

PACE for Home Owners October 29, 2017

Property Assessed Clean Energy, better known as PACE, is a financing innovation that has revolutionized the way property owners upgrade their homes and businesses in the USA, with over 4 billion dollars invested in home upgrades since 2008. The team behind PACE Alberta Co-op has been advocating for the creation of a made in Alberta PACE program since March 2016, and while it is not yet available in Alberta, significant progress has been made and it is anticipated that a PACE program could be in place sometime in 2018.



As such, the following description of PACE for homeowners, sometimes referred to as Residential PACE or R-PACE, is based on characteristics which PACE Alberta is hoping will be adopted moving forward.

In a nutshell, PACE financing programs allow homeowners to fund 100% of the upfront cost of energy and resource improvements to their homes and repay the financing over time through their taxes. Often the savings generated by the PACE upgrades will be greater than the annual repayment, thus also generating an immediate benefit to the pocketbook.



The best PACE programs in the USA are simple to understand and designed to be quick to be processed for approval. In fact, some of the most successful PACE Administrators (the organizations who deliver PACE financing programs to the public) have streamlined their approval process down to 15 minutes. PACE

Alberta is advocating for an R-PACE program model that is quick and easy to administer, and will determine a home owner's qualifications based on four measures:



- Do you own the property?
- Do you have a history of paying your mortgage and property taxes on time?
- Do you have at least 15% equity in your home?
- Will you be hiring a qualified PACE contractor to do the work?

The following highlights key concepts which homeowners should know about PACE financing.

1. No Upfront Payments Required

Upfront costs are one of the biggest barriers to efficiency improvements. PACE financing qualification, however, does not hinge on the ability to make a down payment. This is one of the most notable advantages of PACE.

2. Eligibility Is Based on Your Home's Equity

PACE financing is secured by the property itself, otherwise known as a “debt of property,” not a personal debt. Most PACE programs require between 10 - 15% equity to qualify.

3. You May Qualify for Loan Periods of Up to 30 Years

PACE financing allows homeowners to qualify for improvements that have a longer payback period equal to the effective life of the improvement. Long life large projects such as solar panels or geo-exchange systems, improvements to the envelope of your home with better insulation, or green roof are typically upgrades which may qualify for terms as long as 30 years.

4. Low-Interest Rate Financing

Competitive interest rates can be another advantage of PACE financing which may seem surprising since no down payment is required. To secure repayment the PACE assessment is attached to the property and is listed as a line item in the property tax billing. Property taxes have a lower default rate than loans, so there is less risk for investors funding PACE – and a lower risk of default translates into lower interest rates. In addition, PACE Alberta Co-op is hoping that by operating on a not-for-profit basis it will be able to deliver its PACE program at a cost of between 2% and 4%.

5. The Home Must Be in Good Financial Standing

According to standard USA PACE oversight recommendations, homeowners should prove that they are current on all mortgage payments and have not been late more than once with such payments over the past year. More importantly, since PACE assessments are paid for via property taxes, the homeowner must be current on their taxes and cannot have been late on payments in the past three years.

Main Types of Qualifying Projects

PACE program details vary from place to place. PACE Alberta is hoping to have Albertans be able to access R-PACE financing for the following:

- **Renewable energy:** typically Solar PV module although hydro and wind may also qualify
- **Energy efficiency:** this will be the bulk of PACE qualifying building upgrades. There are a multitude of home upgrade measures which will reduce energy consumption, including upgrading insulation, windows and doors, and installing top efficiency heating and cooling systems such as ground source and air source heat pump systems. The intent is to have a menu of pre-qualified items which homeowners will be able to choose from.
- **Water & Resource conservation:** measures which reduce water consumption or which use longer life products such as metal roofs and long life siding are expected to be added to the PACE qualified list as these upgrades reduce the building's overall footprint and impact on the environment by reducing waste and landfill use.

What PACE Will Cover

R-PACE upgrades to your home can take a variety of different forms. Typically, successful R-PACE programs use a pre-approved list or menu of items which qualify for PACE financing and have the upgrades installed by approved contractors. While there is no universal list of PACE-eligible improvements that applies to every region in the United States, PACE Alberta anticipates that the following list will be used as the foundation for establishing PACE qualifying upgrades.

Solar Power

Solar panels can provide significant energy savings and according to recent studies can be considered effective for up to 35 years on average, with overall energy savings over time far surpassing the initial cost of the project. The exact amount saved will vary from location to location.



Climate Control

Air source and ground source heat pumps, high efficiency furnaces and air conditioners typically all qualify for PACE financing. Homeowners do not need to install a renewable energy source to obtain PACE funding. When it comes to HVAC systems, new equipment can provide significant energy savings when compared to older units.

Doors and Windows

High insulation value and well sealing exterior doors may qualify. And certainly high performance long life windows and glazing systems will qualify as these will significantly reduce both heating and cooling energy requirements and last longer. Windows and doors are an attractive home improvement because they offer cosmetic enhancements in addition to greater efficiency. Other upgrades related to windows and doors could also fall into the PACE purview, even though they are less noticeable. For example, shading from eaves or blinds can decrease cooling costs, while the installation of skylights or solar tubes can lower lighting bills. Finally, homeowners may be able to save on energy costs by adding weather stripping around doors and sealing around window frames.

Lighting and switches

LED lighting offers significant energy savings compared to traditional incandescent bulbs. Not only are LED lights cheaper to illuminate, but they last much longer than alternatives. According to the US Department of Energy, an incandescent light costs between \$3.50 and \$4.80 per year to operate, while a comparable LED costs only \$1 for the same amount of time. An LED light can last 25 times longer than its incandescent peers, further increasing its cost efficiency. As such, PACE programs may be able to help with the higher upfront cost of installing LED lighting fixtures. Because of their efficiency and lifespan, these fixtures usually pay for themselves in the long run. Other lighting-related options include automated switches, which use either timers or sensors to trigger the on and off switch. These controls can limit energy waste if homeowners forget to turn lights off.

Vegetated Roofing

Vegetated roofs provide a number of environmental benefits. Plants absorb the sun's heat to keep living spaces more comfortable and reduce cooling requirements. Vegetated roof membranes also are expected to last longer as the plant cover protects them from the destructive UV rays and from significant 24 hour temperature swings experienced during early and late winter. Properly installed, a roof membrane covered by a vegetated roof can last the life of the home according to some reports from Europe. Reduced energy and extended life make vegetated roofs good candidates for PACE financing.



Insulation

Older homes, depending on when they were built, often lack adequate insulation. Homes built before 1950 may lack insulation entirely; even those built before the 1980s may benefit from an insulation upgrade. Insulation offers an appealing cost-to-energy-savings ratio, but there are many variables to consider. For example, different climates require different levels of insulation. These levels can be measured with something called R-values. Basically, the colder the climate, the higher the R-value needs to be. The insulation's location also matters. Attics are often under-insulated, but walls and underfloor insulation projects can prove more complicated. Contractors may have to spray loose insulation or foam insulation into tight spaces between walls. PACE financing can make this project more financially feasible, even if it's complicated. With potential energy savings between 10 and 50 percent, depending on your home, insulation is typically a worthwhile investment.

Water Efficiency and Landscaping

PACE programs cover more than energy improvements; water-saving measures such as plumbing and landscape irrigation may also be financed. Installing low-flow fixtures (for toilets, faucets, and showers) may help homeowners save money on water costs. Greywater toilet systems, where water is captured from sinks, showers, and/or washing machines and used to flush toilets, are included in some PACE program offerings. Landscaping irrigation can take many forms. In some parts of the country where water prices are high, adding drip irrigation, a rainwater catchment system, or a greywater irrigation system could result in savings while circumventing watering restrictions. These improvements could range from a basic rainwater catchment barrel attached to the gutter, to a complicated greywater irrigation system that uses filters and pumps to clean water from the drain and redistribute it to the yard.

Conclusion: PACE for Commercial is win-win

While it remains to be determined what the Province determines will qualify as PACE building upgrades, over what time frame, and how the program will be delivered, the foregoing information provides an overview of how a PACE program in Alberta will benefit commercial building owners.



It is no wonder that PACE was named “top 20 world changing ideas” in 2009 by Scientific American; **it is a win-win scenario all around: creating jobs, enhancing property values and ROI, and doing so with not one tax dollar required.**