

State Incentives Specifically Targeting CHP and/or On-site Generation

May 12, 2006

**Grants**

State	Funding Name	Technologies	Fuels	Funding Available	Specific Requirements	Size Limits
Connecticut	OnSite Renewable Distributed Generation Program	All	Biogas, Biomass, Hydrogen, LFG	total funding: \$20.55 million; \$9 million for fuel cells; \$9 million for PV; max for any project \$2 million	Funding Limits: Solar: \$5/watt, 20 yr Fuel cells: \$4.70/watt, 10 yr Small wind: \$3.60/watt, 15 yr Small biomass: \$3.30/watt, 10 yr Landfill gas: \$3.20, 10 yr Hydro: TBD, 20 yr	at least 10 kW
Connecticut	Grants for Customer-Side DG	All	All	Emergency Generation: \$200/kW. Base Load DG: \$450/kW. Projects located in Southwest CT that begin operation prior to 4/30/2008 are eligible to receive an additional \$50/kW.	Emergency generators must participate in an ISO-NE response program. Base load generators must operate at 85% capacity during peak hours.	limit of 65 MW
California	CA Self-Generation Incentive Program (SGIP)	Combustion Turbine, Fuel Cell, MicroTurbine, Reciprocating Engine	All	Level 1, Solar : \$2.80/W Level 2, Renewable Non-Solar: wind turbines: \$1.50/W fuel cells: \$4.50/watt fuel MTs and small GTs: \$1.30/watt engines and large GTs: \$1.00/watt Level 3, non-renewable non-solar: fuel cells: \$2.50/watt fossil fuel MTs and small GTs: \$0.80/watt fossil fuel engines and large GTs: \$0.60/watt		Level 2 Min size of 30kW for wind turbines and fuel cells; Max 5 MW*; Level 3 System Size: max 5 MW* only the first 1.0 MW is rebated
New Jersey	Combined Heat and Power Rebate Program	All	All	Level 1: Fuel cells not using non-Class I renewable fuel. \$4/W up to 60% of cost. Level 2: MTs, Engines, GTs. \$1/W up to 30% of cost. Level 3: Heat Recovery or Other Mechanical Recovery. \$0.50/W up to 30% of cost.	average annual fuel efficiency of 60%, rebate available up to 1MW	None
New York	Installed Capacity Program (ICAP)	All	All	Load reduction payment: NY City \$12.35/kW or Westchester County \$1.44 for unforced capacity; Energy Payment is the greater of real time Locational-Based Marginal Price adjusted for losses or the amount specified on the customer's application, but no more than \$.50/kWh.	An electric customer who is capable of reducing at least 100 kW of electric load (with incremental reduction of 100kW) through on-site generation or curtailed load can participate in ICAP.	must be greater than 100 kW
New York	Emergency Demand Response Program (EDRP)	All	All	payment of \$.45 for each kilowatt-hour curtailed, or 90% of the price of energy in the real-time wholesale market, whichever is the larger amount, for events 4 hrs or longer.	capable of reducing at least 100 kW of load and has an interval meter, can participate in EDRP. Cannot participate in both EDRP and ICAP.	larger than 100 kW

**Standby Rates**

Connecticut	Connecticut DG Backup Rates	All	All	Electricity rates for customer-side DG units will be reduced. This will be done by eliminating backup rates and demand ratchets for DG projects.		None
California	CA Standby Rates	All	All	Exemption through 6/2011 for CHP-related generation between 5/2001 - 6/2004. Exemption through 6/2006 for non-CHP applications between 5/2001 - 9/2002. Exemption through 6/2011 for "ultra-clean" and low-emitting DG systems 5 MW and smaller installed between 1/2003 and 1/2005.		5MW or less

**Natural Gas Rates**

California	CA Natural Gas Rates	All	Natural Gas	Gas utilities are required to sell gas to qualified cogenerators at the same price they bill larger electric utilities	minimum efficiency 42.5%	None
Connecticut	CT- Natural Gas Rates	All	Natural Gas	Customers will be rebated an amount equivalent to the customer's retail delivery charge for transporting natural gas from the local gas company to the project		
New York	NY- Natural Gas Rates	All	Natural Gas	local gas distribution companies (LDCs) must apply favorable tariffs to gas-fired distributed generation (DG) units	rates frozen until end of 2007	None

**Tax Credits**

National	Credit for Fuel Cells and Microturbines - EPA Act Sec. 1336	Fuel Cell, MicroTurbine	All	Tax credit: Microturbine: 10% for 2006-2007, less than 2,000 kW and elec. gen. efficiency of 26%, not to exceed \$200/kW. Fuel Cell: credit 30% for 2006-2007, capacity at least 0.5kW, efficiency 30%, not to exceed \$500/0.5kW of capacity.		microturbine <2,000 kW, fuel cell >=0.5 kW
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## State Incentives Specifically Targeting CHP and/or On-site Generation

### Streamlined DG Interconnection

	Max System Size
California	None
Connecticut	65 MW
Delaware	1 MW
Hawaii	None
Massachusetts	None
Michigan	None
Minnesota	10 MW
North Carolina	100 kW
New Hampshire	25 kW
New Jersey	2 MW
New Mexico	10 kW
Ohio	None
New York	2 MW
Texas	10 MW
Wisconsin	15 MW

### Output Based Regulations

California	Small DG rule*
Connecticut	Allowance allocation/trading small DG rule*
Delaware	Allowance allocation/trading, small DG rule*
Indiana	Allowance allocation /set-asides
Maine	Small DG rule
Maryland	Allowance allocation/set-asides
Massachusetts	Allowance allocation/trading*, Small DG rule, multipollutant regulation, allowance allocation/set-asides
New Hampshire	multi-pollutant regulation
New Jersey	Allowance allocation/trading, allowance allocation/set-asides
New York	Small DG rule, allowance allocation/set-asides
Ohio	allowance allocation/set-asides
Texas	conventional Nox limits, small DG rule*

\* applies a CHP thermal credit

### Renewable Portfolio Standards that include CHP

	RPS Total Goal
Arizona*	15% by 2024
Connecticut	10% by 2010 (7% Tier 1)
Hawaii	20% by 2020
Maine	30% by 2000
Nevada**	20% by 2015
Pennsylvania	18% by 2020

\* proposed RPS would include CHP

\*\*Power generation from heat recovery only

### Net Metering (maximum capacity large enough to include small CHP)

	System Size Limit (kW) (Res/Com)
California	1,000
New Jersey	2,000
New York	10/400
Virginia	10/500

## General State Energy Incentives that would include CHP

State	Funding Name	Technologies	Fuels	Funding Available	Specific Requirements	Size Limits
Alabama	Agriculture Efficiency Program	All	All	\$400,000-\$500,000 but depends upon year	Funding available every other year (2005, 2007, etc.)	None
Connecticut	New Energy Technology Program	All	All	5 awards are available; provide \$10,000 each	Eligible applicants include any CT resident or any CT company with 30 or fewer employees.	None
Idaho	Renewable Energy Generation Benefit	All	All	not specified		None
Indiana	Alternative Power and Energy Grant Program	Boiler, other	Biomass, Municipal Solid Waste, Tire Derived Fuel	\$5,000 up to \$30,000	Businesses, non-profit institutions and units of local government (including public schools) are eligible. Up to 30% of project costs may be awarded.	None
Indiana	DG Grant Program	All	All	\$5,000 up to \$30,000	Projects must be 50% efficient. A project must provide baseload power of at least 20 kW for its located facility.	None
Kansas	State Energy Program Grants	All	All	total funding available is \$200,000, a project is limited to \$50,000		None
Minnesota	Minnesota Renewable Development Grants	All	All	not specified	Funding is available periodically but not necessarily on a yearly basis.	None
New Jersey	NJ Clean Energy Program, Renewable Project Grants	All	Biomass, Biogas, LFG	not specified	20% grant for eligible projects that are over 1 MW or supply the PJM Power Pool	borrowers must make 10% equity contribution
Wisconsin	Wisconsin Focus on Energy Implementation Grant	Boiler	Biomass	(Grant Maximum) Bioenergy electric: 35% (\$45,000) Bioenergy thermal: 25% (\$35,000) Both therm and elect: 30% (\$80,000)	The project must replace/save natural gas, LP gas (propane) or electricity, and result in: 1) minimum generation capacity of 20 kW or 2) minimum annual energy production of 5,000 therms.	None
DC, DE, MD, PA, VA, WV	EPA Small Business Innovation Research Program	Other	Biogas, Biomass, Municipal Solid Waste, Other	Phase I involves R&D, maximum is \$70,000, 6 months. Phase II funding available to small businesses done with Phase I. Maximum award for Phase II is \$225,000, typically good for 2 years.	Solicitations for Phase I are due in March of every year.	None

## General State Energy Incentives that would include CHP

### Loans

State	Funding Name	Technologies	Fuels	Funding Available	Specific Requirements	Size Limits
Tennessee	Tennessee Small Business Energy Loan Program	All	All	\$100,000 available at 3% for 7 years	Businesses less than 300 employees and \$3.5 million in annual gross sales or receipts are eligible	None
Alaska	Alaska Power Project Loan Fund	All	All	amount based on available funds	loans are for development or upgrade of small-scale power production facilities, conservation facilities, and bulk fuel storage facilities	None
California	CA Loans for Energy Efficiency Projects	All	All	Total amount available: \$40 million Max amount per project: \$3 million Fixed interest rate: 4.5% Timeframe for repayment: 15 years	Eligible entities are cities, counties, special districts, and public schools, public hospitals, and other public-care facilities. Nonprofits are ineligible.	None
Connecticut	Operational Demonstration Program	All	# 2 Fuel Oil, # 6 Fuel Oil, Biogas, Biomass, Coal, Hydrogen, LFG	Total funding: \$4 million Max Project Amount: \$750,000	requires a front-loaded 25% cash cost-share for any funding provided	Greater than 1 kW
Connecticut	CT Long-term Loans for Customer-side DG	All	All	Total funding: \$150 million	Units must begin operation after 1/1/2006	50kW or greater and not more than 65 MW
Idaho	Idaho Low Interest Energy Loans	All	All	Residential: \$1,000 to \$15,000 Commercial: \$1,000 to \$100,000 Agricultural: Up to \$100,000 Renew. Loans: \$1,000 to \$100,000 Schools, Hospitals, Healthcare Facilities: up to \$100,000	4% Interest 5 Year Loan Repayment	None
Oregon	OR Small Scale Energy Loan Program (SELP)	All	All	program funded by revolving funds; there is no limit but the largest was \$16.8 million	terms vary, normally they match the term of the bonds that funded the loans	None
Massachusetts	Sustainable Energy Development Initiative	All	All	Total funding: \$500,000 Project Amount: \$50,000 to \$500,000	Loan outline: 5-yr loan, 8% Equity: automatically converts at a 25% discount during a qualified financing round Terms: 1 loan per company within any 12-months	None
New Mexico	NM Public Facility Energy Efficiency Loan	All	All	Entities can enter Guaranteed Utility Savings Agreements (energy performance contracts) for up to a 10-year term; agreements finance EE/RE projects		None
Mississippi	Mississippi Energy Investment Program	All	All	Interest rate is 3% below prime, max loan term of 7 years. Loans range from \$15,000 to \$300,000. Program supported by revolving loan fund of \$7 million.	availability of funds wavers based upon received payments from prior borrowers	None
South Carolina	South Carolina ConserFund Loan Program	All	All	Interest rate: Prime minus 1%. Loans: 100% of project costs. Maximum loan: 25,000 to \$500,000 per fiscal year. Financing agreements: max 10 yrs.	Deferred payments are available based on the next unbudgeted fiscal year after the loan commitment date, not to exceed 18 months.	None
New Mexico	NM Industrial Revenue Bond (IRB) Financing	All	All	Any county or municipality may issue Industrial Revenue Bonds (IRBs) for the purpose of financing electric generating plants including CHP		None
North Carolina	NC Energy Improvement Loan Program	All	All	Maximum Loan: \$500,000, is a revolving loan Interest rate currently 3.0% with a 1.0% rate available for some projects.	conservation measure must be able to recover capital costs within the loan's maximum term of 10 years through energy cost savings	None

### Grants and Loans

State	Funding Name	Technologies	Fuels	Funding Available	Specific Requirements	Size Limits
Illinois	IL Clean Energy Community Foundation Grants	All	All	grant and loan amounts vary	financing is provided to nonprofit organizations and state/local govt agencies serving Illinois Residents	None
Ohio	OH Distributed Energy Grant and Loan Program	All	Biogas, Hydrogen, Natural Gas, Waste Heat Recovery	Max Grant Share: 25% of proj cost Max Grant Award: \$100,000 Max Linked Deposit: Up to \$1,000,000 Max Direct Loan: Up to \$500,000 Owners Cash Equity Req: 10% of Total Project Cost	All project components must be new and not all projects will be funded	Systems up to 25 MW are eligible

## Tax Credits

State	Funding Name	Technologies	Fuels	Funding Available	Specific Requirements	Size Limits
National	Credit for Fuel Cells and Microturbines - Sec. 1336	Fuel Cell, MicroTurbine	All	Tax credit: Microturbine: 10% for 2006-2007, less than 2,000 kW and elec. gen. efficiency of 26%, not to exceed \$200/kW. Fuel Cell: credit 30% for 2006-2007, capacity at least 0.5kW, efficiency 30%, not to exceed \$500/0.5kW of capacity.		microturbine <2,000 kW, fuel cell >=0.5 kW
National	Qualifying Gasification Project Credit - Sec 48B	All	All	Total funding: \$350 million for 2006-2011 Credit: 20% per yr for property used for a qualifying gasification project	Project eligible if it employs gasification technology for at least 90% of the fuel required	None
National	Renewable Electricity Production Credit, Sec-1301	All	Biogas, Biomass, Coal, Municipal Solid Waste	Credit: 1.9 cents/kWh for closed-loop biomass; 0.9 cents/kWh for open-loop biomass, landfill gas, municipal solid waste, adjusted for inflation.	10 years, 2006-2016	
Idaho	Idaho Renewable Energy Equipment Sales Tax Refund	All	All	The owner must pay sales/use taxes and then apply for a refund.	A claim must be made within three years	Systems must be at least 25 kW there is no upper size limit
National	Clean Renewable Energy Bond Program	All	All	Total available: \$800 million in Clean Energy bonds, to be used as an income tax credit	government entities including public power are limited to \$500 million	None
Michigan	Alternative Energy Property Tax Exemption	All	All	businesses can claim a credit for their qualified payroll amount, they may also claim a nonrefundable credit for the tax year	businesses must be certified by the NextEnergy Authority and located in a NextEnergy Zone; the credit lasts from 2003 until the end of 2022	None
Michigan	Alternative Energy Property Tax Exemption	All	All	"Alternative energy personal property" certified by NextEnergy Authority and located in the NextEnergy Zone is exempt from personal property taxes.	the program lasts from 2003 until the end of 2012	None
Ohio	Conversion Facilities Property Tax Exemption	All	All	provides tax exemptions for qualified facilities for energy conversion, solid waste energy conversion or thermal efficiency improvements		None
Oregon	Oregon Business Energy Tax Credit	All	All	The 35% tax credit is taken over five years: 10% the 1st and 2nd years and 5% thereafter, unused credit can be used for up to 8 yrs. Project costs of \$20,000 or less can take the credit in 1yr	Under the pass-through option, a project owner may transfer a tax credit to a pass-through partner in return for a lump-sum cash payment.	None
Connecticut	Connecticut Property Tax Exemption	All	All	CHP system must be installed between July 1, 1981, and October 1, 2006	Tax exemption duration: 15 years	None

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