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Eligibility of Projects for Vermont Clean Energy Assessment District (CEAD) Financing

July 1, 2009

Eligible Energy Efficiency Projects

H.446, the Vermont Energy Act of 2009, states that "energy efficiency projects shall be those that are eligible under section 3267 of this title".

§3267. ELIGIBLE ENERGY EFFICIENCY PROJECTS

Those entities appointed as energy efficiency utilities under subsection 209(d) of Title 30 shall develop a list of eligible energy efficiency projects and shall make the list available to the public on or before July 1 of each year.

Eligible energy efficiency improvement projects shall be limited to:

- measures or combinations of measures that are permanently attached to the property for which CEAD financing is being secured
- measures that reduce the net energy requirements of the affected building
- energy-related repair, health and safety measures that may be required to be included in a comprehensive energy efficiency improvement project to secure the energy savings of the project

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Based on Vermont experience, efficiency measures that may meet these requirements may include the following, subject to project-specific costs and savings assessment:

Residential Measures	Specification and/or More Information on this Measure
Blower-door guided air sealing	
Insulate walls, attic, basement	
Energy efficient light fixtures (hard-wired)	
Seal and insulate ducts	
Insulate pipes	
Upgrade heating system to higher efficiency (boiler, furnace, heat pump, distribution, controls)	
Replace/switch water heater	
Ceiling fans	
Replace/renovate windows or doors	
Heat-recovery ventilation system	
Efficient exhaust-only ventilation system	
Hot water heat recovery system	
Services of energy expert/professional	

Commercial Building Measures	Specification and/or More Information on this Measure
Energy efficient light fixtures (hard-wired)	
Seal and insulate building envelope	
Upgrade HVAC system to higher efficiency (HVAC equipment, distribution, controls)	
Comprehensive building re-commissioning	
Compressed air system upgrade	
Premium efficiency motors and controls	
Variable speed drives	
Refrigeration system upgrade	
Heat-recovery ventilation system	
Insulate pipes	
Water heating system upgrade	
Hot water heat recovery system	
Ceiling fans	
Daylighting and controls	
Services of energy expert/professional	

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Eligible Renewable Energy Projects

Renewable energy projects and/or measures may be eligible for CEAD financing, either alone or in combination with eligible efficiency measures, provided they fall under the definition in subdivision 8002(2) of Title 30, where "renewable energy means energy produced using a technology that relies on a resource that is being consumed at a harvest rate at or below its natural regeneration rate," specifically including "flammable gases produced by the decay of sewage treatment plant wastes or landfill wastes and anaerobic digestion of agricultural products, byproducts, or wastes" but excluding "solid waste, other than agricultural or silvicultural waste," any "form of nuclear fuel" and hydroelectric energy from a plant over 200 MW.

Based on Vermont experience, the most likely types of projects to be able to use CEAD financing are listed below. It should be noted, however, that for most of these types of projects, only solar water heating is likely to be supportable with financing alone. Other small-scale renewable energy projects will likely need to have their installed cost reduced by owner investment, grants, tax credits, or other funding sources to the level where annual savings can cover the annual financed payments. Efficiency measures, when combined with renewable energy measures, may also help a combined package to meet minimum benefit/cost requirements.

Renewable Energy Measures (Residential & Commercial)	Specification and/or More Information on this Measure
Solar water heating systems	
Biomass energy heating systems	
Small wind systems	
Micro-hydro systems	
Solar water or space heating system	
Solar electric (photovoltaic) system	
Small wind or micro-hydro system	

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Cost Effectiveness and Cost Limitations on Projects

To be eligible for CEAD financing, a property owner must have an analysis performed to quantify the project costs and energy savings and estimated carbon impacts of the proposed energy improvements, including an annual cash-flow analysis. This analysis may be conducted by Efficiency Vermont or Burlington Electric Department (in Burlington), as Vermont's designated "Energy Efficiency Utilities," or other qualified entities designated by participating cities and towns. All analyses will be reviewed by Efficiency Vermont or Burlington Electric Department.

For resident owned properties, the cost of the project financed through CEAD can not exceed $30,000 or 15% of the assessed value of the property, whichever is less. In addition, the loan-to-value ratio (any outstanding mortgages plus the amount of CEAD financing) can not exceed 90% of the assessed property value. For commercial properties, CEAD financing can not exceed 15% of the assessed property value and the loan-to-value ratio (any outstanding mortgages plus the amount of CEAD financing) can not exceed 90% of the assessed property value.

Clean Energy Assessment Districts (CEAD) –
Information about Vermont's
Property Assessed Clean Energy (PACE) program

There is a new program available to help Vermonters invest in energy efficiency and renewable energy projects for their homes and businesses. The Vermont Energy Act of 2009, which recently became law in Vermont, includes a provision that allows for the creation of Property Assessed Clean Energy, or PACE, programs[1]. This is a concept that has been successfully implemented in California, New York and Colorado, and is being considered in many other locations around the country.

Vermonters know that investing in energy efficiency and renewable energy improvements is good for the environment as well as financially beneficial over time. Vermont policymakers have an interest in encouraging these investments, because they help meet not only greenhouse gas emissions reduction targets, but also the aggressive building energy efficiency goals established in Vermont statutes.

One major barrier to making these investments is a lack of sufficient upfront capital. For property owners who don't have the cash to make these investments in major energy improvements, there are few options available that have the necessary combination of easy qualification, attractive interest rate, and a relatively long repayment term.

PACE is a <u>voluntary</u> mechanism allowing individuals wishing to make eligible energy improvements to opt in to a special assessment district created by their municipality. Energy efficiency and/or renewable energy improvements are funded by taxable municipal bonds or other municipal debt, repaid over up to 20 years. All improvement work must be performed by appropriately qualified and licensed contractors and must be approved by an energy efficiency utility.

Key Provisions of PACE

- Enables municipalities to create and secure debt for a PACE program if they choose, and to secure funding to pay for energy efficiency and renewable energy projects
- Participating municipalities can join together to obtain funding more cost effectively
- Participating property owners pay for the benefit over up to 20 years through a special assessment charged as a new line item on their property tax bills
- The maximum amount that can be financed is 15% of the assessed value of the property, capped at $30,000 for residential properties up to 4 units. The total amount financed by PACE plus any outstanding mortgages on the property cannot exceed 90% of the assessed value.

Benefits for Vermont Property Owners

- Overcomes a key financial hurdle for making investments in energy efficiency and renewable energy.
- Incremental special assessment payments are low and fixed for up to 20 years, with no upfront cost, and there are no costs to property owners who do not participate.

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[1] In the Vermont legislation, this provision is described as the Clean Energy Assessment District program, or CEAD. However, as this concept has gained popularity nationally, it has come to be generally referred to as PACE.

- Special assessment fees transfer to the new owner when the property is sold, or assessment obligation can be paid in full at transfer.
- Electricity and fuel bills are lower than they would be without the improvements, and the property owner is helping to reduce greenhouse gas emissions.

Benefits to Vermont Cities and Towns
- Cities and towns can use PACE to become more self-reliant and energy efficient and contribute to meeting community sustainability, climate, and energy goals.
- Cities and towns can provide a valuable public service to the members of their community.

Benefits to Vermont's Economy
The implementation of PACE:
- Could inject millions of dollars directly into the Vermont economy to make lasting energy and building infrastructure improvements
- Would provide a steady and growing demand for energy efficiency installers, as well as installers of small scale renewable energy systems
- Helps to establish a steady and predictable demand for energy efficiency and renewable energy products, helping suppliers and retailers expand their businesses

Next Steps
- The implementation of PACE in each municipality requires a public vote
- Prior to Town Meeting Day, municipalities will need to hold meetings with interested parties, and have public meetings to educate voters
- Each municipality will have to make decisions about the parameters of their particular program.
- Efficiency Vermont and the Vermont League of Cities and Towns will provide support and model documents to assist in the implementation.

Dear Selectperson _____:

As a property owner in ____________________________ I write to encourage you to create a town wide program to decrease the upfront cost to homeowners of installing solar panels, weatherization or renewable energy. Across the country, cities are helping their residents weatherize their buildings and go solar by offering loans through a new program called Property Assessed Clean Energy financing (PACE). PACE financing would significantly help homeowners like me develop our most abundant local renewable resource without affecting our city's budget.

Our state legislature recently passed a law that enables our cities and towns to create a PACE finance program, and I hope you will become a champion of this innovative financing tool. In California and Colorado where these kinds of programs were already allowed, PACE has proven extremely popular among property owners who want to add renewable energy systems or additional weatherization. Now cities across the country are working to replicate the model and bring PACE benefits to their own residents.

Here's how it works: PACE is based upon the concept of a special tax district, which is already used across our state to finance community projects. PACE expands upon that concept by providing financing to homeowners who choose to install renewable energy projects or weatherization upgrades on their property. Entirely removing the high upfront cost, the financing is repaid through a long-term assessment, (usually 20 years), collected on the participating residents' annual property tax bills. If the home is sold during this time, the lien stays with the property, meaning obligation of the assessment automatically transfers from one homeowner to the next.

Funding options for local governments to run a PACE program are numerous. In Berkeley, CA their program relies on investment entirely from a financial firm working with a commercial line of credit from a local bank. Palm Desert and Sonoma County, CA are utilizing unallocated reserves to issue loans. Another possible source of funds are Energy Efficiency and Conservation Block Grants (EECBG), a portion of which can be used to support the creation of clean energy financing districts.

Renewable energy and better weatherization benefit all residents of ____________________________ by reducing harmful emissions and delivering reliable peak electricity when our grid needs it most. The upfront cost of these improvements is the single greatest barrier to deployment. Municipalities are uniquely positioned to help address this financial hurdle, particularly in these tough economic times of high interest rates and elusive home equity loans. A voluntary, opt-in PACE program would give property owners the finance solution they need to be able to invest in our collective renewable energy future.

I will follow up with your office soon to discuss this request.

Kindest regards,