cost of energy efficient commercial building property placed in service. *IRC §179D; Notice 2006-52, 2006-1 CB 1175; Notice 2008-40, 2008-14 IRB 725; AM2010-007; Rev. Proc. 2011-14; INFO 2011-0072*.

B. ELIGIBLE TAXPAYERS. The tax deduction is available to Taxpayer owners placing energy efficient commercial building property in service.

1. Taxpayer may be the person primarily responsible for designing the property if qualifying property is installed on or in property owned by a federal, state, or local government, or a subdivision of thereof. The deduction may be allocated by the owner of the property to the Taxpayer designer.

- (i). Property owned by a government entity includes public schools.
 - (ii). Taxpayer designer is a person that creates the technical specifications for installation of energy efficient commercial building property. A designer may include an architect, engineer, contractor, environmental consultant or energy services provider who creates the technical specifications for a new building or an addition to an existing building that incorporates energy efficient commercial building property.
 - (iii). Taxpayer designer is not a person that merely installs, repairs, or maintains the property.
 - (iv). The owner of the building shall determine which Taxpayer designer is primarily responsible and allocate the full deduction to that Taxpayer designer, or at the owner's discretion, allocate the deduction among several Taxpayer designers.
2. Taxpayer partners or shareholders of the designer must reduce the adjusted bases in their partnership interests or S corporation stock by the amount of the §179D deduction. Sections 704(d) and 1366(d) limit the benefit of the §179D deduction to the partners or shareholders' adjusted bases in their partnership interests or S corporation stock.

C. QUALIFYING ACTIVITY. Taxpayer must place in service energy efficient commercial building property. Energy efficient commercial building property is depreciable property installed on or in a building located in the U.S. which is installed as part of the interior lighting systems, the heating, cooling, ventilation, and hot water systems, or the building envelope and is certified as being installed as part of a plan designed to reduce the total annual energy and power costs of the building by 50% or more in comparison to a reference building that meets the minimum requirements of ASHRAE Standard 90.1–2001.

- 1. Qualifying buildings must be wholly or partially enclosed within exterior walls, or within exterior and party walls, and a roof, affording shelter to persons, animals, or property.
- 2. Qualifying building does not include a single-family house, a multi-family structure of three stories or fewer above grade, a manufactured house (mobile home), or a manufactured house (modular).
- 3. Energy efficient commercial building property that cannot be certified as reducing total annual energy and power costs by 50% or more, may be certified as a lighting, heating, cooling, ventilation & hot water, or building envelope system that satisfies the energy-savings targets for that system.
- 4. Qualifying energy reductions does not include energy reductions in any other energy uses, such as receptacles, process loads, refrigeration, cooking, and elevators.
 - (i). Partially qualifying heating, cooling, ventilation, and hot water systems must reduce the total annual energy and power costs for combined usage of the building's heating, cooling, ventilation, hot water, and interior lighting systems by 16.66% or more as compared to a reference building. The required 16.66% reduction must be accomplished solely through energy and power cost reductions for the heating, cooling, ventilation, and hot water systems.
 - (ii). Partially qualifying building envelope must reduce the total annual energy and power costs with respect to combined usage of the building's heating, cooling, ventilation, hot water, and interior lighting systems by 16.66% or more as compared to a reference building. The required 16.66% reduction must be accomplished solely through energy and power cost reductions for the heating, cooling, ventilation, hot water, and interior lighting systems. Taxpayer may elect to substitute "10" for "16.66" for

- energy efficient building envelope property and substitute "20" for "16.66" for energy efficient lighting property and energy efficient heating, cooling, ventilation, and hot water property.
- (iii). Partially qualifying interior lighting systems that will reduce the total annual energy and power costs for combined usage of the building's heating, cooling, ventilation, hot water, and interior lighting systems by 16.66% or more as compared to a reference building that meets the minimum requirements of Standard 90.1-2001. The required 16.66% reduction must be accomplished solely through energy and power cost reductions for the heating, cooling, ventilation, hot water, and interior lighting systems. For property placed in service before final regulations are issued, the interim lighting rule provides that lighting system that will reduce lighting power density of 25% (50% in the case of a warehouse) of the minimum requirements in Table 9.3.1.1 or Table 9.3.1.2 (not including additional interior lighting power allowances) of Standard 90.1-2001 are partially qualifying interior lighting systems. A pro-rated partial deduction is allowed for a lighting system that: (1) reduces lighting power density between 25% and 40%; (2) has controls and circuiting that comply fully with the mandatory and prescriptive requirements of Standard 90.1-2001; (3) includes provision for bi-level switching in all occupancies except hotel and motel guest rooms, store rooms, restrooms, and public lobbies; and (4) meets the minimum requirements for calculated lighting levels as set forth in the IESNA Lighting Handbook,

Performance and Application, Ninth Edition, 2000.

5. Qualifying computer software must prepare energy or power cost savings calculation.
6. Qualifying individuals must inspect and test the qualifying buildings to ensure compliance of the buildings with energy-savings plans and targets. Qualifying individuals must certify and provide an explanation to the owner of the building of the energy efficiency features of the building and its projected annual energy costs.
7. Standard 90.1-2001 is Standard 90.1-2001 of the American Society of Heating, Refrigerating, and Air Conditioning Engineers and the Illuminating Engineering Society of North America (ASHRAE/IESNA) (as in effect on Apr. 2, 2003).

D. INCENTIVE AMOUNTS. The tax deduction amount is 100% of the cost of energy efficient commercial building property.

E. INCENTIVE LIMITS. The maximum tax deduction amount is the product of \$1.80 and the square footage of the qualifying building. The maximum tax deduction amount for partially qualifying property is the product of \$0.60 or \$1.20 and the square footage of the qualifying building.

F. INCENTIVE TIMEFRAME. The tax deduction expired December 31, 2013.

G. MISCELLANEOUS.

1. The basis of the qualifying property must be reduced by the amount of the tax deduction allowed or allocated.

00.13 Federal income tax deduction for certain energy property

A. GENERAL DESCRIPTION. The Federal Internal Revenue Code provides an income tax accelerated cost recovery over 5 years for energy property. *IRC §168(e)(3); Memo 20113901F; PLR 201221002.*

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

C. 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.

1. Energy property must be qualifying small power production facility within the meaning of section 16 U.S.C. 3(17)(C), as in effect on September 1, 1986.

D. 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.

E. INCENTIVE LIMITS.

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

G. MISCELLANEOUS.

A. GENERAL DESCRIPTION. The Federal Internal Revenue Code provides an income tax depreciation deduction in the amount of 50% of the adjusted basis of such property for qualifying second generation biofuel plant property. *IRC §168(l)*.

B. ELIGIBLE TAXPAYERS. The tax deduction is available to Taxpayer owners placing in service qualifying second generation biofuel plant property subject to cost recovery.

C. QUALIFYING ACTIVITY. Taxpayer must place in service qualifying second generation biofuel plant property. Qualifying second generation biofuel plant property is depreciable property used in the United States solely to produce second generation biofuel. Second generation biofuel is any liquid fuel which is produced from any lignocellulosic or hemicellulosic matter that is available on a renewable or recurring basis, and any cultivated algae, cyanobacteria, or lemna. Second generation biofuel includes bagasse (from sugar cane), corn stalks and switchgrass; dedicated energy crops such as energy cane, hybrid poplar wood, or elephant grass; agricultural residues such as rice straw, corn stover, or wheat straw; agricultural wastes such as rice hulls, corn fiber, sugar beet pulp, citrus pulp, or citrus peels; forestry wastes such as hardwood or softwood thinnings or residues from timber operations; wood wastes such as saw mill waste or pulp mill waste; and urban wastes such as the paper fraction of municipal solid waste, municipal wood waste, or municipal green waste.

1. Second generation biofuel plant property does not include any property otherwise eligible for bonus depreciation as qualifying property or qualifying New York Liberty Zone property if it is depreciated under the alternative depreciation system.
2. Second generation biofuel plant property does not include any property any portion of which is financed with the proceeds of tax-exempt obligations.

D. INCENTIVE AMOUNTS. The tax deduction amount is 50% of the adjusted basis of second generation biofuel plant property.

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. The tax deduction expired December 31, 2013.

00.14 Federal income tax depreciation deduction for cellulosic biofuel plant property

G. MISCELLANEOUS.

1. The tax deduction may be recaptured if the amount deducted as an expense under IRC §179(d) in the year that property is placed in service exceeds the total amount that would have been allowed as depreciation. The amount recaptured is treated as ordinary income in the tax year of recapture.
2. Qualifying second generation biofuel plant property are subject to rules similar to the rules under IRC §179(d)(10).
3. The basis of qualifying second generation biofuel plant property is reduced by the amount of the tax deduction before computing the amount otherwise allowable as a depreciation deduction for the tax year and any later tax year.

00.15 Federal income tax credit for clean renewable energy bonds

A. 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.*

B. ELIGIBLE TAXPAYERS. Taxpayer holders of clean renewable energy bonds.

C. 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.

1. 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).
2. Qualifying renewable energy projects must be owned by a government body, a public power provider, or a cooperative electric company.
3. 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.
4. Qualifying issuer must reasonably expect 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.
 - (i). 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.
 - (ii). Qualifying issuer must redeem all of the nonqualifying bonds within 90 days after the end of the extended or unextended period.

D. 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.

1. The tax credit for new clean renewable energy bonds is 70% of the amount that would otherwise be allowable under IRC §54A(b).
2. 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.

E. 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.

F. INCENTIVE TIMEFRAME. The tax credit for clean renewable energy bonds expired December 31, 2009.

1. 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.

G. MISCELLANEOUS.

1. The tax credit must be included in gross income, and treated as interest income.
2. Qualifying projects are subject to the requirements of subchapter IV of chapter 31 of title 40 of the United States Code that the minimum wage paid must be the average local wage (i.e., the "Davis-

Bacon Act" prevailing wage requirements), for bonds issued after February 17, 2009.

00.16 Federal income tax credit for qualifying energy conservation bonds

A. GENERAL DESCRIPTION. The Federal Internal Revenue Code provides an income tax credit in the amount of 70% of a portion of the qualifying energy conservation bonds' nonrefundable outstanding face amount which will permit issuance with a specified maturity or redemption date without discount and without interest cost. *IRC §54D; Notice 2009-29, 2009-16 IRB 849; Notice 2012-44, 2012-28 IRB.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer holders of qualifying energy conservation bonds.

1. The IRS must allocate qualifying energy conservation bonds among the states in proportion to the state's population.

C. QUALIFYING ACTIVITY. Taxpayer must hold qualifying energy conservation bonds. A qualifying energy conservation bond must be issued and designated by a state or local government. All of the qualifying energy conservation bond issue's available project proceeds must be used for capital expenditures for one or more qualifying conservation purposes. Qualifying conservation purposes include (1) capital expenditures incurred for purposes of reducing energy consumption in publicly-owned buildings by at least 20%; implementing green community programs (including the use of loans, grants or other repayment mechanisms to implement those programs); rural development involving the production of electricity from renewable energy resources; or any qualifying facility as determined under IRC §45(d) without regard to any placed in service date; (2) expenditures with respect to research facilities and research grants that support research in: the development of cellulosic ethanol or other nonfossil fuels; technologies for the capture and sequestration of carbon dioxide produced through the use of fossil fuels; increasing the efficiency of existing technologies for producing nonfossil fuels; automobile battery technologies and other technologies to reduce fossil fuel consumption in transportation; or technologies to reduce energy use in buildings;

(3) mass commuting facilities and related facilities that reduce the consumption of energy, including expenditures to reduce pollution from vehicles used for mass commuting; (4) demonstration projects designed to promote the commercialization of: green building technology; conversion of agricultural waste for use in the production of fuel or otherwise; advanced battery manufacturing technologies; technologies to reduce peak use of electricity; or technologies for the capture and sequestration of carbon dioxide emitted from combusting fossil fuels in order to produce electricity; (5) public education campaigns to promote energy efficiency.

1. Qualifying conservation purposes do not include refined coal production or Indian coal production facilities.
2. Qualifying publicly-owned building are buildings that are owned by a State or local or any instrumentality thereof for Federal tax purposes.
3. Qualifying green community programs are programs to promote one or more of the purposes of energy conservation, energy efficiency, or environmental conservation initiatives relating to energy consumption, broadly construed, and must involve property or financing programs available to the general public.

D. INCENTIVE AMOUNTS. The tax credit amount is 70% of a portion of the qualifying energy conservation bonds' nonrefundable outstanding face amount which will permit issuance with a specified maturity or redemption date without discount and without interest cost.

E. INCENTIVE LIMITS. The nationwide maximum cumulative tax credit amount is \$3.2 billion.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

1. The tax credit is includible in gross income, and is treated as interest income.
2. Qualifying projects are subject to the requirements of subchapter IV of chapter 31 of title 40 of the United States Code that the minimum wage paid must be the average local wage (i.e., the "Davis-Bacon Act" prevailing wage requirements).

00.17 Federal personal income tax credit for nonbusiness energy property

A. GENERAL DESCRIPTION. The Federal Internal Revenue Code provides a personal income tax credit in the amount of 10% of the costs for qualifying building envelope components or residential energy property expenditures. *IRC §25C; IRS Notice 2006-26, 2006-1 CB 622; IRS Notice 2009-53, 2009-25 IRB 1095; INFO 2009-0231; INFO 2009-0239; INFO 2009-0243; INFO 2010-0098; INFO 2010-0105; CONEX-120518-10; CONEX-131502-10; CONEX-145283-10; CONEX-140778-10; INFO 2011-0001; INFO 2011-0006; INFO 2011-0015; INFO 2011-0016; INFO 2011-0048; Announcement 2011-73; PLR 201130003; IRS Notice 2013-70.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer individuals installing energy efficient property in the Taxpayer's principal residence.

1. The tax credit may be allocated among Taxpayers in jointly occupied units, Taxpayer tenant-owners in a cooperative or Taxpayer members of a condominium.
2. Taxpayer may not be a cooperative.

C. QUALIFYING ACTIVITY. Taxpayer must install energy efficient property in Taxpayer's principal residence. Qualifying energy efficient property is energy efficiency improvements to the building envelope and residential energy property expenditures. Qualifying energy efficient property must be reasonably expected to remain in use for 5 years. Qualifying energy efficiency improvements to the building envelope are any energy efficient building envelope component that meets the prescriptive criteria for that component established by the 2000 International Energy Conservation Code, as supplemented and as in effect on Aug. 8, 2005; or a metal roof with appropriate pigmented coatings or an asphalt roof with appropriate cooling granules that meets the Energy Star program requirements. Residential energy property includes: (1) an advanced main air circulating fan used in a natural gas, propane, or oil furnace and that has an annual electricity use of no more than 2% of the total annual energy use of the furnace (as determined in the standard US Department of Energy test procedures); (2) a qualifying natural gas furnace that achieves an annual fuel utilization efficiency rate of not less

than 95; (3) a qualifying propane furnace that achieves an annual fuel utilization efficiency rate of not less than 95; (4) a qualifying oil furnace that achieves an annual fuel utilization efficiency rate of not less than 90; (5) a qualifying natural gas hot water boiler that achieves an annual fuel utilization efficiency rate of not less than 90; (6) a qualifying propane hot water boiler that achieves an annual fuel utilization efficiency rate of not less than 90; (6) a qualifying oil hot water boiler that achieves an annual fuel utilization efficiency rate of not less than 90; (7) an electric heat pump water heater that yields an energy factor of at least 2.0 in the standard DOE test procedure; (8) an electric heat pump that achieves the highest efficiency tier established by the Consortium for Energy Efficiency, as in effect on Jan. 1, 2009. For split heat pumps, these standards are a seasonal energy efficiency ratio (SEER) greater than or equal to 15, energy efficiency ratio (EER) greater than or equal to 12.5, and heating seasonal performance factor (HSPF) greater than or equal to 8.5. For packaged heat pumps, the standards are a SEER greater than or equal to 14, EER greater than or equal to 12, and HSPF greater than or equal to 8.0; (9) a central air conditioner that achieves the highest efficiency tier established by the Consortium for Energy Efficiency, as in effect on Jan. 1, 2009. For split systems, these standards are a SEER greater than or equal to 16 and EER greater than or equal to 12; (10) a natural gas, propane, or oil water heater that has either an energy factor of at least 0.82 or a thermal efficiency of at least 90%; and (11) a biomass fuel stove that burns biomass fuel to heat or to heat water for use in a residence, and that has a thermal efficiency rating of at least 75%, as measured using a lower heating value. Biomass fuel is any plant-derived fuel available on a renewable or recurring basis, including agricultural crops and trees, wood and wood waste and residues (including aquatic plants), grasses, residues, and fibers.

1. Building envelope component is: (1) any insulation material or system that is specifically and primarily designed to reduce the dwelling unit's heat loss or gain when installed in or on the dwelling unit and meets the prescriptive criteria for that material or system established by the 2009 International Energy Conservation Code (including supplements), as in effect on Feb. 17, 2009; (2) exterior windows (including skylights); (3) exterior doors; and (4) any metal roof or asphalt roof installed on a

dwelling unit, but only if the roof has appropriate pigmented coatings or cooling granules that are specifically and primarily designed to reduce the dwelling unit's heat gain.

2. Building envelope component does not include components with a principal purpose is to serve any function unrelated to the reduction of heat loss or gain or if production costs attributable to features other than those that reduce heat loss or gain exceed production costs attributable to features that reduce heat loss or gain.
3. Building envelope component does not include exterior windows, skylights, and doors with a U factor greater than 0.30 and a SHGC greater than 0.30.
4. Qualifying metal roofs must have appropriate pigmented coatings that are specifically and primarily designed to reduce the heat gain of a dwelling unit when installed on the dwelling unit; and meets or exceeds the Energy Star program requirements in effect at the time of installation.
5. Building envelope components do not include property that provides structural support or a finished surface, such as drywall or siding, including vinyl siding.
6. Building envelope components or energy property may be certified by its manufacturer if installed in a manner that is consistent with the manufacturer's certification. The certification statement may be provided by including a written copy of the statement with the packaging of the component or property, in printable form on the manufacturer's website, or in any other manner that will permit Taxpayer to retain the certification statement for tax recordkeeping purposes.
7. Taxpayer may not rely on an Energy Star label for certifying qualifying property.
8. Qualifying expenditures are incurred for an existing home or for an addition or renovation to an existing home and not for a newly constructed home.

D. INCENTIVE AMOUNTS. The tax credit amount is 10% of the cost of qualifying building envelope components or residential energy property expenditures during the taxable year.

1. Cost of qualifying building envelope components includes costs incurred to purchase the components, and not for amounts paid or incurred for onsite preparation, assembly or installation.
2. Cost of qualifying energy property includes the cost of the property and labor costs properly allocable to the onsite preparation, assembly, or original installation of the property.
3. Cost of qualifying energy property includes only the portion of the cost for nonbusiness purpose if less than 80% of the use of an item is for nonbusiness purposes.

E. INCENTIVE LIMITS. The maximum lifetime tax credit amount is \$500.

F. INCENTIVE TIMEFRAME. The tax credit expired December 31, 2013.

1. Cost of qualifying energy property is made when the original installation is completed. Cost of qualifying energy property in connection with the construction or reconstruction of a structure is treated as made when Taxpayer's original use of the constructed or reconstructed structure begins.

G. MISCELLANEOUS.

1. The basis increase of the property which would result from the cost of qualifying energy property is reduced by the amount of the tax credit.
2. The tax credit can be claimed against the AMT.

00.18 Federal personal income tax credit for residential energy efficient property

A. 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; INFO 2011-0010; INFO 2011-0019; INFO 2011-0031; INFO 2011-0059; PLR 201130003; IRS Notice 2013-70.

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

C. 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.

1. 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.
2. 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.
3. 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.

D. INCENTIVE AMOUNTS. The tax credit amount is 30% of the qualifying property costs.

1. 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.
2. 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.
3. 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.
4. Qualifying property costs does not include an expenditure 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.
5. Qualifying property costs include amount of any Renewable Energy Credits payments from public utilities.

E. INCENTIVE LIMITS. The maximum annual tax credit amount is: \$500 for each 0.5 kilowatt of capacity for qualifying fuel cell property.

1. 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.

F. INCENTIVE TIMEFRAME. The tax credit expires December 31, 2016.

1. Qualifying property costs are made when the original installation is completed.
2. Qualifying property costs related to the construction or reconstruction of a structure are made when Taxpayer begins using the structure.

G. MISCELLANEOUS.

1. Taxpayer who qualifies for both the nonbusiness energy property credit in

IRC §25C and the tax credit may claim both credits.

2. The tax credit can be claimed against the AMT.
3. The basis increase of the property which would result from the qualifying property costs is reduced by the amount of the tax credit.
4. The tax credit is reduced by the amount of nontaxable energy conservation subsidy received under IRC §136. Because state-provided incentives are includable in gross income, Taxpayer is not required to reduce the amount of his or her qualified expenditures qualifying for the tax credit.
5. If Taxpayer uses more than 20% of qualified property for business purposes, the Taxpayer can only take the portion of the expenditures that is properly allocable to use for nonbusiness purposes. Taxpayer may be eligible for the IRC §48 business credit for the cost of qualifying property allocable to Taxpayer's use of the system in a trade or business, or for the production of income.

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

A. GENERAL DESCRIPTION. Alabama provides an income or excise tax credit over 20 years in the amount of 5% of the capital invested in 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.*

B. 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.

1. Taxpayer must be certified by the AL Department of Revenue.

C. QUALIFYING ACTIVITY. Taxpayer must invest in alternative energy electricity production facilities. Alternative energy electricity production facilities are facilities that produce electricity from renewable energy 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.

1. Alternative energy electricity production facilities must have capital costs of at least \$100 million.
2. Qualifying hydropower production facilities must have capital costs of at least \$5 million.

D. 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.

E. INCENTIVE LIMITS. The maximum tax credit allowed to be claimed is 80% of the tax due. The maximum tax credit allowed to be claimed is 60% of the tax due, for qualifying hydropower production.

F. INCENTIVE TIMEFRAME. The tax credit period is 20 years. The tax credit expires December 31, 2015.

G. MISCELLANEOUS.

01.02 Alabama state property tax abatement for alternative energy electricity production facilities

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

B. ELIGIBLE TAXPAYERS. Taxpayer utility, electric cooperative, municipal electric authority owners of alternative energy electricity production facilities..

1. Taxpayers include entities in which one or more of the foregoing owns an interest.

C. QUALIFYING ACTIVITY. Taxpayer must own alternative energy electricity production facilities. An alternative energy electricity production facility is any plant, property, or facility that produces electricity from alternative energy 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.

1. Alternative energy electricity production facilities must have capital costs of at least \$100 million.
2. Qualifying hydropower production facilities must have capital costs of at least \$5 million.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. The tax abatement expires December 31, 2018.

G. MISCELLANEOUS.

01.03 Alabama state tax deduction for wood-burning heating systems

A. GENERAL DESCRIPTION. Alabama provides an income tax deduction in the amount of 100% the cost of converting an existing residential gas or electric heating system to a qualifying wood-burning heating system. *Ala. Code §40-18-15(a)(16)*.

B. ELIGIBLE TAXPAYERS. The tax deduction is available to Taxpayer individuals owning converted heating systems.

C. QUALIFYING ACTIVITY. Taxpayer must convert an existing gas or electric heating system to a qualifying wood-burning heating system.

1. Qualifying wood-burning heating systems must be used as the primary energy source for heating a home.

D. INCENTIVE AMOUNTS. The tax deduction amount is 100% of the total cost of purchase and installation for the conversion from gas or electricity to wood.

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. The tax deduction must be taken for the taxable year during which the conversion was completed.

G. MISCELLANEOUS.

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

09.01 Connecticut state sales and use tax exemption for renewable and clean energy technology industries

A. GENERAL DESCRIPTION. Connecticut provides a sales and use tax exemption in the amount of 100% of the tax on items used directly in renewable and clean energy technology industries. *Conn. Gen. Stat. §12-412(117)(B); S.B. 2007(7); H.B. 5435 (2010); Special Notice 2010(9.1).*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer purchasers of items used directly in renewable and clean energy technology industries.

1. Taxpayer purchaser must present certificate CERT-142, Items Used Directly in the Renewable Energy and Clean Energy Technology Industries, to the seller when purchasing the items.

C. QUALIFYING ACTIVITY. Taxpayer must purchase items used directly in renewable and clean energy technology industries equipment. Renewable and clean energy technology industries are industries that apply technologies to produce, improve, or develop solar energy electricity generating systems, passive or active solar water or space heating systems, geothermal resource systems, and wind power electric generation systems.

1. Qualifying renewable and clean energy technology industries equipment includes research, development, testing and manufacturing beginning with research activities and ending when the product is ready for delivery or storage, including overpacking and crating.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

09.02 Connecticut state corporate business tax exemption for alternative energy and motor vehicle systems

A. GENERAL DESCRIPTION. Connecticut provides a corporate business tax exemption in the amount of 100% of the tax on qualifying businesses engaged in the research, design, manufacture, sale or installation of alternative energy systems or motor vehicles powered by electricity, natural gas or solar energy. *Conn. Gen. Stat. §12-214(a).*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer corporations engaged in the research, design, manufacture, sale or installation of alternative energy systems or motor vehicles powered by electricity, natural gas or solar energy.

1. Taxpayer must have gross annual revenues for the preceding income year not exceeding \$100 million and 75% of the gross annual revenues derived from alternate energy systems or alternate-fuel motor vehicles.

C. QUALIFYING ACTIVITY. Taxpayer must engage in research, design, manufacture, sale or installation of alternative energy systems or qualifying motor vehicles. Alternative energy systems are those which use solar, wind, water or biomass energy in producing space heating or cooling, water heating, or electrical generation. Qualifying motor vehicles must be powered by electricity, natural gas or solar energy.

1. Alternative energy systems do not include wood-burning stoves.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

09.03 Connecticut state sales tax exemption for fuel cell manufacturing facilities

A. GENERAL DESCRIPTION. Connecticut provides a sales tax exemption in the amount of 100% of the tax on the sales to and the storage, use or other consumption by a fuel cell manufacturing facility of machinery and equipment. *Conn. Gen. Stat. §12-412(113)*.

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer fuel cell manufacturing facilities purchasing qualifying machinery and equipment. A fuel cell manufacturing facility is the portion of a plant, building, or other real property improvement used for the manufacturing of fuel cell parts or components or for the significant overhauling or rebuilding of such parts or components on a factory basis.

C. QUALIFYING ACTIVITY. Taxpayer must purchase qualifying machinery and equipment. Fuel cell is a device that directly or indirectly produces electricity directly from hydrogen or hydrocarbon fuel through a noncombustive electro-chemical process. Machinery and equipment is tangible personal property, which is installed in a fuel cell manufacturing facility operated by a fuel cell manufacturer and the predominant use of which is the manufacturing of fuel cells.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

09.04 Connecticut state personal income tax exclusion for state rebates for efficient furnaces and boilers

A. GENERAL DESCRIPTION. Connecticut provides a personal income tax exclusion in the amount of the \$500 rebate for efficient furnaces and boilers from the CT Office of Policy and Management. *Conn. Gen. Stat. §16-46e(d)*.

B. ELIGIBLE TAXPAYERS. The tax exclusion is available to Taxpayer individuals receiving the \$500 rebate for efficient furnaces and boilers from the CT Office of Policy and Management.

C. QUALIFYING ACTIVITY. Taxpayer must receive the \$500 rebate for efficient furnaces and boilers from the CT Office of Policy and Management.

D. INCENTIVE AMOUNTS. The tax exclusion amount is \$500.

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

09.05 Connecticut state income tax exemption for sales or import of alternative fuel commercial heating oil

A. GENERAL DESCRIPTION. Connecticut provides an income tax exemption in the amount of 100% of the tax for sales or import of alternative fuel commercial heating oil. *Conn. Gen. Stat. §12-587; Connecticut Special Notice 2006(2), 06/19/2006*.

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer seller and importers of alternative fuel commercial heating oil.

C. QUALIFYING ACTIVITY. Taxpayer must sell or import qualifying commercial heating oil blend. Qualifying commercial heating oil blend is heating oil containing not less than 10% of alternative fuels derived from agricultural produce, food waste, waste vegetable oil or municipal solid waste, including, but not limited to, biodiesel or low sulfur dyed diesel fuel.

D. INCENTIVE AMOUNTS. The tax exemption amount is 100% of the gross earnings on the sale or import qualifying commercial heating oil blend.

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

09.06 Connecticut state income tax credit for energy efficient green building

A. GENERAL DESCRIPTION. Connecticut provides an income tax credit in the amount of 5-11% of allowable costs of energy efficient green building projects. *Conn. Gen. Stat. §12-217mm; L. 2009 09-8 §7(b)*.

B. ELIGIBLE TAXPAYERS. Taxpayer owners constructing or renovating eligible green building projects.

1. Taxpayer must be certified by the CT Secretary of the Office of Policy and Management.
2. Taxpayer must be certified by an architect or professional engineer and accredited through the LEED Accredited Professional Program.
3. Taxpayer may assign or transfer the tax credit to Taxpayer transferees.
4. Taxpayer subsequent successor in interest to the property may claim the tax credit if the deed transferring the property assigns the subsequent successor such right and the deed does not specify that the seller shall retain the right to claim such tax credit.

C. QUALIFYING ACTIVITY. Taxpayer must construct or renovate energy efficient green building projects. Green building projects are LEED certified Gold or better buildings.

1. Energy efficient green building projects must not have energy use that exceeds 70% of the energy use permitted by the state building code for new construction. Energy efficient green building projects must not have energy use that exceeds 80% of the energy use permitted by the state building code for a renovation project.
2. Energy efficient green building projects must use equipment and appliances that meet Energy Star standards.

D. INCENTIVE AMOUNTS. The tax credit amount is equal to the tax credit percentage multiplied by the qualifying costs. The base tax credit percentage amounts are: 5% for LEED Certified Gold core and shell or commercial interior projects; 7% for LEED Certified Platinum core and shell or commercial interior projects; 8% for LEED Certified Gold new construction or major renovation projects; and 10.5% for LEED Certified Platinum new construction or major renovation projects. Qualifying costs are the amounts

chargeable to a capital account, including, but not limited to: (1) construction or rehabilitation costs; (2) commissioning costs; (3) architectural and engineering fees allocable to construction or rehabilitation, including energy modeling; (4) site costs, such as temporary electric wiring, scaffolding, demolition costs and fencing and security facilities; and (5) costs of carpeting, partitions, walls and wall coverings, ceilings, lighting, plumbing, electrical wiring, mechanical, heating, cooling and ventilation.

1. A 0.5% tax credit percentage increase is allowed for projects that are: (1) mixed-use developments, (2) located in a brownfield or enterprise zone, (3) does not require a sewer extension of more than 1/8 of a mile, or (4) located within 1/4 of a mile walking distance of publicly available bus transit service or within 1/2 of a mile walking distance of adequate rail, light rail, streetcar or ferry transit service.
2. Qualifying costs do not include the purchase of land, any remediation costs and the cost of telephone systems or computers.

E. INCENTIVE LIMITS. The maximum annual tax credit amount is the tax credit for allowable costs of \$250 per square foot for new construction and of \$150 per square foot for renovation or rehabilitation of a building; or 25% of allowable costs. The statewide maximum annual tax credit amount is \$25 million.

F. INCENTIVE TIMEFRAME. Unused tax credit may be carried forward 5 years.

G. MISCELLANEOUS.

09.07 Connecticut state property tax exemption for renewable energy systems

A. GENERAL DESCRIPTION. Connecticut provides a property tax exemption assessment in the amount of 100% of the cost for Class I renewable energy systems and hydropower facilities that generate electricity for private residential use and commercial or industrial purposes. *Conn. Gen. Stat. §12-81(56),(57); Conn. Gen. Stat. §16-1(26),(27); P.A. 13-61*.

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer owners of Class I renewable energy systems and hydropower facilities.

C. QUALIFYING ACTIVITY. Taxpayer must own Class I renewable energy source residential property or commercial/industrial property. Class I renewable energy source is energy or electrical generation derived from solar power, wind power, a fuel cell, methane gas from landfills, ocean thermal power, wave or tidal power, low emission advanced renewable energy conversion technologies, a run-of-the-river hydropower facility, or a sustainable biomass facility with an average emission rate of equal to or less than .075 pounds of nitrogen oxides per million BTU of heat input for the previous calendar quarter, a sustainable biomass facility with a capacity of less than 500 kilowatts or any distributed electrical generation, generated from a Class I renewable energy source. Active solar energy heating or cooling system is equipment which: (1) provides for the collection, transfer, storage and use of incident solar energy for water heating, space heating or cooling which absent such solar energy system would require a conventional energy resource, such as petroleum products, natural gas or electricity, (2) employs mechanical means such as fans or pumps to transfer energy, and (3) meets standards established by regulation by the CT Office of Policy and Management.

1. Class I renewable energy sources residential property must serve single-family homes or multi-family dwellings limited to four units to be eligible.
2. Class I renewable energy sources commercial or industrial property must be for commercial or industrial purposes, and the nameplate capacity of such source or facility must not exceed the load for the location where such generation or displacement is located.
3. Qualifying hydropower facilities must have a generating capacity of not more than 5 megawatts and must not cause an appreciable change in the river flow.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. An tax exemption claim must be filed with the assessor or board of

assessors in the town in which the property is placed on or before November 1st in the applicable assessment year.

1. Applications required if major alterations are made to the renewable energy system.

G. MISCELLANEOUS.

09.08 Connecticut state sales and use tax exemption for residential energy-efficient products

A. GENERAL DESCRIPTION. Connecticut provides a sales and use tax exemption in the amount of 100% the tax on residential energy conservation and weatherization products. *Conn. Gen. Stat. §12-412k*.

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer purchasers of residential energy conservation and weatherization products.

C. QUALIFYING ACTIVITY. Taxpayer must purchase residential energy conservation and weatherization products. Residential energy conservation and weatherization products include compact fluorescent light bulbs, programmable thermostats, window film, caulking, window and door weather strips, insulation, water heater blankets, water heaters, natural gas and propane furnaces and boilers that meet the federal Energy Star standard, windows and doors that meet the federal Energy Star standard, oil furnaces and boilers that are not less than 84% efficient and ground-source heat pumps that meet the minimum federal energy efficiency rating.

D. INCENTIVE AMOUNTS. The tax exemption amount is 100% sales and use tax due.

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

09.09 Connecticut state income tax credit for energy conservation programs serving low-income persons

A. GENERAL DESCRIPTION. Connecticut provides an income tax credit in the amount of 60-100% of the amount invested in energy conservation programs serving low-income persons. *Conn. Gen. Stat. §12-635.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer corporations investing in eligible energy conservation projects serving low-income persons.

C. QUALIFYING ACTIVITY. Taxpayer must invest in eligible energy conservation projects serving low-income persons. Energy conservation projects must be directed toward properties occupied by persons, at least 75% of whom are at an income level not exceeding 150% of the poverty level for the year next preceding the year during which such tax credit is to be granted, or properties owned or occupied by charitable corporations, foundations, trusts or other entities.

D. INCENTIVE AMOUNTS. The tax credit amount is 60-100% of amount invested.

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

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

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

A. GENERAL DESCRIPTION. Delaware provides an income tax credit in the amount of \$750 per job created in clean energy manufacturing. *Delaware Code Title 30 Section 2040; S.B. 40 (2011)*.

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

C. QUALIFYING ACTIVITY. Taxpayer must hire 5 or more workers and invest at least \$200,000 (\$40,000 per new worker) in a qualified facility manufacturing clean energy technology devices. Clean energy technology devices are:

1. solar power devices or systems that use photovoltaic solar cells to produce electricity or that use solar energy to heat water;
2. fuel cell devices or systems that use an electrochemical generator that converts the chemical energy of a fuel and an oxidant directly to electricity;
3. wind power devices or systems that convert the motion of wind into electric power; or
4. geothermal power devices or systems that use the temperature differentials between the atmosphere and subterranean areas to heat or cool buildings or to heat water.

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

E. INCENTIVE LIMITS. The maximum annual tax credit amount is \$500,000. The maximum annual tax credit allowed is 50% of Taxpayer's pre-credit tax liability in any one year.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

11. District of Columbia State Tax Incentives for Renewable Energy and Energy Efficiency

11.01 District of Columbia property tax exemption for cogeneration equipment

A. GENERAL DESCRIPTION. District of Columbia provides a property tax exemption in the amount of 100% of District tax on cogeneration equipment. *District of Columbia Official Code §47-1508(a)(12)*.

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer owners of cogeneration equipment.

C. QUALIFYING ACTIVITY. Taxpayer must own cogeneration equipment. Cogeneration equipment is equipment that produces both electric energy and useful heat energy or steam energy.

1. Qualifying cogeneration equipment must serve developments of more than 1 million square feet.
2. Qualifying cogeneration equipment must use fuel already subject to District tax.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. The tax exemption is available starting October 1, 2016.

G. MISCELLANEOUS.

11.02 District of Columbia property tax exemption for solar energy systems

A. GENERAL DESCRIPTION. District of Columbia provides a property tax exemption in the amount of 100% of District tax on solar energy systems. *District of Columbia Official Code §47-1508(a)(11); District of Columbia Official Code §34-1431(14); Law 19-252, (2013)*.

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

C. QUALIFYING ACTIVITY. Taxpayer must own solar energy systems. Solar energy system is equipment that use exclusively solar energy. Solar energy is radiant energy, direct, diffuse, or reflected, received from the sun at wavelengths suitable for conversion into thermal, chemical, or electrical energy, that is collected, generated, or stored for use at a later time.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

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

12.01 Florida state property tax exemption for residential renewable energy source devices

A. GENERAL DESCRIPTION. Florida provides a property tax assessment exemption in the amount of 100% the cost of residential renewable energy source devices. *Fla. Stat. §193.624; H.B. 277 (2013)*.

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

C. QUALIFYING ACTIVITY. Taxpayer must own residential renewable energy source devices. A renewable energy source device is equipment that collects, transmits, stores, or uses solar energy, wind energy, or energy derived from geothermal deposits. Renewable energy source devices include: (a) solar energy collectors, photovoltaic modules, and inverters; (b) storage tanks and other storage systems, excluding swimming pools used as storage tanks; (c) rockbeds; (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 and wind turbines; (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.

1. Renewable energy source devices do not include conventional backup systems.

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

1. Renewable energy source devices operating for only a portion of the year of application for the tax exemption will receive a proportionally reduced tax exemption.

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. Taxpayer must file with the county property appraiser an application on or before March 1 of the first year such treatment is requested.

G. MISCELLANEOUS.

12.02 Florida state corporate income tax credit for renewable energy production

A. GENERAL DESCRIPTION. Florida provides an 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.; Section 7, Chapter 2012-117, Laws of Florida (2012)*.

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer corporation producers and sellers of electricity produced from renewable energy facilities.

1. Taxpayer must be certified by the FL Department of Agriculture and Consumer Services.
2. 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.
3. Taxpayer may use the tax credit on a consolidated return basis up to the amount of tax imposed upon the consolidated group.

C. 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.

D. INCENTIVE AMOUNTS. The tax credit amount is equal to \$0.01/kWh of electricity produced and sold.

1. The tax credit amount is based on the sale of the facility's entire electrical production.
2. 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 2011 electrical production and sales.

E. INCENTIVE LIMITS. The maximum annual tax credit amount is \$1 million. The statewide maximum annual tax credit amount is \$10 million. When 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.

F. INCENTIVE TIMEFRAME. The tax credit expires June 30, 2016. Applications are due by February 1 of each year. Unused tax credit may be carried forward 5 years.

G. MISCELLANEOUS.

1. Taxpayer cannot claim both the tax credit and the renewable energy technologies investment tax credit per Fla. Stat. §220.192.
2. The tax credit increases net income in the amount of the business deductions claimed on its federal return paid or incurred for the taxable year.

12.03 Florida state corporate income tax credit for alternative fuel vehicle property

A. GENERAL DESCRIPTION. Florida provides an income tax credit in the amount of 75% of the investment in production, storage, and distribution of biodiesel, biomass and ethanol. *Fla. Stat. §220.192; Section 6, Chapter 2012-117, Laws of Florida (2012); Fla. Dept. of Rev., Regs. §§12C-1.0191 et seq.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer corporations investing alternative fuel vehicle property.

1. Taxpayer must be certified by the FL Department of Agriculture and Consumer Services.
2. Taxpayer or Taxpayer subsequent transferee may transfer the tax credit, in whole or in part, to any Taxpayer transferee by written agreement without transferring any ownership interest in the property or any interest in the entity owning such property. Taxpayer transferee is entitled to apply the tax credit against the tax with the same effect as if the Taxpayer transferee had incurred the eligible costs.
3. A tax credit held by a Taxpayer pass-through entity may be passed through to the Taxpayer allocatees designated as partners, members, or owners, respectively, in the manner agreed to by Taxpayer allocatees regardless of whether Taxpayer allocatees are allocated or allowed any portion of the federal energy tax credit for the eligible costs. Taxpayer allocatees must attach a copy of the certificate to each tax return on which the Taxpayer allocatee claims any portion of the tax credit.

C. QUALIFYING ACTIVITY. Taxpayer must make investments in alternative fuel vehicle property. Alternative fuel vehicle property includes production, storage, and distribution of biodiesel, biomass and ethanol. Biodiesel is the mono-alkyl esters of long-chain fatty acids derived from plant or animal matter for use as a source of energy and meeting the specifications for biodiesel and biodiesel blends with petroleum products as adopted by rule of the FL Department of Agriculture and Consumer Services. Ethanol is an anhydrous denatured alcohol produced by the conversion of carbohydrates meeting the specifications for fuel ethanol and fuel ethanol blends with petroleum products as adopted by the FL Department of Agriculture and Consumer Services. Renewable fuel is a fuel produced from biomass that is used to replace or reduce the quantity of fossil fuel present in motor fuel or diesel fuel. Biomass is a power source that is comprised of, but not limited to, combustible residues or gases from forest products manufacturing, waste, byproducts, or products from agricultural and orchard crops, waste or coproducts from livestock and poultry operations, waste or byproducts from food processing, urban

wood waste, municipal solid waste, municipal liquid waste treatment operations, and landfill gas.

1. Qualifying ethanol distribution property includes gasoline fueling station pump retrofits.

D. INCENTIVE AMOUNTS. The tax credit amount is 75% of all capital costs, operation and maintenance costs, and research and development costs incurred between July 1, 2012, and June 30, 2016.

1. Qualifying costs include the cost of constructing, installing, and equipping alternative fuel vehicle property in the state.

E. INCENTIVE LIMITS. The maximum annual amount is \$1 million. The statewide maximum annual tax credit amount is \$10 million.

F. INCENTIVE TIMEFRAME. The tax credit expires December 31, 2016. Unused tax credit may be carried forward in tax years ending before December 31, 2018.

G. MISCELLANEOUS.

12.04 Florida state sales tax exemption for solar energy systems

A. GENERAL DESCRIPTION. Florida provides a sales tax exemption in the amount of 100% of the tax on purchases of solar energy systems. *Fla. Stat. §220.192; Fla. Stat. §212.08(7)(hh). Florida Tax Information Publication 05(A)01-05, 06/01/2005; Florida Tax Information Publication 00(A)01-27, 09/20/2000.*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer purchasers of solar energy systems and their components.

1. Taxpayer must be certified by the FL Energy and Climate Commission.

C. QUALIFYING ACTIVITY. Taxpayer must purchase solar energy systems. A solar energy system is the equipment and requisite hardware that provide and are used for collecting, transferring, converting, storing, or using incidental solar energy for water heating, space heating and cooling, or other applications that

would otherwise require the use of a conventional source of energy such as petroleum products, natural gas, manufactured gas, or electricity.

1. Solar energy systems will be listed periodically by the FL Solar Energy Center to the FL Department of Revenue.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

12.05 Florida state sales tax refund for alternative fuel distribution property

A. GENERAL DESCRIPTION. Florida provides a sales tax refund in the amount of 100% of the tax paid on purchases relating to distribution of biodiesel and ethanol. *Fla. Stat. §220.192; Section 4, Chapter 2012-117, Laws of Florida (2012); Fla. Stat. §212.08(7)(hhh); Fla. Admin. Code Ann. 12A-1.0142; Florida Tax Information Publication 10(A)01-09, 06/01/2012.*

B. ELIGIBLE TAXPAYERS. The tax refund is available to Taxpayer purchasers of property relating to alternative fuel distribution property.

1. Taxpayer must be certified by the FL Department of Agriculture and Consumer Services.

C. QUALIFYING ACTIVITY. Taxpayer must purchase alternative fuel distribution property. Alternative fuel vehicle distribution property is materials used in the distribution of biodiesel (B10-B100), ethanol (E10-E100), and other renewable fuels, including fueling infrastructure, transportation, and storage. Biodiesel is the mono-alkyl esters of long-chain fatty acids derived from plant or animal matter for use as a source of energy and meeting the specifications for biodiesel and biodiesel blends with petroleum products as adopted by rule of the FL Department of Agriculture and Consumer Services. Ethanol is an anhydrous denatured alcohol produced by the conversion of carbohydrates meeting the specifications for fuel ethanol and fuel ethanol

blends with petroleum products as adopted by the FL Department of Agriculture and Consumer Services. Renewable fuel is a fuel produced from biomass that is used to replace or reduce the quantity of fossil fuel present in motor fuel or diesel fuel. Biomass is a power source that is comprised of, but not limited to, combustible residues or gases from forest products manufacturing, waste, byproducts, or products from agricultural and orchard crops, waste or coproducts from livestock and poultry operations, waste or byproducts from food processing, urban wood waste, municipal solid waste, municipal liquid waste treatment operations, and landfill gas.

1. Qualifying distribution must be certified by the FL Department of Agriculture and Consumer Services.

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

E. INCENTIVE LIMITS. The statewide maximum annual tax refund amount is \$1 million.

F. INCENTIVE TIMEFRAME. The tax refund expires July 1, 2016.

G. MISCELLANEOUS.

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

13.01 Georgia state income tax credit for clean energy property

A. GENERAL DESCRIPTION. Georgia provides an 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; H.B. 346 (2011).*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayers placing into service clean energy property.

1. Taxpayer must be certified by the GA Department of Revenue.

C. 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.

1. 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.
2. Energy efficient buildings do not include single-family residential property.

D. 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.

1. 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.

E. INCENTIVE LIMITS. The statewide maximum annual tax credit amount is \$5 million. Taxpayers denied all or part of the tax credit because of the statewide maximum annual cap will be added to a waiting list prioritized by the postmark on the Taxpayer's first application.

1. The maximum annual tax credit amounts for non-single family residential purposes are:
 - (i). \$100,000 per installation for domestic solar water heating;
 - (ii). \$500,000 per installation for photovoltaics, solar thermal electric applications, active space heating, biomass equipment and wind energy systems;
 - (iii). \$100,000 per installation for Energy Star-certified geothermal heat pumps;
 - (iv). \$100,000 for lighting retrofit projects;
 - (v). \$100,000 for energy-efficient products installed during construction.
2. The maximum annual tax credit amounts for single family residential purposes are:

- (i). \$2,500 per dwelling unit for clean energy property related to solar energy equipment for domestic water heating;
- (ii). \$10,500 per dwelling unit for clean energy property related to solar energy equipment for photovoltaic, other solar thermal electric applications, and active space heating or to wind; and
- (iii). \$2,000 per installation for Energy Star certified geothermal heat pump systems.

F. INCENTIVE TIMEFRAME. The tax credit expires December 31, 2014. The tax credit period is 4 years. 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.

G. MISCELLANEOUS.

13.02 Georgia state sales tax exemption for biomass materials

A. GENERAL DESCRIPTION. Georgia provides a sales tax exemption in the amount of 100% of the tax on sale or use of biomass material used in the production of energy. O.C.G. §48-8-3(83).

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer purchasers of qualifying biomass material.

C. QUALIFYING ACTIVITY. Taxpayer must purchase biomass material utilized in the production of energy, including the production of electricity and steam. Biomass material is organic matter, excluding fossil fuels, including agricultural crops, plants, trees, wood, wood wastes and residues, sawmill waste, sawdust, wood chips, bark chips, and forest thinning, harvesting, or clearing residues; wood waste from pallets or other wood demolition debris; peanut shells; pecan shells; cotton plants; corn stalks; and plant matter, including aquatic plants, grasses, stalks, vegetation, and residues, including hulls, shells, or cellulose containing fibers.

1. Biomass materials include pellets and fuels derived from biomass.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

13.03 Georgia state income tax credit for low- and zero- emission vehicles and chargers

A. GENERAL DESCRIPTION. Georgia provides an income tax credit in the amount of 20% for the purchase or lease of a zero emission vehicle, 10% for the purchase or lease of electric vehicle or alternative fuel converted vehicle, and 100% the cost of an electric vehicle charger. O.C.G. §48-7-40.16.

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer owners or lessee of electric vehicles, alternative fuel converted vehicles, and electric vehicle chargers.

1. Taxpayer must be certified and approved by the Environmental Protection Division of the GA Department of Natural Resources.
2. Taxpayer ownership of a new clean fueled vehicle must be evidenced by the certificate of title issued for such vehicle.
3. Taxpayer owner of an electric vehicle charger must be provided a certification issued by the seller.

C. QUALIFYING ACTIVITY. Taxpayer must purchase or lease electric vehicles, alternative fuel converted vehicles, or electric vehicle chargers.

1. Qualifying electric vehicles, alternative fuel converted vehicles or electric vehicle chargers must be certified by the GA Board of Natural Resources.
2. Alternative fuel includes methanol, denatured ethanol, natural gas, , hydrogen, fuels derived from biological materials or electricity.

D. INCENTIVE AMOUNTS. The tax credit amount is 20% the cost of an electric vehicle or alternative

fuel converted vehicle and 10% of the cost of an electric vehicle charger.

E. INCENTIVE LIMITS. The maximum tax credit amounts are \$5,000 for an electric vehicle or alternative fuel converted vehicle and \$2,500 of the cost of an electric vehicle charger.

F. INCENTIVE TIMEFRAME. Qualifying leases must be in effect on or before the last day of the calendar year in which the tax credit is claimed. Unused tax credit may be carried forward 5 years.

G. MISCELLANEOUS.

13.04 Georgia state sales tax exemption for energy-efficient products

A. GENERAL DESCRIPTION. Georgia provides a sales tax exemption in the amount of 100% the tax on energy-efficient residential appliances, lighting, doors and windows. *O.C.G. §48-8-3(82); Georgia Dept of Rev. Rule 560-12-2-.112 (2012)*.

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer purchasers of energy-efficient residential appliances, lighting, doors and windows.

C. QUALIFYING ACTIVITY. Taxpayer must purchase energy efficient products under \$1,500. Energy efficient products include any energy efficient product for noncommercial home or personal use including dishwashers, clothes washers, air conditioners, ceiling fans, fluorescent light bulbs, dehumidifiers, programmable thermostats, refrigerators, doors, or windows which have been designated by the US Environmental Protection Agency and the US Department of Energy as meeting or exceeding each such agency's energy saving efficiency requirements or Energy Star program.

1. Qualifying energy efficient products must be certified Energy Star or WaterSense Products.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. The tax exemption is effect from October 3 to October 5 (2014).

G. MISCELLANEOUS.

13.05 Georgia state income tax credit for biomass material transportation

A. GENERAL DESCRIPTION. Georgia provides an income tax credit in the amount determined by the GA Forestry Commission for transporting or diverting wood residuals to a renewable biomass qualified facility. *Ga. Code Ann. §48-7-29.14; Ga. Comp. R. & Regs. r. 560-7-8-.48*.

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer transporters of wood residuals to a renewable biomass qualified facility.

1. Taxpayer must be certified by the GA Forestry Commission.

C. QUALIFYING ACTIVITY. Taxpayer must transport or divert wood residuals to a renewable biomass qualified facility. Wood residuals include land-clearing residue, urban wood residue, and pellets.

1. Renewable biomass qualified facility must use the wood residuals for the purpose of providing bioelectric power to a third party.
2. Wood residuals do not include wood from any United States national forest.

D. INCENTIVE AMOUNTS. The tax credit amount is determined by the GA Forestry Commission on a per tonnage basis.

E. INCENTIVE LIMITS. The statewide maximum annual tax credit amount is \$25 million.

F. INCENTIVE TIMEFRAME. The tax credit expires December 31, 2014.

G. MISCELLANEOUS.

13.06 Georgia state income tax credit for alternative energy product manufacturing

A. GENERAL DESCRIPTION. Georgia provides an income tax credit in the amount of up to \$4,000 per new employee in alternative energy manufacturing business enterprises located in qualified counties. O.C.G. §48-7-40; H.B. 868 (2012).

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer manufacturers of alternative energy manufacturing business enterprises.

C. QUALIFYING ACTIVITY. Taxpayer must be located in qualified counties and create jobs in manufacturing of alternative energy products. Alternative energy products are produced for use in solar, wind, battery, bioenergy, biofuel, and electric vehicle enterprises.

1. Qualified counties must be certified by the GA Commissioner of Community Affairs.
2. Qualifying jobs must require a minimum of 35 hours a week and have an average wage above the average wage of the county that has the lowest average wage of any county in the state to qualify.

D. INCENTIVE AMOUNTS. The annual tax credit amount is \$4,000 per eligible new full-time employee for existing business enterprise in Tier 1 counties.

E. INCENTIVE LIMITS. The maximum tax credit allowed to be claimed is 50% of the state income tax liability of Taxpayer located in Tier 3 and 4 counties. The tax credit may be carried forward 10 years.

F. INCENTIVE TIMEFRAME. The tax credit period is 5 years.

G. MISCELLANEOUS.

13.07 Georgia state income tax credit for alternative fuel vehicles

A. GENERAL DESCRIPTION. Georgia provides an income tax credit in the amount of \$12,000 or \$20,000 for the purchase of an purchasing alternative fuel vehicle. O.C.G. §48-7-29.18; H.B. 348 (2014).

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer corporation purchasing alternative fuel vehicles.

1. Taxpayer must be certified by the GA Department of Revenue.

C. QUALIFYING ACTIVITY. Taxpayer must purchase alternative fuel vehicles. Alternative fuel vehicles are heavy- and medium-duty vehicles that run on electricity, liquid petroleum gas, natural gas, or hydrogen fuel.

1. Alternative fuel vehicles do not include hybrid electric drives unless the vehicle has a gross weight equal to or greater than 8,500 pounds and less than 26,000 pounds.
2. Alternative fuel vehicles must be certified by the GA Department of Natural Resources.
3. Alternative fuel vehicles must accumulate at least 75 percent of its mileage in Georgia in each year for a 5-year period, and be registered in Georgia for no less than 5 years.

D. INCENTIVE AMOUNTS. The tax credit amount is \$20,000 per heavy-duty vehicle and \$12,000 per medium-duty vehicle.

E. INCENTIVE LIMITS. The statewide maximum annual tax credit amount is \$2.5 million. The maximum annual tax credit amount is \$250,000 per taxpayer. The tax credit is not refundable.

F. INCENTIVE TIMEFRAME. The tax credit is available July 1, 2015. The tax credit expires June 30, 2017. 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.

G. MISCELLANEOUS. The tax credit is not available for a Taxpayer that has received a tax credit for a low emissions vehicle.

17. Illinois State Tax Incentives for Renewable Energy and Energy Efficiency

17.01 Illinois state property tax exemption for solar and wind energy property

A. GENERAL DESCRIPTION. Illinois allows a property tax exemption in the amount of 100% of the tax on solar energy systems or wind energy devices. *ILCS Chapter 35 §200/10-10 et seq.; H.B. 4797 (2010).*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer owners of property with a solar energy system or wind energy device installed.

1. Taxpayer must file a claim with the county.

C. QUALIFYING ACTIVITY. Taxpayer must own a solar energy system or wind energy device. A solar energy system is a complete assembly, structure, or design of solar collector, or a solar storage mechanism, which uses solar energy for generating electricity or for heating or cooling gases, solids, liquids, or other materials; the design, materials, or elements of a system and its maintenance, operation, and labor components, and any necessary components of supplemental conventional energy systems designed or constructed to interface with a solar energy system; and any legal, financial, or institutional orders, certificates, or mechanisms, including easements, leases, and agreements, required to ensure continued access to solar energy, its source, or its use in a solar energy system, including monitoring and educational elements of a demonstration project. Wind energy device is any wind turbine, with a nameplate capacity of at least 0.5 megawatts, that is used in the process of converting kinetic energy from the wind to generate electric power for commercial sale.

1. Solar energy systems do not include distribution equipment that is equally usable in a conventional energy system except for those components of the equipment that are necessary for meeting the requirements of efficient solar energy utilization; and components of a solar energy system that serve structural, insulating, protective, shading,

aesthetic, or other non-solar energy utilization purposes.

2. Solar energy systems must be certified by the IL Department of Commerce and Economic Opportunity.
3. Wind energy device projects must use an Illinois registered land surveyor to prepare a plat showing the metes and bounds description, including access routes, of the area immediately surrounding the wind energy device over which that owner has exclusive control and must record the plat and deliver a copy of it to the chief county assessment officer and to the owner of the land surrounding the newly platted area.

D. INCENTIVE AMOUNTS. The tax exemption amount for solar energy systems is 100% of the property tax due. The tax exemption amount for wind energy property lowers the assessment amount to the fair cash value. Fair cash value is the real property cost basis of \$360,000 (2007) per megawatt of nameplate capacity less an allowance for physical depreciation. The allowance for physical depreciation is equal to (i) the actual age in years of the wind energy device on the assessment date divided by 25 years multiplied by (ii) the trended real property cost basis. The allowance for physical depreciation, however, may not reduce the value of the wind energy device to less than 30% of the trended real property cost basis.

1. Fair cash value may be further reduced by functional obsolescence and external obsolescence.

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. The tax exemption expires December 31, 2016.

G. MISCELLANEOUS.

17.02 Illinois state tax credit for renewable energy and energy conservation job creation

A. GENERAL DESCRIPTION. Illinois provides a tax credit in the amount awarded by the IL Department of Commerce and Economic Opportunity for renewable energy and energy conservation job creation. *ILCS Chapter 35 §10;*

ILCS Chapter 20 §630/2; Public Act 097-058/ (2011).

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer qualifying employers.

1. Taxpayer must be certified by the IL Department of Commerce and Economic Opportunity for designation as a qualified employer.
2. Shareholders or partners of a Taxpayer that is a pass through entity shall be entitled to the tax credit allowed under the agreement between Taxpayer and IL Department of Commerce and Economic Opportunity.

C. QUALIFYING ACTIVITY. Taxpayer must produce energy conserving materials or services or be involved in development of renewable sources of energy.

D. INCENTIVE AMOUNTS. The tax credit amount is determined by the IL Department of Commerce and Economic Opportunity and is based on the following criteria: (1) the number and location of jobs created and retained in relation to the economy of the county where the projected investment is to occur; (2) the potential impact on the economy of Illinois; (3) the magnitude of the cost differential between Illinois and the competing state; (4) the incremental payroll attributable to the project; (5) the capital investment attributable to the project; (6) the amount of the average wage and benefits paid by the Applicant in relation to the wage and benefits of the area of the project; (7) the costs to Illinois and the affected political subdivisions with respect to the project; (8) the financial assistance that is otherwise provided by Illinois and the affected political subdivisions.

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. The tax credit may not exceed 10 years or 15 years for corporate headquarters relocation.

G. MISCELLANEOUS.

A. GENERAL DESCRIPTION. Illinois provides a sales tax exemption in the amount of 20% of the tax on alternative fuel. *ILCS Chapter 35 §105/3-10; ILCS Chapter 35 §120/2-10.*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer purchasers of alternative fuel.

C. QUALIFYING ACTIVITY. Taxpayer must purchase alternative fuel. Qualifying alternative fuel is gasohol and biodiesel blends with not less than 1% and not more than 10% biodiesel. Gasohol is motor fuel that is a blend of denatured ethanol and gasoline that contains not more than 1.25% water by weight. Biodiesel blend is a blend of biodiesel with petroleum-based diesel fuel in which the resultant product contains not less than 1% and not more than 99% biodiesel.

1. Qualifying gasohol must contain 90% gasoline and 10% denatured ethanol.

D. INCENTIVE AMOUNTS. The tax exemption amount is 20% of the sales tax due.

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. The tax exemption expires December 31, 2018.

G. MISCELLANEOUS.

17.03 Illinois state sales tax exemption for alternative fuel

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

18.01 Indiana state property tax exemption for renewable energy property

A. 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).*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer owners of qualifying renewable energy property installed in real property or a mobile home.

1. Taxpayer must fill out Form 18865 and file it with the local county auditor.
2. 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.

C. 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.

1. A hydroelectric power device is a device designed to utilize the kinetic power of moving water to provide mechanical energy or to produce electricity.
2. A geothermal energy or cooling device is a device designed to utilize the natural heat from the earth to provide hot water, produce electricity, or generate heating or cooling.

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

E. INCENTIVE LIMITS.

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

G. MISCELLANEOUS.

18.02 Indiana state income tax credit for biodiesel and blended biodiesel production

A. GENERAL DESCRIPTION. Indiana provides an income tax credit in the amount of \$1.00 per gallon of biodiesel produced, \$0.02 per gallon of blended biodiesel produced, and \$0.01 per gallon of blended biodiesel distributed at retail. *Ind. Code §6-3.1-27; Indiana Information Bulletin IT91, 06/01/2006.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer producers of biodiesel and Taxpayer producers and distributors of blended biodiesel.

1. Taxpayer must be certified by the IN Economic Development Corporation.
2. Taxpayer may apply the tax credit against the sales tax, the adjusted gross income tax, the financial institutions tax, or the insurance premiums tax.
3. Taxpayer shareholder, partner, or member of a pass-through entity is entitled to a portion of the tax credit in the percentage of the pass-through entity's distributive income to which the Taxpayer allocatee is entitled.

C. QUALIFYING ACTIVITY. Taxpayer must produce biodiesel. Biodiesel is a renewable, biodegradable, mono alkyl ester combustible liquid fuel derived from agricultural plant oils or animal fats that meets American Society for Testing and Materials specification D6751-03a Standard Specification for biodiesel fuel (B100) blend stock for distillate fuels. Blended biodiesel is a blend of biodiesel with petroleum diesel so that the percentage of biodiesel in the blend is at least 2% (B2 or greater).

1. Blended biodiesel does not include biodiesel (B100).

D. INCENTIVE AMOUNTS. The tax credit amount is \$1.00 per gallon of biodiesel produced, \$0.02 per gallon of blended biodiesel produced, and \$0.01 per gallon of blended biodiesel distributed.

1. The tax credit is reduced by any tax credit or subsidy that Taxpayer is entitled to receive from the federal government for the production of blended biodiesel.

E. INCENTIVE LIMITS. The maximum cumulative tax credit amount for biodiesel production is \$3 million, but may be increased to \$5 million with prior approval. The statewide maximum annual tax credit amount and the ethanol production tax credit in Ind. Code §6-3.1-28 amount is \$50 million. The statewide maximum cumulative tax credit amount for blended biodiesel distribution is \$1 million.

F. INCENTIVE TIMEFRAME. The tax credit for blended biodiesel distributed at retail expired December 31, 2010. The tax credit expires December 31, 2014. Unused tax credit may be carried forward 6 years.

G. MISCELLANEOUS.

18.03 Indiana state income tax credit for ethanol production

A. GENERAL DESCRIPTION. Indiana provides an income tax credit in the amount of \$0.125 per gallon of ethanol produced. *Ind. Code §6-3.1-28; Indiana Information Bulletin IT93, 07/01/2007.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer producers of ethanol.

1. Taxpayer must be certified by the IN Economic Development Corporation.
2. Taxpayer may apply the tax credit against the sales tax, the adjusted gross income tax, the financial institutions tax, or the insurance premiums tax.
3. Taxpayer shareholder, partner, or member of a pass-through entity is entitled to a portion the tax credit in the percentage of the pass-through entity's distributive income to which the Taxpayer allocatee is entitled.

C. QUALIFYING ACTIVITY. Taxpayer must produce ethanol. Ethanol is agriculturally derived ethyl alcohol. Ethanol includes cellulosic ethanol, which is ethanol derived solely from lignocellulosic or hemicellulosic matter.

1. Qualifying production facility must have the capacity to produce at least 40 million gallons of ethanol a year, or has increased its ethanol production capacity by at least 40 million gallons per year.

D. INCENTIVE AMOUNTS. The tax credit amount is \$0.125 per gallon of ethanol produced.

E. INCENTIVE LIMITS. The tax credit may only be applied against the state tax liability attributable to business activity taking place at the qualifying production facility. The maximum annual tax credit amounts are \$2 million for Taxpayers that produce at least 40 million gallons but less than 60 million gallons of grain ethanol in the taxable year and \$3 million for Taxpayers that produce at least 60 million gallons of grain ethanol in the taxable year. The statewide maximum cumulative tax credit amount is \$20 million for Taxpayers who produces at least 20 million gallons of cellulosic ethanol in a taxable year.

1. The statewide maximum annual tax credit and the biodiesel production tax credit, the blended biodiesel production tax credit in Ind. Code §6-3.1-27 amount is \$50 million.

F. INCENTIVE TIMEFRAME. The tax credit expires December 31, 2014. Unused tax credit may be carried forward.

G. MISCELLANEOUS.

18.04 Indiana state income tax credit for alternative fuel vehicle manufacturing

A. GENERAL DESCRIPTION. Indiana provides an income tax credit in the amount of 15% of the qualifying investment in alternative fuel vehicle manufacturing. *Ind. Code §6-3.1-1-3; Ind. Code §6-3.1-31.9; Indiana Information Bulletin IT103, 08/01/2009; Indiana Information Bulletin IT103, 05/01/2012.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer assemblers or manufacturers of alternative fuel vehicles.

1. Taxpayer must be certified by the IN Economic Development Corporation.

C. QUALIFYING ACTIVITY. Taxpayer must invest in alternative fuel vehicle manufacturing. An alternative fuel vehicle is any passenger car or light truck with a gross weight of 8,500 pounds or less that is designed to operate using smethanol, denatured ethanol, other alcohols, E85 (mixtures containing 85 percent or more by volume of methanol, denatured ethanol, and other alcohols with gasoline or other fuel), natural gas, liquefied petroleum gas, hydrogen, coal-derived liquid fuels, non-alcohol fuels derived from biological material, P-Series fuels, electricity, biodiesel, or ultra-low sulfur diesel fuel.

D. INCENTIVE AMOUNTS. The tax credit amount is 15% of the qualifying investment. Qualifying investment is the amount of Taxpayer's expenditures in Indiana that are reasonable and necessary for the manufacture or assembly of alternative fuel vehicles. Qualifying investments include construction of new (or the modernization of existing) telecommunications, production, manufacturing, fabrication, assembly, finishing, distribution, transportation, or logistical distribution facilities; purchase of new equipment used for telecommunications, production, manufacturing, fabrication, assembly, finishing, distribution, transportation, or logistical distribution; purchase of new computers and related equipment; onsite infrastructure improvements; costs associated with retooling existing machinery and equipment; costs associated with the construction of special-purpose buildings, pits, and foundations; and costs associated with the purchase of machinery, equipment, or special-purpose buildings used to manufacture or assemble alternative fuel vehicles.

1. Qualifying investment must be certified by the IN Economic Development Corporation

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. The tax credit expires December 31, 2016. Unused tax credit may be carried forward 9 years.

G. MISCELLANEOUS. The tax credit may not be claimed with any of the other tax credits listed in Ind. Code §6-3.1-1-3.

A. GENERAL DESCRIPTION. Indiana provides an income tax deduction in the amount of 100% the cost of the materials and labor used to install qualifying insulation in a taxpayer's principal residence. *Ind. Code §6-3-2-5; Indiana Information Bulletin IT43, 01/01/2003.*

B. ELIGIBLE TAXPAYERS. The tax deduction is available to Taxpayer individuals installing qualifying insulation in Taxpayer's principal residence.

C. QUALIFYING ACTIVITY. Taxpayer must install qualifying insulation in Taxpayer's principal residence. Qualifying insulation includes ceiling insulation, wall insulation, floor insulation, roof insulation, hot bare pipe insulation and exterior insulation for a hot water heater. Insulation is any material commonly used in the building industry for the sole purpose of controlling the passage of heat energy into or out of a building. Qualifying insulation types include material made from fiberglass, rock wool, cellulose, Styrofoam, urea-based foam urethane, vermiculite, perlite, polystyrene, reflective insulation, extruded polystyrene foam, blown-in insulation, rolled insulation, sheet Styrofoam insulation, and wrap insulation. Ceiling insulation is insulation installed within the enclosed walls of a principal residence or insulation installed between unheated attic space and the top level of a principal residence. Wall insulation is insulation installed in the surface of an exterior wall or in the cavity of an exterior wall. Floor insulation is insulation installed between the first level heating space of a residence and the unheated space beneath it, including a crawl space or a basement. Roof insulation is insulation installed on the surface of the roof facing the residential interior. Hot bare pipe insulation is insulation installed around the exterior of pipes. Exterior insulation for a hot water heater is insulation placed around the exterior of a hot water heater tank.

1. Qualifying insulation does not include materials replacing broken or worn-out materials.
2. Qualifying insulation includes weather stripping, storm windows, storm doors, thermal pane windows, and caulking.
3. Qualifying insulation does not include automatic setback thermostats, flue opening modifications, mechanical furnace ignition systems, solar energy equipment (such as collectors, rock beds, and heat exchangers), wind energy

18.05 Indiana state income tax deduction for installation of insulation

- equipment (such as windmills), geothermal energy equipment, furnace replacement burners, meters, wood burning stoves, sky lights, heat pumps, and temporary plastic window coverings.
4. Qualifying residence or portion of residence must have been built at least 3 years prior to the taxable year for which the deduction is taken.
 5. Qualifying insulation must be new and not used as a replacement for other material.

D. INCENTIVE AMOUNTS. The tax deduction amount is the cost of the insulation.

1. The cost of insulation includes installation costs.

E. INCENTIVE LIMITS. The maximum tax deduction is \$1,000.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

D. INCENTIVE AMOUNTS. The tax deduction amount is 50% the cost of labor and materials for the installation of the solar powered roof vent or fan.

E. INCENTIVE LIMITS. The maximum annual tax deduction amount is \$1,000.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

18.06 Indiana state income tax deduction for solar powered roof vent or fan

A. GENERAL DESCRIPTION. Indiana provides an income tax deduction in the amount of 50% the cost of labor and materials for the installation of the solar powered roof vent or fan installed. *Ind. Code §6-3-2-5.3; Ind. Dept. of Rev., Tax Information Income Tax Bulletin 105.*

B. ELIGIBLE TAXPAYERS. The tax deduction is available to Taxpayer individuals installing a solar powered vent or fan on a building owned or leased by Taxpayer.

1. Taxpayer must file with the IN Department of Revenue proof of Taxpayer's costs for installation of a solar powered roof vent or fan and a list of the persons or corporations that supplied labor or materials for the installation of the solar powered roof vent or fan.

C. QUALIFYING ACTIVITY. Taxpayer must install a solar powered vent or fan on a building owned or leased by Taxpayer. A solar powered vent or fan is a roof vent or fan that is powered by solar energy and used to release heat from a building.

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

21.01 Kentucky state corporate income tax credit for renewable energy facilities

A. GENERAL DESCRIPTION. Kentucky provides an income tax credit in the amount of 50% of the investment in renewable energy facilities. *Ky. Rev. Stat. Ann. §154.27-010 et seq.; 307 Ky. Admin. Regs. 1:040; H.B. 552 (2010); H.B. 589 (2010).*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer corporations constructing, retrofitting or upgrading facilities that generate power from renewable resources.

1. Taxpayers must be certified by the KY Economic Development Finance Authority.

C. QUALIFYING ACTIVITY. Taxpayer must construct, retrofit or upgrade a renewable energy facility. A renewable energy facility is one that generates at least 50 kW of electricity from solar power or at least 1 MW from wind power, biomass resources, landfill gas, hydropower, energy-efficient alternative fuel, natural gas alternative fuel or similar renewable resources.

1. Qualifying electricity must be sold to an unrelated party.
2. Qualifying renewable energy facilities must have a minimum of \$1 million in capital expenditures.
3. Qualifying energy-efficient alternative fuel facilities and biomass facilities must have a minimum of \$25 million in capital expenditures.

D. INCENTIVE AMOUNTS. The tax credit amount is 50% of the capital investment.

E. INCENTIVE LIMITS. The maximum tax credit amount is 50% of the capital investment.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

21.02 Kentucky state income tax credit for renewable energy systems

A. GENERAL DESCRIPTION. Kentucky provides an 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. §141.436; 307 Ky. Admin. Regs. 1:040.*

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

C. QUALIFYING ACTIVITY. Taxpayer must install renewable energy systems. Renewable energy systems include solar hot water, solar energy systems, PV panels, inverters, wind and geothermal heat pumps.

1. Qualifying wind and solar hot water equipment must have a manufacturer's warranty of 5 years or more.
2. 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.
3. Qualifying solar energy systems must be installed by a North American Board of Certified Energy Practitioners-certified installer.
4. Qualifying PV panels and inverters must meet article 690 of the National Electrical Code and be certified by Underwriters Laboratories.
5. Qualifying wind turbines must meet the wind industry consensus standards developed by the American Wind Energy Association and U.S. Department of Energy.
6. Qualifying wind turbines must meet the requirements of article 705 of the NEC, and must be UL-certified.
7. Qualifying closed loop geothermal heat pumps must have EER of 14.1 and COP of 3.6
8. Qualifying open loop geothermal heat pump must have EER of 16.2 and COP of 3.5
9. Qualifying DX geothermal heat pump must have EER of 15 and COP of 3.5

D. 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 photovoltaic systems.

E. 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.

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

G. MISCELLANEOUS.

21.03 Kentucky state sales tax exemption for renewable energy facilities

A. GENERAL DESCRIPTION. Kentucky provides a sales tax exemption for renewable energy facility property. *Ky. Rev. Stat. Ann. §154.27-010 et seq.*; *103 Ky. Admin. Regs. 31:190*; *H.B. 552 (2010)*; *H.B. 589 (2010)*.

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer purchasers of property for facilities that generate power from renewable resources.

1. Taxpayer must be certified by the KY Economic Development Finance Authority.

C. QUALIFYING ACTIVITY. Taxpayer must purchase property for renewable energy facilities. A renewable energy facility is defined as one that generates at least 50 kW of electricity from solar power or at least 1 MW from wind power, biomass resources, landfill gas, hydropower, energy-efficient alternative fuel, natural gas alternative fuel or similar renewable resources.

1. Qualifying electricity must be sold to an unrelated party.
2. Qualifying renewable energy facility must have a minimum \$1 million in capital expenditures.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. The maximum tax exemption period is 25 years.

G. MISCELLANEOUS.

21.04 Kentucky state income tax credit for biodiesel and renewable diesel

A. GENERAL DESCRIPTION. Kentucky provides an income tax credit in the amount of \$1.00 per gallon for producing and blending biodiesel and renewable diesel. *Ky. Rev. Stat. Ann. §141.422 et seq.*; *Ky. Admin. Regs. 103 §15:140(4)*; *L. 2012, H.B. 441 (2012)*.

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer corporations or individuals producing or blending biodiesel and renewable diesel.

1. Taxpayer must be certified by the KY Department of Revenue.
2. Taxpayer agriculture cooperatives formed as limited cooperative associations may apportion the tax credit among patron members of the association.

C. QUALIFYING ACTIVITY. Taxpayer must produce or blend biodiesel and renewable diesel. Biodiesel is a renewable, biodegradable, mono alkyl ester combustible liquid fuel derived from agriculture crops, agriculture plant oils, agriculture residues, animal fats or waste products that meets current American Society for Testing and Materials specification D6751 for biodiesel fuel (B100) blend stock distillate fuels. Blended biodiesel is a blend of biodiesel with petroleum diesel so that the percentage of biodiesel in the blend is at least 2% (B2 or greater). Renewable diesel is a renewable, biodegradeable, non-ester combustible liquid that is derived from biomass resources and meets the current American Society for Testing and Materials Specification D396 for fuel oils intended for use in various types of fuel oil burning equipment, D975 for diesel fuel oils suitable for various types of diesel fuel engines or D1655 for aviation turbine fuels.

D. INCENTIVE AMOUNTS. The tax credit amount is \$1.00 per biodiesel gallon produced by a biodiesel

producer, \$1.00 per gallon of biodiesel used in the blending process and \$1.00 per gallon of renewable diesel produced by a renewable diesel producer.

E. INCENTIVE LIMITS. The statewide maximum annual tax credit amount is \$10 million. If the tax credit exceeds the statewide maximum annual tax credit amount, the tax credit will be prorated among approved producers and blenders.

F. INCENTIVE TIMEFRAME. Taxpayer must apply for the tax credit by January 15 of the preceding calendar year.

G. MISCELLANEOUS.

21.05 Kentucky state income tax credit for cellulosic ethanol or ethanol fuel

A. GENERAL DESCRIPTION. Kentucky provides an income tax credit in the amount of \$1.00 per gallon for producing cellulosic ethanol fuel. *Ky. Rev. Stat. Ann. §141.4244; Ky. Rev. Stat. Ann. §141.422; Ky. Rev. Stat. Ann. §141.4242; Ky. Dept. of Rev., Prop. Regs. §15:110 et seq.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer corporations, limited liability entities or individuals producing cellulosic ethanol or ethanol.

1. Taxpayer must be certified by the KY Department of Revenue.
2. Taxpayer pass-through entities claiming the tax credit must apply the tax credit based on distributive share.

C. QUALIFYING ACTIVITY. Taxpayer must produce cellulosic ethanol or ethanol. Cellulosic ethanol is ethyl alcohol for use as a motor fuel that meets the current American Society for Testing and Materials specification D4806 for ethanol that is produced from cellulosic biomass materials of any lignocellulosic or hemicellulosic material that is available on a renewable or recurring basis including: plant wastes from industrial processes such as sawdust and paper pulp; energy crops grown specifically for fuel production such as switchgrass or agricultural plant residues such as corn stover, rice hulls, sugar cane and cereal straws. Ethanol is ethyl alcohol produced from corn, soybeans, or wheat for use as a motor fuel that meets the current American Society for

Testing and Materials specification D4806 for ethanol.

D. INCENTIVE AMOUNTS. The tax credit amount is \$1.00 per cellulosic ethanol or ethanol gallon produced.

E. INCENTIVE LIMITS. The statewide maximum annual tax credit amounts are \$5 million for cellulosic ethanol and \$5 million for ethanol. If the amount of credit exceeds the statewide maximum annual tax credit amounts, the tax credit will be prorated among approved producers.

F. INCENTIVE TIMEFRAME. Taxpayer must apply for the tax credit by January 15 of the preceding calendar year.

G. MISCELLANEOUS.

21.06 Kentucky state income tax credit for energy efficient commercial property

A. GENERAL DESCRIPTION. Kentucky provides an income tax credit in the amount of 30% of the cost of energy efficiency measures on commercial property. *Ky. Rev. Stat. Ann. §141.435 et seq.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer corporations and individuals installing certain energy efficiency measures on commercial property.

C. QUALIFYING ACTIVITY. Taxpayer must install energy efficiency measures on commercial property. Energy efficiency measures include energy efficient lighting systems, energy efficient HVAC system, and Energy Star manufactured homes. An energy efficient lighting system is an interior lighting system that meets the maximum reduction in lighting power density requirements for the federal energy efficient commercial building deduction under IRC §179D, as in effect December 31, 2007. An energy-efficient heating, cooling, ventilation, or hot water system as a system that meets the requirements for the federal energy-efficient commercial building deduction under IRC §179D, as in effect December 31, 2007.

D. INCENTIVE AMOUNTS. The tax credit amount is 30% of installed cost.

E. INCENTIVE LIMITS. The maximum tax credit amount is \$1,000. The maximum tax credit amount for energy efficient lighting system is \$500. The maximum tax credit amount for energy efficient HVAC System is \$500. The maximum tax credit amount for Energy Star manufactured home sold is \$400.

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

G. MISCELLANEOUS.

21.07 Kentucky state sales tax exemption for energy efficient manufacturing machinery and equipment

A. GENERAL DESCRIPTION. Kentucky provides a sales tax exemption in the amount of 100% of the tax on energy efficient manufacturing machinery and equipment. *Ky. Rev. Stat. Ann. §139.518; 103 Ky. Admin. Regs. 31:200.*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer purchasers of new or replacement equipment for an energy efficiency project.

1. Taxpayer must be certified by the KY Cabinet for Economic Development and the KY Department of Revenue prior to purchasing new or replacement equipment.

C. QUALIFYING ACTIVITY. Taxpayer must purchase equipment for an energy efficiency project. An energy efficiency project is a project that decreases the measurable amount of energy used by the facility by at least 15% percent while maintaining or increasing the production for the same period.

1. Qualifying equipment does not include windows, lighting or other improvements to buildings and repair, replacement and spare parts.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. The maximum tax exemption period is 25 years.

G. MISCELLANEOUS.

21.08 Kentucky state personal income tax credit for energy efficient residential property

A. GENERAL DESCRIPTION. Kentucky provides an income tax credit in the amount of 30% of the cost of energy efficiency measures on residential property. *Ky. Rev. Stat. Ann. §141.435 et seq.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer individuals installing certain energy efficiency measures on residential property.

C. QUALIFYING ACTIVITY. Taxpayer must install certain energy efficiency measures on residential property. Energy efficiency measures include: (1) qualifying energy property including water heaters, heat pumps, central air conditioners, and advanced main air circulating fans; and (2) weatherization measures including windows and storm doors, and added insulation.

1. Qualifying electric heat pump water heater must yield an energy factor of at least 2.0 in the standard DOE test procedure.
2. Qualifying split central air conditioning system must have a SEER of 15 and EER of 12.5.
3. Qualifying packaged central air conditioning system must have a SEER of 14 and EER of 12.
4. Qualifying natural gas, propane or oil water heater must have an Energy factor of .80 or higher.
5. Qualifying natural gas, propane or oil furnace or hot water boiler must have an annual fuel utilization efficiency rate of at least 95.
6. Qualifying exterior wall, crawl space, basement exterior wall insulation must have a R-13 or higher
7. Qualifying floor insulation must have a R-19 or higher

D. INCENTIVE AMOUNTS. The tax credit amount is 30% of the installed cost.

E. INCENTIVE LIMITS. The maximum tax credit amount is \$500 for any combination of qualifying energy property and weatherization measures. The maximum tax credit amounts are \$100 for insulation, and \$250 for qualifying energy property, windows and storm doors.

F. INCENTIVE TIMEFRAME. The tax credit expires December 31, 2015.

G. MISCELLANEOUS.

21.09 Kentucky state corporate income tax credit for Energy Star homes

A. GENERAL DESCRIPTION. Kentucky provides an income tax credit in the amount of \$400 - \$800 per Energy Star home sold or built for use as a principal place of residence. *Ky. Rev. Stat. Ann. §141.437*.

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer corporations or limited liability entities building or selling Energy Star homes.

C. QUALIFYING ACTIVITY. Taxpayer must build an Energy Star home or sell an Energy Star manufactured home. An Energy Star home is any single-family residence that qualifies for and receives the Energy Star label under the Energy Star Program administered by the US Environmental Protection Agency. An Energy Star manufactured home is a manufactured home that meets the Energy Star label under the Energy Star Program administered by the US Environmental Protection Agency.

D. INCENTIVE AMOUNTS. The tax credit amount is \$800 if Taxpayer builds an Energy Star home. The tax credit amount is \$400 if Taxpayer sells an Energy Star manufactured home.

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. The tax credit applies in the year in which the taxpayer completes construction of the Energy Star home or sells the Energy Star manufactured home. The tax credit expires December 31, 2015.

G. MISCELLANEOUS. Taxpayer may not take the energy efficiency tax credit per *Ky. Rev. Stat. Ann. §141.435 et seq.*

21.10 Kentucky state sales and use tax rebate for renewable energy facilities

A. GENERAL DESCRIPTION. Kentucky provides a sales and use tax rebate in the amount of 100% of the sales and use tax paid for personal property used to construct, retrofit, or upgrade renewable energy facilities. *Ky. Rev. Stat. Ann. §154.27-070*.

B. ELIGIBLE TAXPAYERS. The tax refund is available to Taxpayer corporations constructing, retrofitting or upgrading facilities that generate power from renewable resources.

1. Taxpayers must be certified by the KY Economic Development Finance Authority.

C. QUALIFYING ACTIVITY. Taxpayer must construct, retrofit or upgrade a renewable energy facility. A renewable energy facility is one that generates at least 50 kW of electricity from solar power or at least 1 MW from wind power, biomass resources, landfill gas, hydropower, energy-efficient alternative fuel, natural gas alternative fuel or similar renewable resources.

D. INCENTIVE AMOUNTS. The tax refund amount is 100% of the sales and use tax paid on the purchase of tangible personal property, including but not limited to materials, machinery, and equipment used to construct, retrofit, or upgrade a qualifying renewable energy facilities.

1. The tax refund is reduced by the vendor compensation provided under *Ky. Rev. Stat. Ann. §139.570*.
2. Qualifying personal property does not include property purchase before the activation date or operating supplies, repair, replacement or spare parts.

E. INCENTIVE LIMITS. The maximum tax refund amount is 100% of the sales and use tax paid.

F. INCENTIVE TIMEFRAME. The tax refund expires upon the sooner of: (i) completion of the construction, retrofit, or upgrade of the qualifying renewable energy facilities; or (ii) 5 years from the

activation date of the qualifying renewable energy facilities.

G. MISCELLANEOUS.

23. Maine State Tax Incentives for Renewable Energy and Energy Efficiency

23.01 Maine state sales tax refund for qualifying community wind energy property

A. GENERAL DESCRIPTION. Maine provides a sales tax refund in the amount of 100% of the tax paid on qualifying community wind energy property. *36 Me. Rev. Stat. Ann. §2017; 35 Me. Rev. Stat. Ann. §3402.*

B. ELIGIBLE TAXPAYERS. The tax refund is available to Taxpayer contractors or generators of community wind energy projects purchasing community wind energy property.

1. Taxpayer must be certified by the ME Public Utilities Commission and fill out an application with ME Revenue Services.

C. QUALIFYING ACTIVITY. Taxpayer must purchase community wind energy property. Community wind energy property is tangible personal property that has been physically incorporated into real property in the development of a community wind project having nameplate capacity of 10 megawatts (MW) or less.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. Taxpayer must apply for the tax refund within 3 years of the personal property being physically incorporated into real property.

G. MISCELLANEOUS.

23.02 Maine state income tax credit for biofuel production

A. GENERAL DESCRIPTION. Maine provides an income tax credit in the amount of \$0.05 per gallon of biofuel production. *36 Me. Rev. Stat. Ann. §5219-X.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer producers of biofuel.

1. Taxpayer must be certified by the ME Commissioner of Environmental Protection regarding the biofuel being produced, including the quantity of biofuel products, the type of forest or agricultural product being utilized, the nature and composition of the biofuel being produced, the proportion and composition of any nonbiofuel with which the biofuel is blended, the type of application for which it is intended to be used, and the BTU equivalent of the biofuel as compared to the BTU value of 1 gallon of gasoline.

C. QUALIFYING ACTIVITY. Taxpayer must produce biofuel. Biofuel is any commercially produced liquid or gas used to propel motor vehicles or otherwise substitute for liquid or gaseous fuels that is derived from agricultural crops or residues or from forest products or by-products, as distinct from petroleum or other fossil carbon sources.

1. Biofuel must be liquid or gaseous with a BTU equivalent to that of 1 gallon of gasoline that replaces the use of petroleum or liquid fuels derived from other fossil carbon sources.
2. Biofuel includes ethanol, methanol derived from biomass, levulinic acid, biodiesel, pyrolysis oils from wood, hydrogen or methane from biomass, or combinations of any of the above that may be used to propel motor vehicles either alone or in blends with conventional gasoline or diesel fuels or that may be used in place of petroleum products in whole or in part to fire heating devices or any stationary power device.
3. Biofuel must be offered for sale and income must be derived from the commercial production of biofuel.
4. Biofuel includes blends with petroleum or other nonbiofuels only on the portion of that blend that the biofuel constitutes.

D. INCENTIVE AMOUNTS. The tax credit amount is \$0.05 per gallon of biofuel produced.

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. Unused tax credit may be carried forward 10 years.

G. MISCELLANEOUS.

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

24.01 Maryland state income tax credit for renewable energy production

A. GENERAL DESCRIPTION. Maryland provides an 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).*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer corporations or individuals producing electricity generated from renewable sources.

1. Taxpayer must be certified by the MD Energy Administration.

C. 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, waste water-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.

D. 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.

E. INCENTIVE LIMITS. The maximum tax credit amount is \$500,000 annually, and \$2.5 million over a 5-year period. The statewide aggregate maximum tax credit amount is \$25 million.

F. INCENTIVE TIMEFRAME. The tax credit period is 5 years. The tax credit expires December 31, 2015. The tax credit is refundable.

1. 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.

G. MISCELLANEOUS.

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

A. 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.*

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

C. QUALIFYING ACTIVITY. Taxpayer must equip buildings with a solar, geothermal or qualifying energy conservation device.

1. 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.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

24.03 Maryland state property tax exemption for renewable energy systems

A. 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).*

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

C. QUALIFYING ACTIVITY. Taxpayer must own geothermal, solar photovoltaic (PV), solar hot

water system property and residential wind energy equipment.

1. Qualifying solar property includes equipment used to generate electricity that is supplied to the electric grid.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

24.04 Maryland state property tax financing option for renewable energy and energy-efficiency systems

A. GENERAL DESCRIPTION. Maryland provides a property tax financing option for municipalities for renewable energy and energy-efficiency systems. *Md. Code Ann. §9-1501 et seq.; H.B. 1567 (2009).*

B. ELIGIBLE TAXPAYERS. The tax financing is available to Taxpayer financing renewable energy or eligible energy-efficiency improvements.

C. QUALIFYING ACTIVITY. Taxpayer must finance renewable energy or eligible energy-efficiency improvements.

1. Renewable energy or eligible energy-efficiency improvements for commercial property owners must not have a capacity of more than 100 kw.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

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

A. 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; Md. Regs. Code §03.06.01.43; H.B. 1171 (2009); S.B. 621 (2009).*

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

C. 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 supplied to the electric grid, 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.

1. 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.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

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

A. 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.*

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

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

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

24.07 Maryland state income tax credit for cellulosic ethanol technology research and development

A. GENERAL DESCRIPTION. Maryland provides an income tax credit in the amount of 10% of costs for cellulosic ethanol technology research and development. *Md. Code Ann. §10-726; Md. Regs. Code §24.05.12.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayers incurring cellulosic ethanol technology research and development expenses.

1. Taxpayer must be certified by the MD Department of Business and Economic Development.
2. Taxpayer partners or members of a pass-through entity are allocated tax credit amounts as agreed to in writing by the Taxpayer allocatees. If there is no written agreement governing the allocation of the tax credit, the tax credit is allocated in the same proportion as other items are allocated for the taxable year.

C. QUALIFYING ACTIVITY. Taxpayer must incur cellulosic ethanol technology research and development expenses. Cellulosic ethanol technology is technology that is used to develop cellulosic biomass for conversion to ethanol fuel.

1. Cellulosic ethanol technology research or development activities must be performed, conducted, or carried on in Maryland.

2. Cellulosic ethanol technology research or development activities must consume all supplies in Maryland.

D. INCENTIVE AMOUNTS. The tax credit amount is 10% of cellulosic ethanol technology research and development expenses.

E. INCENTIVE LIMITS. The statewide maximum annual tax credit amount is \$250,000. If the total amount of tax credits applied for exceeds the statewide maximum annual tax credit amount, the tax credit is prorated credit amount for each qualifying applicant.

F. INCENTIVE TIMEFRAME. The tax credit expires December 31, 2016. Taxpayer must apply for the tax credit by September 15 of the calendar year following the end of the taxable year in which the qualifying research and development expenses were incurred. The MD Department of Business and Economic Development must issue the certification by December 15th. Taxpayer must file an amended income tax return for the taxable year in which the qualifying research and development expense was incurred, and attach a copy of the MD Department of Business and Economic Development's certification to the amended income tax return. Unused tax credit may be carried forward 15 tax years.

G. MISCELLANEOUS. The tax credit amount claimed must be added to federal taxable income to calculate Taxpayer's Maryland modified income.

24.08 Maryland state income tax credit for biodiesel heating fuel

A. GENERAL DESCRIPTION. Maryland provides an income tax credit in the amount of \$0.03 per gallon of biodiesel heating fuel purchased. *Md. Code Ann. §10-727.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer corporations and individuals purchasing biodiesel used for space or water heating.

C. QUALIFYING ACTIVITY. Taxpayer must purchase biodiesel used for space or water heating. The heating oil blend must contain at least 5% biodiesel (B5).

D. INCENTIVE AMOUNTS. The tax credit amount is \$0.03 per gallon of biodiesel purchased.

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

F. INCENTIVE TIMEFRAME. The tax credit expired December 31, 2012.

G. MISCELLANEOUS.

24.09 Maryland state income tax credit for green building

A. GENERAL DESCRIPTION. Maryland provides an income tax credit generally in the amount of 6-8% the cost of green non-residential and residential multifamily buildings and 20-30% the cost of green building components. *Md. Code Ann. §10-722; Md. Energy Admin., Emergency Regs. §§14.26.02.02 and -02.04 to -02.10; Md. Dept. of Planning, Regs. §34.04.07.04.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer owners of green non-residential and residential multifamily buildings.

C. QUALIFYING ACTIVITY. Taxpayer must construct or rehabilitate green non-residential and residential multifamily buildings. Green non-residential and residential multifamily buildings are multifamily buildings of at least 20,000 square feet that are constructed or rehabilitated to meet criteria set forth by the U.S. Green Building Council or other similar criteria.

1. Green non-residential and residential multifamily buildings that are newly constructed must be located on a qualifying brownfields site, or in a priority funding area, and not in a wetlands area.
2. Green non-residential and residential multifamily buildings that are rehabilitated must not increase the size of the building by 25% or be located in a priority funding area.
3. For newly constructed and rehabilitated green whole buildings that include green tenant space buildings must be certified as meeting, at a minimum, the requirements to qualify for a Gold rating in the LEED Rating System LEED 2009 for New Construction and Major Renovations in the following categories:

- (i). Sustainable Sites, Credit 8—Light Pollution Reduction,
- (ii). Water Efficiency, Credit 3—Water Use Reduction,
- (iii). Materials and Resources, Credit 2—Construction Waste Management, and
- (iv). Energy and Atmosphere, Credits 1 through 6, with at least 15 points.

4. Newly constructed and rehabilitated green tenant space is a building space that uses not more than 65 percent of the energy attributable to a reference building meeting the applicable ASHRAE 90.1-1999 standards and, at a minimum, is certified to qualify for a Gold rating in the LEED Rating System 2009 for Commercial Interiors in certain categories.

D. INCENTIVE AMOUNTS. The tax credit amounts are:

1. 20% of the incremental cost for building-integrated photovoltaics;
2. 25% of the incremental cost for nonbuilding-integrated photovoltaics;
3. 30% of the costs, including installation, for a fuel cell;
4. 25% of the costs, including installation, for a wind turbine;
5. 6% of the allowable costs for the construction of or rehabilitation to a green base building or green tenant space;
6. 8% of the allowable costs for the construction or rehabilitation of a green whole building.
7. Allowable costs include amounts for construction or rehabilitation; commissioning costs; interest paid or incurred during the construction or rehabilitation period; architectural, engineering, and other professional fees allocable to construction or rehabilitation; closing costs for construction, rehabilitation, or mortgage loans; recording taxes and filing fees incurred with respect to construction or rehabilitation; and finishes and furnishings consistent with the regulations, lighting, plumbing, electrical wiring, and ventilation.
8. Allowable costs does not include the cost of telephone systems and computers,

other than electrical wiring costs; legal fees allocable to construction or rehabilitation; site costs, including temporary electric wiring, scaffolding, demolition costs, and fencing and security facilities; finishes or furnishings that are not consistent with the regulations; or the cost of purchasing or installing fuel cells, wind turbines, or photovoltaic modules.

E. INCENTIVE LIMITS. The maximum tax credit amount is the tax credit for allowable project costs of \$120/sq. ft. (whole/base building), \$60/sq. ft. (tenant space), \$3/watt for photovoltaics, and \$1,000/kW for fuel cells.

F. INCENTIVE TIMEFRAME. The tax credit expired December 31, 2011. Unused tax credit may be carried forward 10 years.

1. Taxpayer must show they are likely to place the property in service within three years of submitting their initial credit certificate application.
2. The certificate must expire no more than nine months after the date the property is expected to be placed in service, unless the taxpayer receives an extension from the administration.

G. MISCELLANEOUS.

24.10 Maryland state property tax credit for LEED Silver or better green buildings

A. GENERAL DESCRIPTION. Maryland provides a property tax credit in the amount of 100% of the tax on LEED Silver green buildings. *Md. Code Ann. §9-242.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer owners of LEED Silver or better green buildings.

C. QUALIFYING ACTIVITY. Taxpayer must own LEED Silver or better green buildings.

D. INCENTIVE AMOUNTS. The tax credit amount is 100% of the property tax paid.

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

24.11 Maryland state sales tax exemption for wood heating fuel

A. GENERAL DESCRIPTION. Maryland provides a sales tax exemption in the amount of 100% of tax on wood heating fuel. *Md. Code Ann. §11-207.*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer purchasers of all-wood or refuse-derived fuel used for residential heating purposes.

C. QUALIFYING ACTIVITY. Taxpayer must purchase all-wood or refuse-derived fuel used for residential heating purposes.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

24.12 Maryland state income tax credit for Sustainable Communities

A. GENERAL DESCRIPTION. Maryland provides an income tax credit in the amount of 25% of the cost of historically certified LEED Gold green buildings. *Md. Code Ann. §5A-303; H.B. 475 (2010); H.B. 668 (2012); H.B. 510 (2014).*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer owners of LEED Gold or better qualified rehabilitated structures.

1. Taxpayer must be certified by the MD Historical Trust and the MD Department of Planning.
2. Taxpayer may allocate the tax credit among its partners, members, or shareholders of an entity in any manner agreed to.

C. QUALIFYING ACTIVITY. Taxpayer must own LEED Gold or better qualified rehabilitated structure. A qualified rehabilitated structure is a building other than a single-family, owner-occupied residence that is located in a sustainable community. The rehabilitation must retain specified minimum percentages of internal and external walls and internal framework during the rehabilitation.

1. A sustainable community must be certified by the MD Department of Housing and Community Development.
2. Qualified rehabilitated structure must be a building that meets or exceeds the current version of the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) green building rating system gold rating, or achieves at least a comparable numeric rating according to a nationally recognized, accepted, and appropriate numeric green building rating system, guideline, or standard approved by the Secretaries of Budget and Management and General Services.
3. Qualified rehabilitated structures must meet substantial expenditure thresholds and the U.S. Secretary of the Interior's Standards for Rehabilitation (36 CFR 67). A substantial rehabilitation is the rehabilitation of a structure for which the qualified rehabilitation expenditures over a 24-month period exceed (1) \$5,000 for a single-family, owner-occupied residence; or (2) the greater of the adjusted basis of the property or \$25,000 for all other properties.
4. A single-family, owner-occupied residence is a structure or a portion of a structure occupied by the owner and the owner's immediate family as their primary or secondary residence. Single-family, owner-occupied residence includes a residential unit in a cooperative project owned or leased to a cooperative housing corporation and leased for exclusive occupancy to, and occupied by, a member of the corporation and the member's immediate family.
5. A small commercial project is a rehabilitation of a structure primarily used for commercial, income-producing purposes if the qualified rehabilitation expenditures do not exceed \$500,000

and the structure is located in a sustainable community.

D. INCENTIVE AMOUNTS. The tax credit amount is 25% of the qualified rehabilitation expenditure. Qualified rehabilitation expenditure is any amount that: (i) is properly chargeable to a capital account; (ii) is expended in the rehabilitation of a structure that by the end of the calendar year in which the certified rehabilitation is completed is a certified heritage structure; and (iii) is expended in compliance with a plan of proposed rehabilitation.

1. Qualified rehabilitation expenditure does not include expenditures funded from the following: (1) State or local grants; (2) grants made from the proceeds of tax-exempt bonds issued by the State, a political subdivision of the State, or an instrumentality of the State or of a political subdivision of the State; (3) state tax credit other than the tax credit; or (4) other financial assistance from the State or a political subdivision of the State, other than a loan that must be repaid at an interest rate that is greater than the interest rate on general obligation bonds issued by the State at the most recent bond sale prior to the time the loan is made.

E. INCENTIVE LIMITS. The maximum tax credit amounts are \$3 million for a commercial rehabilitation (any building that is not a single-family, owner-occupied residence) and \$50,000 for all other rehabilitations. The statewide aggregate maximum tax credit amount for small commercial projects is \$4 million.

F. INCENTIVE TIMEFRAME. The tax credit expires June 30, 2017.

G. MISCELLANEOUS. The tax credit may be recaptured during a 5 year period starting during the taxable year in which a certified rehabilitation is completed if any disqualifying work is performed on the certified heritage structure for which the certified rehabilitation has been completed.

24.13 Maryland state sales tax exemption for energy-efficient equipment

A. GENERAL DESCRIPTION. Maryland provides a sales tax exemption in the amount of 100% the

tax on energy-efficient appliances. *Md. Code Ann. §11-226; Md. Regs. Code 03.06.01.44.*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer purchasers of Energy Star product or solar water heater.

C. QUALIFYING ACTIVITY. Taxpayer must purchase Energy Star product or solar water heater. An Energy Star product is an air conditioner, clothes washer, clothes dryer, furnace, heat pump, standard size refrigerator, compact fluorescent light bulb, dehumidifier, boiler, or programmable thermostat that has been designated as meeting or exceeding the applicable Energy Star efficiency requirements developed by the U.S. Environmental Protection Agency and the U.S. Department of Energy and is authorized to carry the Energy Star label. A solar water heater is a system composed of equipment designed to heat water by the use of solar energy.

1. A standard size refrigerator is a refrigerator with a factory-built, self-contained cabinet that is marketed for use in a private residence or household, whether or not used in a private residence.
2. A compact fluorescent light bulb is a fluorescent light bulb that has been compressed into the size of a standard-issue screw-in incandescent light bulb.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. The tax exemption period is the weekend that consists of the Saturday immediately preceding the third Monday in February through the third Monday in February.

G. MISCELLANEOUS.

24.14 Maryland state sales tax exemption for electricity from solar and residential wind equipment

A. GENERAL DESCRIPTION. Maryland provides a sales tax exemption in the amount of 100% the tax on electricity from solar and residential wind equipment. *Md. Code Ann. §11-207(a); H.B. 502 (2011).*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer purchasers of electricity from solar and residential wind equipment.

1. Taxpayer must be an eligible customer-generator. An eligible customer-generator is a customer that owns and operates, leases and operates, or contracts with a third party that owns and operates a biomass, micro combined heat and power, solar, fuel cell, or wind electric generating facility that: (i) is located on the customer's premises or contiguous property; (ii) is interconnected and operated in parallel with an electric company's transmission and distribution facilities; and (iii) is intended primarily to offset all or part of the customer's own electricity requirements.

C. QUALIFYING ACTIVITY. Taxpayer must purchase electricity from solar and residential wind equipment. Residential wind energy equipment is equipment installed on residential property that uses wind energy to generate electricity to be used in a residential structure on the property. Solar energy equipment is equipment that uses solar energy to heat or cool a structure, generate electricity to be used in a structure or supplied to the electric grid, or provide hot water for use in a structure.

1. Solar energy equipment does not include equipment that is part of a nonsolar energy system or that uses any type of recreational facility or equipment as a storage medium.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

24.15 Maryland state sales tax exemption for the manufacturing equipment of Energy Star windows and doors

A. GENERAL DESCRIPTION. Maryland provides a sales tax exemption in the amount of 100% of the

tax on the manufacturing machinery or equipment of Energy Star windows and doors. *Md. Code Ann. §11-210(e); H.B. 1301 (2012).*

B. ELIGIBLE TAXPAYERS. Taxpayer purchasers manufacturing machinery or equipment of Energy Star windows and doors.

C. QUALIFYING ACTIVITY. Taxpayer must purchase manufacturing machinery or equipment used directly and primarily to produce Energy Star windows and doors for residential real property.

1. Qualifying equipment includes electricity, fuel and other utilities used to operate that machinery or equipment.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

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

Massachusetts state excise tax deduction for solar or wind powered systems

A. GENERAL DESCRIPTION. Massachusetts provides an excise tax deduction in the amount of 100% of the cost of any solar or wind powered climatic control or water heating units used exclusively in a trade or business. *Mass. Gen. Laws ch. 63, §38H.*

B. ELIGIBLE TAXPAYERS. The tax deduction is available to Taxpayer corporations placing solar or wind powered climatic control or water heating units in service used exclusively in a trade or business.

C. QUALIFYING ACTIVITY. Taxpayer must install a solar or wind powered climatic control or water heating units.

1. Solar or wind powered climatic control unit and any solar or wind powered water heating unit includes labor expenditures.
2. Qualifying system must be used exclusively in the trade or business of the business.
3. Qualifying system manufacturer's BTU impact statement must be certified by the MA Director of Building Construction.
4. Solar or wind powered climatic control unit and any solar or wind powered water heating unit does not include any other climate control unit, any water heating unit or other unit used ancillary to any solar or wind powered unit.

D. INCENTIVE AMOUNTS. The tax deduction amount is 100% of the cost of the solar or wind powered climatic control or water heating units. In calculating the deduction, the net income for the taxable year and all succeeding taxable years must be computed without any exemption, credit or deduction for such expenditures or for depreciation of the property.

1. Costs include installation costs and wages for personnel to operate the unit.

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS. The tax deduction may be recaptured for a period of 10 years if there is any change of use disqualifying the system.

1. The gain or loss on the sale or disposition of a qualifying system must be the gain or loss resulting as if the deduction has not been elected and the cost or other basis of the units has been reduced by straight-line depreciation based on the useful life of the qualifying system. The basis is \$0 if the sale or disposition occurs within 3 years of the date the qualifying system is placed in service.
2. A qualifying system is excluded from the tangible property measure of the excise tax.

25.02 Massachusetts state property tax exemption for renewable energy property

A. GENERAL DESCRIPTION. Massachusetts provides a property tax exemption in the amount of 100% of the tax on solar and wind energy systems used as a primary or auxiliary power system. *Mass. Gen. Laws ch. 59 §5 (45, 45A).*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer owners of solar and wind energy systems used as a primary or auxiliary power system.

C. QUALIFYING ACTIVITY. Taxpayer must own solar and wind energy systems used as a primary or auxiliary power system.

1. Hydropower facilities are also exempt from local property tax for a 20-year period if a system owner enters into an agreement with the city or town to make a payment (in lieu of taxes) of at least 5% of its gross income in the preceding calendar year.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. The tax exemption period is 20 years.

G. MISCELLANEOUS.

25.03 Massachusetts state income tax deduction for energy conservation or alternative energy patents

A. GENERAL DESCRIPTION. Massachusetts provides an income tax deduction in the amount of 100% of the income received from the sale or lease of a U.S. patent beneficial for energy conservation or alternative energy development and any income received from the sale or lease of personal or real property or materials manufactured and subject to the approved patent. *Mass. Gen. Laws ch. 62, §2(a)(2)(G)*.

B. ELIGIBLE TAXPAYERS. The tax deduction is available to Taxpayer corporations or individuals with income from a qualifying patent beneficial for energy conservation or alternative energy development.

C. QUALIFYING ACTIVITY. Taxpayer must derive income from a qualifying patent. Income from a qualifying patent is any income, including royalty income, received from the sale, lease or other transfer of tangible, intangible, personal or real property or materials manufactured in the Commonwealth subject to such patent.

1. Qualifying patent must be certified as beneficial for energy conservation or alternative energy development by the MA Department of Energy Resources.

D. INCENTIVE AMOUNTS. The tax deduction amount is 100% of the income received.

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. The tax deduction period is 5 years from the sooner of the date of issuance of the U.S. patent or the date of approval by the MA Department of Energy Resources.

G. MISCELLANEOUS.

25.04 Massachusetts state income tax credit for renewable energy systems in primary residences

A. GENERAL DESCRIPTION. Massachusetts provides an income tax credit in the amount of 15% of the cost of a renewable-energy system installed on a primary residence. *Mass. Gen. Laws Ch. 62, §6(d)*. *Mass. Regs. Code 830 CMR §62.6.1(2)*.

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer owners or tenants of residential property installed with renewable-energy system.

1. Taxpayer may be owners or occupants for a newly constructed home.
2. Taxpayers who are joint owners of a residential property share any tax credit available to the property in the same proportion as their ownership interest.

C. QUALIFYING ACTIVITY. Taxpayer must install renewable energy source property in residential property. Renewable energy source property is property that when installed in connection with a dwelling, transmits or uses solar energy or any other form of specified renewable energy, for the purpose of heating or cooling the dwelling, providing hot water for use within the dwelling, or for producing electricity for such purposes, or wind energy for non-business, residential purposes. Renewable energy source property includes solar water and space heating, photovoltaics (PV), and wind-energy systems.

1. Renewable energy source property does not include heating and cooling systems that supplement renewable energy source equipment in heating or cooling a dwelling, and which use a form of energy other than solar or wind.
2. Renewable energy source property must have the original use begin with Taxpayer.
3. Renewable energy source property must reasonably be expected to remain in operation for at least 5 years.

D. INCENTIVE AMOUNTS. The tax credit amount is 15% of the cost of the renewable energy source property.

1. The cost of the renewable energy source property is the total of the purchase price for any renewable energy source property, plus installation cost less any credits received pursuant to the IRC and less grants or rebates received from the

US Department of Housing and Urban Development.

E. INCENTIVE LIMITS. The maximum tax credit amount is \$1,000.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

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

A. 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.*

B. 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.

1. Taxpayer must complete and present Massachusetts Tax Form ST-12 to seller.

C. QUALIFYING ACTIVITY. Taxpayer must purchase or lease equipment directly related to a solar, wind or heat pump system used as a primary or auxiliary power system for heating or otherwise supplying energy needs.

1. Qualifying equipment includes the fans and ductwork as components of solar heating systems to taxpayers for use in their principal residences.
2. Qualifying equipment does not include passive air-to-air heat exchanger.
3. Qualifying equipment does not include equipment that serves as a structural component of a dwelling, such as glass for a solar sunspace.
4. 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.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

25.06 Massachusetts state sales tax exemption for wind turbine equipment in furnishing electricity

A. GENERAL DESCRIPTION. Massachusetts provides a sales tax exemption in the amount of 100% of the tax on wind turbine equipment used directly and exclusively in furnishing electricity to consumers through mains, lines, or pipes. *Mass. Gen. Laws 64H §6(s); Massachusetts Letter Ruling 10-03, 07/07/2010; Massachusetts Letter Ruling 12-7, 07/02/2012.*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer purchasers of wind turbine equipment.

1. Taxpayer must complete and present Massachusetts Tax Form ST-12 to seller.

C. QUALIFYING ACTIVITY. Taxpayer must purchase wind turbine equipment used directly and exclusively in furnishing electricity to consumers through mains, lines, or pipes.

1. Qualifying equipment includes the tower, the turbine, component parts, adjuncts or attachments necessary for the turbine to furnish the electricity to consumers through electrical lines, or to the extent that they are used or required to control, regulate or operate the turbine

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

25.07 Massachusetts state sales tax exemption for cellulosic biofuel

A. GENERAL DESCRIPTION. Massachusetts provides a sales tax exemption in the amount up to \$0.21 per gallon of cellulosic biofuel. *Mass. Gen. Laws 64A §§1 and 1A.*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer purchasers of cellulosic biofuel.

C. QUALIFYING ACTIVITY. Taxpayer must purchase cellulosic biofuel. Qualifying cellulosic biofuel is cellulosic biofuel that yields at least a 60% reduction in lifecycle greenhouse gas emissions relative to average lifecycle greenhouse gas emissions for petroleum based fuel sold in 2005.

1. Qualifying cellulosic biofuel must be certified by the MA Department of Energy Resources and the Department of Environmental Protection.
-

D. INCENTIVE AMOUNTS. The tax exemption amount is up to \$0.21 per gallon of cellulosic biofuel. A proportional tax exemption amount is available for fuel containing a percentage of cellulosic biofuel.

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. The tax exemption expires December 31, 2017.

G. MISCELLANEOUS.

26. Michigan State Tax Incentives for Renewable Energy and Energy Efficiency

26.01 Michigan state tax abatements for renewable energy renaissance zones

A. GENERAL DESCRIPTION. Michigan provides a tax abatement in the amount of 100% of the business tax, state education tax, personal and real property taxes, and local income taxes for renewable facilities located in renewable energy renaissance zones. *Mich. Comp. Laws §125.2681 et seq.; H.B. 5555 (2010).*

B. ELIGIBLE TAXPAYERS. The tax abatements are available to Taxpayer owners of renewable energy facilities.

C. QUALIFYING ACTIVITY. Taxpayer must own a renewable facility located in renewable energy renaissance zones. A renewable facility is a facility that creates energy directly or fuel from the wind, the sun, or wide variety of biomass-based materials or a facility that focuses on research, development, or manufacturing of systems or components of systems used to create energy, green biodiesel, or advanced battery technology or fuel from renewable sources.

1. Renaissance zone designations are approved by the MI State Administrative Board based upon recommendations from the MI Strategic Fund.

D. INCENTIVE AMOUNTS. The tax abatement amount is 100% of the business tax, state education tax, property tax, or local income tax due.

E. INCENTIVE LIMITS. The maximum cumulative tax abatement amount is \$10 million.

F. INCENTIVE TIMEFRAME. The maximum tax abatement period is 15 years.

1. Tax abatement phases out in 25% increments over the last 3 years of the zone designation.

G. MISCELLANEOUS.

26.02 Michigan state personal property tax exemption for alternative energy technology manufacturing and research

A. GENERAL DESCRIPTION. Michigan provides a property tax exemption in the amount of 100% of the tax on alternative energy technology manufacturing and research property. *Mich. Comp. Laws §211.9(i); Mich. Comp. Laws §207.821 et seq.*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer owners of alternative energy technology manufacturing and research property and nonresidential alternative technology owners.

C. QUALIFYING ACTIVITY. Taxpayer must own alternative energy technology manufacturing and research property. Alternative energy technology manufacturing and research property includes alternative energy systems less than 2 megawatts (MW), or integrated combinations of alternative energy systems of no more than 10 MW. Alternative energy systems include: fuel cells, PV, solar thermal heating and cooling, wind energy, CHP, microturbines, miniturbines, Stirling engines, electricity storage systems, and clean fuel energy systems powered by methane, natural gas, methanol, ethanol or hydrogen. Clean fuels include renewable fuels such as biodiesel and fuels from biomass.

1. Alternative energy technology manufacturing and research property includes alternative energy vehicles. Alternative energy vehicles include hydraulic hybrid vehicles.
2. Alternative energy technology manufacturing and research property includes the personal property of an alternative energy technology business and the personal property of a business not engaged in alternative-energy technology that is used solely for the purpose of researching, developing or manufacturing alternative energy technologies.
3. Qualifying alternative energy technology manufacturing and research property must be new to Michigan and must not have previously been subject to or exempted from Michigan taxation.
4. Qualifying alternative energy technology manufacturing and research property

must be certified by the MI Next Energy Authority.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. The tax exemption expired December 31, 2012.

G. MISCELLANEOUS.

26.03 Michigan state business tax credit for biofuel service station conversion

A. GENERAL DESCRIPTION. Michigan provides a business tax credit in the amount of 30% of the eligible costs of an installed or converted biofuel delivery system. *Mich. Comp. Laws §208.1101 to 208.1601; Michigan Public Act 335 of 2008; DELEG's Bureau of Energy Systems Announces Availability of Tax Credits to Convert and/or Install Biofuel Infrastructure, 03/18/2009.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer corporation owners of biofuel service stations.

1. Taxpayer must be certified by the MI Department of Energy, Labor & Economic Growth.

C. QUALIFYING ACTIVITY. Taxpayer must install or convert to a biofuel delivery system to the public. Biofuels include ethanol (E85) and/or biodiesel (B5 or higher).

D. INCENTIVE AMOUNTS. The tax credit amount is 30% of the costs of an installed or converted biofuel delivery system.

1. The costs of an installed or converted biofuel delivery system does not include any federal and state grants and incentives (but not tax credits) received by Taxpayer.

E. INCENTIVE LIMITS. The maximum tax credit amount is \$20,000 per taxpayer.

F. INCENTIVE TIMEFRAME. The tax credit expired December 31, 2012.

G. MISCELLANEOUS.

26.04 Michigan state property tax exemption for biomass gasification and methane digester property

A. GENERAL DESCRIPTION. Michigan provides a property tax exemption in the amount of 100% the tax on biomass gasification and methane digester property. *Mich. Comp. Laws §211.9(j).*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer owners of energy production related farm facility property.

1. Taxpayer must be certified by the MI Agriculture Environmental Assurance Program.
2. Taxpayer must allow access for 2 universities to collect information regarding the effectiveness of the methane digester and the methane digester electric generating system in generating electricity and processing animal waste and production area waste.

C. QUALIFYING ACTIVITY. Taxpayer must own energy production related farm facility property. Energy production related farm facility property include certain methane digesters, biomass gasification equipment, equipment used to harvest crop residues or dedicated crops used for energy production, equipment used to generate electricity from methane digester systems and equipment used to generate heat or electricity from biomass gasifiers.

1. Energy production related farm facility property must be certified by the MI Department of Agriculture.
2. Biomass gasification system is apparatus and equipment that thermally decomposes agricultural, food, or animal waste at high temperatures and in an oxygen-free or a controlled oxygen-restricted environment into a gaseous fuel and the equipment used to generate electricity or heat from the gaseous fuel or store the gaseous fuel for future generation of electricity or heat.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

26.05 Michigan state sales tax exemption for biofuel

A. GENERAL DESCRIPTION. Michigan provides a sales tax exemption in the reduced amount of \$0.12 per gallon of biofuel. *Mich. Comp. Laws §207.1008.*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer purchasers of biofuel.

C. QUALIFYING ACTIVITY. Taxpayer must purchase biofuel. Qualifying biofuel is fuel that contains at least 5% biodiesel. Biodiesel is a fuel composed of mono-alkyl esters of long chain fatty acids derived from vegetable oils or animal fats and, in accordance with standards specified by the American society for testing and materials, designated B100 and meeting the requirements of D-6751.

1. Qualifying biodiesel must be certified by the MI Department of Agriculture.

D. INCENTIVE AMOUNTS. The tax exemption amount is a reduction to \$0.12 per gallon of biofuel.

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

28. Mississippi State Tax Incentives for Renewable Energy and Energy Efficiency

28.01 Mississippi state business income tax credit for alternative energy job creation

A. GENERAL DESCRIPTION. Mississippi provides a business income tax credit over 20 years in the amount of \$1,000 annually for each net new full-time employee job in manufacturing or production facilities of alternative energy through an alternative fuels project. *Miss. Code Ann. §27-7-22.29.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer businesses employing new full-time employees in manufacturing or production facilities of alternative energy.

C. QUALIFYING ACTIVITY. Taxpayer must employ new full-time employees in manufacturing or production facilities of alternative energy.

1. Qualifying facility must create 25 or more new full-time employee jobs.

D. INCENTIVE AMOUNTS. The tax credit amount is \$1,000 per year for each net new full-time employee job.

1. In the first year, the number of new full-time jobs is determined by using the monthly average number of full-time employees subject to Mississippi income tax withholding. For subsequent years, the determination is made by comparing the monthly average number of full-time employees subject to Mississippi income tax withholding with the corresponding period of the prior taxable year.

E. INCENTIVE LIMITS. The maximum tax credit allowed to be claimed is 100% of the state income tax liability that is generated by the qualifying facility.

F. INCENTIVE TIMEFRAME. The tax credit is taken over 20 years. Taxpayer may choose the beginning date for the period not more than 5 years from the date manufacturing or production of alternative energy begins. Unused tax credit may be carried forward 5 years. Unused tax

credit on qualifying facilities in disaster areas may be carried forward 7 years.

G. MISCELLANEOUS. Taxpayer may not use the tax credit offered in the Economic Development Reform Act, Miss. Code Ann. §57-73-21.

28.02 Mississippi state sales and use tax exemption for solar panel manufacturers

A. GENERAL DESCRIPTION. Mississippi provides a sales and use tax exemption in the amount of 100% of the tax on solar panel manufacturers. *Miss. Code Ann. §57-75-5; S.B. 3189 (2010).*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer manufacturers of solar panels.

C. QUALIFYING ACTIVITY. Taxpayer must manufacture solar panels.

1. Taxpayer must have received an investment of at least \$132 million by December 31, 2015, from sources other than Mississippi state or local governments.
2. Taxpayer must create at least 500 new full-time jobs within 5 years after the start of commercial production. Taxpayer must maintain those jobs for at least 10 years with an average annual compensation of at least \$34,000 per year, excluding any benefits not subject to Mississippi income tax.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

28.03 Mississippi state franchise tax exemption for solar panel manufacturers

A. GENERAL DESCRIPTION. Mississippi provides a franchise tax exemption in the amount of 100% of

the tax on solar panel manufacturers. *Miss. Code Ann. §57-75-5; S.B. 3189 (2010).*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer manufacturers of solar panels.

C. QUALIFYING ACTIVITY. Taxpayer must manufacture solar panels.

1. Taxpayer must have received an investment of at least \$132 million by December 31, 2015, from sources other than Mississippi state or local governments.
2. Taxpayer must create at least 500 new full-time jobs within 5 years after the start of commercial production. Taxpayer must maintain those jobs for at least 10 years with an average annual compensation of at least \$34,000 per year, excluding any benefits not subject to Mississippi income tax.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

28.04 Mississippi state income tax exemption for clean energy manufacturing facilities

A. GENERAL DESCRIPTION. Mississippi provides an income tax exemption in the amount of 100% of the tax on clean energy manufacturing facilities. *Miss. Code Ann. §57-113-1 et seq.; H.B. 1071 (2010).*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer owners of clean energy manufacturing facilities.

C. QUALIFYING ACTIVITY. Taxpayer must own clean energy manufacturing facilities. Clean energy is energy that is generated from either a renewable energy source, such as wind, water, biomass or solar power; or an alternative energy source, such as nuclear power.

1. Taxpayer must make a minimum capital investment of \$50 million in a facility that manufactures or assembles systems or components used in the generation of clean energy.
2. Taxpayer must create at least 250 new, full-time jobs.

D. INCENTIVE AMOUNTS. The tax exemption is 100% of the tax due related to the facility.

E. INCENTIVE LIMITS.

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

G. MISCELLANEOUS.

28.05 Mississippi state franchise tax exemption for clean energy manufacturing facilities

A. GENERAL DESCRIPTION. Mississippi provides an income tax exemption in the amount of 100% of the tax on clean energy manufacturing facilities. *Miss. Code Ann. §57-113-1 et seq.; H.B. 1701 (2010).*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer owners of clean energy manufacturing facilities.

C. QUALIFYING ACTIVITY. Taxpayer must own clean energy manufacturing facilities. Clean energy is energy that is generated from either a renewable energy source, such as wind, water, biomass or solar power; or an alternative energy source, such as nuclear power.

1. Taxpayer must make a minimum capital investment of \$50 million in a facility that manufactures or assembles systems or components used in the generation of clean energy.
2. Taxpayer must create at least 250 new, full-time jobs.

D. INCENTIVE AMOUNTS. The tax exemption is 100% of the tax due related to the facility.

E. INCENTIVE LIMITS.

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

G. MISCELLANEOUS.

28.06 Mississippi state sales and use tax exemption for clean energy manufacturing facilities

A. GENERAL DESCRIPTION. Mississippi provides a sales and use tax exemption in the amount of 100% of the sales and use tax on the construction or expansion of clean energy manufacturing facilities. *Miss. Code Ann. §57-113-1 et seq.; H.B. 1701 (2010).*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer owners of clean energy manufacturing facilities.

C. QUALIFYING ACTIVITY. Taxpayer must own clean energy manufacturing facilities. Clean energy is energy that is generated from either a renewable energy source, such as wind, water, biomass or solar power; or an alternative energy source, such as nuclear power.

1. Taxpayer must make a minimum capital investment of \$50 million in a facility that manufactures or assembles systems or components used in the generation of clean energy.
2. Taxpayer must create at least 250 new, full-time jobs.

D. INCENTIVE AMOUNTS. The tax exemption is 100% of the tax due related to the purchase or lease of component building materials, equipment, and machinery for the initial construction or expansion of the facility.

E. INCENTIVE LIMITS.

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

G. MISCELLANEOUS.

28.07 Mississippi state corporate income tax credit for biomass fuel production facilities

A. GENERAL DESCRIPTION. Mississippi provides an income tax credit in the amount of 5% of

investments made in biomass fuel production facilities. *Miss. Code Ann. §27-7-22.35.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer investing in biomass fuel production facilities.

C. QUALIFYING ACTIVITY. Taxpayer must invest in biomass fuel production facilities. A biomass fuel production facility is a facility that consists of all components necessary for the production of electric energy from the direct firing or co-firing of biomass or waste heat recovery, and other energy sources; produces both electric energy and useful thermal energy, such as heat or steam, through the sequential use of energy (cogeneration); and consists of all components necessary for the production of synfuel.

1. Taxpayer must make a minimum capital investment of \$50 million in a facility.
2. Taxpayer must create at least 20 new, full-time jobs.
3. An eligible facility includes all burners and boilers, any handling and delivery equipment that supplies fuel directly to, and is integrated with, such burners and boilers, steam headers, turbines, generators, property used for the collection, processing, or storage of biomass or synfuel, transformers, pipelines and all other property used in the transmission of electricity or synfuel and related depreciable property.
4. Biomass includes any of the following: forest-related mill residues, pulping by-product and other by-products of wood processing, thinnings, slash, limbs, bark, brush, and other cellulosic plant material or nonmerchantable forest-related products; solid wood waste materials, including dunnage, manufacturing, and construction wood wastes, demolition and storm debris and landscape or right-of-way trimmings; agriculture wastes, including orchard tree crops, vineyard, grain, legumes, sugar, and other crop by-products or residues and livestock waste nutrients; all plant and grass material that is grown exclusively as a fuel for the production of electricity; refuse derived fuels consisting of organic components and fibers of waste water treatment solids; or whole trees.

D. INCENTIVE AMOUNTS. The tax credit amount is 5% of the amount invested.

E. INCENTIVE LIMITS. The maximum tax credit allowed to be claimed is 50% of the state income tax liability of Taxpayer.

F. INCENTIVE TIMEFRAME. Taxpayer may choose the beginning date for the period not more than 2 years from the facility becomes fully operational. Unused tax credit may be carried forward 5 years.

G. MISCELLANEOUS.

28.08 Mississippi state sales and use tax exemption for biomass fuel production facilities

A. GENERAL DESCRIPTION. Mississippi provides a sales and use tax exemption in the amount of 100% of tax due on the materials used in the construction, improvement, or enlargement of a biomass fuel production facility. *Miss. Code Ann. §27-7-22.35; H.B. 8b (2010).*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer purchasing materials used in the construction, improvement, or enlargement of a biomass fuel production facility.

C. QUALIFYING ACTIVITY. Taxpayer must purchase materials used in the construction, improvement, or enlargement of a biomass fuel production facility. A biomass fuel production facility is a facility that produces of renewable crude oil and consists of all components necessary for the production of electric energy from the direct firing or co-firing of biomass or waste heat recovery, and other energy sources; produces both electric energy and useful thermal energy, such as heat or steam, through the sequential use of energy (cogeneration); and consists of all components necessary for the production of synfuel.

1. Taxpayer must make a minimum capital investment of \$50 million in a facility.
2. Taxpayer must create at least 20 new, full-time jobs.
3. An eligible facility includes all burners and boilers, any handling and delivery equipment that supplies fuel directly to, and is integrated with, such burners and boilers, steam headers, turbines,

generators, property used for the collection, processing, or storage of biomass or synfuel, transformers, pipelines and all other property used in the transmission of electricity or synfuel and related depreciable property.

4. Biomass includes any of the following: forest-related mill residues, pulping by-product and other by-products of wood processing, thinnings, slash, limbs, bark, brush, and other cellulosic plant material or nonmerchantable forest-related products; solid wood waste materials, including dunnage, manufacturing, and construction wood wastes, demolition and storm debris and landscape or right-of-way trimmings; agriculture wastes, including orchard tree crops, vineyard, grain, legumes, sugar, and other crop by-products or residues and livestock waste nutrients; all plant and grass material that is grown exclusively as a fuel for the production of electricity; refuse derived fuels consisting of organic components and fibers of waste water treatment solids; or whole trees.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

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

A. 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*

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

C. 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.

1. 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; and (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.

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

E. INCENTIVE LIMITS.

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

G. MISCELLANEOUS.

33.02 New Hampshire state property tax exemption for residential renewable-energy systems

A. GENERAL DESCRIPTION. New Hampshire provides a property tax exemption in the amount of 100% of the tax on residential renewable-energy systems. *N.H. Rev. Stat. Ann. ch. 72:61 et seq.*

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

C. QUALIFYING ACTIVITY. Taxpayer must own residential renewable-energy system property. Residential renewable-energy system property includes solar-energy systems (photovoltaic systems, solar space-heating systems, solar water-heating systems, passive solar-energy systems); wind-energy systems, and wood-fired central heating systems. Solar energy systems are systems which utilizes solar energy to heat or cool the interior of a building or to heat water for use in a building and which includes one or more collectors and a storage container or system which provides electricity for a building by the use of photovoltaic panels. Wind-powered energy systems are wind-powered devices which supplement or replace electrical power supplied to households or businesses at the immediate site. Wood heating energy systems are wood burning appliances designed to operate as a central heating system to heat the interior of a building.

1. Qualifying wood heating energy systems may burn wood solely or burn wood in combination with another fuel.
2. Qualifying wood heating energy systems include a central appliance to distribute heat by a series of pipes, ducts or similar distribution system throughout a single building or group of buildings.
3. Qualifying wood heating energy systems does not include a fireplace, meaning a hearth, fire chamber or similarly prepared place with a chimney intended to be usable in an open configuration whether or not it may also be closed and operated closed; or a wood stove meaning a wood burning appliance designed for space heating purposes which does not operate as a central heating system or as a sole source of heat.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

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

34.01 New Jersey state income tax credit for alternative energy technology company

A. GENERAL DESCRIPTION. New Jersey provides an income tax credit over 3 years in the amount of 10% per year of qualifying investment for environmental technology businesses, including businesses developing of alternative energy sources. *N.J. Rev. Stat. §54:10A.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer investors making a qualifying investment in an environmental technology business.

C. QUALIFYING ACTIVITY. Taxpayer must make qualifying investments in small New Jersey-based environmental technology business. Environmental technology business is a high-technology business in assessment and prevention of threats or damage to human health or the environment, environmental cleanup or the development of alternative energy sources.

1. A qualifying investment is the non-refundable at-risk cash investment made by an unrelated entity and transferred to a small New Jersey-based high-technology business in exchange for stock, interests in partnerships or joint ventures, licenses, rights to use technology, marketing rights, warrants, options or any similar rights, including, but not limited to, options or rights to acquire any of the above items.
2. A small New Jersey-based high-technology business is a corporation doing business, employing or owning capital or property, or maintaining an office in New Jersey that has qualifying research expenses paid or incurred for research conducted in the state, or that conducts pilot scale manufacturing in the state, and that has fewer than 225 employees, at least 75% of whom are New Jersey-based employees filling positions or jobs within the state.

D. INCENTIVE AMOUNTS. The tax credit amount is 10% of qualifying investments in each tax year.

E. INCENTIVE LIMITS. The maximum annual tax credit is \$500,000 for each qualifying investment. The maximum annual tax credit that may be claimed is 50% of the tax liability otherwise due.

F. INCENTIVE TIMEFRAME. The tax credit period is 3 years. Unused tax credit may be carried forward 15 years. Unused tax credit may not be carried over by target corporations in a corporate acquisition.

G. MISCELLANEOUS. Qualifying investments may not be used for the research and development tax credit. A corporation must take all other tax credits to which it is entitled before claiming the tax credit for investments in small New Jersey-based high-technology businesses.

34.02 New Jersey state property tax exemption for renewable energy systems

A. 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.*

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

1. Taxpayer must be certified by their local assessor.
2. 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.

C. 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.

1. Qualifying renewable energy systems must be installed on residential, commercial, industrial, or mixed use buildings as accessory uses.
2. Qualifying renewable energy systems must be certified by the NJ Board of Public Utilities and the Commissioner of Community Affairs.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS. The tax exemption may be recaptured if the structure or equipment has ceased to be used for the primary purpose of providing renewable energy to provide all or a portion of the electrical, heating, cooling, or general energy needs of the structure and is being used for a different primary purpose or if the equipment, design and construction is no longer suitable and reasonably adequate for the purpose of using renewable energy to provide all or a portion of the electrical, heating, cooling, or general energy needs of the structure.

34.03 New Jersey state sales tax exemption for solar energy equipment

A. GENERAL DESCRIPTION. New Jersey provides a sales tax exemption in the amount of 100% of the tax on solar energy equipment. *N.J. Stat. §54:32B-8.33.*

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

C. QUALIFYING ACTIVITY. Taxpayer must purchase solar energy equipment. Solar energy equipment is solar energy devices or systems designed to provide heating or cooling, or electrical or mechanical power by collecting and transferring solar-generated energy and including mechanical or chemical devices for storing solar generated energy.

1. Solar energy equipment includes equipment for passive solar design.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

34.04 New Jersey state sales tax exemption for cogeneration facility equipment

A. GENERAL DESCRIPTION. New Jersey provides a sales tax exemption in the amount of 100% of the tax on cogeneration facility equipment. *N.J. Stat. §54:32B et seq; A.B. 3339 (2010).*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer purchasers of cogeneration facility equipment.

C. QUALIFYING ACTIVITY. Taxpayer must purchase cogeneration facility equipment. Cogeneration facility is a facility the primary purpose of which is the sequential production of electricity and steam or other forms of useful energy which are used for industrial or commercial heating or cooling purposes and which is designated by the Federal Energy Regulatory Commission, or its successor, as a qualifying facility per the Public Utility Regulatory Policies Act of 1978.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

34.05 New Jersey state income tax credit for wind energy facilities

A. GENERAL DESCRIPTION. New Jersey provides an income tax credit over 10 years in the amount of 100% of its capital investment in a qualified offshore wind project. *N.J. Rev. Stat. §54:209.4. S.B. 2036 (2010).*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer investors making a qualifying investment in a qualified offshore wind project.

C. QUALIFYING ACTIVITY. Taxpayer must make an investment in a qualified offshore wind project. Qualified offshore wind project is a wind turbine electricity generation facility in the Atlantic Ocean and connected to the electric transmission system in this State, and includes the associated transmission-related interconnection facilities and equipment.

1. Qualified offshore wind project must be certified by the NJ Economic Development Authority.
2. Qualified offshore wind project must have a capital investment of at least \$50 million. Tenants of the qualified offshore wind project must have a capital investments of at least \$17.5 million.
3. Qualified offshore wind project must employ at least 300 new, full-time employees.
4. Qualified wind energy facility is any building, complex of buildings, or structural components of buildings, including water access infrastructure, and all machinery and equipment used in the manufacturing, assembly, development or administration of component parts that support the development and operation of a qualified offshore wind project, or other wind energy project as determined by the authority, and that are located in a wind energy zone.
5. Wind energy zone is the South Jersey Port District established pursuant to "The South Jersey Port Corporation Act," P.L.1968, c.60 (C.12:11A-1 et seq.).

D. INCENTIVE AMOUNTS. The tax credit amount is 100% of the capital investment.

E. INCENTIVE LIMITS. The maximum statewide tax credit amount is \$100 million.

F. INCENTIVE TIMEFRAME. The tax credit is taken over a 10-year period. The tax credit expires August 19, 2015.

G. MISCELLANEOUS.

34.06 New Jersey state sales tax exemption for zero emissions vehicles

A. GENERAL DESCRIPTION. New Jersey provides a sales tax exemption in the amount of 100% of the tax on zero emissions vehicles. *N.J. Stat. §54:32B-8.55.*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer purchasers of zero emissions vehicles.

C. QUALIFYING ACTIVITY. Taxpayer must purchase zero emissions vehicles. A zero emissions vehicle is a vehicle certified as a zero emission vehicle pursuant to the California Air Resources Board zero emission vehicle standards for the applicable model year, but shall not include any other type of vehicle that may be delivered by a manufacturer for sale or lease to satisfy the zero emission vehicle requirement established by the California Air Resources Board in lieu of a vehicle that qualifies as a pure zero emission vehicle.

1. Zero emissions vehicles must be certified by the NJ Commissioner of Environmental Protection.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

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

36.01 New York state property tax abatement for photovoltaic equipment expenditures installed in New York City

A. GENERAL DESCRIPTION. New York provides a property tax abatement over 4 years in amounts ranging from 20% of the cost of photovoltaic systems made on buildings located in New York City. *NY CLS RPTL §499-aaaa et seq.*

B. ELIGIBLE TAXPAYERS. The tax abatement is available to Taxpayer owners of eligible buildings in New York City with photovoltaic systems installed.

1. Taxpayer must be certified by the NYC Department of Finance and the NYC Department of Buildings.

C. QUALIFYING ACTIVITY. Taxpayer must own eligible buildings in New York City with photovoltaic systems installed.

1. Eligible buildings include all real property except utility real property.

D. INCENTIVE AMOUNTS. The tax credit amount over 4 years is 20% of costs for systems installed.

1. Qualifying costs include reasonable expenditures for materials and labor associated with planning, designing, and installing the system.
2. Qualifying costs do not include interest or finance charges.
3. Qualifying costs include costs funded from federal, state or local tax credits, tax abatements, tax exemptions or tax rebates.
4. Qualifying costs do not include costs funded from federal, state, or local grants.

E. INCENTIVE LIMITS. The maximum tax abatement during a year is \$62,500 or the amount of real property taxes owed during the year. Unused balances may not be carried forward to subsequent years.

F. INCENTIVE TIMEFRAME. The tax abatement expired December 31, 2012. Taxpayer must apply for the tax abatement by March 15 in order to be eligible for the tax credit during the year the application is submitted.

G. MISCELLANEOUS. Taxpayer may claim the property tax exemption on the value added by solar, wind, and farm-based biogas energy systems per NY CLS Real Property Tax, Article 4 §487.

36.02 New York state property tax exemption for solar, wind & biomass energy systems

A. GENERAL DESCRIPTION. New York provides a property tax exemption in the amount of 100% of the tax on solar, wind and biomass energy systems. *NY CLS Real Property Tax, Article 4 §487; A.B. 10875 (2010).*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer owners of solar, wind and farm-waste energy equipment systems.

1. The tax exemption may be opted out of by the municipality.

C. QUALIFYING ACTIVITY. Taxpayer must own solar, wind or farm-waste energy equipment system. Qualifying farm-waste energy systems are systems and related equipment that generate electric energy from biogas produced by the anaerobic digestion of agricultural waste, such as livestock manure, farming waste and food processing wastes. Qualifying solar energy equipment systems include passive solar heating systems such as mass wall and direct gain systems.

1. Qualifying systems must be certified by the NY State Energy Research and Development Authority.
2. Qualifying farm-waste energy systems must have a maximum rated system capacity of 400 kilowatts (kW).
3. Qualifying systems includes insulated glazing or insulation to the extent that such materials exceed the energy efficiency standards required by law.
4. Qualifying systems do not include pipes, controls, insulation or other equipment which are part of the normal heating,

cooling, or insulation system of a building.

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

E. INCENTIVE LIMITS. The tax exemption applies only to general municipal and school district taxes and may not be applied to special assessments or special ad valorem levies.

F. INCENTIVE TIMEFRAME. The tax exemption period is 15 years. The tax exemption expires December 31, 2014.

G. MISCELLANEOUS. Taxpayer may be required by municipality to enter into a contract for payments in lieu of taxes, not to exceed the amount payable without the tax exemption.

36.03 New York state franchise tax credit for biofuel production

A. GENERAL DESCRIPTION. New York provides a franchise tax credit in the amount of \$0.15 per gallon of biofuel production. *N.Y. Tax Law §28; N.Y. Tax Law §187-c ; N.Y. Tax Law §210(38); A.B. 9710 (2010).*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer corporations producing biofuel.

1. Taxpayer must be certified by the NYS Energy and Research Development Authority.

C. QUALIFYING ACTIVITY. Taxpayer must produce biofuel. Biofuel is biodiesel and ethanol, or any other standard approved by the NY State Energy and Research Development Authority. Biodiesel is a fuel composed exclusively of mono-alkyl esters of long chain fatty acids derived from vegetable oils or animal fats, designated B100, which meets the specifications of the ASTM designation D 6751-02. Ethanol is ethyl alcohol manufactured in the U.S. and its territories and sold: (1) for fuel use and which has been rendered unfit for beverage use and which is produced at a facility approved by the Federal ATF for the production of ethanol for fuel, or (2) as denatured ethanol used by blenders and refiners which has been rendered unfit for beverage use.

D. INCENTIVE AMOUNTS. The tax credit amount is \$0.15 per gallon after the production of the first 40,000 gallons per year presented to market.

E. INCENTIVE LIMITS. The maximum annual tax credit amount is \$2.5 million. The maximum annual tax credit allowed to be claimed is the higher of the fixed dollar minimum tax or the tax on the minimum taxable income base. The tax credit is refundable up to \$2 million.

1. The tax credit may not be applied against the MTA surcharge.
2. The maximum annual tax credit amount is determined at the entity level in the case of partnerships, S corporations, and limited liability companies.

F. INCENTIVE TIMEFRAME. The maximum tax credit period is 4 years. The tax credit expired December 31, 2012.

G. MISCELLANEOUS.

36.04 New York state franchise tax credit for alternative fuel vehicle refueling and electric vehicle recharging property

A. GENERAL DESCRIPTION. New York provides a franchise tax credit in the amount of 50% of the cost of alternative fuel vehicle refueling and electric vehicle recharging property. *N.Y. Tax Law §187-b; §210(24); New York Technical Service Bureau Memorandum TSB-M-06(3)C, 04/19/2006; A.B. 9710 (2010).*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer corporations placing alternative fuel vehicle refueling and electric vehicle recharging property in service. Taxpayer may elect to allow its affiliate to claim the tax credit.

C. QUALIFYING ACTIVITY. Taxpayer must place in service alternative fuel vehicle refueling property or electric vehicle recharging property. Alternative fuel vehicle refueling property is all of the equipment needed to dispense into a motorized vehicle any fuel at least 85% of the volume of which consists of one or more of the following: natural gas, liquefied natural gas, liquefied petroleum or hydrogen. Electric vehicle recharging property is all the equipment needed to convey electric power from the electric grid or

another power source to an onboard vehicle energy storage system.

1. Qualifying alternative fuel vehicle refueling property does not include refueling property relating to a qualifying hybrid vehicle.

D. INCENTIVE AMOUNTS. The tax credit amount is 50% of the cost of alternative fuel vehicle refueling property.

E. INCENTIVE LIMITS. The maximum amount of tax credit is \$5,000.

F. INCENTIVE TIMEFRAME. The tax credit expires December 31, 2017.

G. MISCELLANEOUS. The tax credit may be recaptured if, at any time before the end of its recovery period, the alternative fuel vehicle refueling property ceases to be qualifying. The alternative fuel vehicle refueling property ceases to be qualifying if: (1) the property no longer qualifies as property described in IRC §30C; (2) 50% or more of the use of the property in a tax year is other than in a trade or business in New York; or (3) the Taxpayer sells or disposes of the property and knows, or has reason to know, that the property will be used in a manner as described in (1) or (2). N.Y. Tax Law §210(24)(e).

1. Taxpayer may not claim the clean-fuel vehicle refueling property credit.

36.05 New York state property tax exemption for energy conservation improvements

A. GENERAL DESCRIPTION. New York provides a property tax exemption in the amount of 100% of the tax on qualifying energy-conservation improvements to one, two, three or four family homes. *NY CLS Real Property Tax Law §487-a; New York Technical Service No. TSB-M-06(4)C, 07/21/2006. NY ORPS Exemption Administration Manual - Part 1 Residential - Other Than Multiple Dwellings - Section 4.01 - RPTL Section 487-a.*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer owners of qualifying energy-conservation improvements to one, two, three or four family homes.

C. QUALIFYING ACTIVITY. Taxpayer must own qualifying energy-conservation improvements to one, two, three or four family homes. Qualifying energy-conservation improvements include insulation and other energy conservation measures such as caulking and weather-stripping of all exterior doors and windows; furnace efficiency modifications; furnace and boiler retrofits; furnace and boiler replacements, provided that such replacements meet minimum efficiency standards; heat pumps that meet minimum efficiency standards; clock thermostats; ceiling, attic, wall, foundation, air duct, heating pipe, and floor insulation; hot water heater insulation; storm and thermal windows and doors; solar and wind systems; load management devices and energy use meters, together with associated wiring.

1. Qualifying homes must qualify for financing under a home conservation plan under Article VII-A of the Public Service Law, or any conservation-related state or federal tax credit or deduction.

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

E. INCENTIVE LIMITS. The tax exemption includes general municipal property taxes, school district taxes, and special ad valorem taxes, but does not apply to special assessments.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

36.06 New York state tax credit for clean heating fuel purchase

A. GENERAL DESCRIPTION. New York provides an income tax credit in the amount of \$0.01 per percent of biodiesel per gallon of biodiesel purchased and used for residential space heating and water heating. *N.Y. Tax Law §210.39; NY CLS Tax, Article 22 §606 (mm). New York Technical Service Bureau Memorandum TSB-M-08(5)C, 05/29/2008; A.B. 9710 (2010); S.B. 6039 (2012).*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer corporations or individuals purchasing biodiesel or bioheat used for residential space heating and water heating.

C. QUALIFYING ACTIVITY. Taxpayer must purchase biodiesel or bioheat used for residential space heating and water heating. Biodiesel is fuel comprised exclusively of mono-alkyl esters of long chain fatty acids derived from vegetable oils or animal fats, designated B100 (pure biodiesel), which meets the specifications of ASTM designation D 6751. Bioheat is a fuel comprised of biodiesel blended with conventional home heating oil, which meets the specifications of the ASTM designation D 396 or D 975. The percentage of biodiesel included in the bioheat is the number preceded by the letter "B" in the bioheat designation. For example, bioheat designated B5 contains 5% biodiesel, bioheat designated B20 contains 20% biodiesel, etc.

1. Qualifying residential use is any use of a structure, or part of a structure, as a place of abode maintained by or for a person, whether or not owned by such person, on other than a temporary or transient basis. Residential use includes multi-family dwelling units such as multi-family homes, apartment buildings, condominiums, and cooperative apartments.
2. Qualifying residential use does not include part of a structure used as a hotel, motel, or similar space, except for those units used by the same occupant for at least 90 consecutive days.
3. Qualifying use in buildings with both residential and non-residential space and a common oil storage tank is eligible for a partial tax credit based on the percentage of square footage used for residential purposes.

D. INCENTIVE AMOUNTS. The tax credit amount is \$0.01/gallon for each percent of biodiesel blended with conventional home heating.

1. Taxpayer should have an invoice or bill that includes the date of purchase the number of gallons of bioheat purchased, and the percentage of biodiesel included in the bioheat.

E. INCENTIVE LIMITS. The maximum tax credit amount is \$0.20/gallon purchased. The tax credit is refundable up to \$2 million.

F. INCENTIVE TIMEFRAME. Taxpayer must claim the tax credit for the tax year in which the

qualifying bioheat is purchased. Qualifying bioheat is deemed purchased on the date of delivery, regardless of when payment occurs. The tax credit expires December 31, 2016.

G. MISCELLANEOUS.

36.07 New York state personal income tax credit for solar and fuel cell system equipment

A. GENERAL DESCRIPTION. New York provides an income tax credit in the amount of 25% of the cost of solar energy system equipment and 20% of the cost of fuel cell electric generating equipment. *NY CLS Tax, Article 22 §606 (g-1) and (g-2); NY CLS Tax, Article 22 §210.37; A.B. 9710 (2010); A.B. 00034B (2012); New York Technical Service Bureau Memorandum No. TSB-M-12(10)I, 12/06/2012; New York Advisory Opinion No. TSB-A-13(8)I, 09/09/2013.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer individuals installing solar and fuel cell system equipment at their principal residence.

1. Taxpayers installing in a principal residence shared by two or more taxpayers, may prorate the tax credit according to the percentage of the total costs contributed by each taxpayer.
2. Taxpayer condominium management associations or cooperative housing corporations may allow Taxpayer members or tenant-stockholders to claim a proportionate share of the total tax credit attributable to his or her principal residence.
3. Taxpayer lessors of qualifying solar energy system equipment under a written agreement that spans at least 10 years may claim the tax credit.
4. Taxpayer power purchasers generated by qualifying solar energy system equipment under a written agreement that spans at least 10 years may claim the tax credit.

C. QUALIFYING ACTIVITY. Taxpayer must install solar or fuel cell system equipment at their principal residence. Solar system equipment is an arrangement or combination of components utilizing solar radiation which produces energy designed to provide heating, cooling, hot water or

electricity. Fuel cell system equipment is an on-site electricity generation system utilizing proton exchange membrane fuel cells.

1. Qualifying fuel cell system equipment must provide a maximum rated baseload capacity of 25 kW and must utilize proton exchange membrane (PEM) technology.
2. Qualifying solar system equipment must comply with the 10 kW capacity limit on residential, net-metered solar-energy systems (50 kW for condominiums and cooperative housing associations).
3. Qualifying systems do not include pool heating or other recreational applications.

D. INCENTIVE AMOUNTS. The tax credit amount is 25% of the cost of equipment and installation for solar system equipment and 20% of the cost of fuel cell system equipment.

1. Qualifying costs include expenditures for materials, labor costs properly allocable to on-site preparation, assembly and original installation, architectural and engineering services, and designs and plans directly related to the construction or installation of the qualifying equipment.
2. Qualifying costs do not include interest or other finance charges.
3. Qualifying costs do not include the cost of property financed by any federal, state or local grant received by the taxpayer and which was not included in the federal gross income of the taxpayer.

E. INCENTIVE LIMITS. The maximum tax credit amounts for each residence are \$5,000 for solar-energy systems and \$1,500 per generating unit for fuel cells.

F. INCENTIVE TIMEFRAME. Unused tax credit may be carried forward 5 years.

G. MISCELLANEOUS.

36.08 New York state sales tax exemption for residential and commercial solar-energy systems equipment

A. GENERAL DESCRIPTION. New York provides a sales tax exemption in the amount of 100% of the tax on residential and commercial solar-energy

systems. *NY CLS Tax, Article 28 §1115 (ee); N.Y. Tax Law §1210(a)(1) ; New York Department of Taxation & Finance Publication 718-S, 08/01/2008; New York Special Tax Department Notice ST-06-3, 02/01/2006; New York Department of Taxation & Finance Publication No. 718-CS, 12/26/2012; New York Sales Tax Bulletin TB-ST-775, 09/17/2012.*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer purchasers of residential and commercial solar-energy systems.

C. QUALIFYING ACTIVITY. Taxpayer must purchase residential and commercial solar-energy systems. Residential and commercial solar-energy systems are systems that utilize solar radiation to produce energy designed to provide heating, cooling, hot water and/or electricity.

1. Qualifying residential and commercial solar-energy systems do not include solar pool heating or other recreational applications.
2. Residential and commercial solar-energy systems do not include property used in the transmission or distribution of electricity outside the production process, including any interconnection equipment components, substation equipment, meters, wire, intra-solar facility electrical collection equipment, cables, junction boxes, poles, step-up transformers or other equipment used beyond the inverter.

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

1. Local governments may grant an exemption from local sales taxes. See http://www.tax.state.ny.us/pubs_and_bulls/publications/sales_pubs.htm The solar sales tax list is Publication 718-S.
2. The exemption for commercial solar energy equipment applies to the 4% state sales and use tax and the 3/8% sales and use tax imposed in the Metropolitan Commuter Transportation District (MCTD); localities may elect to grant an exemption for local sales and use taxes.

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

36.09 New York state sales tax exemption for wind farm components

A. GENERAL DESCRIPTION. New York provides a sales tax exemption in the amount of 100% of the tax on wind farm components. *NY CLS Tax, Article 28 §1115 (a)(1); NY CLS Tax, Article 28 §1105-B; New York Department of Taxation and Finance TSB-A-09(59)S.*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer purchasers of machinery, equipment, tools and supplies used in connection with generating electricity for sale.

C. QUALIFYING ACTIVITY. Taxpayer must purchase: (i) machinery or equipment with a useful life of more than a year for use or consumption directly and predominantly in the generation of electricity for sale; or (ii) tools and supplies with a useful life of one year or less and also exempts services for installation and maintenance used in connection with such generating machinery and equipment.

1. Qualifying property includes wind turbine equipment, consisting of rotor blades, hub, nacelle and tower, constitute a unitary piece of machinery or equipment that is used directly and predominantly in the generation of electricity for sale.
2. Qualifying property includes property purchased by the wind farm operator or purchased by a contractor or subcontractor and sold to the operator on an installed basis.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

36.10 New York state tax income credit for fuel cell electric generating equipment

A. GENERAL DESCRIPTION. New York provides an income tax credit in the amount of 100% of the cost for fuel cell electric generating equipment. *N.Y. Tax Law §210.37.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer purchasing fuel cell electric generating equipment.

C. QUALIFYING ACTIVITY. Taxpayer must purchase fuel cell electric generating equipment. Fuel cell electric generating equipment are onsite electricity generation units utilizing proton exchange membrane fuel cells, providing a rated baseload capacity of no less than one kilowatt and no more than 100 kilowatts of electricity. Materials, labor for onsite preparation, assembly and original installation, engineering services, designs and plans directly related to construction or installation and utility compliance costs.

1. Fuel cell electric generating equipment does not include interest or other finance charges, or the amount of any federal, state or local grants received.

D. INCENTIVE AMOUNTS. The tax credit amount is 100% of the cost of fuel cell electric generating equipment.

E. INCENTIVE LIMITS. The maximum tax credit amount is \$1,500 per unit.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

36.11 New York state property tax exemption for green buildings

A. GENERAL DESCRIPTION. New York provides a property tax exemption in various amount of the tax on green buildings. *NY RPT Law §470; S.B. 1462 (2012).*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer owners of green buildings.

1. Taxpayer must be certified by the assessor of the local jurisdiction.

C. QUALIFYING ACTIVITY. Taxpayer must own a green building. A green building is any building that meets LEED certification standards for green buildings, Green Building Initiative's Green Globes rating system, the American National Standards Institute, or substantially equivalent standards for certification using a similar program for green buildings as determined by the local jurisdiction.

1. Green building improvements do not include ordinary maintenance and repairs.

D. INCENTIVE AMOUNTS. The tax exemption amount of property tax due is the amount of any increase in assessed value resulting from the construction or reconstruction of the qualifying property. The tax exemption amount is: (i) for LEED Certified Silver, 100% in years 1 through 3, and a 20% decrease every year thereafter; (ii) for LEED Certified Gold, 100% in years 1 through 4, and a 20% decrease every year thereafter; and (iii) for LEED Certified Platinum, 100% in years 1 through 6, and a 20% decrease every year thereafter.

E. INCENTIVE LIMITS. The local jurisdiction must adopt local laws to grant the property tax exemption.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

36.12 New York state sales tax exemption for alternative fuel sales

A. GENERAL DESCRIPTION. New York provides a sales tax exemption in the amount of 100% of alternative fuel sales. *N.Y. Tax Law §1115(42); A.B. 9710 (2010).*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayers purchasing alternative fuel.

C. QUALIFYING ACTIVITY. Taxpayer must purchase alternative fuel. Alternative fuel is E85, CNG or hydrogen, for use or consumption directly and exclusively in the engine of a motor vehicle.

1. Alternative fuel also includes qualifying B20 fuel.

D. INCENTIVE AMOUNTS. The tax exemption amount is 100% of the sales tax due. The tax exemption amount is 20% for retail sales of qualifying B20 fuel.

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. The tax exemption expires August 31, 2014.

G. MISCELLANEOUS.

36.13 New York state property tax abatement for green roofs

A. GENERAL DESCRIPTION. New York provides a property tax abatement in the amount of \$5.23 per square foot the tax on green roofs. *N.Y. Real Property Tax Law §§499-aaa to 499-ggg.*

B. ELIGIBLE TAXPAYERS. The tax abatement is available to Taxpayer owners of green roofs.

1. Taxpayer must be certified by the assessor of the local jurisdiction.

C. QUALIFYING ACTIVITY. Taxpayer must own a green roof. A green roof is an addition to a roof of an eligible building that covers at least 50% of such building's eligible rooftop space and includes: (a) a weatherproof and waterproof roofing membrane layer that complies with local construction and fire codes, (b) a root barrier layer, (c) an insulation layer that complies with the Energy Conservation Construction Code of New York state and local construction and fire codes, (d) a drainage layer that complies with local construction and fire codes and is designed so the drains can be inspected and cleaned, (e) a growth medium, including natural or simulated soil, with a depth of at least two inches, (f) if the depth of the growth medium is less than three inches, an independent water holding layer that is designed to prevent the rapid drying of the growth medium, such as a non-woven fabric, pad or foam mat or controlled flow roof drain, unless the green roof is certified not to need regular irrigation to maintain live plants, and (g) a vegetation layer, at least 80% of which must be covered by live plants such as (i) sedum or equally drought resistant and hardy plant species, (ii) native plant species, and/or (iii) agricultural plant species.

1. Eligible building is a class one, class two or class four real property, as defined in subdivision one of §1802, located within a city having a population of one million or more person.
2. Qualifying green roofs must be certified by a designated agency.

D. INCENTIVE AMOUNTS. The tax abatement amount is \$5.23 per square foot of a green roof.

E. INCENTIVE LIMITS. The local jurisdiction must adopt local laws to grant the property tax abatement. The tax abatement expires June 30, 2019.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

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

37.01 North Carolina state income tax credit for renewable energy systems

A. GENERAL DESCRIPTION. North Carolina provides an income tax credit in the amount of 35% of the cost of renewable energy systems. *N.C. Gen. Stat. §105-129.15 et seq.; H.B. 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.; N.C. Gen. Stat. §105-129.16A; S.B. 388 (2010); H.B. 1829 (2010).*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer corporations 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.

1. 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.

C. QUALIFYING ACTIVITY. Taxpayer must purchase and install or lease renewable energy property. Renewable energy property is:

1. 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.
2. 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.
3. 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.

4. 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.
5. 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.
6. 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%.

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

1. 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.
2. The tax credit amount for a taxpayer donor is the share of the tax 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 tax credit the nonprofit organization or government unit could claim if it were subject to tax.

E. 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.

1. 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.

F. 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.

1. Taxpayer donor must take the tax credit in the taxable year in which the property is placed in service.

G. 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.

37.02 North Carolina state property tax assessment for solar energy electric system

A. GENERAL DESCRIPTION. North Carolina provides a property tax assessment in the amount of 80% the cost of solar energy electric system. *N.C. Gen. Stat. §105-275 (section 45).*

B. ELIGIBLE TAXPAYERS. The tax assessment is available to Taxpayer owners installing solar energy electric system property.

C. QUALIFYING ACTIVITY. Taxpayer must install a solar energy electric system. A solar energy electric system is all equipment used directly and exclusively for the conversion of solar energy to electricity.

D. INCENTIVE AMOUNTS. The tax exemption amount is 80% of the property tax due.

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

37.03 North Carolina state property tax abatement for active solar heating and cooling systems

A. GENERAL DESCRIPTION. North Carolina provides a property tax abatement in the amount of 100% of active solar heating and cooling systems. *N.C. Gen. Stat. §105-277(g).*

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

C. QUALIFYING ACTIVITY. Taxpayer must install solar heating and cooling system property. Qualifying property includes all controls, tanks, pumps, heat exchangers and other equipment used directly and exclusively for the conversion of solar energy for heating or cooling.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

37.04 North Carolina state income tax credit for renewable fuel facilities

A. GENERAL DESCRIPTION. North Carolina provides an income tax credit over 3 or 7 years in the amount of 15% of the cost of constructing and installing a renewable fuel dispensing facility, 25% of the cost of constructing and equipping a commercial facility for processing renewable fuel, and 35% of the cost of constructing and equipping three or more commercial facilities for processing renewable fuel and that invest a total amount of at least \$400 million in the facilities. *N.C. Gen. Stat. §105-129.16D et seq.; H.B. 1829 (2010); H.B. 1025 (2012).*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer corporations or individuals constructing, installing, and placing in service renewable fuel commercial facilities.

C. QUALIFYING ACTIVITY. Taxpayer must construct, install or place in service a renewable fuel commercial facility. Renewable fuel commercial facilities include renewable fuel dispensing facilities and renewable fuel processing facilities. Renewable fuel is either biodiesel fuel, or ethanol either unmixed or in mixtures with gasoline that are 70% or more ethanol by volume. Qualifying renewable fuel dispensing facility is the equipment used to store or dispense renewable fuel is labeled for this purpose and clearly identified as associated with renewable fuel. Qualifying renewable fuel dispensing facilities include the pumps, storage tanks, and related equipment, that is directly and exclusively used for dispensing or storing renewable fuel.

1. Taxpayer must construct or equip 3 or more renewable fuel processing facilities and invest a total amount of at least \$400 million in the renewable fuel processing facilities to qualify for the 35% tax credit.

D. INCENTIVE AMOUNTS. For qualifying renewable fuel dispensing facilities, the tax credit amount over 3 years is 15% of the costs. For qualifying renewable fuel processing facilities, the tax credit amount over 7 years is 25% or 35% of the costs.

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. The tax credit must be taken over 3 years for qualifying renewable fuel dispensing facilities and 7 years for qualifying renewable fuel production facilities. The tax credit expired December 31, 2013. Unused tax credit may be carried forward 10 years.

G. MISCELLANEOUS. The tax credit may be disallowed if portion of the facility directly and exclusively used for dispensing or storing renewable fuel is disposed of or taken out of service or fails to meet such qualifying requirements but meets the production credit requirements. Taxpayer may be liable for the additional taxes avoided plus interest at the rate established under state law.

37.05 North Carolina state corporate income tax credit for biodiesel production

A. GENERAL DESCRIPTION. North Carolina provides an income tax credit in the amount of 100% of the excise tax paid on biodiesel produced. *N.C. Gen. Stat. §105-129.16F; H.B. 1829 (2010); H.B. 1025 (2012).*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer corporations producing biodiesel fuel.

C. QUALIFYING ACTIVITY. Taxpayer must produce biodiesel fuel. Biodiesel is liquid fuel derived in whole from agricultural products, animal fats, or wastes from agricultural products or animal fats. Qualifying production must be at least 100,000 gallons of biodiesel during the tax year.

D. INCENTIVE AMOUNTS. The tax credit amount is 100% of the per gallon motor fuels excise tax paid.

E. INCENTIVE LIMITS. The maximum tax credit amount is \$500,000. The maximum tax credit allowed to be claimed is 50% of the tax liability, reduced by the sum of all other tax credits allowed against that tax liability. Unused tax credit may be carried forward 5 years.

F. INCENTIVE TIMEFRAME. The tax credit expired December 31, 2013.

G. MISCELLANEOUS.

37.06 North Carolina state sales tax exemption for residential energy-efficient appliances

A. GENERAL DESCRIPTION. North Carolina provides a sales tax exemption in the amount of 100% of the tax on residential energy-efficient appliances. *N.C. Gen. Stat. §105-164.13D.*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayers purchasing Energy Star-certified products.

C. QUALIFYING ACTIVITY. Taxpayer must purchase Energy Star certified products including clothes washers, freezers and refrigerators, central air conditioners and room air conditioners, air-source heat pumps and geothermal heat pumps, ceiling fans, dehumidifiers and programmable thermostats.

1. Qualifying products must not be for use in a trade or business, or for rental appliances.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. The tax exemption period is the first Friday of November through the following Sunday.

G. MISCELLANEOUS.

37.07 North Carolina state sales tax exemption for alternative fuels

A. GENERAL DESCRIPTION. North Carolina provides a sales tax exemption in the amount of 100% of the tax on alternative fuels. *N.C. Gen. Stat. §105-164.13(11); N.C. Gen. Stat. §105-449.130.*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayers purchasing alternative fuels.

C. QUALIFYING ACTIVITY. Taxpayer must purchase alternative fuels. An alternative fuel is a combustible gas or liquid that can be used to generate power to operate a highway vehicle and

that is not subject to tax under Article 36C of this N.C. Gen. Stat. §105.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

37.08 North Carolina state corporate income tax credit for cogenerating power plants

A. GENERAL DESCRIPTION. North Carolina provides an income tax credit in the amount of 10% of the cost paid for a cogeneration power plant. *N.C. Gen. Stat. §105-130.25.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer corporations purchase and installing cogenerating power plants.

C. QUALIFYING ACTIVITY. Taxpayer must purchase and install the electrical or mechanical power generation equipment of a cogenerating power plant.

D. INCENTIVE AMOUNTS. The tax credit amount is 10% of the cost paid for a cogeneration power plant. A cogenerating power plant is a power plant that sequentially produces electrical or mechanical power and useful thermal energy using natural gas as its primary energy source.

E. INCENTIVE LIMITS. The maximum cumulative statewide tax credit amount is \$5 million.

F. INCENTIVE TIMEFRAME. The tax credit may be carried forward 10 years.

G. MISCELLANEOUS.

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

39.01 Ohio state property tax financing option for special energy improvement districts

A. GENERAL DESCRIPTION. Ohio provides a property tax financing option for municipalities for special energy improvement districts. *Ohio Rev. Code Ann. §1710.01 et seq.; H.B. 1 (2009).*

B. ELIGIBLE TAXPAYERS. The tax financing is available to Taxpayer owners financing photovoltaic or solar-thermal systems on real property.

1. Taxpayers must provide their solar - energy project plans as part of the petition, as it would serve as the request and basis for levying the special assessment on the participating owners' property.

C. QUALIFYING ACTIVITY. Taxpayer must own and finance photovoltaic or solar-thermal systems on real property.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

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

A. 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.*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer owners of solar and wind

energy systems and hydrothermal energy systems.

C. 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.

1. Qualifying energy systems must be certified by the OH Director of Development.
2. 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

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

39.03 Ohio state income tax credit for ethanol plant investment

A. GENERAL DESCRIPTION. Ohio provides an income tax credit in the amount of 50% of investments in the construction and operation of a certified ethanol facility. *Ohio Rev. Code Ann. §5733.46.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayers investing in certified ethanol facilities.

1. Taxpayer must be certified by the OH Ethanol Incentive Board.

2. Facility must be majority owned by Ohio farmers.

C. QUALIFYING ACTIVITY. Taxpayer must invest in the construction and operation of a certified ethanol facility. Ethanol is fermentation ethyl alcohol derived from agricultural products, including potatoes, cereal, grains, cheese whey, and sugar beets; forest products; or other renewable resources, including residue and waste generated from the production, processing, and marketing of agricultural products, forest products, and other renewable resources that meet all of the specifications in the ASTM Specification D 4806-88 and is denatured as specified in Parts 20 and 21 of Title 27 of the Code of Federal Regulations.

1. Qualifying ethanol does not include fermentation ethyl alcohol derived from biomass resources.

D. INCENTIVE AMOUNTS. The tax credit amount is 50% of the amount invested in the construction and operation of a certified ethanol facility.

E. INCENTIVE LIMITS. The maximum tax credit amount is \$5,000 per certified ethanol plant.

F. INCENTIVE TIMEFRAME. The tax credit must be claimed in the tax year immediately following the calendar year in which the investment was made. The tax credit expired December 31, 2012. Unused tax credit may be carried forward 3 years.

G. MISCELLANEOUS.

39.04 Ohio state tax exemptions for energy conversion and thermal efficiency improvements

A. GENERAL DESCRIPTION. Ohio provides tax exemptions in the amount of 100% of tax on energy conversion and thermal efficiency improvements. *Ohio Rev. Code Ann. §3706 et seq.; Ohio Rev. Code Ann. §5739 et seq.; Ohio Rev. Code Ann. §5709.20 et seq.; Ohio Rev. Code Ann. §5733.05; OAC 5703-1-06.*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer buyers and owners of property used in energy conversion, thermal-efficiency improvements and the conversion of solid waste to energy.

C. QUALIFYING ACTIVITY. Taxpayer must own property used in energy conversion, thermal-efficiency improvements and the conversion of solid waste to energy. Energy conversion is the replacement of fossil-fuel resources with alternative fuels or technologies. Thermal efficiency improvements is the recovery of waste heat or steam produced in any commercial or industrial processes. Solid waste conversion is the use of waste to produce energy and the utilization of such energy. Qualifying systems include solar-thermal systems, photovoltaic systems, wind, biomass, landfill gas and waste-recovery systems.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

39.05 Ohio state income tax credit for alternative fuel retailers

A. GENERAL DESCRIPTION. Ohio provides an income tax credit in the amount of \$0.035-0.13 per gallon of alternative biodiesel fuel sold. *Ohio Rev. Code Ann. §§5733.48; Ohio Rev. Code Ann. §5747.77 et seq.; S.B. 131 (2010).*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer retail dealers of alternative fuel sold and dispensed through a metered pump at the Taxpayer retail dealer's retail service station.

1. An equity owner of Taxpayer that is a pass-through entity may claim the owner's distributive or proportionate share of the tax credit for the equity owner's taxable year that includes the last day of the Taxpayer's taxable year.

C. QUALIFYING ACTIVITY. Taxpayer must sell alternative fuel at retail. Alternative fuel is E85 blend fuel or blended biodiesel.

1. E85 blend fuel is fuel containing 85% or more ethanol, or containing any other

percentage of not less than seventy per cent ethanol if the United States department of energy determines, by rule, that the lower percentage is necessary to provide for the requirements of cold start, safety, or other vehicle functions, and that meets the ASTM specification for E85 blend fuel. Ethanol is fermentation ethyl alcohol derived from agricultural products, including potatoes, cereal, grains, cheese whey, and sugar beets; forest products; or other renewable resources, including residue and waste generated from the production, processing, and marketing of agricultural products, forest products, and other renewable resources that meet all of the specifications in the ASTM specification D 4806-88 and is denatured as specified in Parts 20 and 21 of Title 27 of the Code of Federal Regulations.

2. Blended biodiesel is a blend of biodiesel with petroleum-based diesel fuel in which the resultant product contains not less than 6% biodiesel and meets the ASTM specification for blended diesel fuel. Biodiesel is a mono-alkyl ester combustible liquid fuel that is derived from vegetable oils or animal fats, or any combination of those reagents that meets the ASTM specification for biodiesel fuel (B100) blend stock distillate fuels.

D. INCENTIVE AMOUNTS. The tax credit amount is \$0.13 per gallon for fuel sold.

1. The tax credit amount for blended biodiesel containing 10-20% biodiesel is \$0.075 per gallon. The tax credit amount for blended biodiesel containing 6-10% biodiesel is \$0.035 per gallon.

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. The tax credit expired on December 31, 2011.

G. MISCELLANEOUS.

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

42.01 Pennsylvania state property tax exemption for commercial wind farms and alternative energy systems

A. GENERAL DESCRIPTION. Pennsylvania provides a property tax exemption in the amount of 100% of the tax on wind turbines and related equipment (including towers and foundations) and alternative energy systems. *72 Penn. Stat. §5490.1 et seq.; 72 Penn. Stat. §1648.2 et seq.; 72 Penn. Stat. §5453.201 et seq.; H.B. 1394 (2009).*

B. ELIGIBLE TAXPAYERS. The tax assessment is available to Taxpayer owners of commercial wind farm real property and alternative energy systems.

C. QUALIFYING ACTIVITY. Taxpayer must own commercial wind farm real property or alternative energy systems. Commercial wind farm real property includes wind turbine generated generators or related wind energy appliances and equipment, including towers and tower foundations. Alternative energy sources are solar photovoltaic and solar thermal energy, wind power, low-impact hydropower, geothermal energy, biologically derived methane gas, fuel cells, biomass energy, and coal mine methane.

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

E. INCENTIVE LIMITS. The valuation of real property used for the purpose of wind-energy generation will utilize the income capitalization approach to value.

F. INCENTIVE TIMEFRAME. Taxpayer must provide relevant, nonproprietary lease and lease-income information to county assessors by September 1 of each year.

G. MISCELLANEOUS.

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

A. 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)*.

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

C. 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.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

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

A. 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*.

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

C. QUALIFYING ACTIVITY. Taxpayer must own renewable energy system property.

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

E. INCENTIVE LIMITS. The local jurisdiction must adopt local laws to grant the property tax exemption.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

44.03 Rhode Island state income tax credit for hydroelectric power installation

A. GENERAL DESCRIPTION. Rhode Island provides an income tax credit, in the amount of 10% of the installation cost of small hydroelectric power facilities. *R.I. Gen. Laws §44-30-20 et seq.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer corporations and individuals installing small hydroelectric power facilities.

C. QUALIFYING ACTIVITY. Taxpayer must install a small hydroelectric power facility. A small hydroelectric power facility is any in-state hydroelectric power project that uses the water power potential of an existing dam, and that has no more than 15,000 kilowatts of installed capacity.

D. INCENTIVE AMOUNTS. The tax credit amount is 10% of the cost of the small hydroelectric power facility.

E. INCENTIVE LIMITS. The maximum tax credit amount is \$50,000. Unused tax credit may be carried forward 5 years.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

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

A. 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).*

B. ELIGIBLE TAXPAYERS. The tax credit is available to corporate Taxpayer owners, renters, contract buyers or speculative sellers of residences incorporating renewable energy systems and Taxpayer purchasers of residential renewable energy systems.

1. Taxpayer must be certified by the RI Office of Energy Resources.
2. Taxpayer members or partners of pass-through entities divide the tax credit in the same manner as income.

C. 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.

1. 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.
2. 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.
3. 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.

4. 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.
5. 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.
6. 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.

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

E. 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.

F. 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.

G. MISCELLANEOUS.

44.05 Rhode Island state property tax exemption for residential solar property

A. GENERAL DESCRIPTION. Rhode Island provides a property tax exemption in the amount of 100% of the tax on residential solar property. *R.I. Gen. Laws §44-57-4(a)(6).*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer owners of residential solar property.

C. QUALIFYING ACTIVITY. Taxpayer must own residential solar property. Residential solar property includes photovoltaic (PV) systems, solar hot-water systems and active solar space-heating systems.

D. INCENTIVE AMOUNTS. The tax exemption amount is an amount to which the residential solar-energy system is assessed at not more than the value of a conventional heating system, a conventional water-heating system or energy production capacity that otherwise could be necessary to install in a building.

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

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

45.01 South Carolina state income tax credit for solar energy or small hydropower systems

A. GENERAL DESCRIPTION. South Carolina provides an income tax credit in the amount of 25% the cost of solar energy and 25% the cost of small hydropower systems. *S.C. Code Ann. §12-6-3587; South Carolina Information Letter 09-16, 09/09/2009.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayers purchasing and installing a solar energy or small hydropower system.

C. QUALIFYING ACTIVITY. Taxpayer must purchase and install a solar energy or small hydropower system property. Solar energy or small hydropower system must be used for heating water, space heating, air cooling, energy-efficient daylighting, heat reclamation, energy-efficient demand response, or the generation of electricity in a building owned by the taxpayer. Small hydropower system is new generation capacity on a non-impoundment or on an existing impoundment that: (1) meets licensing standards as defined by the Federal Energy Regulatory Commission (FERC); (2) is a run-of-the-river facility with a capacity not to exceed 5MW; or (3) consists of a turbine in a pipeline or in an irrigation canal. Solar energy or small hydropower system property includes all controls, tanks, pumps, heat exchangers, and other equipment used directly and exclusively for the solar-energy system. System property does not include any land or structural elements of the building, such as walls and roofs, or other equipment ordinarily contained in the structure.

1. Qualifying solar-thermal systems must be certified by the Solar Rating and Certification Corporation or a comparable entity endorsed by the SC Energy Office.

D. INCENTIVE AMOUNTS. The tax credit amount is 25% of the cost of solar energy system property and 25% of the cost of small hydropower system property.

E. INCENTIVE LIMITS. The maximum tax credit allowed to be claimed is \$3,500 for each facility or

50% of the taxpayer's tax liability for that taxable year, whichever is less.

F. INCENTIVE TIMEFRAME. Unused tax credit may be carried forward 10 years.

G. MISCELLANEOUS.

45.02 South Carolina state corporate income tax credit for biomass energy systems

A. GENERAL DESCRIPTION. South Carolina provides an income tax credit in the amount of 25% of the cost of biomass energy systems. *S.C. Code Ann. §12-6-3620.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer corporations purchasing and installing biomass energy systems.

C. QUALIFYING ACTIVITY. Taxpayer must purchase and install a biomass energy system. Biomass energy systems are equipment used to create heat, power, steam, electricity or another form of energy for commercial use from a fuel consisting of at least 90% biomass resources. A biomass resource is noncommercial wood, by-products of wood processing, demolition debris containing wood, agricultural waste, animal waste, sewage, landfill gas, and other organic materials, not including fossil fuels.

1. Qualifying biomass wood resource does not include wood intended for the purpose of generating a profit.

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

1. Cost of the biomass energy system must be certified by the SC State Energy Office, in consultation with the SC Department of Agriculture and the SC Institute for Energy Studies.

E. INCENTIVE LIMITS. The maximum annual tax credit amount is \$650,000. The maximum annual tax credit allowed to be claimed is 100% of Taxpayer's liability for that year.

F. INCENTIVE TIMEFRAME. Taxpayer must apply for the tax credit by January 31st of the year following the 18-month period in which the

qualifying biomass energy system is placed in service. The SC State Energy Office must award the tax credit by March 1st of that year. Unused tax credit may be carried forward 15 years.

G. MISCELLANEOUS. The tax credit may be discontinued if the equipment ceases to use biomass resources as its primary fuel source before the entire tax credit has been utilized.

45.03 South Carolina state corporate income tax credit for ethanol and biodiesel production facilities

A. GENERAL DESCRIPTION. South Carolina provides an income tax credit in the amount of \$0.20-0.30 per gallon of corn-based ethanol or soy-based biodiesel produced. *S.C. Code Ann. §12-6-3600(A)(1); H.B. 3649 (2008)*.

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer corporations owning corn-based ethanol or soy-based biodiesel production facilities.

1. Taxpayers must be certified by the SC Energy Office.

C. QUALIFYING ACTIVITY. Taxpayer must own ethanol or biodiesel production facilities. Ethanol facility is a plant or facility primarily engaged in the production of ethanol or ethyl alcohol derived from renewable and sustainable bioproducts used as a substitute for gasoline fuel. Biodiesel facility is a plant or facility primarily engaged in the production of plant or animal-based fuels used as a substitute for diesel fuel.

1. Qualifying facility must be in production for at least 25% of its name plate design capacity

D. INCENTIVE AMOUNTS. The tax credit amount is \$0.20 per gallon of corn-based ethanol or soy-based biodiesel produced and \$0.30 per gallon of noncorn ethanol or nonsoy oil biodiesel produced. After December 31, 2016 the tax credit amount is \$0.075 per gallon of corn-based ethanol or soy-based biodiesel newly produced.

New production is production that results from a new facility, a facility that has not received tax credits before 2017, or the expansion of the capacity of an existing

facility by at least 2 million gallons first placed into service after 2016.

E. INCENTIVE LIMITS. The maximum annual tax credit amount is the amount for production of up to 25 million gallons and 125 million gallons for a 5-year period.

F. INCENTIVE TIMEFRAME. The tax credit period is 5 years. Taxpayer must apply for the tax credit by January 31st of the year following the 18-month period in which the qualifying production facility is placed in service. The tax credit expires December 31, 2016. Unused tax credit may be carried forward 10 years.

1. Taxpayer may claim the tax credit for the first 6 months of qualifying production in addition to qualifying production during its current taxable year.

G. MISCELLANEOUS.

45.04 South Carolina state income tax credit for ethanol and biodiesel research

A. GENERAL DESCRIPTION. South Carolina provides an income tax credit in the amount of 25% of expenditures for ethanol and biodiesel research. *S.C. Code Ann. §12-6-3631(A); H.B. 4478 (2010); PLR No. 11-6*.

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer incurring qualifying research expenditures for ethanol and biodiesel research.

1. Taxpayer may be a pass-through entity and pass through the tax credit to individual shareholders, partners or members who may apply the tax credit against individual income taxes.

C. QUALIFYING ACTIVITY. Taxpayer must incur qualifying research expenditures for ethanol and biodiesel research. Qualifying research expenditure include those to develop feedstocks and processes for cellulosic ethanol and for algae-derived biodiesel, such as enzymes and catalysts involving cellulosic ethanol and algae-derived biodiesel; best and most cost-efficient feedstocks for South Carolina; or product and development, including cellulosic ethanol or algae-derived biodiesel products. Qualifying research

expenditure includes expenditures related to waste grease-derived biodiesel. Cellulosic ethanol is fuel from ligno-cellulosic materials, including wood chips derived from noncommercial sources, corn stover, and switchgrass.

1. Qualifying research expenditures must be certified by the SC Energy Office.

D. INCENTIVE AMOUNTS. The tax credit amount is 25% of qualifying research expenditures and 10% for research and development for waste grease derived biodiesel.

E. INCENTIVE LIMITS. The maximum lifetime tax credit amount is \$100,000 per taxpayer.

F. INCENTIVE TIMEFRAME. Taxpayer must apply for the tax credit by January 31st of the year following the 18-month period in which the qualifying production facility is placed in service. The tax credit expired December 31, 2011. Unused tax credit may be carried forward 5 years.

G. MISCELLANEOUS.

45.05 South Carolina state corporate income tax credit for plug-in hybrid vehicles

A. GENERAL DESCRIPTION. South Carolina provides an income tax credit in the amount of \$2,000 for the in-state purchase or lease of plug-in hybrid vehicles. *S.C. Code Ann. §12-6-3376(A); H.B. 3059 (2012); New Plug-In Hybrid Vehicle Credit Information, S.C. Dept of Rev., 07/15/2013; New Plug-In Hybrid Vehicle Information, 03/14/2014.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer corporations purchasing or leasing plug-in hybrid vehicles.

C. QUALIFYING ACTIVITY. Taxpayer must purchase or lease of a plug-in hybrid vehicle. A plug-in hybrid vehicle is a vehicle that shares the same benefits as an internal combustion and electric engine with an all-electric range of at least 9 miles, has 4 or more wheels, draws propulsion using a traction battery, has at least 4 kilowatt hours of battery capacity and uses an external source of energy to recharge the battery.

D. INCENTIVE AMOUNTS. The tax credit amount is \$667 for a battery capacity of 4 kilowatt hours, with an additional \$111 for each additional kilowatt hour. The maximum tax credit amount is \$2,000 per plug-in hybrid vehicle.

E. INCENTIVE LIMITS. The statewide maximum annual tax credit amount is \$200,000.

F. INCENTIVE TIMEFRAME. The tax credit expires December 31, 2016. Unused tax credit may be carried forward 5 years.

G. MISCELLANEOUS.

45.06 South Carolina state corporate income tax credit for renewable fuel distribution, processing and dispensing property

A. GENERAL DESCRIPTION. South Carolina provides an income tax credit over 3 years in the amount of 25% of the cost of purchasing, constructing, or installing renewable fuel distribution, processing and dispensing property. *S.C. Code Ann. §12-6-3610(A); H.B. 3649 (2008).*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer corporations placing in service in South Carolina property for distributing, processing or dispensing renewable fuel.

1. Taxpayers must be approved by the SC Energy Office.

C. QUALIFYING ACTIVITY. Taxpayer must purchase, construct and install and place in service property for distributing, processing or dispensing renewable fuel. Renewable fuel is E70 or greater ethanol fuel dispensed at the retail level for use in motor vehicles and pure ethanol or biodiesel fuel dispensed by a distributor or facility that blends these nonpetroleum fuels with gasoline fuel or diesel fuel for use in motor vehicles. Property for distributing or dispensing renewable fuel includes pumps, storage tanks, and related equipment that is directly and exclusively used for distributing, dispensing, or storing renewable fuel.

1. Qualifying property for distributing or dispensing renewable fuel must be labeled for this purpose and be clearly identified as associated with renewable fuel.

2. Qualifying property for processing renewable fuel includes property used for intermediate steps such as milling, crushing, and handling of feedstock, and the distillation and manufacturing of the final product.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. The tax credit must be taken over 3 years. The tax credit for processing must be taken over 7 years. Taxpayer must apply for the tax credit by January 31st of the year following the year in which the qualifying property is placed in service. The tax credit expires December 31, 2019. Unused tax credit may be carried forward 10 years.

G. MISCELLANEOUS. The tax credit may be discontinued if within the 3 year period the property is disposed of or taken out of service and not replaced.

45.07 South Carolina state sales tax exemption for hydrogen and fuel cell equipment

A. GENERAL DESCRIPTION. South Carolina provides a sales tax exemption in the amount of 100% of the tax on hydrogen and fuel cell equipment. *S.C. Code Ann. §12-36-2120(71)*.

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer purchasers of hydrogen and fuel cell equipment.

C. QUALIFYING ACTIVITY. Taxpayer must purchase hydrogen and fuel cell equipment. Fuel cell is a device that directly or indirectly creates electricity using hydrogen (or hydrocarbon-rich fuel) and oxygen through an electro-chemical process. Hydrogen and fuel cell equipment is any device, equipment, or machinery: (1) operated by hydrogen or fuel cells; (2) used to generate, produce, or distribute hydrogen and designated specifically for hydrogen applications or for fuel cell applications; or (3) used predominantly for the manufacturing of, or research and development involving hydrogen or fuel cell technologies.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

45.08 South Carolina state personal income tax credit for energy efficient manufactured homes

A. GENERAL DESCRIPTION. South Carolina provides an income tax credit in the amount of \$750 for energy efficient manufactured homes. *S.C. Code Ann. §48-52-870*.

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer individuals purchasing energy efficient manufactured homes.

C. QUALIFYING ACTIVITY. Taxpayer must purchase an energy efficient manufactured homes. An energy efficient manufactured homes is: (1) a manufactured home designated by the U.S. Environmental Protection Agency and the U.S. Department of Energy as meeting or exceeding each agency's energy saving efficiency requirements; or (2) a manufactured home that has been designated as meeting or exceeding energy efficiency requirements under the ENERGY STAR program.

1. Qualifying energy efficient manufactured homes must be purchase from a retail dealership licensed by the SC Manufactured Housing Board.
2. Qualifying energy efficient manufactured homes must be used in South Carolina.

D. INCENTIVE AMOUNTS. The tax credit amount is \$750 per manufactured home.

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. The tax credit expires July 1, 2019.

G. MISCELLANEOUS.

45.09 South Carolina state sales tax exemption for energy efficient manufactured homes

A. GENERAL DESCRIPTION. South Carolina provides a sales tax exemption in the amount of 100% of the tax on energy efficient manufactured homes. *S.C. Code Ann. §12-36-2110.*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer purchasers of energy efficient manufactured homes.

C. QUALIFYING ACTIVITY. Taxpayer must purchase manufactured homes meeting energy efficiency standards. Efficiency standards are storm or double-pane glass windows, insulated or storm doors, and a minimum thermal resistance rating of the insulation of R-11 for walls, R-19 for floors, and R-30 for ceilings.

1. Qualifying efficiency standards include variations of the above if the total heat loss for the home does not exceed that calculated using the ASHRAE levels of R-11 for walls, R-19 for floors, and R-30 for ceilings.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. The tax exemption expires July 1, 2019

G. MISCELLANEOUS. The dealer selling the manufactured home must maintain records for 3 years on each manufactured home sold that meets the energy efficiency levels.

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

A. GENERAL DESCRIPTION. South Carolina provides an income tax credit in the amount of 10% of the qualifying investments in plant and equipment for clean energy manufacturing operations. *S.C. Code Ann. §12-6-3588; H.B. 4478 (2010); H.B. 3644 (2014).*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer corporations placing in

service plant and equipment for clean energy manufacturing operations.

1. Taxpayers must be approved by the SC Energy Office.

C. QUALIFYING ACTIVITY. Taxpayer must purchase, construct and install and place in service plant and equipment for clean energy manufacturing operations. Clean energy manufacturing operations are manufacturers of systems and components that are used or useful in manufacturing clean energy equipment for the generation, storage, testing and research and development, and transmission or distribution of electricity from clean sources, including specialized packaging for the clean energy equipment manufactured at the facility.

1. Clean energy systems are solar, wind, geothermal, or other clean energy uses.
2. Clean energy manufacturing operation must invest at least \$50 million in new qualifying plant and equipment.
3. Clean energy manufacturing operation must create 1.0 full-time jobs that pay at least 125% of the state average annual median wage for every \$500,000 of capital investment.
4. 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.

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

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

F. INCENTIVE TIMEFRAME. Unused tax credit may be carried forward 15 years. The tax credit expires December 31, 2020. The tax credit is not refundable.

G. MISCELLANEOUS.

45.11 South Carolina state corporate income tax credit for alternative motor vehicles

A. GENERAL DESCRIPTION. South Carolina provides an income tax credit in the amount of 20% of the federal tax credit allowed for alternative motor vehicles. *S.C. Code Ann. §12-6-3600; S.C. Code Ann. §12-6-3377.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer who is eligible for and claims a federal alternative motor vehicle tax credit.

C. QUALIFYING ACTIVITY. Taxpayer must be eligible for and claim the new qualified fuel cell motor vehicle credit, the new advanced lean burn technology motor vehicle credit, the new qualified hybrid motor vehicle credit based on the combined city/highway metric or standard set by federal Internal Revenue Code Section 30B, or the new qualified alternative fuel motor vehicle credit allowed pursuant to Internal Revenue Code Section 30B.

D. INCENTIVE AMOUNTS. The tax credit amount is 20% of the federal credit allowed pursuant to IRC §30B for alternative motor vehicles.

1. The tax credit amount is calculated without regard to the phaseout period limits of Internal Revenue Code Section 30(B)(f). The provisions of Internal Revenue Code Section 30(B) are deemed permanent law.

E. INCENTIVE LIMITS. The tax credit is not refundable.

F. INCENTIVE TIMEFRAME. Unused tax credit may be carried forward 5 years.

G. MISCELLANEOUS.

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

A. 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 (2009).*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer manufacturers of clean energy technologies purchasing property.

1. 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.
2. Taxpayer must be certified by the TN Department of Revenue and the TN Department of Economic and Community Development.
3. Taxpayer may not be a business engaged in the development and construction of coal fired power plants.

C. 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.

1. 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.

2. Qualifying tangible personal property does not include any payments with respect to leases of qualifying tangible personal property that extend beyond the investment period.
3. Qualifying tangible personal property does not include any materials, machinery, or equipment that replaces tangible personal property that previously generated tax credit.

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

E. 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%.

F. INCENTIVE TIMEFRAME. The maximum investment period is 8 years.

G. MISCELLANEOUS. The tax credit may be recaptured if the qualifying facility does not maintain at least 50 qualifying full-time employee positions, or is not utilized to support an emerging industry for a period of 10 years.

47.02 Tennessee state franchise and excise tax credit for green energy supply chain manufacturers

A. GENERAL DESCRIPTION. Tennessee provides a franchise or excise tax credit in the amount by which the charge for electricity sold to a manufacturer exceeds the charge that would have been made for such total delivered electricity if the maximum certified rate had been applied. *Tenn. Code Ann. §67-4-2109(m).*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer corporations certified as a green energy supply chain manufacturer.

1. A certified green energy supply chain manufacturer is any manufacturer that has made, during the investment period,

a required capital investment in excess of \$250 million in constructing, expanding, or remodeling a facility that is certified by the TN Commissioner of Revenue, the TN Commissioner of Economic and Community Development, and the TN Commissioner of Environment and Conservation, in their sole discretion, to be a facility engaged in manufacturing a product that is necessary for the production of green energy.

2. A certified green energy supply chain manufacturer includes campus affiliates, integrated customers and integrated suppliers of the green energy manufacturer.

C. QUALIFYING ACTIVITY. Taxpayer must invest in constructing, expanding, or remodeling a facility engaged in manufacturing a product that is necessary for the production of green energy.

D. INCENTIVE AMOUNTS. The tax credit amount is the 100% of the amount by which the charge for electricity sold to the manufacturer exceeds the charge that would have been made for such total delivered electricity if the maximum certified rate had been applied during the applicable tax year.

1. Qualifying manufacturers are also allowed a carbon charge credit against franchise and excise tax equal to any carbon charges incurred by or imposed directly on the certified green energy supply chain manufacturer or imposed on the TN Valley Authority or other applicable energy provider and billed to the certified green energy supply chain manufacturer during the applicable tax year.

E. INCENTIVE LIMITS. The tax credit may be refunded up to \$1.5 million for each \$250 million in cumulative capital investments made.

F. INCENTIVE TIMEFRAME. Taxpayer must make a claim for refund within 3 years from December 31 of the year in which the tax credit was incurred. The tax credit expires December 31, 2028. Unused tax credit may be carried forward.

G. MISCELLANEOUS.

47.03 Tennessee state property tax exemption for green energy production facilities

A. GENERAL DESCRIPTION. Tennessee provides a property tax exemption in the amount of 67-87.5% of the tax on green energy production facilities. *Tenn. Code Ann. §67-5-601; Tenn. Code Ann. §67-4-2004; S.B.1000 (2013).*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer public utilities, businesses or industrial facilities owning green energy production facilities.

C. QUALIFYING ACTIVITY. Taxpayer must own commercial and industrial property, or public utility property, that is a green energy production facility. A green energy production facility is a facility certified by the TN Department of Environment and Conservation as producing electricity for use and consumption off the premises using clean energy technology. Clean energy technology is technology used to generate energy from geothermal, hydrogen, solar, and wind sources, facilities which utilize natural gas in a combined heat and power configuration (CHP) for production of heat and electricity for consumption onsite, and alternative motor vehicle fueling stations that utilizes natural gas in compressed or liquid form for the purpose of fueling motor vehicles and that is projected to displace more than 6,000 gallons of petroleum annually.

D. INCENTIVE AMOUNTS. The tax exemption amount is 70% of the property tax due. The tax exemption amount is 67% of the property tax due for wind property and 87.5% of the property tax due for solar property.

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

47.04 Tennessee state franchise tax exemption for green energy production facilities

A. GENERAL DESCRIPTION. Tennessee provides a franchise tax exemption in the amount of 100% of the tax on green energy production facilities. *Tenn. Code Ann. §67-4-2108(a)(5); Tenn. Code Ann. §67-4-2004.*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer public utilities, businesses or industrial facilities owning

C. QUALIFYING ACTIVITY. Taxpayer must own commercial and industrial property, or public utility property, that is a green energy production facility. A green energy production facility is a facility certified by the TN Department of Environment and Conservation as producing electricity for use and consumption off the premises using clean energy technology. Clean energy technology is technology used to generate energy from geothermal, hydrogen, solar, and wind sources, and facilities which utilize natural gas in a combined heat and power configuration (CHP) for production of heat and electricity for consumption onsite, and alternative motor vehicle fueling stations that utilizes natural gas in compressed or liquid form for the purpose of fueling motor vehicles and that is projected to displace more than 6,000 gallons of petroleum annually.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

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

50.01 Vermont state property tax exemption for alternate energy source systems

A. GENERAL DESCRIPTION. Vermont provides a property tax exemption in the amount of 100% of the tax on alternate energy source systems. *Vt. Stat. Ann.* 32 §3845.

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer owners of alternate energy source system property.

C. QUALIFYING ACTIVITY. Taxpayer must own alternate energy sources system property. Alternate energy sources system property includes any plant, structure or facility used for the generation of electricity or production of energy used on the premises for private, domestic, or agricultural purposes. Alternate energy sources systems include windmills, facilities for the collection of solar energy or the conversion of organic matter to methane, and net-metered systems.

1. Qualifying alternate energy sources system property does not include any property for sale or exchange to the public.
2. Qualifying alternate energy sources includes all component parts and land upon which a facility is located, not to exceed 1/2 acre.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

50.02 Vermont state property tax financing for clean energy assessment districts

A. GENERAL DESCRIPTION. Vermont provides a property tax financing option for municipalities for clean energy assessment districts. *Vt. Stat. Ann.*

24 §1751(3); *Vt. Stat. Ann.* 24 §3261 et seq.; *H.B.* 446 (2009).

B. ELIGIBLE TAXPAYERS. The tax financing is available to Taxpayer owners of clean energy property.

1. Taxpayer must conduct an energy audit to quantify project costs, energy savings and carbon impacts.

C. QUALIFYING ACTIVITY. Taxpayer must own and finance clean energy property. Clean energy property is property used in 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.

1. Qualifying energy-efficiency projects must be certified by Efficiency Vermont.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

50.03 Vermont state sales tax exemption for renewable-energy systems

A. GENERAL DESCRIPTION. Vermont provides a sales tax exemption in the amount of 100% of the tax on renewable-energy systems. *Vt. Stat. Ann.* 32 §9741(46).

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer purchasers of renewable-energy systems.

C. QUALIFYING ACTIVITY. Taxpayer must purchase renewable-energy systems. Renewable-energy systems include: (1) systems which generate electricity using eligible renewable energy resources up to 250 kW in capacity; (2) micro-combined heat and power systems up to 20 kW in capacity; and (3) solar water-heating systems. Renewable energy is energy produced

using a technology that relies on a renewable energy resource that is being consumed at a harvest rate at or below its natural regeneration rate.

1. Qualifying renewable energy resource includes methane gas and other flammable gases produced by the decay of sewage treatment plant wastes or landfill wastes and anaerobic digestion of agricultural products, byproducts, or wastes.
2. Qualifying renewable energy resource does not include solid waste.
3. Qualifying renewable energy resource does include agricultural or silvicultural waste.
4. Qualifying renewable energy resource does not include nuclear fuel.
5. Qualifying renewable energy resource does not include hydroelectric facility with a generating capacity of greater than 200 megawatts.
6. Qualifying renewable energy resource does not include coal, oil, propane, and natural gas.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

50.04 Vermont state income tax credit for solar energy equipment on business properties

A. GENERAL DESCRIPTION. Vermont provides an income tax credit in the amount of 30% of the cost of solar energy equipment on business properties. *Vt. Stat. Ann. 32 §5930z; Vt. Stat. Ann. 32 §5822; H.B. 313 (2009); H.B. 781 (2010); H.B. 56 (2011).*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayers installing solar energy equipment on business properties.

1. Taxpayer may not receive any grants or similar funding from the VT Clean Energy Development Fund.

C. QUALIFYING ACTIVITY. Taxpayer must install of solar energy equipment on business properties. Solar energy equipment is equipment that 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.

D. INCENTIVE AMOUNTS. The tax credit amount is 30% of the cost of systems and equipment until December 31, 2011, and 7.2% of the cost of systems and equipment until December 31, 2016.

1. Qualifying costs of systems and equipment does not include grants or similar funding from any public or private program that assists in providing capital investment for a renewable energy project, including subsidized energy financing or tax-exempt private activity bonds.

E. INCENTIVE LIMITS. The maximum annual statewide tax credit amount is \$9.4 million.

F. INCENTIVE TIMEFRAME. The tax credit expires December 31, 2016. Unused tax credit may be carried forward 5 years.

MISCELLANEOUS. The tax credit may be recaptured if the federal tax credit is recaptured. Taxpayers may not receive Vermont's Clean Energy Development Fund financing.

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

51.01 Virginia state property tax financing option for clean energy assessment districts

A. GENERAL DESCRIPTION. Virginia provides a property tax financing option for municipalities for clean energy assessment districts. *Va. Code Ann. §15.2-958.3*.

B. ELIGIBLE TAXPAYERS. The tax financing is available to Taxpayers acquiring or installing clean energy improvements, distributed generation renewable energy sources or energy efficiency improvements.

C. QUALIFYING ACTIVITY. Taxpayer must acquire, install and finance clean energy improvements, distributed generation renewable energy sources or energy efficiency improvements.

D. INCENTIVE AMOUNTS. The tax financing option amounts varies by local jurisdiction.

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

51.02 Virginia state property tax exemption for solar energy property

A. GENERAL DESCRIPTION. Virginia provides a property tax exemption in the amount of 100% of the tax on solar energy property. *Constitution of Va. §6(d); Va. Code Ann. §58.1-3660; H.B. 1239 (2014)*.

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer owners of solar energy equipment or recycling equipment incorporated into residential, commercial or industrial property.

1. Taxpayer must be certified by the local building department.

C. QUALIFYING ACTIVITY. Taxpayer must own solar energy equipment or recycling equipment incorporated into residential, commercial or

industrial property. Solar energy equipment is equipment which is designed and used primarily for the purpose of collecting, generating, transferring, or storing thermal or electric energy. Recycling equipment is equipment which is integral to the recycling process and for use primarily for the purpose of abating or preventing pollution of the atmosphere or waters.

1. Qualifying property must be certified by the local building department or the VA Department of Environmental Quality.
2. Qualifying property includes solar energy equipment, facilities, or devices owned or operated by a business that collect, generate, transfer, or store thermal or electric energy whether or not such property has been certified to the Department of Taxation by a state certifying authority.
3. Qualifying solar photovoltaic (electric energy) systems must equal 20 megawatts or less.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. The tax exemption period is 5 years.

G. MISCELLANEOUS.

51.03 Virginia state income tax credit for biodiesel and green diesel production

A. GENERAL DESCRIPTION. Virginia provides an income tax credit in the amount of \$0.01 per gallon of biodiesel and green diesel produced. *Va. Code Ann. §58.1-439.12:02; Virginia Ruling of the Commissioner PD 09-21*.

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer producers of biodiesel and green diesel.

1. Taxpayer must be certified by the VA Department of Mines, Minerals and Energy.
2. Taxpayer partners, shareholders, or members of a pass-through entity are allocated the tax credit in proportion to

their ownership or interest in the business entity.

3. Taxpayer may transfer unused tax credit to 3rd parties.

C. QUALIFYING ACTIVITY. Taxpayer must produce biodiesel or green diesel fuels. Biodiesel fuel is fuel composed of mono-alkyl esters of long-chain fatty acids derived from vegetable oils or animal fats, designated B100, and meeting the requirements of ASTM D6751. Green diesel fuel is fuel produced from nonfossil renewable resources including agricultural or silvicultural plants, animal fats, residue and waste generated from the production, processing, and marketing of agricultural products, silvicultural products, and other renewable resources, and meeting applicable ASTM specifications.

1. Taxpayer must produce in Virginia 2 million gallons of biodiesel or green diesel fuels using feedstock originating domestically within the United States.
2. Feedstock is the agricultural or other renewable resources, whether plant or animal derived, used to produce biodiesel or green diesel fuels.

D. INCENTIVE AMOUNTS. The tax credit amount is \$0.01 per gallon of biodiesel and green diesel produced during the first 3 years of production.

E. INCENTIVE LIMITS. The maximum annual tax credit amount is \$5,000.

F. INCENTIVE TIMEFRAME. The tax credit period is first 3 years of production. Unused tax credit may be carried forward 3 years.

G. MISCELLANEOUS.

51.04 Virginia state corporate income tax credit for clean-fuel vehicle and refueling property

A. GENERAL DESCRIPTION. Virginia provides an income tax credit in the amount of 10% of the deduction allowed under IRC §179A and 10-20% the costs used to compute the IRC §30 federal credit for electric vehicles. *Va. Code Ann. §58.1-438.1.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer corporations purchasing

clean-fuel vehicles, clean-fuel refueling property and electric vehicles.

1. Tax credits granted to a partnership or S corporation may be passed through to the partners or shareholders.

C. QUALIFYING ACTIVITY. Taxpayer must purchase clean-fuel vehicles, clean-fuel refueling property or electric vehicles.

D. INCENTIVE AMOUNTS. The tax credit amount is 10% of the deduction allowed under IRC §179A and 10% the costs used to compute the IRC §30 federal credit for electric vehicles. The tax credit amount is 20% the costs of equipment certified by the VA Department of Environmental Quality when it is located in a municipality where an enhanced vehicle emissions inspections program is implemented.

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. Unused tax credit can be carried forward 5 years.

G. MISCELLANEOUS.

51.05 Virginia state corporate income tax credit for clean fuel vehicle job creation

A. GENERAL DESCRIPTION. Virginia provides an income tax credit in the amount of \$700 for each clean fuel vehicle job created by manufacturers. *Va. Code Ann. §58.1-439.1.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer corporations creating clean fuel vehicle jobs.

1. Taxpayer may not qualify for the major business facility job tax credit.
2. Taxpayer corporate partners or corporate members of pass-through entities must be allocated the tax credit in proportion to their ownership or interest in the pass-through entity.

C. QUALIFYING ACTIVITY. Taxpayer must create clean fuel vehicle jobs. Clean fuel vehicle jobs are jobs in: the manufacture of the major components of the energy storage, energy supply

or engine, motor, and power train mechanisms unique to a vehicle fueled by clean special fuels; the manufacture of components uniquely used to convert vehicles designed to operate on gasoline or diesel fuel to operate on clean special fuels or advanced biofuels; the conversion of vehicles designed to operate on gasoline or diesel fuel to operate on clean special fuels or advanced biofuels; the manufacture of vehicles designed to operate on clean special fuels; the manufacture of components designed to produce, store, and dispense clean special fuels or advanced biofuels; or the production of advanced biofuels.

1. Advanced biofuel is fuel derived from any cellulose, hemicellulose, or lignin that is derived from renewable biomass or algae.
2. Clean special fuel is any product or energy source used to propel a highway vehicle, the use of which, compared to conventional gasoline or reformulated gasoline, results in lower emissions of oxides of nitrogen, volatile organic compounds, carbon monoxide or particulates or any combination thereof, and includes compressed natural gas, liquefied natural gas, liquefied petroleum gas, hydrogen, hythane (a combination of compressed natural gas and hydrogen), or electricity.

D. INCENTIVE AMOUNTS. The annual tax credit amount is \$700 for each clean fuel vehicle job created.

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. The tax credit period is 3 years. The tax credit expires December 31, 2014. Unused tax credit may be carried forward 5 years.

G. MISCELLANEOUS.

51.06 Virginia state property tax assessment for energy efficient buildings

A. GENERAL DESCRIPTION. Virginia provides a property tax assessment in various amount of the tax on energy efficient buildings. *Va. Code Ann. §58.1-3221.2.*

B. ELIGIBLE TAXPAYERS. The tax assessment is available to Taxpayer owners of energy efficient buildings.

1. Energy-efficient building certification is determined by: (a) the granting of a certification under one of the programs that certifies the building meets or exceeds the performance standards or guidelines of the program, or (b) a qualifying architect or professional engineer designated by the county, city, or town who shall determine whether the building meets or exceeds the performance standards or guidelines under any program described.

C. QUALIFYING ACTIVITY. Taxpayer must own an energy-efficient building. An energy-efficient building is any building that exceeds the energy efficiency standards of the Virginia Uniform Statewide Building Code by 30%; meets performance standards of the Green Globes Green Building Rating System, the Leadership in Energy and Environmental Design (LEED) System or the EarthCraft House Program; or qualifies as an Energy Star home under federal Energy Star criteria.

1. Qualifying energy-efficient buildings do not include the real estate or land on which it is located.
2. Qualifying energy-efficient buildings must be located in a city or county embraced by the Northern Virginia Transportation Authority or the Hampton Roads Transportation Authority.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

51.07 Virginia state sales tax exemption for energy-efficient products

A. GENERAL DESCRIPTION. Virginia provides a sales tax exemption in the amount of 100% of the

tax on energy-efficient products. *Va. Code Ann. §58.1-609.1(18); Ruling 09-137; Ruling 12-154.*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer purchasers of Energy Star or WaterSense appliances

C. QUALIFYING ACTIVITY. Taxpayer must purchase Energy Star or WaterSense dishwashers, clothes washers, air conditioners, ceiling fans, compact fluorescent light bulbs, dehumidifiers, programmable thermostats or refrigerators with a sales price of \$2,500 or less per product purchased for noncommercial home or personal use.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. The tax exemption period is the 4-day period that begins each year on the Friday before the second Monday in October and ends at midnight on the second Monday in October.

G. MISCELLANEOUS.

51.08 Virginia state income tax deduction for sales and use tax paid on energy conservation personal property

A. GENERAL DESCRIPTION. Virginia provides an income tax deduction in the amount of 20% the sales and use tax paid on energy conservation personal property. *Va. Code Ann. §58.1-322(D)(12).*

B. ELIGIBLE TAXPAYERS. The tax deduction is available to Taxpayer purchasers of energy conservation personal property.

C. QUALIFYING ACTIVITY. Taxpayer must purchase energy conservation personal property. Energy conservation personal property which includes: (i) any clothes washers, room air conditioners, dishwashers, and standard size refrigerators that meet or exceed the applicable energy star efficiency requirements developed by the United States Environmental Protection Agency and the United States Department of Energy; (ii) any fuel cell that (a) generates

electricity using an electrochemical process, (b) has an electricity-only generation efficiency greater than 35%, and (c) has a generating capacity of at least two kilowatts; (iii) any gas heat pump that has a coefficient of performance of at least 1.25 for heating and at least 0.70 for cooling; (iv) any electric heat pump hot water heater that yields an energy factor of at least 1.7; (v) any electric heat pump that has a heating system performance factor of at least 8.0 and a cooling seasonal energy efficiency ratio of at least 13.0; (vi) any central air conditioner that has a cooling seasonal energy efficiency ratio of at least 13.5; (vii) any advanced gas or oil water heater that has an energy factor of at least 0.65; (viii) any advanced oil-fired boiler with a minimum annual fuel-utilization rating of 85; (ix) any advanced oil-fired furnace with a minimum annual fuel-utilization rating of 85; and (x) programmable thermostats.

D. INCENTIVE AMOUNTS. The tax deduction amount is 20% of the sales and use tax due.

E. INCENTIVE LIMITS. The maximum annual tax deduction amount is \$500.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

51.09 Virginia state property tax assessment for renewable energy manufacturing

A. 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).*

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

C. 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.

1. Renewable energy does not include energy derived from coal, oil, natural gas or nuclear power.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

51.10 Virginia state income tax credit for green job creation

A. GENERAL DESCRIPTION. Virginia provides an income tax credit in the amount of \$500 for each new green job created. *Va. Code Ann. §58.1-439.12:05; S.B. 623 (2010).*

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

1. Taxpayer partners or members of pass-through entities must be allocated the tax credit in proportion to their ownership or interest in the pass-through entity.

C. 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.

1. Qualifying green jobs must be certified by the VA Secretary of Commerce and Trade.

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

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

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

G. MISCELLANEOUS. Taxpayer will not be allowed a green job creation tax credit for any green job for which Taxpayer is allowed: (1) a major business facility job tax credit pursuant to Va. Code Ann. §58.1-439, or (2) a federal tax credit for investments in manufacturing facilities for clean energy technologies that would foster investment and job creation in clean energy manufacturing.

54. West Virginia State Tax Incentives for Renewable Energy and Energy Efficiency

54.01 West Virginia state business and operation tax abatement for wind energy generation

A. GENERAL DESCRIPTION. West Virginia provides a business and operation tax abatement in the amount 70% of the value on wind energy generation. *W. Va. Code §11-13-2o*.

B. ELIGIBLE TAXPAYERS. The tax abatement is available to Taxpayer owners of wind energy generation electricity production facilities.

C. QUALIFYING ACTIVITY. Taxpayer must generate, produce or sell electricity produced utilizing a turbine powered primarily by wind.

D. INCENTIVE AMOUNTS. The tax abatement amount is 70% of the tax due.

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

54.02 West Virginia state property tax exemption assessment for wind energy systems

A. GENERAL DESCRIPTION. West Virginia provides a property tax exemption assessment in the amount of 21% of the value of qualifying property of wind energy systems. *W. Va. Code §11-6A-5a*.

B. ELIGIBLE TAXPAYERS. The tax assessment is available to Taxpayer utilities that own qualifying property of wind energy systems.

C. QUALIFYING ACTIVITY. Taxpayer must own qualifying property of wind energy systems. A wind energy system is a power project designed, constructed or installed to convert wind into electrical energy. Qualifying property includes the wind turbine and tower and is limited to: the rotor, consisting of the blades and the supporting hub; the drive train, which includes the remaining rotating parts such as the shafts, gearbox, coupling, a mechanical brake and the generator;

the nacelle and main frame, including the wind turbine housing, bedplate and the yaw system; the turbine transformer; the machine controls; the tower; and the tower foundation.

D. INCENTIVE AMOUNTS. The tax assessment amount is 79% of the effective tax rate on most other types of newly constructed electricity-generating units.

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

54.03 West Virginia state sales tax exemption for energy-efficient products

A. GENERAL DESCRIPTION. West Virginia provides a sales tax exemption in the amount of 100% of tax on energy-efficient products. *W. Va. Code §11-15-9k(a)(1)(A)*; *W. Va. Code §11-15-9k(a)(2)(A)*; *WV Streamlined Sales and Use Tax Taxability Matrix, 09/24/2009*.

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer purchasers of Energy Star products.

C. QUALIFYING ACTIVITY. Taxpayer must purchasing Energy Star qualifying products for home or personal use, of \$5,000 or less. Energy Star qualifying products are products that meet the energy efficient guidelines set by the United States Environmental Protection Agency and the United States Department of Energy that are authorized to carry the Energy Star label.

1. Energy Star qualifying products does not include shipping or installation charges associated the appliance.

D. INCENTIVE AMOUNTS. The tax exemption amount is 100% of the 6% sales tax due.

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. The tax exemption period is September through November in 2009 and 2010.

G. MISCELLANEOUS.

54.04 West Virginia state personal income tax credit for residential solar energy installations

A. GENERAL DESCRIPTION. West Virginia provides an income tax credit in the amount of 30% of the cost of residential solar energy installations. *W. Va. Code §§11-13Z-1 et seq.; H.B. 2535 (2009).*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer individuals installing residential solar energy systems.

C. QUALIFYING ACTIVITY. Taxpayer must install residential solar energy installations. Residential solar energy installations include systems that use solar energy to generate electricity, heat or cool a residence, or provide hot water or solar process heat for use in the residence.

1. Qualifying systems installed to provide hot water must derive 50% or more of its energy to heat or cool from the sun.
2. Qualifying storage mediums do not include swimming pools, hot tubs or any other energy storage medium that has a function other than storage.

D. INCENTIVE AMOUNTS. The tax credit amount is 30% of the cost to purchase and install the residential solar energy installations.

E. INCENTIVE LIMITS. The maximum tax credit amount is \$2,000.

F. INCENTIVE TIMEFRAME. The tax credit expired July 1, 2013. Unused tax credit may be carried forward.

G. MISCELLANEOUS.

54.05 West Virginia state income tax credit for alternative fuel vehicles and refueling infrastructure

A. GENERAL DESCRIPTION. West Virginia provides an income tax credit in the amount ranging from \$7,500 - \$25,000 per alternative fuel vehicle and 50 - 62.5% of the cost of alternative

fuel refueling infrastructure. *W. Va. Code §11-6D-1 et seq.; S.B. 465 (2011); S.B. 185 (2013).*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer purchasing or converting to alternative fuel vehicles and construction or purchase and installation of alternative fuel refueling infrastructure.

1. Taxpayer may be any natural person, corporation, limited liability company or partnership.
2. When the taxpayer is a pass-through entity treated like a partnership for federal and state income tax purposes, the credit allowed under this article for the year shall flow through to the equity owners of the pass-through entity in the same manner that distributive share flows through to the equity owners and in accordance with any legislative rule the Tax Commissioner may propose.

C. QUALIFYING ACTIVITY. Taxpayer must purchase or convert to alternative fuel vehicles or construction or purchase and install alternative fuel refueling infrastructure. Alternative-fuel motor vehicle is a motor vehicle that as a new or retrofitted or converted fuel vehicle: (1) operates solely on one alternative fuel; (2) is capable of operating on one or more alternative fuels, singly or in combination; or (3) is capable of operating on an alternative fuel and is also capable of operating on gasoline or diesel fuel. Qualified alternative fuel vehicle refueling infrastructure is commercial property owned by the applicant for the tax credit and used for storing alternative fuels and for dispensing such alternative fuels into fuel tanks of motor vehicles, including but not limited to, compression equipment, storage tanks and dispensing units for alternative fuel at the point where the fuel is delivered. Alternative fuel includes: (1) compressed natural gas; (2) liquefied natural gas; and (3) liquefied petroleum gas.

D. INCENTIVE AMOUNTS. The tax credit amount is 35% of the purchase price of, or 50% of the cost of conversion to, an alternative fuel vehicle weighing less than 26,000 pounds, up to a maximum amount of \$7,500, and up to a maximum amount of \$25,000 for vehicles weighing more than 26,000 pounds. The tax credit amount is 50% of the cost of construction or purchase and installation of alternative fuel refueling infrastructure and 62.5% of the cost of

construction or purchase and installation of public use alternative fuel refueling infrastructure.

1. Qualified costs do not include costs associated with exploration, development or production activities necessary for severing natural resources from the soil or ground.

E. INCENTIVE LIMITS. The maximum tax credit amount for alternative fuel refueling infrastructure is \$200,000 and for public use alternative fuel refueling infrastructure \$250,000. Beginning January 1, 2016 the maximum tax credit amount for alternative fuel refueling infrastructure is \$150,000 and for public use alternative fuel refueling infrastructure \$187,500.

F. INCENTIVE TIMEFRAME. The tax credit for alternative fuel vehicles and alternative fuel refueling infrastructure expires December 31, 2021. Unused tax credit for alternative fuel vehicles may be carried forward for 4 years. Unused tax credit for alternative fuel infrastructure may be carried forward.

G. MISCELLANEOUS.

55. Wisconsin State Tax Incentives for Renewable Energy and Energy Efficiency

55.01 Wisconsin state property tax exemption for biogas, solar and wind-energy systems

A. GENERAL DESCRIPTION. Wisconsin provides a property tax exemption in the amount of 100% of the tax on biogas, solar and wind-energy systems. *Wis. Stat. §70.111(18); Wis. Adm. Code Tax 12.50.*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer owners of biogas, solar= or wind-energy system property.

C. QUALIFYING ACTIVITY. Taxpayer must own biogas, solar or wind-energy system property. A biogas energy system is equipment which directly converts biomass, as defined under section 45K (c) (3) of the Internal Revenue Code, into biogas or synthetic gas, equipment which generates electricity, heat, or compressed natural gas exclusively from biogas or synthetic gas, equipment which is used exclusively for the direct transfer or storage of biomass, biogas, or synthetic gas, and any structure used exclusively to shelter or operate such equipment. A solar-energy system is equipment which directly converts and then transfers or stores solar energy into usable forms of thermal or electrical energy. A wind-energy system is equipment which converts and then transfers or stores energy from the wind into usable forms of energy.

1. Qualifying energy systems must be certified by the WI Department of Commerce.
2. Qualifying solar-energy systems do not include equipment or components that would be present as part of a conventional energy system or a system that operates without mechanical means.
3. Qualifying biogas and wind-energy systems do not include equipment or components that would be present as part of a conventional energy system.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. Taxpayer must apply for the tax exemption by April 1 immediately following the assessment date for which the exemption is claimed.

G. MISCELLANEOUS.

55.02 Wisconsin state property tax financing option for renewable energy and energy-efficiency projects

A. GENERAL DESCRIPTION. Wisconsin provides a property tax financing option for municipalities for renewable energy and energy-efficiency projects. *Wis. Stat. §66.0627 (8); A.B. 255 (2009).*

B. ELIGIBLE TAXPAYERS. The tax financing is available to Taxpayer installing an energy efficiency improvement or a renewable resource application to Taxpayer's residential property.

C. QUALIFYING ACTIVITY. Taxpayer must install and finance an energy efficiency improvement or a renewable resource application to Taxpayer's residential property. Local governments may offer property tax financing for renewable energy and energy efficiency improvements proposed by property owners. An energy efficiency improvement is an improvement to a residential premises that reduces the usage of energy or increases the efficiency of energy usage.

D. INCENTIVE AMOUNTS.

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

55.03 Wisconsin state sales tax exemptions for renewable energy systems

A. GENERAL DESCRIPTION. Wisconsin provides a sales tax exemption in the amount of 100% of the tax on renewable energy systems. *Wis. Stat. §77.54(56); Wis. Stat. §77.54(30)(a)(1m); Wis. Stat. §196.378(1)(ar); A.B. 40 (2011).*

B. ELIGIBLE TAXPAYERS. The tax exemption is available to Taxpayer purchasers of biomass fuel

and wind, solar, and anaerobic digester equipment.

C. QUALIFYING ACTIVITY. Taxpayer must: (1) purchase biomass fuel or biofuel; (2) purchase wind, solar, or anaerobic digester equipment; or (3) sell, store, use, or otherwise consume electricity or energy produced by a qualifying system. Qualifying systems include biomass, wind and solar systems.

1. Biomass includes wood, energy crops, biological wastes, biomass residues, and landfill gas. Biomass residues includes harvesting of timber or the production of wood products, including slash, sawdust, shavings, edgings, slabs, leaves, wood chips, bark and wood pellets manufactured primarily from wood or primarily from wood residue.
2. Biofuel includes vegetable oil and animal fats that are converted into motor vehicle fuel.
3. Qualifying equipment must be capable of producing at least 200 watts of alternating current or 600 British thermal units per day.
4. Qualifying equipment does not include an uninterruptible power source that is designed primarily for computers.

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

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME.

G. MISCELLANEOUS.

55.04 Wisconsin state income tax credit for biodiesel fuel production

A. GENERAL DESCRIPTION. Wisconsin provides an income tax credit in the amount of \$0.10 per gallon of biodiesel fuel produced. *Wis. Stat. §71.28(4)(b); Wisconsin Dept. Rev. Tax Bulletin 162, 07/01/2009.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayer producers of biodiesel fuel.

1. Pass-through entities such as tax-option (S) corporations, partnerships, and

limited liability companies pass the tax credit along to their shareholders, partners or members, as the case may be, in proportion to their ownership interests

C. QUALIFYING ACTIVITY. Taxpayer must produce biodiesel fuel. Biodiesel fuel is a fuel that is comprised of monoalkyl esters of long chain fatty acids derived from vegetable oils or animal fats.

1. Taxpayers must produce at least 2.5 million gallons of biodiesel fuel per year.

D. INCENTIVE AMOUNTS. The tax credit amount is \$0.10 per gallon of biodiesel fuel produced.

E. INCENTIVE LIMITS. The maximum annual tax credit amount is \$1 million.

F. INCENTIVE TIMEFRAME. The tax credit expires December 31, 2014. Unused tax credit may be carried forward 15 years.

G. MISCELLANEOUS.

55.05 Wisconsin state income tax credit for ethanol and biodiesel fuel pump

A. GENERAL DESCRIPTION. Wisconsin provides an income tax credit in the amount 25% of the installation or retrofit costs of ethanol and biodiesel fuel pumps. *Wis. Stat. §71.07(5j); Wis. Stat. §71.28(5j)(b); S.B. 279 (2010).*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayers installing or retrofitting ethanol and biodiesel fuel pumps.

1. Pass-through entities such as tax-option (S) corporations, partnerships, and limited liability companies pass the tax credit along to their shareholders, partners or members, as the case may be, in proportion to their ownership interests

C. QUALIFYING ACTIVITY. Taxpayer must install or retrofit pumps capable of dispensing motor vehicle fuel marketed as gasoline and 85% or more ethanol, or motor vehicle fuel marketed as diesel fuel, and 20% biodiesel fuel or that mix fuels from separate storage tanks and allow the end user to

choose the percentage of gasoline replacement renewable fuel or diesel replacement renewable fuel in the motor vehicle fuel dispensed.

D. INCENTIVE AMOUNTS. The tax credit amount is 25% of the installation or retrofit costs of the ethanol and biodiesel fuel pumps.

E. INCENTIVE LIMITS. The maximum tax credit amount is \$5,000 per service station.

F. INCENTIVE TIMEFRAME. The tax credit expires December 31, 2017. Unused tax credit may be carried forward 15 years.

G. MISCELLANEOUS.

55.06 Wisconsin state income tax credit for vehicle and energy-efficiency research activities

A. GENERAL DESCRIPTION. Wisconsin provides an income tax credit in the amount of 10% of the increase in qualifying research expenses paid or incurred in the current taxable year over the base period research expenses. *Wis. Stat. §71.28; Wis. Stat. §71.47; Wis. Stat. §71.07(4k); Wisconsin Dept. Rev. Tax Publication No. 131, 02/01/2014.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayers paying or incurring qualifying research expenses.

1. Taxpayer may not be a pass-through entity, including partnerships, limited liability companies, and tax-option (S) corporations. Taxpayer may not be a partner, member or shareholder of a pass-through entity. Taxpayer may be a limited liability company or publicly traded partnership that is treated as a corporation under Wisconsin law.

C. QUALIFYING ACTIVITY. Taxpayer must pay or incur qualifying research activities. Qualifying research activities consist of research into the design of energy efficient lighting systems, building automation and control systems, fuel cell, electric and hybrid drives for vehicles, including designing vehicles powered by fuel cell, electric and hybrid drives and improving the production processes for vehicles and fuel cell, electric and hybrid drives.

D. INCENTIVE AMOUNTS. The tax credit amount is 10% of the increase in qualifying research expenses paid or incurred in the current taxable year over the base period research expenses. Qualifying research expenses are defined in IRC §41 as the sum of in-house research expenses and 65% of contract research expenses (75% for amounts paid to qualifying research consortia). The base amount is the product of Taxpayer's fixed-base percentage and the average annual gross receipts for the four tax years preceding the tax credit year.

1. Taxpayer may elect to calculate the research credit using the alternative computation method provided under IRC §41(c)(4).

E. INCENTIVE LIMITS.

F. INCENTIVE TIMEFRAME. The tax credit must be claimed within 4 years after the unextended due date of the return to which it relates. Unused tax credit may be carried forward 15 years.

G. MISCELLANEOUS.

55.07 Wisconsin state income tax credit for woody biomass equipment

A. GENERAL DESCRIPTION. Wisconsin provides an income tax credit in the amount of 10% the cost of equipment that is used primarily to harvest or process woody biomass that is used as fuel or as a component of fuel. *Wis. Stat. §71.07(3rm); Wis. Stat. §560.209; Regs. §§166.10 to .60.*

B. ELIGIBLE TAXPAYERS. The tax credit is available to Taxpayers paying or incurring qualifying biomass equipment.

1. Taxpayer must be certified by the WI Department of Commerce.
2. Taxpayer may not be a pass-through entity, including partnerships, limited liability companies, and tax-option (S) corporations. A partnership, limited liability company, or tax-option corporation may compute the amount of credit that each of its partners, members, or shareholders may claim and shall provide that information to each of them. Partners, members of limited liability

companies, and shareholders of tax-option corporations may claim the credit in proportion to their ownership interest.

C. QUALIFYING ACTIVITY. Taxpayer must place in service equipment that is used primarily to harvest or process woody biomass that is used as fuel or as a component of fuel. Woody biomass is trees and woody plants, including limbs, tops, needles, leaves, and other woody parts, grown in a forest or woodland or on agricultural land.

D. INCENTIVE AMOUNTS. The tax credit amount is 10% the cost of qualifying equipment.

E. INCENTIVE LIMITS. The aggregate maximum tax credit amount is \$100,000 per taxpayer and per project. The maximum statewide annual tax credit amount is \$900,000.

1. Taxpayers having no more than \$5 million in gross receipts must be allocated \$450,000 of the maximum statewide annual tax credit amount.

F. INCENTIVE TIMEFRAME. The tax credit expires December 31, 2015.

G. MISCELLANEOUS.



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