

Overview

Clean Technology and Renewable Energy Incentives in Selected States

August 2010



Table of Contents

Page

Overview.....	2
I) Northeast States	
A. Connecticut	3
B. Maine	5
C. Massachusetts.....	10
D. New Hampshire	14
E. New Jersey	16
F. New York	20
G. Rhode Island	25
H. Vermont.....	27
II) Mid-Atlantic States	
A. Maryland	30
B. Virginia.....	33
C. Washington, D.C.	35
D. West Virginia	36
III) Far West States	
A. California	38
Contact Information for Bingham's Clean Technology Practice	46

An Overview of CleanTech Incentives in Selected States

Many states have created various types of incentive programs available to CleanTech companies in order to both promote business in their states and foster the development of CleanTech practices. The nature and scope of these incentive programs vary considerably from state to state. This reference summarizes the incentive programs available as of July 30, 2010 in the New England States and New York, California, Maryland, Washington, D.C., Virginia, West Virginia and New Jersey.¹ It also lists helpful resources providing comprehensive information and summaries of state, local, and selective Federal incentives that promote renewable energy, including summaries provided by the United States Environmental Protection Agency (the “EPA”).²

Database of State Incentives for Renewable Energy (“DSIRE”)³

(www.dsireusa.org)

This is a comprehensive source of information on state, local, utility, and selected federal incentives that promote renewable energy. This site is maintained by the Interstate Renewable Energy Council, funded by the U.S. Department of Energy and managed by the North Carolina Solar Center.

EPA State-by-State Summaries:

These websites, maintained by the EPA, provide an overview of state level incentives “that can be leveraged for clean and renewable energy and development of contaminated land.” These sites are updated less frequently than the DSIRE site—most were last updated in November 2008—but most of the programs listed are still operating.

http://www.epa.gov/renewableenergyland/incentives/ct_incentives.pdf (Connecticut)
http://www.epa.gov/renewableenergyland/incentives/me_incentives.pdf (Maine)
http://www.epa.gov/renewableenergyland/incentives/ma_incentives.pdf (Massachusetts)
http://www.epa.gov/renewableenergyland/incentives/nh_incentives.pdf (New Hampshire)
http://www.epa.gov/renewableenergyland/incentives/nj_incentives.pdf (New Jersey)
http://www.epa.gov/renewableenergyland/incentives/ny_incentives.pdf (New York)
http://www.epa.gov/renewableenergyland/incentives/ri_incentives.pdf (Rhode Island)
http://www.epa.gov/renewableenergyland/incentives/vt_incentives.pdf (Vermont)
http://www.epa.gov/renewableenergyland/incentives/md_incentives.pdf (Maryland)
http://www.epa.gov/renewableenergyland/incentives/va_incentives.pdf (Virginia)
http://www.epa.gov/renewableenergyland/incentives/wv_incentives.pdf (West Virginia)
http://www.epa.gov/renewableenergyland/incentives/ca_incentives.pdf (California)

¹ These states correspond generally to the footprint of Bingham’s offices in the United States.

² There are also a variety of incentives available in each state for individuals, residential complexes, and businesses to upgrade their homes or buildings or to incorporate clean technology practices and products, to become more energy efficient. Except as otherwise noted, we have not included these incentives in this reference.

³ Existing DSIRE program summaries are updated and program summaries are added as the project staff become aware of new information. Incentives and policies that are created or modified through the legislative process, such as tax incentives, are reviewed and updated as necessary once per year. Other types of incentives and policies that are typically created or modified by other means, such as rebate programs and grant programs, are reviewed several times each year.

I) Northeast States

A. Connecticut⁴

1. Connecticut Clean Energy Fund (“CCEF”) (CONN. GEN. STAT. § 16-245n (2007))

In 1998, the Connecticut General Assembly created the Connecticut Clean Energy Fund (“CCEF”), a public benefits fund which Connecticut Innovations (a quasi-public organization) administers. The CCEF promotes, develops, and invests in clean and sustainable energy sources. It is funded by a surcharge on electric ratepayers’ utility bills. These funds go toward providing a number of incentives in Connecticut, including:

a. CCEF Operational Demonstration Program⁵

The CCEF created the Operational Demonstration Program in August 2005 to enable early-stage companies to demonstrate the effectiveness of their own near-commercial, clean-energy technologies. This program supports proposals for demonstration projects that have a high likelihood of developing into a commercial product within a reasonable period of time—generally, five years for fuel cells and three years for most other clean-energy technologies (wind, solar, wave power, biomass, landfill gas resources, and other resources).⁶

Funding is provided in the form of an unsecured loan, with repayment contingent upon the product achieving “commercial success.” The CCEF also collects an additional percentage of product revenues for products that exceed a higher revenue threshold. The fund requires a front-loaded 25% cash cost-share for any funding provided; in-kind contributions are accepted under certain conditions. The maximum amount of funding for each individual award is \$750,000. Requests for funding above \$500,000 must be justified, however, by the unique nature of the project, the project’s large scale, or compelling potential benefits for Connecticut electric ratepayers.

b. CCEF Affordable Housing Initiative Solar PV Rebate Program⁷

Through the CCEF Affordable Housing Initiative, developers who install solar photovoltaic (“PV”) systems at affordable housing projects may apply for a grant to defray a portion of the upfront installation costs.

c. CCEF Project 150 Initiative⁸

This initiative helps electric distribution companies (“EDCs”) finance renewable energy projects through long-term Electricity Purchase Agreements (“EPAs”). EDCs enter into

⁴ <http://www.ctcleanenergy.com/>

⁵ <http://www.ctcleanenergy.com/default.aspx?tabid=98>

⁶ Depending on the nature of the power deliveries made from a particular project funded under this program, state and/or Federal regulatory authorizations for project interconnection, power sales, and business organization might be required.

⁷ <http://www.ctcleanenergy.com/default.aspx?tabid=101>

⁸ <http://www.ctcleanenergy.com/YourBusinessorInstitution/Project150/tabid/97/Default.aspx>

ten to twenty year EPAs with generators of Class I renewable energy.⁹ Pricing under these EPAs will include a premium of up to 5.5¢/kWh. In addition, the CCEF awards at least \$50,000 to each project selected for an EPA.

d. CCEF Community Innovations Grant Program

The Community Innovations Grants Program, originally a pilot program in June 2006, provides funding for communities to increase voluntary support for clean energy and to build model sustainable communities. Up to 50 municipalities are eligible to receive a micro-grant of \$4,000, and up to 45 municipalities are eligible to receive a micro-grant of \$2,000. At least 10 “at-large” recipients may receive a micro-grant of up to \$1,000. Recipient municipalities must commit to the state’s “20% by 2010 Campaign” and the EPA Community Energy Challenge, and may not re-apply.

Applicants for individual micro-grants may apply to the local energy task force for funds ranging from \$250 to \$2,000, to support a public-awareness project or education project addressing the benefits and availability of clean energy.

e. Other CCEF Programs

CCEF also sponsors a number of other programs, including:

- CCEF CT Solar Lease Program
- CCEF On-Site Renewable DG Program
- CCEF Geothermal Rebate Program
- CCEF Solar PV Rebate Program
- CCEF Solar Thermal Incentive Program

2. Connecticut Office of Policy and Management—New Energy Technology Program¹⁰

Grants are available to applicants who submit promising pre-commercial technologies that conserve energy or facilitate the use of renewable energy. Individual awards up to \$10,000 are awarded to as many as five “small firms”—a firm that employs 30 or fewer people—each year. Previous award recipients have used grant funding for product development, prototype testing, patent application, business plan development, payroll and product marketing, and promotion at trade shows.

In addition to providing grant funding, the Connecticut Office of Policy and Management offers guidance to recipients to find additional technical and financial assistance.

3. The United Illuminating Company Energy Conscious Blueprint Grant Program¹¹

The United Illuminating Company Energy Conscious Blueprint Program provides design grants and implementation grants to assist designers, project owners and architects of commercial or industrial buildings with the additional cost of modeling, analysis, actual design, and implementation of energy efficient buildings. The maximum grant available is

⁹ Class I generators may be subject to state and/or Federal regulation as to project interconnection, power sales and business organization, depending on project size, fuel source and certain related operational matters.

¹⁰ <http://www.ct.gov/opm/cwp/view.asp?a=2994&q=383312>

¹¹ <http://www.uinet.com/uinet/connect/UINet/Top+Navigator/Your+Business/UI+Products+%26+Services/Energy+Conscious+Blueprint/>

\$750,000 per Customer's Federal Tax ID number per year, or \$300,000 per metered site or account per year.

The Program also offers rebates for new construction, major renovation, and equipment replacement to increase the electric energy efficiency of non-residential new construction and major renovation projects. The rebates vary and are customized to the individual project.

4. Property Tax Exemption for Class I Renewable Energy Systems and Hydropower Facilities¹²

This program provides a 100% property tax exemption for Class I renewable energy systems and hydropower facilities. Class I renewable energy is (1) energy 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 (with certain restrictions) or a sustainable biomass facility (with certain restrictions), or (2) any electrical generation, including distributed generation, generated from a Class I renewable energy source.

5. Sales Tax Exemption for Solar and Geothermal Systems

Connecticut provides a 100% sales tax exemption for solar and geothermal heat pumps, including solar electricity generating systems.

B. Maine ^{13 14}

1. Voluntary Renewable Resources Grants¹⁵

Provides funding (up to \$50,000) for small-scale demonstration projects designed to educate communities on the value and cost-effectiveness of renewable energy and clean electricity.¹⁶ The financing available through this fund is dependent on voluntary contributions by electric customers and revenues from the renewable portfolio standard alternative compliance payment. Maine-based non-profit organizations, electric cooperatives, quasi-municipal corporations and districts, and community action programs are all eligible for funding.

2. Streamlined Permit Process for Ocean Energy Technologies

On June 4, 2004, Governor John E. Baldacci signed LD 1465, An Act To Facilitate Testing and Demonstration of Renewable Ocean Energy Technology (L.D. 1465), which establishes a

¹² http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=CT07F&re=1&ee=1

¹³ <http://www.maine.gov/governor/baldacci/policy/energy.shtml>, <http://www.maine.gov/spo/programs/energy.htm>; <http://www.energymaine.com>

¹⁴ Maine has incentives for general business development which can be used by CleanTech companies. Since there are few incentives in Maine targeted directly to CleanTech companies, we have included general business incentives that may be useful for CleanTech companies.

¹⁵ http://www.energymaine.com/renewable_programs_voluntary.htm

¹⁶ The projects we anticipate receiving incentives under this program could potentially be eligible for a range of Federal and state exemptions from energy producer regulations.

streamlined permit process for companies that want to test promising new renewable ocean energy technologies in appropriate sites in the Gulf of Maine.¹⁷

3. Renewable Resource Portfolio

The Maine PUC adopted a Renewable Resource Portfolio Requirement rule in 1999. The rule requires electric providers to supply at least 30% of their total retail electric sales in Maine with electricity from eligible renewable resources. Electric providers that fail to comply with the 30% renewable requirement are subject to penalties including license revocation, an optional payment into a renewable resource research and development fund, or other monetary penalties.

4. Solar Easements

(ME. REV. STAT. ANN. tit. 33, §1401 (1981))

Maine allows for the creation of easements to ensure access to direct sunlight.

5. Maine Technology Institute (“MTI”)¹⁸

MTI is a state-funded nonprofit corporation that offers early-stage capital and commercialization assistance for the research and development of innovative technology-based projects that create new products, processes and services, generating high-quality jobs across Maine. MTI has six projects relevant to CleanTech companies:

a. Seed Grant Program

Grants between \$1,000 and \$12,500 are offered to Maine companies and entrepreneurs six times a year to support early-stage research and development activities for new products and services that lead to market commercialization. Activities include market research, intellectual property filing, feasibility studies, and prototype development. Seed Grants require at least a 1:1 match from the applicant.

All projects must be in one of the following sectors: advanced technologies for forestry and agriculture, aquaculture and marine technology, biotechnology, composite materials technology, environmental technology, information technology, or precision manufacturing technology.

b. Development Awards

Development Awards are offered three times a year and fund up to \$100,000 (for technology transfer R&D) or \$50,000 to \$500,000 (for corporate, comprehensive later-stage R&D) per application for research and development of new and/or enhanced products, processes, or services leading to commercialization. Development awards require at least a 1:1 match from the applicant, and repayment of the reward is required when the product, process, or service developed is successfully commercialized.

All projects must fall under one of Maine’s seven targeted technology sectors: advanced technologies for forestry and agriculture, aquaculture and marine technology, biotechnology, composite materials technology, environmental

¹⁷ Federal and state agencies have environmental and economic regulatory jurisdiction over hydrokinetic projects of this nature.

¹⁸ http://www.mainetechnology.org/content/282/Grants_Awards/

technology, information technology, or precision manufacturing technology. Activities may include those funded by the Seed Grant Program. Other eligible projects include prototype development and testing, patent applications, small-scale manufacturing and scale up for manufacturing with limited production.

c. Accelerated Commercialization Fund (“ACF”)

MTI’s ACF Program helps eligible Development Award recipients bridge the financing gap between research and development and sales, moving them toward the market by providing capital to match other investor’s capital. The MTI investment piggybacks on other investor’s terms, generally in the form of equity, and either converts existing MTI debt or provides additional capital to help advance the company’s new products toward the market.

d. SBIR/STTR Phase 0 Proposal Assistance Program

This program helps small companies identify business opportunities within a \$2 billion federal market for research and development. MTI offers grants of up to \$5,000 per proposal to support competitive federal Small Business Innovation Research and Small Business Technology Transfer (“SBIR/STTR”) proposal submissions from Maine applicants. Funds can be used for direct costs associated with preparing an SBIR/STTR proposal like market research, consultant services, proposal preparation and review. These grants are awarded on a rolling basis and require at least a 1:1 match from the applicant.

MTI also provides guidance at no cost to Maine technology companies to help them prepare competitive proposals.

e. SBIR/STTR Pre-Phase II Matching Grant

MTI offers grants of up to \$10,000 to support Maine-based small businesses that have received a Phase I award from one of the eleven federal agencies which participate in the federally mandated program.

Phase I applicants are encouraged to obtain a letter of support and notice of commitment from MTI to include with their Phase I application.

f. Cluster Initiative Program

MTI launched the Cluster Initiative Program in 2008, replacing the Cluster Enhancement Awards Program and expanding the total amount of awards to over \$2 million per year, and the maximum award limit from \$200,000 to \$500,000. The program aims to boost the strength and scale of Maine’s high-potential technology intensive clusters.

Awards of up to \$50,000 are offered on a rolling basis for planning or feasibility studies. Awards of up to \$500,000 support Maine’s technology sectors and businesses by improving the effectiveness of their infrastructure, as well as resources and connections among firms, service providers, research laboratories and educational institutions. There are two levels of applications, both of which require matching funds.

The awards focus on collaborative efforts to spread knowledge and skills, build connections among businesses, connect them to research and service partners, and address common opportunities and challenges, leading to more vibrant economic growth and innovation in Maine’s high-potential technology clusters.

g. Maine Technology Asset Fund

The Maine Technology Asset Fund is a two-year, competitive award program funded by a \$50 million bond approved by Maine voters in November 2007. The awards must be used to fund capital and related expenditures supporting research, development, and commercialization projects that will lead to significant economic benefits for Maine. The expenses may include facilities construction and renovation, machinery and equipment (including computers, software and licenses required for their use, as well as related technician training for operation of equipment and machinery purchased), and land purchase. This may also include expenses directly associated with the acquisition and installation of such assets. The awards may not be used to fund ordinary annual operating expenses.

In 2008 and 2009, the MTI Board awarded approximately \$46 million to fund 26 projects in two competitive application rounds. The third round will award approximately \$4 million in unused funds from the second round, as well as allow MTI to award an additional \$3 million that may become available from future bond referenda.

6. Sales and Use Tax Refund for Qualified Community Wind Generators

(ME. REV. STAT. ANN. tit. 36, § 2017 (2005))

(ME. REV. STAT. ANN. tit. 35, § 3402 (2007))

The Maine Legislature enacted S.B. 477 (L.D. 1379) in May 2006 as a revision to the Maine Wind Energy Act. This legislation encourages the development of community wind generation projects (those projects having nameplate capacity of 10 megawatts (“MW”) or less). Qualified community wind power generation projects get a reimbursement of taxes paid with regard to the sale or use of tangible personal property that has been physically incorporated into real property. The property has to be used directly and primarily for electricity generation by the community wind generator.

The community wind generator must be certified by the PUC and must fill out an Application Form with Maine Revenue Services. The claim for a tax refund must be filed by the contractor within three years of the personal property being physically incorporated into real property. Community wind generators may apply for the refund if the contractor releases their claim to the refund.¹⁹

7. Maine Public Utilities Commission (“PUC”) Solar and Wind Energy Rebate Program

This program provides rebates for the installation of solar photovoltaic (“PV”), solar hot water, and solar air systems for Maine residents. Rebate incentive amounts for FY2008 included a commercial incentive: the lesser of 35% of the system costs, or \$10,500. The two-

¹⁹ The projects we anticipate receiving incentives under this program would likely be eligible for a range of Federal and state exemptions from energy producer regulations.

year program extension provides additional funding for PV installations from January 1, 2009 through December 31, 2010.

Due to the popularity of the program, the state government enacted legislation in April 2008, extending rebates to grid-tied wind energy systems installed after January 1, 2009. The PUC is currently working to establish new rebate levels.

8. Community-Based Renewable Energy Production Incentive Pilot Program

In June 2009, Maine established the Community-Based Renewable Energy Pilot Program, whose mission is to encourage the development of locally owned, in-state renewable energy resources. In February 2010, the PUC finalized the rules, mandating that the programs allow up to 50 MW of generating capacity. Of the 50 MW cap, 10 MW must be reserved specifically for small program participants (those with a generating capacity of less than 100 kW), or for participants located in a service territory of a cooperative transmission and distribution utility. Individual participants may not exceed 10 MW.

To be eligible for the incentives, a generating facility must be 51% locally owned, use renewable energy resources (solar, wind, hydro, certain biomass, fuel cells, and tidal), be no larger than 10 MW in generating capacity, and be located in Maine. Community-based renewable energy projects 100 kW or greater must provide documentation of support from the municipality or tribe in which the project will be located. All projects must be grid-connected and put into service after September 1, 2009.

The maximum incentive size is \$0.10/kWh, or the cost of the project, whichever is lower. Program participants have a choice between two incentives: long-term contract and renewable energy credit multiplier.

9. Pine Tree Development Zones (“PTDZ”)²⁰

The Pine Tree Development Zone Program offers eligible businesses the chance to greatly reduce or virtually eliminate state taxes for up to ten years. The goal is to create quality jobs in targeted industries and in targeted geographic areas with high unemployment and low wages. Currently, the zones offer 30,000 acres in over 100 communities. The targeted industries are: manufacturing, financial services, biotechnology, aquaculture and marine technology, composite materials technology, environmental technology, information technology, and advanced technologies for forestry and agriculture.

The Program works closely with expanding businesses, start-up businesses, and businesses relocating to Maine who employ anywhere from one to hundreds of people. Depending on the level of qualified business activity conducted in a PTDZ, starting with the statutory requirement for hiring a minimum of one net new qualified employee, qualified businesses may reduce their tax burdens through exemptions, reimbursements, and credits.

10. Property-Assessed Clean Energy (“PACE”)

Property-Assessed Clean Energy (“PACE”) financing allows property owners to borrow money to pay for energy improvements. The amount borrowed is typically repaid via a special assessment on the property over a period of years. In April 2010, Maine signed PACE

²⁰ http://192.220.60.172/why_maine/pine_tree_zones.asp

legislation into law and authorized certain local governments to establish PACE programs, but not all local governments in Maine choose to offer PACE financing.

Efficiency Maine Trust (established by legislation LD 1485 in 2009) promulgates laws, rules, and standards for Maine’s PACE programs. Municipalities which choose to pass PACE ordinances and develop PACE programs must comply with these laws, rules, and standards.

In April 2010, the Retrofit Ramp-Up²¹ program selected Maine to receive \$30 million to help support the implementation of its PACE programs statewide.

C. Massachusetts²²

1. Massachusetts Technology Collaborative Renewable Energy Trust (“MTCRET”)²³

The Massachusetts Technology Collaborative (the “MTC”) is the state’s development agency for renewable energy and the innovation economy, and is responsible for one-quarter of all jobs in the state. MTC administers the John Adams Innovation Institute and the Renewable Energy Trust and works to stimulate economic activity in communities throughout the Commonwealth.

The Renewable Energy Trust’s Industry Investment and Development (“I&D”) Program sponsors a number of programs relevant to CleanTech companies.

2. Massachusetts Clean Energy Center (“Mass CEC”)—Investments in the Advancement of Technology²⁴

MassCEC makes venture capital equity investments in promising clean energy companies that are developing and commercializing technologies that contribute to the advancement of clean energy. MassCEC offers seed venture investments in the form of suitable equity instruments in amounts up to \$500,000.

3. Business Expansion Initiative (“BEI”)²⁵

The BEI supports the development and expansion of the production capacity of renewable energy technology firms in Massachusetts. The BEI provides secured debt capital to expansion-stage companies for new renewable energy product design and manufacturing financing. BEI loans may only be made to companies located within Massachusetts.

²¹ The Department of Energy’s Energy Conservation Block Grant program funded the Retrofit Ramp-Up program at a level of \$390 million through competitive grants. The American Recovery and Reinvestment Act (“ARRA”) of 2009 established the money allocation structure.

²² <http://www.mass.gov/?pageID=eoeesubtopic&L=4&Lo=Home&L1=Energy%2C+Utilities+%26+Clean+Technologies&L2=Renewable+Energy&L3=Renewable+Energy+Funding+and+Incentives&sid=Eoeea>

²³ <http://www.masstech.org/>

²⁴ <http://www.masstech.org/renewableenergy/BEI/index.html> (this page has been archived and has moved to <http://www.masscec.com>); <http://www.masscec.com/index.cfm/page/Investments-in-The-Advancement-of-Technology/cdid/11527/pid/11174>

²⁵ <http://www.masstech.org/renewableenergy/BEI/index.html>. This page has been archived. In accordance with the Massachusetts Green Jobs Act of 2008, Trust services for clean energy business development are currently being transitioned to the Massachusetts Clean Energy Center (“MassCEC”). More information regarding the transition is available on the MassCEC website, at <http://www.masscec.com>.

Award Amount: \$500,000 to \$3 million for capital expenses.

Funding Instrument: Senior secured loan, with required participation of a co-lender.

Interest Rate: Based on the co-lender rate, with allowable discounts on the MTC portion.

Eligibility: The company must be increasing its existing workforce by at least 10%, and output capacity by at least 10%; must currently, or intend to, manufacture a product in one of the following technologies: solar photovoltaic or solar thermal electric energy, wind electricity, ocean thermal, wave or tidal energy, biomass, hydropower, fuel cells, or other equipment that is important to enabling the commercialization of renewable energy technologies; and must establish its need for the financing in one of several specified ways.

4. Sustainable Energy Economic Development (“SEED”) Initiative²⁶

This funding program is primarily intended for early-stage renewable energy companies. SEED funds bridge a gap in a company’s capital-raising lifecycle, providing the company with time and resources to advance to a point at which it would be a good candidate for private investment. SEED funding may also be offered to later-stage companies for improvements to renewable energy technologies.

Award Amount: Up to \$500,000 per company per 12-month period.

Use of Proceeds: Working capital for product development and commercialization.

Funding Instrument: Suitable equity instrument.

5. MassCEC—Company Catalyst Program²⁷

The MassCEC Catalyst Program Awards are designed to support the demonstration of the commercial viability of Clean Energy technologies. Awards may be used to: (1) develop a prototype, (2) gather initial data to show proof of concept, or (3) obtain data that illustrates how the technology compares to existing technologies and shows the competitive advantages. The aim of the funding is to develop technology to a point where its features can be articulated so that additional commercialization funding can be obtained. The maximum award amount is \$40,000.

6. Massachusetts Green Energy Fund (“MGEF”) ²⁸

The MGEF is a privately-managed venture capital fund, created with a \$15 million lead investment from the Massachusetts Technology Collaborative Renewable Energy Trust. The fund is a force for new company creation and growth in Massachusetts and seeks to attract traditional venture capital players into the renewable energy space. It invests equity venture capital in Massachusetts-based renewable energy companies, which typically would be expected to produce power for wholesale sale (re-sale) to utilities and power marketing businesses.

The Fund strongly prefers to make funding decisions through formal solicitation processes and has and will continue to solicit proposals through public advertisement. Unsolicited proposals are expected to provide extraordinary and unique benefits.

²⁶ <http://www.masstech.org/seed/index.asp> (this page has been archived and has moved to <http://www.masscec.com>); <http://www.masscec.com/index.cfm/page/Investments-in-The-Advancement-of-Technology/cdid/11527/pid/11174>

²⁷ <http://www.masscec.com/index.cfm/page/Company-Catalyst/cdid/11531/pid/11174>

²⁸ <http://www.masstech.org/renewableenergy/mgef.htm>, www.massgreenenergy.com

7. **Unsolicited Proposals**²⁹

The II&D Program accepts unsolicited proposals for financial assistance for unique projects, ideas, methods or approaches that don't fit into the existing II&D initiatives. Unsolicited proposals are expected to provide extraordinary and unique benefits.

8. **Programs for Energy Generation Project Developers**³⁰

a. Small Hydropower Initiative

This initiative provides support for the upgrade, rehabilitation, development, or redevelopment of ecologically appropriate hydropower projects³¹ through a choice of grants, loans or pre-purchase of renewable energy certificates.

b. Predevelopment Financing Initiative

This initiative provides financial assistance to developers as they undertake the high-risk, early-stage activities related to the development of new renewable energy facilities.

c. Commonwealth Wind

The Commonwealth Wind Incentive Program provides rebates, grants and loans for the installation of wind projects in Massachusetts. Funding is available for residential, commercial, industrial, and public facilities that are customers of investor-owned electric distribution utilities or Municipal Light Plant Departments that pay into the Renewable Energy Trust.³² There are three initiatives within this program: 1) Micro Wind, 2) Community-Scale Wind and 3) Commercial Wind (coming soon).

9. **Programs for Businesses and Non-profits**³³

*a. Commonwealth Solar*³⁴

Commonwealth Solar provides rebates for solar photovoltaic (“PV”) systems up to 500 kilowatts (“kW”) for businesses, nonprofits, public buildings and other non-residential facilities.

*b. Commonwealth Wind*³⁵

The Commonwealth Wind Incentive Program: Micro Wind Initiative provides rebates for installation of small wind projects with power capacities from 1 kW to 99 kW and located at residential, commercial, industrial, institutional, and public facilities. The project site must be located in the territory of either a Massachusetts investor-

²⁹ http://www.masstech.org/renewableenergy/industry_support/unsolpropguides.htm

³⁰ <http://www.masstech.org/renewableenergy/CEdevelopers.html>

³¹ Nearly all U.S. hydropower projects are subject to extensive licensing requirements under the Federal Power Act, and their wholesale power sales typically require pre-sale governmental authorization as well.

³² Depending on the nature of the power deliveries made from a particular project funded under this program, state and/or Federal regulatory authorizations for project interconnection, power sales and business organization might be required.

³³ <http://www.masstech.org/renewableenergy/index.html#business>

³⁴ <http://www.masstech.org/solar/>; <http://www.commonwealthsolar.org/>

³⁵ http://www.masstech.org/renewableenergy/commonwealth_wind/micro_wind.html;
<http://www.masscec.com/microwind>

owned electric distribution utility or a Municipal Light Plant Department that pays into the Massachusetts Renewable Energy Trust Fund.

10. Renewable Energy Certificate Incentive³⁶

The Energy Consumers Alliance of New England (“ECANE”), which operates as Mass. Energy Consumers Alliance in Massachusetts, and as People’s Power & Light in Rhode Island, is a non-profit organization that buys renewable energy credits (“RECs”) from PV systems and small wind-energy systems. The RECs from PV systems and small wind-energy systems are packaged together with low-impact hydro and biomass RECs and sold as New England GreenStart, a renewable energy-based electricity product marketed through GreenUp. GreenUp is a green power program offered by National Grid, an investor-owned electric utility serving customers in Massachusetts and Rhode Island.

ECANE offers to purchase RECs from PV systems and wind-energy systems installed in Massachusetts after 1998 at \$30 per megawatt-hour (\$0.03 per kilowatt-hour (“kWh”) for a period of three years. After the three-year contract, owners can consider other opportunities for selling RECs in the green power market.

11. MTC’s Matching Grants for Communities³⁷

The MTC’s Clean Energy Choice Program, launched in October 2004, allows Massachusetts electric customers to pay an additional premium each month to support green power. When consumers choose to support clean energy projects that qualify under the state’s renewable portfolio standard, the MTC will match those premiums with up to \$2.5 million annually in grants. Through these matching grants, communities, towns, and cities may receive up to one dollar in funding for each dollar residents spend on clean energy. Towns and cities may use this money to fund clean energy projects in their communities.

12. MTC’s Clean Energy Pre-Development Financing Initiative³⁸

The Clean Energy Pre-Development Financing Initiative offers grants and loans to support the development of grid-connected renewable energy systems in New England. Eligible technologies or resources include wind energy, naturally flowing water and hydroelectric power, landfill gas, anaerobic digestion and low-emission, advanced power-conversion technologies using “eligible biomass fuel,” as provided for in 225 MASS. CODE REGS. 14.05(1)(a)(6).³⁹ This solicitation is not intended to support projects using waste-to-energy, ocean thermal or wave or tidal energy technologies. As of 2009, the Renewable Energy Trust will support large scale projects—such as Commonwealth Wind, Commonwealth Hydro, and the Sustainable Bioenergy (Biomass) Initiative—through resource specific initiatives.

Two types of funding are available under this solicitation: (1) funding for feasibility studies and (2) funding for pre-development activities (*e.g.*, facility design, environmental studies, permitting and similar activities). Feasibility study funding is limited to \$50,000 per project,

³⁶ <http://www.greenerwattsnewengland.com/Solar.REC.Sale.html>

³⁷ http://www.masstech.org/CleanEnergyOrg/matching_grants.htm

³⁸ http://www.masstech.org/grants_and_awards/CE/predev_overview.htm

³⁹ Depending on the nature of the power deliveries made from a particular project funded under this program, state and/or Federal regulatory authorizations for project interconnection, power sales and business organization might be required.

while pre-development funding is limited to \$250,000 for wind and biomass projects and \$150,000 for all other projects.

13. **Hydropower Property Tax Exemption**

(Mass. GEN. LAWS ch. 59, § 5 cl. 45A)

Hydropower facilities are exempt from local property taxes for a period of twenty years from the date of completion of the construction of such facility, if construction of the facility commences after January 1, 1979.

14. **Corporate Deduction**⁴⁰

(MASS. GEN. LAWS ch. 62, § 2(a)(2)(G) (2006))

Massachusetts allows for a corporate excise tax deduction for (1) any income—including royalty income—received from the sale or lease of a U.S. patent deemed beneficial for energy conservation or alternative energy development by the Massachusetts Department of Energy Resources, and (2) any income received from the sale or lease of personal or real property or materials manufactured in Massachusetts and subject to the approved patent. The deduction is effective for up to five years from the date of issuance of the U.S. patent or the date of approval by the Massachusetts Department of Energy Resources, whichever first expires.

15. **Renewable Energy Property Tax Exemption**⁴¹

(MASS. GEN. LAWS ch. 59, § 5 cl. 45, 45A (2006))

Massachusetts law provides that solar-energy systems and wind-energy systems used as a primary or auxiliary power system for the purpose of heating or otherwise supplying the energy needs of taxable property are exempt from local property tax for a twenty-year period. Hydropower facilities are also exempt from local property tax for a twenty-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.

According to the Massachusetts Department of Energy Resources, this incentive applies only to the *value added* to a property by an eligible system; it does not constitute an exemption for the full amount of the property tax bill.

D. **New Hampshire**^{42 43}

1. **Renewable Energy Generation Incentive Program**⁴⁴

The Public Utilities Commission (“PUC”) has developed a rebate program for residential renewable electric generating systems rated less than 5 kW of generating capacity.

⁴⁰ http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=MAo2F&re=1&ee=1

⁴¹ http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=MAo1F&re=1&ee=1

⁴² <http://www.nh.gov/oep/programs/energy/RenewableEnergyIncentives.htm>;
<http://www.puc.state.nh.us/SustainableEnergyForms/RegisterEmailList.aspx>

⁴³ The projects we anticipate receiving incentives under both the renewable and small-scale programs would likely be eligible for a range of Federal and state exemptions from energy producer regulations.

⁴⁴ <http://www.nh.gov/oep/programs/energy/RenewableEnergyIncentives.htm>

2. Renewable Energy and Energy Efficiency Business Loan

The New Hampshire Business Resource Center and Ocean National Bank have partnered to offer the Renewable Energy and Energy Efficiency Business Loan Program, which provides low-interest loans to small businesses to purchase structural and equipment improvements that reduce energy consumption. The program targets loan amounts of \$10,000 or more, with a maximum term of seven years and an interest rate set at the prime rate less 1%.

Eligible projects include energy-efficient lighting, variable frequency drives, premium efficient motors, energy-efficient HVAC systems and chillers, air compressors, energy-efficient dry-type transformers, custom energy-efficiency measures, and renewable-energy systems.

3. Exemption from local property taxes

New Hampshire law (N.H. REV. STAT. ANN. § 72:61–72) permits cities and towns to offer exemptions from local property taxes for certain renewable energy installations. These include solar thermal (for example, to heat water), solar photovoltaic (to generate electricity), wind (to generate electricity) and central wood-fired heating systems (not stoves or fireplaces).

Eighty-four cities and towns have adopted one or more renewable energy property tax exemptions as of October 2009.

4. Energy Efficiency and Clean Energy Districts

Property-Assessed Clean Energy (“PACE”) financing allows property owners to borrow money to pay for the energy improvements. The amount borrowed is repaid via a special assessment on the property over a period of years.

New Hampshire enacted H.B. 1554 in June 2010, authorizing local governments to create energy efficiency and clean energy districts. The municipality must first determine the public benefit of creating energy efficiency/clean energy district before amassing funding and incurring debt for financing the project.

The minimum amount municipalities may finance is \$5,000. The maximum for single-family property owners is \$35,000. The maximum for commercial, industrial, multi-family property owners is the lesser of \$60,000 or 15% of an assessed value ratio. The municipality may authorize the financing term to be up to 20 years.

5. Solar Easements and The National Grid (Gas)—Solar Thermal Rebate Program

New Hampshire allows property owners to create solar easements in order to create and preserve a right to unobstructed access to solar energy.

The National Grid (Gas)—Solar Thermal Rebate Program provides a one-time rebate of \$3 per therm based on estimated first-year savings, and up to 50% of the project cost or \$100,000 per project. The rebate is available to commercial and industrial customers for the installation of solar thermal technologies.

E. New Jersey⁴⁵

1. Renewable Energy Development Initiative (“REDI”)⁴⁶

Provides up to \$50,000 for project design, feasibility studies and permitting processes, and other financial incentives for the rapid development and construction of projects, with further payment schedules based on project milestones. Eligible technologies include photovoltaic (“PV”), wind energy, fuel cells, wave, tidal, renewably generated hydrogen, and sustainably harvested biomass.

2. Renewable Energy Incentive Program (“REIP”)⁴⁷

REIP provides rebates that reduce the up-front cost of installing renewable energy systems including solar, wind, and sustainable biomass projects. The REIP is part of New Jersey's efforts to reach its Energy Master Plan goals of striving to use 30 percent of electricity from renewable sources by 2020. The program includes financial incentives to system owners who install qualified clean energy generation systems in New Jersey.

Public and non-profit solar projects larger than 50 kW and residential projects larger than 10 kW are not eligible for this program. These projects must enroll in the Solar Renewable Energy Certificate (“SREC”) Registration Program (described in more detail, below).

3. Renewable Energy Manufacturing Incentive (“REMI”)⁴⁸

REMI provides rebates to New Jersey residents, businesses, local governments, and non-profit organizations that purchase and install solar panels, inverters, and racking systems manufactured in New Jersey.

4. Clean Energy Fund⁴⁹

The Edison Innovation Clean Energy Fund is a funding opportunity that arose from a collaboration between the New Jersey Commission on Science and Technology (“CST”) and the New Jersey Board of Public Utilities. It provides funding from \$100,000 to \$500,000 to New Jersey technology companies for demonstration projects and developmental and ancillary activities necessary to commercialize identified renewable energy technologies and innovative technologies that significantly increase energy efficiency.

Matching fund requirements are as follows—source of matching funds must be demonstrated and may not be other state funding sources; applicant company must contribute cash at a minimum of 50% of CST funds; partner university, company, or institution must contribute in-kind or cash at a minimum of 20% of CST funds.

5. Edison Innovation Clean Energy Manufacturing Fund⁵⁰

The Edison Innovation Clean Energy Manufacturing Fund (“CEMF”) provides assistance for the manufacturing of energy efficient and renewable energy products that will assist

⁴⁵ <http://www.njcleanenergy.com/renewable-energy/home/home>

⁴⁶ http://www.njcleanenergy.com/files/file/Honeywell_2008_NICEP_Program_Plan_120707_FINAL.pdf - page 67

⁴⁷ <http://www.njcleanenergy.com/renewable-energy/programs/programs>

⁴⁸ <http://www.njcleanenergy.com/renewable-energy/programs/programs>

⁴⁹ <http://www.nj.gov/scitech/entassist/energy/>

⁵⁰ http://www.njeda.com/web/Aspx_pg/Templates/Npic_Text.aspx?Doc_Id=1085&menuid=1287&topid=718&levelid=6&midid=1175

renewable energy and energy efficiency technologies in becoming competitive with traditional sources of electric generation. The CEMF is administered by the New Jersey Economic Development Authority and provides grants and loans for certain business development activities that further these goals.

Grants are awarded up to \$300,000 to cover costs associated with site assessment, procurement, and design of an eligible facility. The grant may not exceed 10% of the total amount of funding requested for the project as a whole.

A maximum of \$3 million is available in the form of a zero-interest ten-year loan to support site improvements, equipment purchases, and facility construction and completion. Repayments begin at the start of the fourth year following the close of the loan. Projects that meet certain milestones may be eligible to convert up to \$1 million of the loan into a performance grant. The maximum funding per project (both loans and grants) is \$3.3 million. A minimum 50% cash match of the total project cost is required to be from non-state-derived matching funds.

6. Edison Innovation R&D Fund⁵¹

The Edison Innovation R&D Fund provides funding to New Jersey technology companies for proof-of-concept research and development activities and ancillary activities necessary to commercialize the identified technology. Companies are encouraged to partner with a New Jersey PhD granting university or with a company or institution with a primary business location in New Jersey. Grants are awarded twice each year, through a two-phase application process. The grants available are between \$100,000 and \$500,000.

7. Edison Innovation Clean Energy Manufacturing Fund (“CEMF”)—Grants and Loans

The Edison Innovation CEMF is intended to provide assistance for the manufacturing of energy efficient and renewable energy products that will assist Class I renewable energy and energy efficiency technologies in becoming competitive with traditional sources of electric generation. The New Jersey Economic Development Authority (“EDA”) administers the CEMF, which is structured to provide grants (Tranche I) and loans (Tranche II) for certain business development activities that further these goals within the State of New Jersey. Applicants may apply for both tranches together, or separately apply for Tranche II funds, but Tranche I applicants must also apply for Tranche II funding. The program accepts applications on an open, rolling basis.

The total amount of available funding is capped at a maximum of \$3.3 million. A minimum 50% cash match of total project costs is required to be from non-state derived matching funds. This incentive program is directed at commercial manufacturing; prototype development projects are not eligible. Notably, manufacturers that are awarded CEMF money are automatically qualified as eligible manufacturers under the New Jersey REMI program.

⁵¹ <http://www.nj.gov/scitech/entassist/edison/>

8. Clean Energy Solutions Capital Investment Loan/Grant⁵²

The New Jersey Economic Development Authority offers up to \$5 million in interest-free loans and grants to commercial, industrial, and institutional entities “going green” in New Jersey. Funding can be used to purchase fixed assets, including real estate and equipment, for an end-use energy efficiency project, combined heat and power production facility, or new state-of-the-art efficient electric generation facility, including Class I and Class II renewable energy.

9. New Jersey Board of Public Utilities (“BPU”) Solar Renewable Energy Certificates (“SRECs”)⁵³

New Jersey’s renewable portfolio standard requires each electricity supplier/provider serving retail customers in the state to include in the electricity it sells 22.5% qualifying renewables by 2021. SRECs represent the renewable attributes of solar generation, bundled in minimum denominations of one megawatt-hour (“MWh”) of production. New Jersey’s SREC program provides a means for SRECs to be created and verified, and allows electric suppliers to buy these certificates in order to meet their solar Renewable Energy Portfolio Standard requirements.

A generator can receive compensation of up to \$0.71 per kWh. In July 2008, the BPU issued an order requiring electric distribution utilities to submit plans for purchasing SRECs from solar facilities through long-term contracts.

In 2004, New Jersey created an on-line marketplace for trading SRECs. According to the New Jersey Office of Clean Energy, in March 2009, the weighted average price of 2009 SRECs was approximately \$467/MWh (\$0.47/kWh), with some trades as high as \$680/MWh.

10. Energy Star Homes Program⁵⁴

The New Jersey Board of Public Utilities, in conjunction with New Jersey utilities, offers the Energy Star Homes Program, with incentives available to builders who construct homes that are 15% more efficient than homes built to the 2006 International Energy Conservation Code.

- **Tier I:** Must be 4,000 square feet or less and meet Energy Star criteria (HERS⁵⁵ of 85 or less) and other minimum mandatory requirements. This incentive is limited to \$2,900.
- **Tier II:** HERS of 65 or less; all homes more than 4,000 square feet must meet this criteria to qualify for incentives.
- **Tier III:** Customized performance at or approaching Net-Zero Energy.

⁵² http://www.njeda.com/web/Aspx_pg/Templates/Npic_Text.aspx?Doc_Id=1078&menuid=1360&topid=722&levelid=6&midid=1357

⁵³ <http://www.njcleanenergy.com/renewable-energy/programs/solar-renewable-energy-certificates-srec/new-jersey-solar-renewable-energy>

⁵⁴ <http://www.njcleanenergy.com/files/file/Residential%20Programs/NJ%20ENERGY%20STAR%20Homes/2009NJESHProgramChangeLetter.pdf>

⁵⁵ Home Energy Rating System

11. **Small Business Innovation Research (“SBIR”) Bridge Grant Program⁵⁶**

The purpose of the SBIR Bridge Grant Program is to increase the success and maximize the growth of small New Jersey companies in moving from Phase I to Phase II of the federal SBIR Program. The SBIR Bridge Grant Program provides \$50,000 grants to sustain small businesses through the funding gap that occurs between completion of the Federal Phase I SBIR/STTR grants and the initiation of a Phase II SBIR/STTR award. Applicants must have: 1) applied for Phase II funding, and 2) been identified as potential Phase II SBIR/STTR awardees.

12. **Solar Access Law**

(N.J. STAT. ANN. § 45:22A-48.2 (2007))

In 2007, New Jersey enacted legislation preventing homeowners associations from prohibiting the installation of solar collectors on certain types of residential properties. This law covers only dwellings that are not deemed community property of the association.

13. **Solar Easements**

(N.J. STAT. ANN. § 46:3-24 et seq. (2008))

New Jersey law provides for the creation of solar easements to ensure that proper sunlight is available to those who operate solar-energy systems.

14. **Solar and Wind Energy Systems Exemption**

New Jersey provides a full exemption from the state’s 7% sales tax for all taxpayers who use solar and wind energy equipment.

15. **Property Tax Exemption for Renewable Energy Systems**

(N.J. STAT. ANN. § 54:4-3.113a et seq. (2008))

Since October 2008, New Jersey exempts renewable energy systems from local property taxes. Eligible renewable energy systems include solar photovoltaic (“PV”), wind, fuel cells, sustainable biomass, geothermal electric, landfill gas, hydroelectric, resource recovery, wave, and tidal systems that produce electricity. Systems that produce energy from solar thermal energy (e.g., solar hot water) or geothermal energy (e.g., geothermal heat pumps) are also eligible for the exemption. The exemption may be claimed for all qualified systems installed on residential, commercial, industrial, or mixed use buildings as accessory uses.

In order to claim the exemption, property owners must apply for a certificate from their local assessor which will reduce the assessed value of their property to what it would be without the renewable energy system. Exemptions take effect for the year after a certification is granted.

16. **Grid-Connected Renewables Program**

The New Jersey Grid-Connected Renewables Program offers competitive incentives for onshore wind and biomass electricity generation projects larger than 1 Megawatt (MW) connected to the electric distribution system serving New Jersey. Offshore wind, solar, and

⁵⁶ <http://www.nj.gov/scitech/entassist/sbir/>

hydrokinetic projects are not eligible for the current solicitation, nor are landfill gas projects that inject gas into a natural gas pipeline (as opposed to generating electricity). Both publicly and privately owned projects are eligible for assistance under this solicitation.

Facilities that use emerging commercial technologies that maximize power production during peak demand periods, address load pocket or congestion problems with the distribution grid serving New Jersey, and are expected to begin generating electricity during 2010, are given preference for grants. However, projects that propose new or innovative onshore wind or biomass technologies, energy storage in conjunction with currently operating Class I renewable energy facilities, or the development of bio-power feedstocks may also apply for support. There is no minimum cost-sharing required as part of the grant, as the incentive is only designed to cover a portion of the total project cost, but higher levels of cost-sharing are given preference in the evaluation process.

The program solicitation contains a schedule of recommended incentive payments based on the technology being employed and whether the project will be undertaken by a public or private entity. The recommended incentives range from \$3.74/MWh for privately-owned landfill gas combustion projects, to \$58.49/MWh for publicly-owned wastewater biogas projects. Incentives for other eligible projects (e.g., bio-power feedstocks without associated Class I electric generation equipment, energy storage technology, or innovative technologies) are considered on a competitive basis.

The application deadline for the most recent solicitation was January 8, 2010, although the New Jersey Office of Clean Energy anticipates that another solicitation for projects will be issued later in 2010. The Revised Clean Energy Budget approved by the BPU in April 2010 includes \$6.2 million in 2010 funding for this program.

F. New York⁵⁷

1. New York State Energy Research and Development Authority (“**NYSERDA**”)⁵⁸

NYSERDA has a number of different projects and incentives for CleanTech companies as follows:

a. *Energy Star Home Builders*⁵⁹

NYSERDA offers a program to encourage more industry involvement in the building of Energy Star Standard Homes. When a builder is certified as an Energy Star Home Builder and builds a home to Energy Star Standards, he or she is eligible for a direct cash incentive of \$750 to \$1,500. Larger incentives are available for display homes (\$2,500) and model homes (\$3,000). The actual level of the incentive depends on how efficient the home is and where it is located. Further bonuses are available for insulation, primary heating system, and primary cooling system installations completed by BPI-accredited professionals employed at a BPI-accredited firm.

⁵⁷ <http://www.nyserda.org/>

⁵⁸ <http://www.nyserda.org/funding/funding.asp?i=>

⁵⁹ <http://www.getenergysmart.org/SingleFamilyHomes/NewConstruction/Builder/SupportIncentives.aspx>

b. *Renewable, Clean Energy and Energy Efficient Product Manufacturing Incentive Program*⁶⁰

Funded from the New York System Benefits Charge, this incentive program seeks to increase the manufacturing of renewable, clean, and energy efficient products in New York by providing funds to manufacturers that wish to develop or expand facilities producing eligible products. Eligible products are limited to those dealing with clean electricity production, more efficient use of electricity or grid-connected electricity storage.

- **Phase I** provides money for facility and site characterization activities.
- **Phase II** covers pre-production development subject to the proposer satisfying defined project milestones.
- **Phase III** is a production incentive payment based on the sale of clean energy products produced at the facility.

Proposals will be accepted through June 30, 2011 at 5:00pm Eastern Time, or until funds run out, whichever is first.

c. *New York State Bio-Fuel Station Initiative*⁶¹

This program accelerates the installation of retail E85 and biodiesel service stations throughout New York. The goal of the program is to create an expanded network of stations for the public and private vehicles that are capable of being operated on these renewable fuels.

Available through May 7, 2010.

d. *Clean Energy Business Growth and Development (PON 1260)*⁶²

NYSERDA seeks to support the growth and development of clean energy companies in New York by supporting business activities that enable their expansion. Applicants are asked to submit proposals for projects that address business development issues relating to sustaining and growing a clean energy business in New York, including those connected to technology commercialization, fundraising, revenue expansion and business operations to support sales growth. Proposals may relate to launching new products and services; entering new energy-related markets with existing products and services; accelerating sales growth with existing products and services; financing new business ventures, joint ventures, and early stage companies and developing business infrastructure or relationships that are necessary for an anticipated acceleration in sales. The following will not be funded: production incentives, subsidies for the installation or operation or demonstration of any technology, and research and development.

A total of \$6.4 million is available for five rounds of funding, although any or all project funds may be allocated during any one round. Project awards may cover up to 50% of

⁶⁰ <http://www.nyserda.org/funding/1176pon.asp>

⁶¹ <http://www.nyserda.org/funding/1093pon.asp>

⁶² <http://www.nyserda.org/funding/1260pon.asp>

a project's cost, with a maximum award of \$200,000. All awards must be matched by a contractor share.

To be eligible, proposers should be businesses with operations in New York seeking to initiate new operations or expand existing ones, or businesses in other states willing to open operations in New York. They must have a product or service that is at a commercial or near commercial stage of development. The projects must be either (1) a power generator from a renewable source, or (2) an energy efficient power generation technology, storage technology, transportation technology, industrial technology, or building technology that uses an alternative fuel or reduces the consumption of fossil fuels and provides environmental benefits.⁶³

e. Renewable, Clean Energy and Energy Efficiency Product Manufacturing Incentive Program (PON 1176)⁶⁴

NYSERDA seeks to expand the level of manufacturing of renewable, clean, and energy efficient products in New York. Examples of eligible products are (1) renewable or clean-energy products that produce or support the production of renewable or clean electricity, (2) energy efficient end-use technologies that use electricity as a principal input and result in a substantial increase in the efficient use or conservation of electricity compared to the status quo, and (3) electric storage technologies for grid-connected applications. In order to be eligible, products should be beyond the prototype stage and mature enough to warrant designing and building or expanding a commercial manufacturing facility.

The maximum grant per project is \$1.5 million. Incentive payments include the following restrictions: 1) up to 25% of project funding will be based on milestones achieved in Phase 1: Facility and Site Characterization and Phase 2: Project Development and Construction, and 75% or more will be based on product sales in Phase 3: Project Commercial Operation; 2) a requirement for local-source content; 3) a limit of five years; and 4) a requirement that the proposer must actively pursue all other incentive and economic development assistance as part of this program. Co-funding by the proposer of 50% or more is required for Phases 1 and 2, and 75% or more is required for Phase 3.

Proposals must include a description of the product to be manufactured, the proposed facility or expansion, and the applicability of the technology to the New York market. Other information from the proposer that is necessary to adequately evaluate proposals includes a business plan, corporate financial information, and letters of support from all team members.

As of April 2010, \$4.5 million is available to allocate to projects.

⁶³ This incentive may address a wide range of different kinds of electricity production facilities, and the required regulatory authorizations would best be addressed on a case-by-case basis.

⁶⁴ <http://www.nyserda.org/funding/1176pon.asp>

f. Renewable Portfolio Standard Customer-Sited Tier Fuel Cell Program⁶⁵

\$11.2 million is available for financial incentives to support the installation and operation of fuel cell systems in New York, with up to \$1 million available per fuel cell system.

Two types of incentive payments may be made under contracts resulting from this solicitation: 1) “capacity payments” based on the kW nameplate rating of the fuel cell system, and 2) annual “performance payments” based on actual kWh production during each of three annual periods following the commissioning of the fuel cell system.

g. New Construction Program Financial Incentive⁶⁶

Incentives are available for the purchase and installation of energy efficient equipment that reduces electric energy consumption in new and substantially renovated buildings. The program offers technical support to building design teams and financial incentives to building owners to evaluate and design energy efficiency options. It also offers funding for building commissioning, peak-load reduction and advanced solar and daylighting systems.

Eligible applicants must purchase energy from one of the following utility companies: Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., New York State Electric & Gas Corporation, National Grid, Orange and Rockland Utilities, Inc., or Rochester Gas and Electric Corporation.

2. Property Tax Exemption for Solar, Wind and Biomass Energy Systems⁶⁷
(New York State Estate Real Property Tax, Article 4 § 487)

Section 487 of the New York State Real Property Tax Law provides a 15 year real property tax exemption for real property that contains a solar, wind, or farm waste energy system approved by the State Energy Research and Development Authority. As currently effective, the law is a local option exemption, meaning that local governments are permitted to decide whether or not to allow it.

3. Fuel Cell Rebate and Performance Incentive (PON 1150)

This program provides financial incentives to support installation and operation of in-state fuel cell systems, with up to \$1 million available per project. Basic capacity incentives include:

- Small Systems (less than 25 kW)—\$2,000/kW, up to \$20,000 per project sites.
- Large Systems (greater than or equal to 25 kW)—\$1,000/kW, up to \$200,000 per project site.

Bonus and performance incentives are also available.

⁶⁵ <http://www.nyserda.org/funding/1150pon.asp>

⁶⁶ <http://www.nyserda.org/funding/1222pon.asp>

⁶⁷ <http://www.orps.state.ny.us/assessor/manuals/vol4/part1/section4.01/sec487.htm>

4. On-Site Small Wind Incentive Program

This program provides up to \$150,000 per site in incentive payments for eligible new small wind systems. The payments are provided to an eligible installer of wind system models and passed on to the site owner.

5. Municipal Sustainable Energy Programs

Property-Assessed Clean Energy (“PACE”) financing allows property owners to borrow money to pay for energy improvements. The amount borrowed is typically repaid via a special assessment on the property over a period of years. In 2009, New York enacted two separate bills—A.B. 8862 in August and A.B. 40004A in November—authorizing local governments to offer these types of programs using different mechanisms. Not all local governments in New York offer PACE financing.

- A.B. 40004A authorizes counties, towns, cities and villages (collectively referred to as “municipal corporations”) to offer sustainable energy loan programs. Loans may be used to pay for energy audits; cost-effective, permanent energy efficiency improvements (i.e., appliances are generally not eligible); renewable energy feasibility studies; and the installation of renewable energy systems. The authorizing legislation does not limit the authority of local governments to provide loans.

In order to qualify for a loan, energy audits or renewable energy feasibility studies must be performed by a contractor certified according to standards set by NYSERDA or by a local government under standards at least as stringent as those developed by NYSERDA. Energy efficiency improvements must meet cost-effectiveness criteria also established by NYSERDA. The definition of eligible renewable energy systems includes solar photovoltaic, solar thermal, wind, geothermal, anaerobic digester gas, and fuel cell systems that generate electric or thermal energy. NYSERDA is permitted to approve additional renewable energy technologies as eligible, with the exception of those that involve combustion or pyrolysis of solid waste. Loans may not be issued for energy efficiency improvements that have not been determined to be appropriate by an energy audit or for renewable energy systems that have not undergone a feasibility study. Loans may not exceed 10% of the value of the real property upon which the improvements take place, or the cost of such improvements.

- A.B. 8862, allows *towns* to create residential home energy efficiency programs funded by periodic charges or fees for the services rendered. The effect of this policy, although not precisely a loan, is similar to a loan. In towns that offer such a program, the town would be permitted to enter into contracts for home energy audits and energy efficiency improvements on behalf of participating residents. Participating residents benefit by having improvements made upon their property by the town at no up-front cost to themselves, and are permitted to repay the town for the improvements through a periodic fee or charge. The charges associated with the service constitute a lien upon the property on which the improvements took place.

G. Rhode Island⁶⁸

1. Renewable Energy Certificate (“REC”) Incentive⁶⁹

Energy Consumers Alliance of New England, which operates as Mass. Energy Consumers Alliance in Massachusetts and as People’s Power & Light in Rhode Island, is a non-profit organization that buys RECs from photovoltaic (“PV”) systems and small wind-energy systems.⁷⁰ ECANE offers to purchase RECs from PV systems and small wind-energy systems installed in Rhode Island after 1998 at \$30 per megawatt-hour (\$0.03 per kWh) for a period of three years.

2. RIEDC Renewable Energy Fund Grants and Loans⁷¹

(R.I. Gen. Laws § 39-2-1.2)

(H.B. 7806)

(Rules and Regulations for the Renewable Energy Development Fund)

The Rhode Island Economic Development Corporation (“RIEDC”) is now accepting financing applications for renewable energy projects that “directly benefit the state of Rhode Island.” These financial incentives, which include grants, recoverable grants and loans, are funded by the Rhode Island Renewable Energy Fund (“REF”). Examples include:

a. *Non-Profit Affordable Housing Investment Program*

This program is open to non-profit affordable housing developers and agencies. The program allocation is the lesser of 10% of the RIEDC REF or the \$200,000 per year collected from the 0.30 mils/ kWh charge for renewable programs that provides funds for the REF. No project’s funding may exceed \$100,000.

Applications are due every March 31 and September 30.

b. *Municipal Renewable Energy Investment Program*

In July 2008, H.B. 7806 authorized the RIEDC to integrate and coordinate state renewable energy policies. This particular program utilizes the lesser of the 50% of the RIEDC REF or \$1 million collected annually from the 0.3 mils per kWh surcharge for renewable energy programs, and offers grants of up to \$500,000 per project.

Applications are due every March 31 and September 30.

c. *Pre-Development Consultant and Technical Feasibility Program*

This program is open to commercial enterprises, civic and educational institutions, non-profit organizations, municipalities, and non-profit affordable housing developers. The program allocation is the lesser of 10% of the RIEDC REF or the \$200,000 per year collected from the 0.3 mils/ kWh charge for renewable programs that provides funds for the REF. There is no cap or limit to grants available through this program, but

⁶⁸ <http://www.energy.ri.gov/programs/efficiency.php>

⁶⁹ <http://www.massenergy.com/Solar.REC.Sale.html>

⁷⁰ The relevant PV and small wind systems to receive incentives under this program would in most cases be eligible for a range of exemptions from most Federal and state energy regulatory laws.

⁷¹ <http://www.riedc.com/business-services/renewable-energy>

recipients who have previously received financing are ineligible to apply for repeat funding.

Applications are due every March 31 and September 30.

d. Renewable Energy Development Program

This program is open to commercial enterprises, civic and educational institutions, non-profit organizations, municipalities, and non-profit affordable housing developers. The program allocation is the balance of the REF, less other expenditures. The maximum funding for a project is \$750,000. Recipients and their affiliates are ineligible to apply for repeat funding.

Applications are accepted on a rolling-basis.

3. Rhode Island Renewable Energy Fund (“REF”)⁷²

(R.I. GEN. LAWS § 39-2-1.2)

(Rules and Regulations for the Renewable Energy Development Fund)

The REF provides grants, loans, and other financing for renewable energy projects that produce electricity in a cleaner, more sustainable manner, and stimulate job growth in Rhode Island’s economy. Grants are available up to \$500,000 per project for municipal renewable-energy projects.

The renewable-energy systems eligible for support from the REF include facilities in the New England Power Pool control area that generate electricity using solar, wind, wave, tidal, ocean-thermal, geothermal, hydro, or sustainably-managed biomass resources. Solar-thermal systems (including solar space-heating systems) are eligible if installed on low-income housing projects certified by the Rhode Island Housing and Mortgage Finance Corporation. In addition, co-firing systems are eligible for funding, as well as fuel cells and microturbines using renewable fuels. Projects and activities directly related to implementing eligible renewable-energy projects in Rhode Island also are eligible.⁷³

a. REF: Photovoltaic Solar Opportunity

This program provides partial grants of up to \$3 per watt for commercial projects and \$3.50 per watt for non-profit organizations, for the installation of solar PV systems of up to 25 kW on commercial, industrial, and institutional buildings.

4. Rhode Island Winds (“RIWINDS”), Rhode Island Wind Alliance, Rhode Island Wind Mapper

Rhode Island established the RIWINDS program in 2006 to promote the development of wind energy in the state. The goal is to obtain 20% of the state’s energy from renewable resources by 2011.

5. Property Tax Exemption for Renewable Energy Systems

(R.I. GEN. LAWS § 44-3-21)

⁷² <http://www.riedc.com/business-services/renewable-energy>

⁷³ This incentive may address a wide range of different kinds of electricity production facilities, and the required regulatory authorizations would best be addressed case-by-case.

Rhode Island law allows cities and towns to exempt renewable-energy systems from property taxation. Eligible systems include: solar water heat, solar space heat, PV, wind, biomass, and small hydroelectric.

6. Renewable Energy Sales Tax Exemption

(R.I. GEN. LAWS § 44-18-30)

Certain renewable energy systems and equipment sold in Rhode Island are exempt from the state's sales and use tax. Eligible products include solar electric systems, inverters for solar electric systems, solar thermal systems, manufactured mounting racks and ballast pans for solar collectors, geothermal heat pumps, and wind turbines and towers.

H. Vermont⁷⁴

1. Clean Energy Development Fund ("CEDF") Grant Program⁷⁵

(VT. STAT. ANN. tit. 10, § 6523 (2005))

The CEDF Grant Program offers a portfolio of funding opportunities, including: grants and contracts; loans; equity investments; direct incentive payments for renewable energy projects for pre-development activities, installation of small and large systems, and business development and equity.

Funding is available in the following project categories:

- Pre-project Financial Assistance, with a maximum award of \$75,000.
- Small-Scale Systems (microturbines, fuel cells and combined heat and power), with a maximum award of \$50,000.
- Large-Scale Systems and special demonstration projects, with a maximum award of \$250,000.
- Community-Scale Systems, with a maximum award of \$500,000.
- Special Demonstration Projects, with a maximum award of \$250,000.

The CDEF expects to award \$2 million in funding for projects in 2010.

2. Clean Energy Development Fund ("CEDF") Loan Program⁷⁶

(VT. STAT. ANN. tit. 10, § 6523 (2005))

The CEDF Loan Program seeks to promote the development of clean electricenergy technologies by providing funding for purchasing land and buildings (when specific to qualifying projects), purchasing and installing machinery and equipment, and providing working capital. Low-interest loans with a fixed rate of 2% are available to individuals, companies, nonprofits and municipalities. Eligible clean electric-energy technologies generally include solar, wind, biomass, fuel cells, and combined heat and power systems.

⁷⁴ <http://www.vermont.org/incentives.php>

⁷⁵ http://publicservice.vermont.gov/energy/ee_cleanenergyfund.html

⁷⁶ http://publicservice.vermont.gov/energy/ee_cleanenergyfund.html

The minimum loan amount is \$50,000; the maximum amount is \$1 million. Loans may not be used for more than 90% of the cost of a project. All financing must be used for activities or assets directly related to the project. The term for real estate loans is 10 years, amortized on a 15-year basis. The maximum term for machinery and equipment loans is seven years. The term for working capital loans is three years. Borrowers must pay an application fee of 1% on the loan amount, which is capped at \$1,500, after the loan is approved.

3. Clean Energy Development Fund (“CEDF”) Municipal Technical Assistance Grants

The CEDF provides grants to municipal governments and public schools (K-12 and university) to investigate the installation of grid-connected, renewable energy systems. It provides up to 90% of the project cost, with the maximum available incentive set at \$5,000. The money may be used for technical assistance for site evaluation, project development and/or permitting, project proposals, and project bids in response to specific Requests for Proposal (RFP) calls. Eligible entities are required to provide 10% of matching funds. If awarded, eligible entities must complete the project within one year of approval.

4. Vermont Solar and Small Wind Incentive Program⁷⁷

The VT Solar & Small Wind Incentive Program is designed to accelerate market demand for high-quality solar and small wind systems in Vermont. Nearly \$1 million in incentives are available, and the program offers the incentives only to renewable energy systems installed by local program partners (and approved by the Solar and Wind Partnership Program). The program incentives cover approximately 20-25% of the total installed cost for eligible systems.

Eligible installations include new grid-connected photovoltaic (“PV”) solar energy (\$1.75 per W up to \$8,750) and wind energy system installations (as much as \$4 per W, up to \$12,500).

5. Biomass Electricity Production Incentives and Grants

(Vermont Public Service Board Order, Docket 6545)

The Central Vermont Public Service Corporation (“CVPS”) Renewable Development Trust Fund encourages the development of new renewable-energy projects that utilize anaerobic digestion of agricultural products, byproducts or waste to produce electricity. This fund provides grants and other incentives, and a dedicated project coordinator, to support project development, project operations and interconnection to the grid.⁷⁸

CVPS also offers a production incentive for electricity generated by eligible anaerobic digesters. CVPS purchases this electricity at 95% of the Locational Marginal Price of generation published by ISO New England (roughly the utility’s avoided cost), plus an additional \$0.04 per kWh to purchase the RECs and all other associated environmental attributes such as methane destruction, odor reduction, and other ancillary benefits.

⁷⁷ <http://www.revermont.org/incentives.php>; <http://www.nerc-vt.org/incentives/index.htm>

⁷⁸ Depending on the nature of the power deliveries made from a particular project funded under this program, state and/or Federal regulatory authorizations for project interconnection, power sales, and business organization might be required.

6. Vermont Small-Scale Renewable Energy Program⁷⁹

This program provides incentives to individuals, businesses, farms, schools, and municipalities for a portion of the cost of installing small-scale solar and wind systems.⁸⁰ \$5.25 million in funds are available for award during Round VI of the Program, which will run from April 2010 to April 2012.

7. Renewable Energy Systems Sales Tax Exemption⁸¹

(VT. STAT. ANN. tit. 32, § 9741(46) (2005))

Vermont has a complete exemption to its 6% sales tax for renewable-energy equipment, including solar hot water systems, off-grid PV and wind systems, and anaerobic digesters. The exemption covers systems up to 250 kW in capacity that generate electricity using eligible “renewable energy” resources (as defined under 30 V.S.A. § 8002), micro-combined heat and power systems up to 20 kW, and solar water-heating systems.

8. Clean Energy Finance Districts

Property-Assessed Clean Energy (“PACE”) financing allows property owners to borrow money to pay for the energy improvements. The amount borrowed is repaid via a special assessment on the property over a period of years. Financing may not exceed 15% of the assessed property value, and the combined amount of assessment and outstanding mortgages may not exceed 90% of the assessed property value.

Vermont enacted Act 45 in May 2009, authorizing local governments to create districts (Clean Energy Assessment District) to provide financing to property owners for renewable energy and energy-efficiency projects. Voter approval is necessary to establish a financing district. Eligible renewable-energy technologies include solar water and space heating, PV, biomass energy heating systems, small wind systems, and micro-hydroelectric systems. The Efficiency Vermont and Burlington Electric Department has determined the eligible energy efficiency projects.

⁷⁹ <http://www.nerc-vt.org/incentives/index.htm>

⁸⁰ The projects we anticipate receiving incentives under this program would likely be eligible for a range of Federal and state exemptions from energy producer regulation.

⁸¹ <http://www.revermont.org/incentives.php>

II) Mid-Atlantic

A. Maryland⁸²

1. MTECH Chesapeake Bay Seed Capital Fund⁸³

Maryland Technology Enterprise Institute (“MTECH”) at the University of Maryland administers the Chesapeake Bay Seed Capital Fund and is supported by the Maryland Department of Natural Resources. The fund invests \$250,000 annually over a three-year period into Maryland-based startup companies with innovative technologies that may help improve air and water quality in the Chesapeake Bay area. The goal of the fund is to accelerate the flow of capital to innovative ventures creating sustainable solutions to restoring the Chesapeake Bay and its watershed.

2. Maryland Clean Energy Center⁸⁴

In 2008, state leaders passed legislation establishing the Maryland Clean Energy Center. The Center’s purpose is to promote clean energy economic development and jobs in the state, encourage deployment of clean energy technologies across Maryland, assist newly developed technologies with pilot projects, collect, analyze and disseminate industry data and provide outreach and technical support to further the clean energy industry in Maryland.

Programs and incentives include: Clean Energy Home Owner Loan Program; Solar Training Initiative; MD Clean Energy Tech Incubator Network; Energy Auditor Certification Program; Residential Financial Incentives; Commercial Financial Incentives; and Research and Development Grants.

3. Clean Energy Economic Development Initiative Support Program⁸⁵

The Maryland Energy Administration (“MEA”) has created the Clean Energy Economic Development Initiative (“CEEDI”) Support Program to assist in the growth of a clean energy industry throughout the state. The CEEDI Support Program will provide funding opportunities to Maryland businesses and organizations that are in the process of advancing new technologies, job creation, and the furthering of consumer products and services related to the clean energy sector.

Funding opportunities through the CEEDI Support Program will come in the form of either a loan guarantee or grant. The MEA prefers to fund projects in the form of revolving loans or loan guarantees, but applicants who require funding in the form of a grant will still be considered. There is no pre-determined funding limit from a proposal request. Total funding available for the CEEDI Support Program is expected to be approximately \$7 million by September 30, 2010, and will be distributed over a number of appropriate projects. This is 15% of the State Energy Program for Clean Energy Economic Development budget.

The second round of MEA proposals closed on April 30, 2010, and the MEA has not yet anticipated the date for accepting a third round of proposals.

⁸² <http://energy.maryland.gov/incentives/allprograms>

⁸³ <http://www.mtech.umd.edu/funding/cbsc/>

⁸⁴ <http://www.marylandcleanenergycenter.org/>

⁸⁵ <http://www.energy.state.md.us/ceedi.asp>; <http://energy.maryland.gov/CleanEnergyEconomicDevelopmentInitiative.asp>;
<http://www.energy.state.md.us/documents/CEEDIProgramJune3.pdf>

4. **Maryland Energy Administration Investment Fund**⁸⁶

a. Combined Heat and Power

This program offers incentives to encourage the development of combined heat and power projects. The MEA funds 75% of the cost of a Level 1 Feasibility Analysis, up to a maximum of \$7,500, and 50% of the cost of a Level 2 Feasibility Analysis, up to a maximum of \$50,000.

b. Grants for Alternative Fuels and Renewable Energy

The MEA administers competitive grants based on availability of funds to local governments, businesses, and non-profits. Projects are selected based on greenhouse gas emission reduction, petroleum and fossil fuel displacement potential and the project's ability to support state goals and policies. Grants are used to help finance and support renewable energy project development.

Specific grant amounts are not listed.

c. Grants for Supporting Clean Energy Generation Within Maryland

The MEA uses Strategic Energy Investment Fund money to provide assistance where there is potential for the generation of clean energy, but there is a barrier to entry, such as a technical, financial, strategic, or development validation requirement needed before the resource can be harnessed into clean energy. If there is a demonstrated potential for the generation of clean energy within the state and verification is required, for example, to provide mapping of resources or the deployment of a technology along with possible costs and potential revenues, these grants can be used to provide program credibility for the purpose of going to the next stage of commercialization. Projects are selected based on the potential energy generated from renewable resources.

The grants are considered for programs that: demonstrate a quantifiable level of clean energy generation; directly support the generation of clean energy within Maryland's state boundaries; bring state-wide, county or city benefit; are close to commercialization; and allow Maryland to take control of its energy future by investing in energy efficiency technology and clean renewable power.

Specific grant amounts are not listed.

5. **Biofuels Production Incentive**⁸⁷

(MD. CODE ANN., AGRIC. §§ 10-1501 to -1507 (2005))

Qualified ethanol and biodiesel producers are eligible for ethanol and biodiesel production incentives in the form of per gallon credits. To be eligible for the incentive, the producer must first apply to the Renewable Fuels Incentive Board and receive certification as a producer. Credits may be offered to certified Maryland producers of ethanol or biodiesel operating between December 31, 2007 and December 31, 2017.

⁸⁶ http://energy.maryland.gov/documents/MEA_FY10.pdf

⁸⁷ http://www.afdc.energy.gov/afdc/progs/view_ind.php/MD/5834

Ethanol production credits are as follows: a) \$0.20 per gallon of ethanol produced from small grains such as wheat, rye, triticale, oats and hulled or hull-less barley, or b) \$0.05 per gallon of ethanol produced from other agricultural products.

Biodiesel production credits are as follows: a) \$0.20 per gallon of biodiesel produced from soybean oil (the soybean oil must be produced in a facility or through expanded capacity of a facility that began operating after December 31, 2004), or b) \$0.05 per gallon for biodiesel produced from other feedstocks, including soybean oil produced in a facility that began operating on or before December 31, 2004.

6. Windswept Grant Program⁸⁸

In November 2007, the MEA began accepting grant applications for small residential and non-residential wind energy systems through its Windswept Program. To be eligible for a Windswept Grant, the turbine system must be 100 kW or less, and must be listed in either the California Energy Commission's List of Eligible Small Wind Turbine or New York State Research and Development Authority's ("NYSERDA") Qualified Small Wind Generators Listing.

Wind turbines with rated capacities of 20 kW or more must be NEPA (National Environmental Policy Act) compliant. The MEA calculates grants on the basis of a turbine's expected performance at 11 meters per second (25 miles per hour) and allocates grants on a per-property basis. The MEA grants \$2,800 per kW of normalized capacity for the first 5 kW, up to \$14,000. After 5 kW, it grants an additional \$2,100 per kW of normalized capacity, with the maximum total grant allocation set at \$20,000.

7. Solar Energy Grant Program

The MEA administers the Solar Energy Grant Program, which provides financial incentives to homeowners, businesses, local governments, and non-profit organizations that install solar water-heating systems or solar-electric photovoltaic ("PV") systems. This program replaces the expired Clean Energy Incentives tax credit for solar-energy equipment.

The current Solar Energy Grant program provides incentives for: (1) Solar water heating—providing the lesser of \$2,000 or 30% of the installed const; and (2) Solar PV—\$1.25/W DC for the first 2 kW, \$0.50/W for the next 8 kW, and \$0.35/W for the next 10 kW. The maximum rebate is \$10,000, and systems must be 20 kW or less to qualify for a rebate. The first three rounds of this program used funds to support over 200 projects.

8. Solar Incentives

(MD. CODE ANN., Real Prop. § 2-118)

(MD. CODE ANN., Real Prop. § 2-119)

Creates easements for solar energy systems to prevent projects that would block sunlight. It also prohibits unreasonable restrictions on solar energy systems, such as homeowner association covenants against their installation.

⁸⁸ <http://energy.maryland.gov/incentives/residential/windswept/index.asp>

9. Property Tax Credit for High Performance Buildings

Title 9 of Maryland's tax code creates an optional property tax credit for high performance buildings. It allows counties and municipalities to provide a credit against property tax for buildings which achieve at least a silver rating according to the U.S. Green Building Council's LEED (Leadership in Energy and Environmental Design) standards, or which meet other comparable state-approved green building guidelines or standards. The counties or municipalities which elect to provide this property tax credit may determine the amount and duration of, and criteria and qualifications for, the property tax credit.

B. Virginia⁸⁹

1. Biofuels Production Grants⁹⁰

(VA. CODE ANN. § 45.1-393 to -394 (2009))

The Biofuels Production Incentive Grant Program provides grants to producers of advanced biofuels, specifically fuels derived from any cellulose, hemicellulose or lignin that is derived from renewable biomass or algae. A qualified advanced biofuels producer is eligible for a grant of \$0.125 for each gallon of neat advanced biofuels sold on or after January 1, 2008. A qualified producer of non-advanced neat biofuels, including neat biodiesel, green diesel and ethanol fuel, is eligible for a grant of \$0.10 per gallon of neat biofuels sold in the commonwealth on or after January 1, 2008. To qualify, a producer must produce at least one million gallons of neat biofuels in the calendar year in which the incentive is taken. If a producer began selling neat biofuels prior to January 1, 2008, the producer is eligible for a grant only if its production of neat biofuels for the given calendar year exceeds its production in the 2006 calendar year by at least one million gallons and in future years meets or exceeds that amount. Each producer is only eligible for six calendar years of grants.

2. Alternative Fuel Job Creation Tax Credit⁹¹

(VA. CODE ANN. § 58.1-439.1 (2006))

Businesses involved with the manufacture of components for alternative fuel vehicles ("AFVs"), AFV conversions, or the production, storage or dispensing of hydrogen as a vehicle fuel are eligible for a job creation tax credit for up to \$700 per full-time employee. The credit is allowed in the taxable year in which the job is created and in each of the two succeeding years in which the job is continued. Qualifying businesses include AFV component manufacturers and vehicle conversion companies. Qualified AFVs include vehicles that operate using natural gas, hydrogen or electricity. This credit is effective for taxable years through December 31, 2011.

3. Arlington County Green Building Incentive Program⁹²

This program gives bonus densities and/or heights to building projects which receive LEED certification, allowing such projects to exceed the normal density and height restrictions.

⁸⁹ http://www.mme.state.va.us/DE/Alternative_Fuels/alternativefuels.shtml

⁹⁰ http://www.afdc.energy.gov/afdc/progs/view_ind.php/VA/6046

⁹¹ http://www.afdc.energy.gov/afdc/progs/view_ind.php/VA/5158

⁹² <http://www.arlingtonva.us/Departments/EnvironmentalServices/epo/EnvironmentalServicesEpoIncentiveProgram.aspx>

4. **Solar Manufacturing Incentive Grant Program**

(VA. CODE ANN. § 45.1-392 (2000))

The Solar Manufacturing Incentive Grant Program offers up to \$4.5 million per year to encourage the production of photovoltaic panels in Virginia. The incentive is paid at a rate of up to \$0.75 per watt for panels sold in a calendar year, with a maximum of 6 MW.

New manufacturers that meet certain production and other criteria are eligible to receive annual incentive grants for six years. The amount will be awarded as follows:

- Years 1 and 2 – \$0.75/watt.
- Years 3 and 4 – \$0.50/watt.
- Years 5 and 6 – \$0.25/watt.

5. **Property Tax Assessment for Energy Efficient Buildings**

(VA. CODE ANN. § 58.1-3221.2 (2007))

In March 2008, Virginia enacted legislation that allows local jurisdictions to assess the property tax of energy efficient buildings at a reduced rate.

An energy efficient building is defined as 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.

6. **Local Option Property Tax Exemption for Solar**⁹³

(VA. CODE ANN. § 58.1-3661 (1998))

Virginia allows any county, city, or town to exempt or partially exempt solar energy equipment or recycling equipment from local property taxes. Residential, commercial or industrial property is eligible.

Cities and counties currently offering an exemption include: Albemarle, Alexandria, Charlottesville, Chesterfield, Dinwiddie, Fairfax, Falls Church, Hampton, Hanover, Henrico, Isle of Wight, King and Queen, Loudoun, Lynchburg, Prince William, Pulaski, Richlands, Roanoke, Spotsylvania, Warren, and Wise.

7. **Recovery Act Energy Program Application**⁹⁴

The Commonwealth of Virginia submitted an application to the U.S. Department of Energy for \$70 million under the American Recovery and Reinvestment Act of 2009. \$20 million of this money will go towards incentives to support biomass, waste-to-energy, renewable energy and energy efficiency products, services and projects as follows:

- \$10 million to support biomass and waste-to-energy projects.
- \$5 million to support new clean energy business development.

⁹³ http://www.dmme.virginia.gov/DE/Alternative_Fuels/solar.shtml

⁹⁴ <http://www.mme.state.va.us/DE/arra1.shtml>

- \$5 million to support commercialization of new energy technologies.

As of June 29, 2009, Virginia's application for this money was pending. Details regarding how to apply for these incentives will be made available at <http://www.stimulus.virginia.gov> after Virginia's plan has been approved by the U.S. Department of Energy.

8. Green Jobs tax Credit⁹⁵

(VA. CODE ANN. § 58.1-439.12:03(2010))

For every green job created with a yearly salary of \$50,000 or more, the company will earn a \$500 income tax credit for five years. "Green jobs" are defined as jobs in the manufacturing and operation of renewable or alternative energy products and technologies used to generate electricity and energy. Eligible alternative energy sources are defined as "hydrogen and fuel cell technology, landfill gas, geothermal heating systems, solar heating systems, hydropower systems, wind systems, and biomass and biofuel systems." The Office of Commerce and Trade will develop a full list of jobs eligible to qualify for the tax credit. Companies will be allowed tax credits for up to 350 green jobs created. If the taxpayer does not have enough tax liability to take the full credit, it may be carried forward for up to 5 years.

9. Commonwealth's Energy Leasing Program⁹⁶

(VA. CODE ANN. § 2.2-2417 (2001))

Lease financing, administered by the Departments of Treasury and Mines, Minerals and Energy, provides funding for energy efficiency projects in state facilities. It allows for the purchase of the services and equipment required to develop, design, and install an energy efficiency project. Agencies can lease or "borrow" a minimum of \$10,000 and make repayments over 3, 5, or 7 years. The funds can be used to finance projects such as lighting and motor efficiency upgrades, building envelope enhancements, distribution system improvements, and energy management controls.

C. Washington, D.C.⁹⁷

1. Renewable Energy Incentive Program⁹⁸

This program offers rebates for solar PV and wind energy systems. Incentives are capped at \$33,000 per site per fiscal year. The current incentives for solar and wind energy systems are as follows:

- \$3/watt for first 3 kW installed capacity.
- \$2/watt for next 7 kW installed capacity.
- \$1/watt for next 10 kW installed capacity.

Projects must be located within the District of Columbia and applicants must be customers of Pepco. The federal government, the D.C. government, and public schools are specifically identified as ineligible. The systems must be at least 1 kW in order to qualify and should be sized not to exceed on-site energy consumption as measured for the previous 12 months.

⁹⁵ <http://leg6.state.va.us/cgi-bin/legp604.exe?101+ful+SB623ER>

⁹⁶ <http://www.trsvirginia.gov/documents/debt/MELP/EnergyDescription.pdf>

⁹⁷ <http://green.dc.gov/green/cwp/view,a,1244,q,461562.asp>

⁹⁸ <http://green.dc.gov/green/cwp/view,a,1244,q,461562.asp>

2. Energy-Related Stimulus Funding⁹⁹

This Fund allows for the submission of energy related stimulus funding ideas to Green Energy D.C., a service of the District Department of the Environment.

3. Green Building Act¹⁰⁰

The 2006 Green Building Act requires certain building and renovation projects in Washington, D.C. to be green certified by LEED (for commercial projects) or meet the Green Communities Standard¹⁰¹ (for residential projects). Each year, through 2012, more types of construction will be required to meet these standards.

4. Clean and Affordable Energy Act of 2008¹⁰²

The Clean and Affordable Energy Act, passed on July 2, 2008, requires the mayor of Washington, D.C., within one year, to commission a study to determine the economic, legal and technical viability of the District government pursuing a new large-scale wind energy project through public or private financing.

5. New Construction Energy Efficiency Program¹⁰³

Pepco's Enhanced Commissioning Program offers building design and commissioning incentives to commercial, industrial, governmental, and institutional customers planning large new buildings. Assistance and resources are made available to customers to ensure efficient building construction and operation. Customers may receive up to \$250,000 in incentives per program year or \$500,000 for all combined incentives. Up to \$20,000 in cash incentives are available to participating customers. Implemented measures may involve HVAC and energy management systems, including lighting controls. Buildings must be 100,000 square feet or larger to participate in the program.

D. West Virginia¹⁰⁴

1. Direct Loan Program of the West Virginia Economic Development Authority (“WVEDA”)¹⁰⁵

WVEDA provides loans between \$50,000 and \$10 million for the financing of fixed assets for creditworthy manufacturing concerns, distribution centers, technology-based service companies and other business classifications currently targeted by the West Virginia Development Office meeting WVEDA’s job creation criteria.

The borrower must create or retain one job for every \$15,000 of WVEDA participation. WVEDA can participate up to 45% in eligible fixed assets of qualifying projects and share a first lien on such assets with the participating lender, who also may participate up to 45%. The borrower must inject at least 10% equity into the project. The loan term is generally 15 years for real estate intensive projects and 5 to 10 years for equipment projects. For loans of

⁹⁹ <http://green.dc.gov/green/cwp/view,a,1231,q,462500.asp>

¹⁰⁰ http://dcra.dc.gov/dcra/lib/dcra/information/publications/green_building.pdf

¹⁰¹ <http://greencommunitiesonline.org>

¹⁰² http://dcra.dc.gov/dcra/lib/dcra/information/publications/green_building.pdf

¹⁰³ <https://cienergyefficiency.pepco.com/EnergySavingNC.aspx>

¹⁰⁴ <http://www.energywv.org/community/renewable.html>

¹⁰⁵ <http://www.wveda.org/program-directloan.html>

\$50,000 to \$800,000, the interest rate is the New York Prime Rate minus 4%. Loans above \$800,000 are priced at a rate equal to the U.S. Treasury Note Rate of equivalent maturity plus three-quarters percent. In both instances, the loans are fixed at closing and the interest rate has a floor of 4% and no ceiling.

2. Tax Exemption for Wind Energy Generation

(W. VA. CODE § 11-13-20) (2001))

West Virginia taxes wind turbines at a significantly lower rate than that of most other types of electricity generation. For most types of newly constructed electricity generating units, the business and operating (“B&O”) tax is calculated by multiplying a pre-determined dollar amount by 40% of the nameplate capacity rating of the generating unit. However, the B&O tax on wind turbines is multiplied by only 12% of the nameplate capacity rating. This results in an effective B&O tax rate on wind powered turbines that is about 30% of the effective tax rate of most other types of newly constructed generating units.

3. Special Assessment for Wind Energy Systems

(W. VA. CODE § 11-6A-5a) (2001))

For the purposes of property tax assessment, utility-owned wind projects are considered to have a value equal to their salvage value, with certain limitations. This incentive effectively lowers the property tax base on utility-owned wind turbines from 100% of fair market value to as little as 24.95% of fair market value. This results in an effective property tax rate on wind turbines that is 24.95% of the effective tax rate on most other types of newly constructed electricity-generating units.

III) Far West States

A. California¹⁰⁶

1. City of Palo Alto Solar Renewable Energy Credit Purchase Program (City Council Resolution 8773)

City of Palo Alto Utilities (“CPAU”) currently purchases Solar Renewable Energy Credits (“SRECs”) to meet the demand for the solar portion of their retail green power program, PaloAltoGreen, through a third-party contract with 3-Degrees, Inc. PaloAltoGreen is a voluntary program through which CPAU customers can support renewable energy development by paying an extra 1.5 cents per kWh for their electricity needs. CPAU then uses this money to purchase wind and solar power Renewable Energy Credits, or directly install city-owned systems. Only systems that exceed 100 kW are being considered initially. Contract terms can not exceed 20 years and the contracted amounts can not exceed \$600,000.

2. California Solar Initiative (“CSI”)¹⁰⁷

In January 2006, the California Public Utilities Commission (“CPUC”) adopted a program—the California Solar Initiative (“CSI”)—to provide more than \$3 billion in incentives for solar-energy projects with the objective of providing 3,000 MW of solar capacity by 2016. The CPUC manages the solar program for non-residential projects and projects on existing homes (\$2+ billion), while the California Energy Commission oversees the New Solar Homes Partnership, targeting the residential new construction market (~\$400 million). Together, these two programs comprise the effort to expand the presence of photovoltaic (“PV”) throughout the state, Go Solar California.¹⁰⁸

The CPUC issued a ruling on July 9, 2010, announcing a temporary hold on some parts of this program. The CPUC will be examining the program to ensure that it can maintain its funding with the current incentive structure. Effective July 9 2010, no incentive reservations will be issued for government or nonprofit applications, or for systems 30 kilowatts (kW) or larger. The CPUC expects to lift the hold in September. Until that time, government entities, nonprofits, and owners of systems 30 kW or larger will have their applications kept in a queue, but will not be issued a reservation.

Originally limited to customers of the state’s investor-owned utilities, the CSI was expanded in August 2006, as a result of Senate Bill 1, to encompass municipal utility territories as well. Municipal utilities are required to offer incentives beginning in 2008 (nearly \$800 million); many already offer PV rebates.

¹⁰⁶ <http://www.energy.ca.gov/renewables/index.html>

¹⁰⁷ <http://www.cpuc.ca.gov/PUC/energy/solar>

¹⁰⁸ Depending on project size, CSI-eligible solar power generation facilities may be eligible for certain exemptions from most Federal and state energy regulatory laws.

a. *CSI Photovoltaics (“PV”) Initiatives*

This program offers cash back for the installation of onsite PV systems from 1 kW up to 1 MW. Those systems up to 5 MW may apply, but incentive payments are prorated to 1 MW. For eligible solar systems equal to or greater than 50 kW, CSI provides performance-based incentives: a flat-cents-per-kWh monthly payment for all metered output from eligible solar systems over the first five years of operation.

Many California municipalities and local utility providers offer similar incentives.

b. *Other CSI Initiatives*

CSI offers a number of other initiatives, including:

- Multi-Family Affordable Solar Housing (MASH) Program.
- Single-Family Affordable Solar Housing (SASH) Program.
- Solar Water Heating Rebate Program.

3. *Riverside Public Utilities Energy Efficiency Technology Grant Program*¹⁰⁹

Riverside Public Utilities offers its Energy Efficiency Technology Grant Program to its business customers to fund research, development, and effective use of innovative energy technologies that are unique to that particular business or industry’s specific manufacturing techniques or processes. Grant amounts may reach up to 100% of the project cost, with a maximum of \$100,000 per project and no matching funds or repayment requirements. Proposals must be in one of the following categories to be eligible for consideration: (1) building end-use efficiency, (2) environmentally preferred advanced generation, (3) renewable generation, (4) energy-related environmental research, (5) strategic energy research, or (6) electric transportation.

4. *Public Benefits Funds for Renewables and Efficiency*¹¹⁰

The California Energy Commission manages renewables funds through three programs:¹¹¹

a. *Existing Renewable Facilities Program (“ERFP”)*

ERFP provides production incentives, based on kilowatt-hours generated, to support existing renewable energy facilities. The program allocates state funds to increase the competitiveness of existing (operational on or prior to September 26, 1996) in-state renewable generating facilities. For example, if a facility has a 6-cent per kWh target price and the market price for the facility drops to 5-cents/kWh, the facility would receive 1.0-cent per kWh from the ERFP for generation (to bring the revenue stream up to the 6-cent/kWh target price). The ERFP will pay up to 1.5 cents/kWh.

¹⁰⁹ <http://www.riversideca.gov/utilities/busi-technologygrant.asp>

¹¹⁰ http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=CAo5R&re=1&ee=1

¹¹¹ These incentives may address a wide range of different kinds of electricity production facilities, and the required regulatory authorizations would best be addressed on a case-by-case basis.

b. Emerging Renewables Program

This program seeks to develop a self-sustaining market for “emerging” renewable energy technologies in distributed generation applications. The program seeks to stimulate market demand for renewable energy systems that meet certain eligibility requirements by offering rebates to reduce (buy-down) the initial cost of the system to the customer. Another goal of the Emerging Renewables Program is to encourage the siting of small, reliable distributed generating systems throughout California in locations where the produced electricity is both needed and consumed. Wind systems must be permanently interconnected to the electrical distribution grid of the utility serving the customer’s electrical load, but fuel cells used for backup generation for emergency, safety, or telecommunication purposes do not need to be grid-connected. To be eligible for the Emerging Renewables Program rebate, the participant must be a customer of one of the utilities contributing funds to support the program—Pacific Gas & Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, or Southern California Water Company (doing business as Bear Valley Electric Service). Although the Emerging Renewables Program is open to emerging renewable generating systems of various sizes, subject to certain conditions and restrictions, it was designed to favor small generating systems, such as those typically used by residential or small commercial and agricultural customers.

Effective April 7, 2010, rebate levels for the Emerging Renewables Program are:

- Small Wind Turbines (up to 50 kW): \$3.00/W for first 10 kW and \$1.50/W for increments > 10 kW and < 30 kW.
- Fuel cells (<30 kW) using renewable fuels: \$3.00/W for systems less than 30 kW.

Rebates for eligible renewable energy systems installed on affordable housing projects are available at 25% above the standard rebate level up to 75% of the system’s installed cost.

c. Public Interest Energy Research (“PIER”) Program¹¹²

The PIER Program annually awards funds to support energy electricity and natural gas research, design and development projects. Allocations are based on executive orders, state legislation such as Senate Bill 1250 (Perata, Chapter 512, Statutes of 2006), the California Energy Commission’s Integrated Energy Policy Reports and interagency cooperation and coordination. The relevant PIER programs are listed under the California Energy Commission’s Research, Development and Demonstration Division below.

¹¹² <http://www.energy.ca.gov/contracts/pier.html>;

http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=CA05R&re=1&ee=1

5. California Energy Commission Research, Development and Demonstration Division Program

The California Energy Commission's Research, Development and Demonstration ("RD&D") Division supports public interest energy research, development and demonstration. RD&D activities include providing contracts and grants for research and development of energy technologies and related scientific activities. Some of these projects work in conjunction with the PIER program. The following programs are relevant to CleanTech companies:

a. Energy Systems Integration ("ESI")—Demand Response¹¹³

Demand response to electricity prices and system contingencies is a coordinated initiative of the Buildings Program and the ESI Program. This program element conducts research, development and design on technologies and policies that facilitate demand response. The goal of the program is to complement efforts by the California Public Utilities Commission and the California Independent System Operator to develop and implement commercially available demand response programs. The program examines and learns from deployed technologies and investigates the development of the next generation of tools and technologies.

b. Advanced Generation Research¹¹⁴

The Environmentally Preferred Advanced Generation ("EPAG") unit of the PIER Program has the objective of facilitating widespread use of non-renewable distributed generation ("DG") and improving California's air quality by developing reliable, cost effective, emission-reduction technologies for reciprocating engines, small turbines and microturbines, fuel cells, and hybrid fuel cell-microturbine technologies.

DG is electricity production that is on-site or close to the load center and is interconnected to the utility distribution system. DG is the application by which the EPAG program provides initial, tangible public benefits in the form of efficient, clean power and heat for California industry and buildings.

c. Transportation¹¹⁵

The California Energy Commission is developing programs to reduce petroleum consumption and greenhouse emissions by researching and introducing new, efficient vehicle technologies and alternative fuels. The Transportation subject area supports the research and development of these new technologies through concept feasibility research, research centers, collaborations and strategic partnerships. PIER Transportation's efforts can also be implemented by the Alternative and Renewable Fuels and Vehicle Technology (Assembly Bill 118) program through incentives, demonstrations, retrofits, and training and workforce development.

¹¹³ <http://www.energy.ca.gov/research/esi/pricing/index.html>

¹¹⁴ <http://www.energy.ca.gov/research/epag/index.html>

¹¹⁵ <http://www.energy.ca.gov/research/transportation/index.html>

d. *Energy Innovations Small Grant Program*¹¹⁶

The California Energy Commission’s Energy Innovations Small Grant Program provides up to \$95,000 for hardware projects and \$50,000 for modeling projects to small businesses, non-profits, individuals and academic institutions to conduct research that establishes the feasibility of new, innovative energy concepts. Research projects must target one of a PIER research and development areas, address a California energy problem and provide a potential benefit to California electric and natural gas ratepayers.

e. *Energy-Related Environmental Research*¹¹⁷

To fulfill its mission, the PIER Environmental Area team (“PIER-EA”), with the help of the University of California’s Institute for Energy Efficiency, has developed a long-term research plan (the “Plan”) that targets energy-related environmental research projects for the PIER-EA program. The Plan is intended to be a living document and will be updated to remain current with end-user needs, with the state of the science in the subject areas being addressed, and with pending legislative or regulatory decisions. The Plan is a portfolio of environmental research issues of both short-term and long-term relevance. Similarly, research activities addressing these issues will include a mix of efforts having short-term and long-term duration.

Core research is being conducted in air quality, aquatic resources, land use and habitat and global climate change.

f. *Industrial / Agricultural / Water End-Use Energy Efficiency (“IAW”)*¹¹⁸ **Project**

This project works in collaboration with representatives of the industrial, agricultural and water end-use energy efficiency industries to identify research, development and design options to overcome energy-related problems. IAW-funded projects will focus on RD&D activities that will provide these industries the ability to address the recent energy crisis.

6. *Energy in Agriculture Loan*¹¹⁹

This program offers below-market-rate (3.2%) loan funds for the purchase of cost effective energy efficient and renewable generation emerging technologies applicable to the agricultural and food processing industries. Loans range from \$50,000 to \$500,000 to finance a single project or multiple projects.

7. *Self-Generation Incentive Program (“SGIP”)*¹²⁰

SGIP offers financial incentives of \$1/W–\$4.50/W to customers who produce electricity with wind turbines and fuel cells. Expires on January 1, 2016. The maximum eligible system size is 5 MW, although the incentive payment is capped at 3 MW. Projects receiving incentives based on future performance of the system are not eligible to receive a SGIP rebate. For

¹¹⁶ <http://www.energy.ca.gov/research/innovations/index.html>

¹¹⁷ <http://www.energy.ca.gov/research/environmental/index.html>

¹¹⁸ <http://www.energy.ca.gov/research/iaw/index.html>

¹¹⁹ http://www.energy.ca.gov/process/agriculture/loan_solicitation/

¹²⁰ <http://www.cpuc.ca.gov/PUC/energy/DistGen/sgip/index.htm>

projects that receive other incentives funded by California investor-owned utility ratepayers, the SGIP incentive is discounted by the amount of the other incentive.

8. Emerging Renewables Rebate Program¹²¹

This program offers cash incentives for the installation of grid-connected small wind and fuel cell renewable energy electric-generating systems, including (1) small wind turbines (up to 50 kW), \$2.50/W for first 7.5 kW and \$1.50/W for increments greater than 7.5 kW and less than 30 kW, and (2) fuel cells (less than 30 kW) using renewable fuels, \$3.00/W. Rebates for eligible systems installed on affordable housing projects are available at 25% above the standard rebate, up to 75% of the system's installed cost.

9. Feed-In Tariffs¹²²

Provides feed-in tariffs for the purchase of up to 480 MW of renewable generating capacity from qualifying renewable energy facilities less than 1.5 MW in size. Sellers receive a fixed-base rate determined by the current Market Price Referent table for a period of 10, 15 or 20 years. These tariffs are intended for renewable electric generation that is not net metered and does not participate in commission-adopted incentive programs.

10. California New Construction Property Tax Exclusion for Active Solar Energy Systems¹²³

California offers a property tax exemption of 100% of solar energy system value and 75% for dual-use equipment, for qualifying clean and renewable energy systems installed on or before December 31, 2009.

11. Marin County Green Building Incentive Program¹²⁴

Marin County's Community Development Agency provides incentives for new construction that incorporates green building practices. The goal of the program is to enhance energy efficiency and conservation in residential, commercial and community facilities.

The incentive program includes the following incentives:

- Waiver of the Title 24 (California Building Energy Efficiency Standards) energy fee (new construction projects only).
- Fast-track permit processing.
- Free green building technical assistance, design consultation, resources and information for all Marin County residents.

A project must fulfill one of the following requirements to qualify for the first two incentives:

- Exceed Title 24 requirements by 20%, or

¹²¹ <http://www.consumerenergycenter.org/erprebate>

¹²² http://docs.cpuc.ca.gov/published/News_release/78824.htm

¹²³ <http://www.boe.ca.gov/legdiv/ptleg/pdf/ab1451-3rk.pdf>

¹²⁴ <http://www.marinsustainability.org>

- Install an on-site renewable energy system that produces a minimum of 75% of the annual energy use for the building and site amenities.

12. San Bernadino County Green Building Incentive¹²⁵

The county program includes a number of incentives to encourage residents, builders, and businesses to adopt more sustainable practices. Builders who participate in San Bernardino County's Green Building program will receive accelerated plan review, priority inspections, design assistance, and recognition for all qualified projects. Builders can earn their green building designation by following any one of these County-approved green rating systems: California Green Builder, Leadership in Energy and Environmental Design (LEED), or the County's Green Building Basics Checklist.

13. San Diego County Green Building Incentive¹²⁶

The County of San Diego has a Green Building Incentive Program designed to promote the use of resource efficient construction materials, water conservation, and energy efficiency in new and remodeled residential and commercial buildings. As part of the program, the County will waive the fee for the building permit and plan check for a photovoltaic system. In addition, for qualifying resource conservation measures, the County will reduce building permit and plan check fees by 7.5% and grant expedited plan checks, saving approximately 7 - 10 days on the project timeline. To qualify for these conservation incentives, the project must comply with the program requirements for either natural resources conservation, water conservation, or energy conservation.

14. Municipal Energy Districts

Property-Assessed Clean Energy (“PACE”) financing allows property owners to borrow money to pay for energy improvements. The amount borrowed is typically repaid via a special assessment on the property over a period of years. California has authorized local governments to establish such programs.

In July 2008, California amended its state law to enable cities and counties to offer PACE financing programs to property owners, to be used for improvements to developed property only if the property owner agrees to a contractual assessment (to repay the loan) on his/her property tax bill for up to 20 years. To be eligible, a property owner must have a clean property title and must be current on property taxes and mortgages. The law requires that local governments first establish draft plans that will be subject to a public hearing, after which officials will develop a report and program upon which the local legislative body will vote.

Senate Bill 77 of 2010 requires the California Alternative Energy and Advanced Transportation Financing Authority to develop and administer a PACE Reserve program to help reduce overall program costs. The bill appropriated \$50 million to the authority through January 1, 2015. The bill also authorizes the authority to issue revenue bonds to help support PACE programs.

¹²⁵ <http://www.sdcounty.ca.gov/dplu/greenbuildings.html>

¹²⁶ <http://www.sdcounty.ca.gov/dplu/greenbuildings.html>

15. Property Tax Exclusion for Solar Energy Systems

Section 73 of the California Revenue and Taxation Code allows a property tax exclusion for certain types of solar energy systems installed between January 1, 1999 and December 31, 2016. This section, amended in September 2008 by AB 1451, now includes the construction of an active solar energy system incorporated by an owner-builder in the initial construction of a new building that the owner-builder does not intend to occupy or use.

Qualifying active solar energy systems are defined as those that "are thermally isolated from living space or any other area where the energy is used, to provide for the collection, storage, or distribution of solar energy." These include solar space conditioning systems, solar water heating systems, active solar energy systems, solar process heating systems, photovoltaic ("PV") systems, and solar thermal electric systems, and solar mechanical energy. Solar pool heating systems and solar hot-tub-heating systems are not eligible.

16. Sales Tax Exemption for Alternative Energy Manufacturing Equipment

SB 71 of 2010 established an exclusion from the state's sales and use tax for expenses related to the design, manufacture, production, or assembly of renewable energy equipment, combined heat and power equipment, and alternative transportation equipment in California. The legislation defines renewable and energy broadly to include "solar, biomass, wind, geothermal, hydroelectricity under 30 megawatts, or any other source of energy, the efficient use of which will reduce the use of fossil and nuclear fuels."

Project owners need to apply to the California Alternative Energy and Advanced Transportation Financing Authority ("CAEATFA") to receive the sales tax exclusion. In selecting the winning projects, the CAEATFA considers:

- The resulting manufacturing facilities or equipment purchases;
- The benefit to the state in relation to the benefit to the company from the exclusion;
- The number of new permanent jobs created by the project;
- If possible to determine, the environmental benefits of the project for California;
- The current unemployment levels in the area of the proposed project; and
- Any other factors deemed appropriate by the CAEATFA.

When the total value of exclusions awarded reaches \$100 million annually, the CAEATFA must provide a 20-day notice to the Legislature prior to approving additional projects. Unless amended by the Legislature, this incentive will remain in place until January 1, 2021.

Contact Information

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*Special thanks to Katerina Papacosma, a summer associate at Bingham McCutchen LLP,
for her efforts in drafting this overview.*