



# **PA C-PACE**

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**PROPERTY ASSESSED CLEAN ENERGY**



**POWERED BY:**



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# PREFACE

In June 2018, Gov. Tom Wolf signed SB 234 granting authority to local governments to establish a Commercial Property Assessed Clean Energy Program (C-PACE). To facilitate the adoption of C-PACE in Pennsylvania, Program Guidelines were developed by Sustainable Energy Fund (SEF) and the Keystone Energy Efficiency Alliance (KEEA) with the assistance of the Pittsburgh Office of Sustainability and Philadelphia Energy Authority. Additionally, the group convened a statewide group of stakeholders and national consultants. There were more than 130 stakeholders represented during the guideline development process.

The goal of the Pennsylvania C-PACE Program Guidelines is to achieve consistent guidelines statewide and maximize the C-PACE investment in the commonwealth.

SEF has openly offered to act as the Program Administrator for any local unit of government in the Commonwealth of Pennsylvania. As a nonprofit, SEF provides any county or municipality opting into the program (outside of the city and county of Philadelphia) a uniform, turn-key C-PACE program administration platform that can be adopted at no cost to the County or Municipality.

SEF offers a single point of access for Property Owners, Local Units of Government, Qualified Contractors, and C-PACE Capital Providers. The Program Administrator reviews and certifies projects that are eligible for C-PACE Financing.

For more information about SEF and KEEA, see Appendix A. For more information about the role of the Program Administrator, see Appendix B.

[WWW.PENNSYLVANIACPACE.ORG](http://WWW.PENNSYLVANIACPACE.ORG)

# C-PACE in Pennsylvania

Commercial Property Assessed Clean Energy (C-PACE) is an innovative financial tool for property owners to obtain low-cost, long-term financing for energy efficiency, renewable energy and water conservation projects. C-PACE can provide up to 100% funding of total project costs by placing a special voluntary assessment (annual payment) on the property that repays the costs of the upgrades. Financing lenders have their own criteria, which may result in significantly less than 100% financing.

In Pennsylvania, C-PACE can be used for existing buildings and construction of commercial, industrial and non-profit properties. It can also be used for agricultural properties. C-PACE is NOT for residential properties including multi-family buildings.

- A local government establishes a C-PACE program and agrees to collect C-PACE payments as part of the real estate tax assessment.
- A C-PACE lien transfers upon sale of the building to the new property owner.
- A C-PACE loan does not accelerate.
- C-PACE provides up to 100% up-front private capital for clean energy and energy efficiency projects on commercial properties.



# GOVERNMENT

C-PACE financing is a voluntary program that is adopted by a county or municipality with an economic or community development department. The local government passes a resolution, adopts a set of Program Guidelines, and Statement of Levy and Lien.

Once the C-PACE Program is established locally, the main responsibility of the local government is to collect C-PACE assessments (payment) through the existing property tax collection process, and to remit payment back to the Program Administrator, who will remit it to the various C-PACE capital providers.

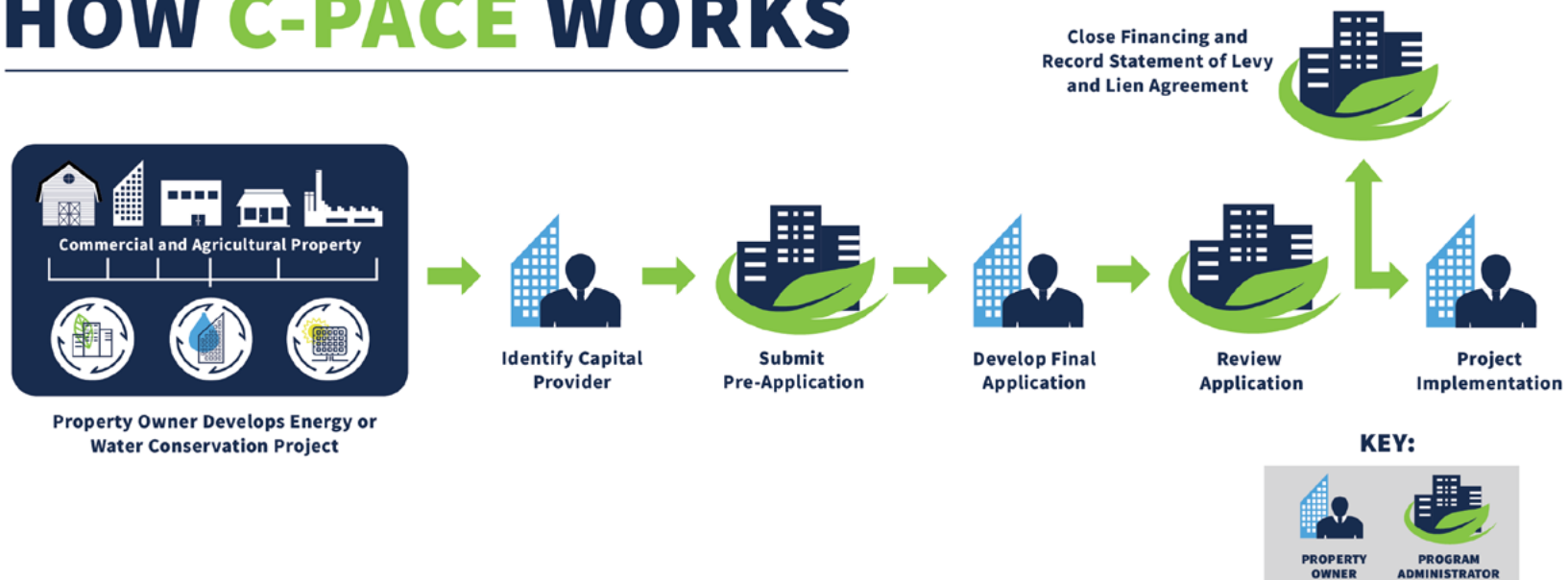
# PROPERTY OWNERS

C-PACE can provide up to 100% funding of total project costs by placing a special voluntary assessment on the property that repays the costs of the upgrades. Because C-PACE is attached to a property, it is a very secure form of financing.

A property owner should work with an architect, engineering firm or other energy services company to evaluate the energy and water use of the property. Building improvements and new equipment can significantly reduce energy use and save the building owner money. These improvements and equipment can be financed through a C-PACE loan.

The property owner should select a private capital provider/lender and quality contractor. The property owner and capital provider develop mutually agreeable repayment terms. The property owner applies to the C-PACE Program Administrator to ensure the improvement meets the Program Guidelines.

## HOW C-PACE WORKS



# C-PACE IMPROVEMENT PROJECTS

The following is a non-exhaustive list of Energy Conservation Measures (ECM), Renewable Energy Improvements and Water Conservation Measures (WCM). This list is intended as a reference list for Pennsylvania C-PACE Applicants and can change at any time.

## ENERGY SAVINGS MEASURES:

- LED lighting and/or lighting sensors and controls
- Heating ventilation air conditioning (HVAC) upgrades
- New automated building, lighting and HVAC controls
- Variable speed drives (VSDs) on motors, fans, and pumps
- Variable frequency drives, energy recovery ventilators (ERV), heat recovery ventilators (HRV), demand control devices, including energy storage systems
- High efficiency chillers
- High efficiency boilers and furnaces
- High efficiency heat pumps
- High efficiency hot water heating systems
- Geothermal energy / geexchange
- Combustion and burner upgrades
- Heat recovery and steam traps
- Building envelope improvements, including insulation, air sealing, window retrofit, and window replacement
- Building automation (energy management) systems
- Heat recovery from processed air and water
- Cogeneration
- Process equipment upgrades and changes
- Green roofs

## WATER CONSERVATION MEASURES:

- Adding aerators to faucets or installation of new faucets or toilets with low-flow options
- Laundry equipment in commercial properties
- Condensate water reuse for cooling towers, for steam boilers, irrigation, evaporative coolers, industrial laundry, decorative water features, water cooled equipment, and air conditioners
- Industrial water consumption from car washes, film and x-ray processing, and high-tech manufacturing can be reduced through the installation of equipment
- Replacement of pre-rinse valves, dishwashers, and icemakers in commercial kitchens
- Implementing processes or equipment that demonstrates water savings of 25% or more

## RENEWABLE ENERGY IMPROVEMENTS:

- Solar photovoltaic power
  - Solar thermal
  - Wind power
  - Fuel cell
- Methane gas from landfills
- Methane gas from anaerobic digestion
- Sustainable biomass facility used for heating and/or generation



# APPENDIX A:

## SUSTAINABLE ENERGY FUND AND THE KEYSTONE ENERGY EFFICIENCY ALLIANCE

SEF is a nonprofit 501(c)(3) organization dedicated to assisting energy users in overcoming financial, educational, and regulatory barriers to a sustainable energy future through a series of financial and educational programs. SEF was created as a result of a settlement during electric deregulation approved by the Pennsylvania Public Utility Commission (Pa PUC). SEF's Board of Directors and any Bylaw changes are approved by the Pa PUC, and SEF submits an annual financial audit and annual report to the Pa PUC. SEF has been operating financial programs since its founding in 1999. SEF has participated in financing all or a portion of more than \$100 million in projects throughout Pennsylvania. SEF has financed loans, participation loans, leases, and energy savings agreements, and has made equity investments.

Sustainable Energy Fund has financial, technical and programmatic staff. If selected as a program administrator, SEF will use its financial and technical staff to ensure proposed projects meet approved program guidelines. It's programmatic and marketing staff will promote the program to commercial, industrial, and agricultural businesses, contractors, financial institutions, and C-PACE capital providers.

Founded in 2008, KEEA has more than a decade of experience promoting energy efficiency throughout the Commonwealth. KEEA educates the public about energy conservation and efficiency; monitors and supports energy efficiency policies and regulations at the state, county, and municipal levels; provides forums for sharing best practices; and mobilizes its network of businesses, nonprofit partners, and community stakeholders to educate decision-makers and showcase the economic impacts of the energy efficiency industry.

### SEF CONTACT INFORMATION

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610.264.4440

### KEEA CONTACT INFORMATION

WWW.KEEALLIANCE.ORG  
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# APPENDIX B:

## ROLE OF PROGRAM ADMINISTRATOR

The administration of C-PACE includes the evaluation of C-PACE Projects according to the C-PACE Program Guidelines and the collection of the annual C-PACE Special Assessment by the local unit of government. Evaluation of C-PACE Projects can be performed by a third-party Program Administrator on behalf of the local unit of government.

The Program Administrator will ensure that projects meet all requirements included in the C-PACE Program Guidelines. These include:

### ENERGY OR WATER SURVEY REQUIREMENTS:

C-PACE Projects must submit a Survey as part of the application to the Program Administrator. The Survey must include a description of the proposed project; expected annual energy savings, electrical demand reduction, water savings, renewable energy capacity (kW), renewable electrical production (kWh) and operational cost (\$) savings; evaluation of energy savings (may need to include weather normalization, where applicable); estimate of the useful life of each ECM; cut sheets supporting useful life; the total project capital cost required for each energy saving measurement; operating cost assumption(s); calculations detailing the estimated annual energy savings, peak electrical demand reduction, and/or water usage.

The Survey can follow one of these standards:

- ASHRAE Energy Audit standards as defined by ANSI/ASHRAE/ACCA Standard 211-2018
- Pacific Northwest National Laboratory, A Guide to Energy Audits, PNNL-20956



- Investor Confidence Project (ICP) Investor Ready Energy Efficiency (IREE) Certification. An IREE certification is an acceptable alternative to an ECM Survey
- Pennsylvania EDC based energy reduction worksheets.

Additionally, the building must be entered into the Energy Star Building Portfolio Manager at:  
[www.portfoliomanager.energystar.gov/pm/login.html](http://www.portfoliomanager.energystar.gov/pm/login.html)

### RENEWABLE ENERGY IMPROVEMENTS:

Property Owner must submit a Renewable Energy Feasibility Survey, which should address the following components:

- Site ambient conditions
- Location for the Renewable Energy Improvement
- Energy system foundation
- Building characteristics
- Utility consumption profile of the site, including the site's historical energy use and cost
- Description of the proposed Renewable Energy Improvement
- Projected annual energy production
- Projected energy and levelized financial cost are inclusive of financing of energy to be generated by the Renewable Energy Improvement

### C-PACE FOR NEW CONSTRUCTION:

New construction projects that utilize building standards and/or equipment outlined in one of the below standards will be eligible for C-PACE Financing.

One hundred percent of the cost of the outlined energy conservation measures will be eligible.

- Net Zero Building: DOE and National Institute of Building Sciences (NIBS)
- Green Building Initiative: Green Globes for New Construction
- LEED: New commercial construction (LEED-NC), Commercial interiors projects (LEED-CI)
- LEED: Core and shell projects (LEED-CS) that exceeds current building code requirements
- Living Building Challenge
- EPA Energy Star
- PHIUS Passive House Commercial Requirements



## APPENDIX B CONTINUED

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### STATEMENT OF LEVY AND LIEN AGREEMENT:

Each approved C-PACE Project requires a Statement of Levy and Lien Agreement that is signed by the property owner, capital provider and the local unit of government. This Agreement includes the C-PACE Payment Schedule, Terms and Conditions and details of the lien enforcement.



## APPENDIX B CONTINUED

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### PUBLIC REPORTING:

Following execution of a C-PACE Statement of Levy and Lien Agreement, the Program Administrator will provide the required public notice on behalf of the local unit of government.

This public notice shall include:

1. The legal description of the property
2. The name of each Property Owner
3. The total amount of the qualified C-PACE Project and a description of the Project
4. C-PACE Financing amount
5. A reference to the statutory assessment lien provided under this chapter of the C-PACE Statute
6. The financing rate on the Bond or C-PACE Financing, the total amount of the financing and any financing charges associated with the C-PACE Statement of Levy and Lien Agreement

Additionally, the Program Administrator will oversee the Registration of Capital Providers/ Lenders and act as a single point of access for property owners, contractors, capital providers, nonprofit partners, and local government.





# Sustainable Energy Fund



KEYSTONE ENERGY EFFICIENCY ALLIANCE

## LEARN MORE

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