



BED'S PROPERTY ASSESSED CLEAN ENERGY (PACE) PROGRAM FOR ENERGY EFFICIENCY & RENEWABLE ENERGY PROJECTS FOR RESIDENTIAL (1 TO 4 UNIT OWNER-OCCUPIED) EXISTING BUILDINGS

Frequently Asked Questions

1. What is BED's PACE program?

Act 45, passed by the Vermont State Legislature, allows Vermont communities to establish "property assessed clean energy" assessment districts to make it easier for residential building owners to invest in eligible energy efficiency and/or renewable energy projects in owner-occupied (1 to 4 unit) existing homes.

Since Burlington voters approved the PACE district in 2010, eligible Burlington residential (owner-occupied) property owners are now able to access funding for eligible energy efficiency and renewable energy projects and then pay back the cost as a regular municipal assessment on their monthly BED electric bill.

What makes PACE unique is that the law allows for the repayment (excluding any past due balances) to transfer to the new property owner at the time of sale *if* the buyer agrees. PACE financing can also be paid off in full at any time. PACE can be an attractive financing option as it allows property owners to make energy improvements now, even though, they may not know how long they will own the property.

2. Why is BED offering a PACE Program?

BED has been offering energy efficiency programs for many years, and we have heard from our customers the need for more creative ways to help pay for all types of energy-related building improvements. Customers have told us that they appreciate the technical assistance and cash incentives from BED (and also from Vermont Gas Systems in many cases) to make efficiency improvement but the up-front capital is not always available to move forward with projects. PACE will help these customers get over this hurdle.

PACE allows for longer participant re-payment terms and the potential transfer to the new property owner, which may encourage more customers to undertake energy projects. Repayments are calculated to recover the cost of the energy project over a loan term that is less than the useful life of the installed efficiency measures or renewable energy project but no longer than 20 years.

Standard technical assistance and incentives from BED and Vermont Gas Systems (www.vermontgas.com) will be available to eligible projects to help reduce participant costs as well as current Federal tax credits (www.energystar.gov) and State of Vermont incentives for renewable energy projects (www.rerc-vt.org).

3. Who is eligible to participate?

- Residential dwellings, including primary residences, vacation homes, 1-4 unit owner-occupied structures and manufactured homes and condominiums are eligible to participate in the PACE Program if property taxes are being paid on the dwelling by the owner of the dwelling.
- Your mortgage and tax payments must be up-to-date, and your property must be free from liens and in good standing.
- Electric and water utility bill(s) must be in good standing.
- Eligibility requires that a lien be placed on the property deed.
- Your **loan**-to-value ratio of your PACE assessment must be equal to or less than 90%. For example, a home is currently assessed at \$250,000, has one mortgage of \$150,000 and wants to add a \$30,000 PACE assessment, which results in a loan-to-value ratio of 72%.
- Your debt-to-income ratio of your PACE assessment must stay equal to or below 41%. This ratio looks at your total monthly expenses divided by your total monthly income.

[Click here to download a spreadsheet tool to help calculate loan-to-value and debt-to-income ratios.](#)

- To be eligible for PACE financing, homeowners must have an energy analysis performed to quantify the project costs, energy savings, and estimated carbon impacts of the proposed energy improvements, including an annual cash flow analysis. This analysis may be conducted by BED, as Burlington's designated "Energy Efficiency Utility," or other qualified entities designated by BED. All analyses will be reviewed by BED.

4. Is there a minimum and maximum loan amount?

\$3,500 is the minimum loan amount and the maximum amount is 15% of the assessed value of the property, capped at \$30,000.

5. What are the loan terms?

Currently it is a 4% fixed-rate loan up to 20 years.

PACE law also requires that participants make a Loan Loss Reserve (LLR) contribution equal to 2% of the borrowed funds. For example, a \$15,000 PACE assessment requires a \$300 LLC contribution that can be added to the loan amount.

6. Is there a loan application, upfront fee and underwriting review process?

Applications and loan closing documents will be processed by the Opportunities Credit Union for BED and will require the following information:

- Completed PACE application (when signed by participant this authorizes a credit check)
- Copy of tax assessment/bill (this shows the legal owners and the assessed value of the property)
- Proof of income if applicable (a paystub or tax returns for self-employed/other sources of income generally are sufficient).
- Copy of Homeowner's Insurance Policy (this can be provided after loan approval)
- Copy of a valid state- or federally-issued photo ID's
- Cash Flow Analysis (provided by BED)
- Non-refundable \$375 application/underwriting fee (this can be included in the PACE loan if eligible)

7. What kinds of energy projects qualify?

The energy efficiency and comfort of many buildings can be improved cost-effectively by increasing insulation levels, reducing air infiltration, and addressing other thermal efficiency issues. Projects that include cost-effective energy efficiency improvements are more likely to result in positive cash flow. --- Additionally, heating and renewable energy systems are more likely to be properly sized.

In order to identify the energy improvements that save the most energy and money, homeowners are encouraged to have an energy audit of the property PRIOR to participating in PACE. The first step is to contact BED at 802-865-7337 to discuss the energy improvement work that you are considering. BED can then help you identify the appropriate energy audit entity. The intent of the audit is to inform the homeowner about efficiency opportunities with estimated costs and savings, and available incentive and financing options. The costs of the energy audit may be included in the amount financed under PACE. Additional incentives to help pay for the improvements may be available from Vermont Gas and/or BED.

Please see the "Current Vermont PACE Eligible Measures" section at the bottom of this document for a list of eligible measures.

8. What if I want to sell my home before paying off the PACE loan?

PACE law allows for the assessment to be transferred to the new property owner at the time of sale should buyer agree to this as part of the property transaction. If the assessment is not transferred to the new property owner then the loan balance will be **due in full** when you close your BED account.

Participation in PACE requires that a lien be placed on the property deed.

9. Can any contractor that I select perform the energy project work?

Yes, as long as the contractor is in the normal business of installing the energy system(s) involved in the project. The property owner is responsible for hiring and paying the contractor. BED requires that the property owner submit a copy of the contractor(s)' formal proposal that separately lists costs of major materials by model number and the labor and permit costs.

The contractor is responsible for securing permits and coordinating inspections with the City's Building Trades Inspection Division as needed.

Change orders that impact the price and/or the energy performance of the project are only allowed with prior approval from BED. BED is not obligated to change the original PACE loan amount without prior notice of change orders.

Property owners are strongly encouraged to get more than one contractor proposal.

10. How do contractors get paid?

The property owner will receive a check from BED and is responsible for providing full payment to the contractor for the performance of work that was agreed upon when signing the "Property Owner's PACE Loan Agreement."

11. Who should contractors contact with any on-going PACE project questions?

The BED Energy Services Specialist that started the project with the contractor and the customer will be available to answer any questions and will also be responsible for conducting the final inspection and ensuring that the payment check is processed.

Contractors will be responsible for securing permits and coordinating inspections with the City's Building Inspection Division.

12. Who services my PACE loan, should I have questions?

The BED Energy Services Specialist that started the project with the customer and their contractor will be available to answer any questions including providing the current balance and pay-off amounts.

13. How do I get more information about BED PACE?

For more information about BED's PACE service, please feel free to call 802-865-7337.

14. Anything else that I should know about PACE?

PACE is one loan option but you should research others to find the best match for your situation. If you are interested in making significant home energy improvements, financing can make the investment

possible and affordable. The ideal loan combines easy qualification, an attractive fixed interest rate, and a relatively long repayment term. Fixed monthly payment plans that can be offset by energy savings pay for themselves. The money that would have been spent on energy bills becomes available to make most or all of the loan payments.

“Current Vermont PACE Eligible Measures”

Those entities appointed as energy efficiency utilities (currently BED and Efficiency Vermont) 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.

To be eligible for PACE financing, homeowners must have an analysis performed to quantify the project costs, energy savings, and estimated carbon impacts of the proposed energy improvements, including an annual cash flow analysis. This analysis may be conducted by BED (in Burlington) or other qualified entities designated by BED. All analyses will be reviewed by BED.

All installation costs associated with eligible energy efficiency and renewable energy measures may be financed under the PACE Program. Measure installation must be completed by professional installation contractors who are properly insured and appropriately licensed or certified for the measure(s) being installed. Installation costs may include, but are not limited to, materials, labor, energy audits, design, engineering, permit fees, and taxes. For home remodeling projects, only that portion of the cost used to complete eligible energy measures is eligible for PACE financing. Repairs and new construction costs do not qualify for financing under the PACE Program, with the exception of health and safety measures necessary to safely complete the proposed energy improvements. Health and safety repairs may not exceed 50% of the total energy improvement project cost.

BED will review the costs and energy savings of the proposed energy improvements and perform a cash flow analysis. Positive cash flow is not required, but homeowners proposing projects with negative cash flow will receive information on the financial implications as well as potential opportunities to improve cash flow. In addition, both the estimated annual energy savings as determined in the energy analysis and the PACE annual assessment payments will be considered in determining eligibility in the underwriting process.

Prior to participating in PACE, , homeowners are encouraged to have an energy audit of the property in order to identify the energy improvements that save the most energy and money. BED will assist customers with locating the proper energy auditing service for their specific project. In some cases BED’s energy auditors may visit the home and in other cases a Vermont Gas energy auditor will. The intent of the energy audit is to inform the homeowner about efficiency opportunities, estimated costs and savings, and available incentive and financing options.

Eligible Energy Efficiency Measures

As a condition to participating in the PACE Program, homeowners are required to fully participate in all available energy efficiency rebates and incentive programs from Vermont Gas and/or BED for the measures that they are installing.

Energy Efficiency Measure	Minimum Requirement
Blower-door assisted air sealing	Installed to Building Performance Institute (BPI) standards by or under the guidance of a Vermont Gas auditor or Home Performance with ENERGY STAR contractor
Insulate building envelope (e.g., attic, basement, walls, crawl space, kneewall, etc.)	Installed to BPI standards by or under the guidance of a Vermont Gas auditor or Home Performance with ENERGY STAR contractor
Seal and insulate heating and cooling distribution systems (e.g., ductwork, piping)	Installed by or under the guidance of a Vermont Gas auditor or Home Performance with ENERGY STAR contractor
Install new efficient heating and/or cooling system	<p>Installed to one of the following standards by a licensed technician possessing the appropriate certification from the Vermont Department of Public Safety, if applicable:</p> <ul style="list-style-type: none"> • ENERGY STAR or equivalent boiler or furnace • Central wood pellet heating system meeting Efficiency Vermont program requirements • Central air conditioning meeting Efficiency Vermont program requirements • ENERGY STAR Tier 3 geothermal (ground source) heat pump <ul style="list-style-type: none"> ○ System design and installation by International Ground Source Heat Pump Association (IGSHPA) certified designer and installer recommended • Air source heat pumps <ul style="list-style-type: none"> ○ ENERGY STAR rated ductless mini splits <ul style="list-style-type: none"> ○ ENERGY STAR Central Systems AND covering 70% of total heat energy consumption
Install new efficient water heating system	<p>Installed by a licensed technician to one of the following standards:</p> <ul style="list-style-type: none"> • ENERGY STAR natural gas or propane water heater • ENERGY STAR heat pump water heater <ul style="list-style-type: none"> ○ Reference Efficiency Vermont Quality Installation Guidelines for installation considerations
Replace windows, doors or skylights	ENERGY STAR-rated meeting minimum performance requirements for Northern Climate Zone installed by a licensed professional per manufacturer's instructions

Whole-home ventilation	<p>Installed by or under the guidance of a Vermont Gas auditor or Home Performance with ENERGY STAR contractor to one of the following standards:</p> <ul style="list-style-type: none"> • Heat recovery or energy recovery ventilation system • Exhaust-only ventilation fan meeting Efficiency Vermont minimum efficiency requirements: <ul style="list-style-type: none"> ○ Efficient lighting if applicable (ENERGY STAR qualified) ○ Efficient fan motor (CFM/Watt \geq 5.0 or “brushless DC” or split-capacitor motor) ○ Efficient controls (bi-level or on/off cycling for minimum 8 hrs/day while occupied and/or in accordance with ASHRAE 62.2 ventilation rate for the building) ○ Quiet operation (rated sound level $<$ 2.0 sones at a static pressure of 0.1 inch of water)
Electric Vehicle Charging Stations	<p>Level 1 & 2 installed by licensed electrician with a dedicated outlet/circuit.</p> <ul style="list-style-type: none"> * Although it’s not a requirement, PACE participants are strongly encouraged to contact their electric utility to learn about possible time-of-use rates and metering. This will allow charging to happen during off peak hours at a lower rate.
Health and safety measures	<p>Installed to BPI standards by or under the guidance of a Vermont Gas auditor or Home Performance with ENERGY STAR contractor. Health and safety measures necessary to safely complete proposed efficiency measures (e.g., ventilation, venting, moisture remediation, vermiculite remediation, removal of knob and tube wiring, etc.) may be included in</p>
	<p>PACE financing but may not exceed more than 50% of the total efficiency project cost.</p>
Energy audit	<p>Audit completed by a participating Home Performance with ENERGY STAR contractor or Vermont Gas auditor; audit cost may be included in PACE financing</p>

Eligible Renewable Measures

As a condition to participating in the PACE Program, homeowners are required to fully participate in all available renewable energy rebate and incentive programs for the measures that they are installing. In order to meet this requirement, it is recommended that homeowners work with a Vermont Solar and Wind Partnership Program installer to complete renewable energy improvements. These installers are eligible to receive financial incentives from the Vermont Small Scale Renewable Energy Incentive Program for their projects. Contact information for Vermont Solar and Wind Partnership Program installers may be obtained from Renewable Energy Vermont at:

<http://vtpartnership.wordpress.com/current-partners/>

Renewable energy measures may be eligible for PACE 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." The following renewable energy measures are eligible for the PACE Program using the standard application process:

Renewable Energy Measure	Minimum Requirement
Solar electric (photovoltaic) system	Meet the requirements of the Vermont Small Scale Renewable Energy Incentive Program: http://www.nerc-vt.org/incentives-program/eligibility
Solar hot water system	
Small wind system	
Micro-hydro system	
Health and safety measures	Health and safety measures necessary to safely complete proposed renewable measures (e.g., roof improvements, larger circuit board, etc.) may be included in PACE financing but may not exceed more than 50% of the total renewable project cost

Other renewable energy measures meeting the legislative definition (e.g., switchgrass, biofuels) are eligible for PACE, but will be reviewed on a custom basis. Applicants may be required to produce their own cash-flow analysis and/or pay a higher application fee to cover the additional cost of generating energy savings estimates for custom measures.