



The  
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**James M. Jeffords Center's  
*Vermont Legislative Research Service***



**PACE Energy Program**

The Property Assessed Clean Energy (PACE) program is a new pilot program that seeks to help property owners invest in energy efficiency and renewable energy for their home or business. A major hurdle to individuals investing in such energy projects for their properties is the lack of the necessary upfront capital to start and finish major energy improvements. The PACE program is voluntary and allows individuals that wish to participate to be placed in a special tax assessment district created by their municipality. This tax assessment district helps them to secure an energy improvement loan for their household. Loans given to property owners for energy improvements are funded by taxable municipal bonds, and are to be repaid incrementally by a special assessment on the property taxes of a residence. The loan repayments are low and fixed and the loan is gradually paid off over 20 years. If a property is sold, the loan repayment and energy improvements stay with the property and are transferred to the new owner.<sup>1</sup>

The PACE energy program is a viable alternative to finance energy improvements for a household that may not qualify for low-income weatherization programs. Such households may not have sufficient funds to invest in other renewable energy improvements, such as electric photovoltaic solar panels or an efficient heating/cooling system.<sup>2</sup>

The Vermont Energy Act of 2009 included a provision that allowed for the creation of Property Assessed Clean Energy Programs like the programs already in place in California, Colorado, and New York.<sup>3</sup> This report provides information about other state PACE programs in order to help Vermont implement its own PACE program.

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<sup>1</sup> Daniel Kammen, "Guide to Energy Efficiency and Renewable Energy Financing Districts for Local Governments," Renewable and Appropriate Energy Laboratory University of California-Berkeley (2009): 4-8.

<sup>2</sup> PACENow, "PACE Programs by State," accessed December 1, 2010, <http://pacenow.org/blog/2010/07/pace-programs-by-state>.

<sup>3</sup> Peter Adamczyk, "Property Assessed Clean Energy (PACE)," Vermont's Property Assessed Clean Energy (PACE) Program, Vermont Energy Investment Corporation (VEIC), accessed November 23, 2010, <http://www.veic.org/resourcelibrary/PACE.aspx>.

## **Berkeley's FIRST Program**

The municipality of Berkeley, California was first to implement a solar financing pilot program called the FIRST Program in 2008 designed to help its citizens invest in solar panels for their homes. Funding for the projects came from the city's Sustainable Energy Financing District with the cost being repaid through a special tax on the property and will be repaid over twenty years. The minimum cost to finance a project was \$5,000 with the maximum cost of \$37,500. The Berkeley program also spawned California law AB811, which allows loan programs to pay back the cost of renewable energy systems. The FIRST program also received an additional \$1.5 million in additional external funding over its course, and has been used as a model for similar programs now active throughout the state.<sup>4</sup>

Twenty-one other states have enacted similar programs since the inception of California's pilot program. These states include: Colorado, Florida, Indiana, Illinois, Louisiana, Maine, Maryland, Minnesota, Missouri, Nevada, New Hampshire, New Mexico, New York, North Carolina, Ohio, Oklahoma, Oregon, Texas, Vermont, Virginia, and Wisconsin. In most states, legislation was adopted in 2009. Among the municipalities that have implemented PACE programs include the city of Berkeley and Sonoma County in California, Boulder County, Colorado, and the town of Babylon, New York.<sup>5</sup>

## **Boulder County's ClimateSmart Program**

Boulder County, Colorado was one of the first municipalities to enact the PACE program now seen across the country. In the 2008 General Election Boulder County voters approved Ballot Measure 1A, which established a "Clean Energy Options Local Improvement District" and gave permission to Boulder County to issue up to a maximum of \$40 million in special assessment bonds for this local improvement district. The ClimateSmart Loan Program is Boulder County's program to administer the loans made possible through this special district.<sup>6</sup>

## **Long Island Green Homes Initiative**

Babylon, NY launched a program called the Long Island Green Homes Initiative which began by amending its definition of "solid waste" to include CO<sub>2</sub>. By doing this Babylon took advantage of an existing municipal waste-funding program by grouping carbon dioxide as waste to assist in funding energy efficient assessments.<sup>7</sup> For a long period of time residents had been getting charged a biannual property appraisal fee for the extraction of solid waste. The amendments to the definition of solid waste allowed for the town to include CO<sub>2</sub>, which allocated funds to finance renewable and energy efficient retrofits to existing homes in Babylon. The state of New

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<sup>4</sup> Official Web Site of the City of Berkeley, California, "Berkeley FIRST Solar Financing," accessed November 22, 2010, <http://www.ci.berkeley.ca.us/ContentDisplay.aspx?id=26580>.

<sup>5</sup> PACENow, "Federal Action Grassroots Toolkit," accessed November 26, 2010, <http://pacenow.org/blog>.

<sup>6</sup> Boulder County Government, "What Is the ClimateSmart Loan Program?" accessed May 3, 2011, <http://www.bouldercounty.org/bocc/cslp/general.htm>.

<sup>7</sup> Bethany K. Speer, "Funding Sources for Property Assessed Clean Energy (PACE) Programs | Renewable Energy Project Finance," accessed December 1, 2010, <http://financere.nrel.gov/finance/content/funding-sources-property-assessed-clean-energy-pace-programs>.

York took the initiative and affirmed the “carbon as waste” rationale, consequently allowing any municipality in the state to set up a waste district for this purpose.<sup>8</sup>

### **PACE in Vermont**

Efficiency Vermont has been the mediator offering energy efficient programs for Vermonters for many years now and has recently begun to look towards its customers for more creative ways to help finance projects for all types of energy related building improvements. The Vermont Legislature established the new statute under Act 45 in May 2009, making it more feasible for business owners to invest in energy efficiency projects to eventually be instituted in homes and businesses. Currently, Burlington, Halifax, Newport, Putney, and Westminster have all approved the formation of PACE in their municipalities. Individual municipalities hold a public vote in order to establish PACE. It is necessary for all municipalities to hold a public vote in order to put a PACE program in place. The state of Vermont allows each municipality to create the limitations of their specific program established through the Clean Energy Assessment District Financing.<sup>9</sup>

### **Fannie Mae/Freddie Mac**

The two government-chartered agencies, Fannie Mae and Freddie Mac, that guarantee over half of the residential mortgage loans in the country expressed their concerns in letters written to mortgage lenders about energy improvement liens on homes taking precedence over a mortgage. Typically, all property taxes must be paid off from any profit on a foreclosed property. Energy liens still in place on a defaulted mortgage could jeopardize the lenders’ interest on such home loans. Fannie Mae and Freddie Mac have stated they cannot guarantee loans on properties that have taken advantage of PACE-funded improvements and have yet offered guidance to mortgage lenders as to how to handle properties with such improvements already installed. The two agencies’ concern has effectively halted PACE programs across the country and put in limbo over \$150 million in stimulus funding from the Obama administration to help fund energy programs like PACE.<sup>10</sup>

### **Home Star Energy Program**

The Home Star Energy Program, as proposed by the Obama administration in 2010, is a government-subsidized program to retrofit homes to be more energy efficient. It had two main goals: to create jobs and to address global climate issues by reducing Carbon Dioxide emissions. This program had the built in incentive of lowering energy costs for homeowners. The Obama administration also has planned for three types of additional incentives for the program. The first type was additional incentives for the homeowner. Under the program, a homeowner could elect to participate in either a Silver Star or Gold Star program. In the Silver Star program,

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<sup>8</sup> Akanimo Udo, "What Is a Property Assessed Clean Energy Bond? Why Is It Important to Weatherizers?" Economic Opportunity Studies, February 2010, accessed December 1, 2010, <http://www.opportunitystudies.org/>.

<sup>9</sup> Vermont Energy Investment Corporation, "Property Assessed Clean Energy (PACE)," accessed November 29, 2010, <http://www.veic.org/resourcelibrary/PACE.aspx>.

<sup>10</sup> Todd Woody, "Loan Giants Threaten Energy-Efficiency Programs," *New York Times* June 30, 2010, accessed May 3, 2011, <http://www.nytimes.com/2010/07/01/business/energy-environment/01solar.html?dbk>.

homeowners would receive anywhere from \$250-\$4,000 in incentives for adopting energy efficient practices. In the Gold Star Program, energy usage would be measured prior to retrofitting and subsequently after retrofitting is completed. The homeowner then would receive \$3,500 for a 20% reduction in emissions as well as an additional \$1,500 for each 5% reduction above the initial 20%. In both the Gold and Silver Star programs, incentives would not exceed 50% of the homeowner's contribution. The second type of additional incentive is industry incentives. These incentives would include funding and tax breaks for retailers and producers of the retrofitting industry. The last type of incentive is consumer financing, which includes low cost financing for entry into the program.<sup>11</sup>

On May 6<sup>th</sup>, 2010 the US House of Representatives passed the Home star energy act. It was received by the Senate on May 7<sup>th</sup>, 2010 where it was read twice and referred to the Senate Committee on Finance. The bill has not yet passed the Senate or become law.<sup>12</sup>

### **Conclusion**

This report has outlined Property Assessed Clean Energy programs since their inception from municipal pilot programs. Programs in Babylon, New York and Berkeley, California initiated the model in which legislation for PACE programs in 22 states are based on.

- Programs are voluntary and approved by voters in a specific municipality.
- Special tax districts are created to assess additional property taxes by which loans are repaid.
- Loans are funded through taxable municipal bonds.
- Loans repayments are low and fixed, and to be repaid over a period of twenty years.
- If the property is sold, improvements and the extra tax assessment stay with the property.
- The FIRST Program in Berkeley, California was the first municipality to explore the creation of a special tax district and loan program.
- Loans typically go to fund expensive energy improvements such as efficient heating/cooling systems and solar panels for a residence.
- Vermont has included legislation in their 2009 energy bill which permits the creation of special tax districts to set up PACE programs across the state.
- Thus far, the towns of Burlington, Halifax, Newport, Putney, and Westminster have approved formation of PACE programs in their respective municipalities.
- Mortgage giants Fannie Mae and Freddie Mac have effectively halted PACE programs nationally, in addition to federal funding due to concerns over energy liens taking precedent over mortgage terms.

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<sup>11</sup>The President's Economic Recovery Advisory Board, "Home Retrofits for American Jobs, Efficiency and Economic Growth," December 4, 2009, accessed April 21, 2011, <http://www.whitehouse.gov/sites/default/files/microsites/091204-PERAB-Home-Retrofits-Memo-Final.pdf>

<sup>12</sup> Library of Congress, Bill Summary and Status, "Home Star Energy Retrofit Act of 2010," accessed May 13, 2011 <http://thomas.loc.gov/cgi-bin/bdquery/z?d111:HR05019:@@X>

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Disclaimer: This report has been compiled by undergraduate students at the University of Vermont under the supervision of Professor Anthony Gierzynski. The material contained in the report does not reflect the official policy of the University of Vermont.